

Rotterdam Water District #5 Wellhead Area Expansion Environmental Assessment

February 4, 2016

Project Name: Rotterdam Water District #5 Wellhead Area Expansion

Project Location: 49 Rice Road, Rotterdam, New York 12306

HTFC SHARS #: N/A

Federal Agency: US Department of Housing and Urban Development
Responsible Entity: New York State Homes and Community Renewal

**Responsible Agency's
Certifying Officer:** Thomas J. King, Assistant General Counsel and Certifying Officer

Project Sponsor: Town of Rotterdam

Primary Contact: **Steven Tommasone, Supervisor**
Town of Rotterdam
1100 Sunrise Boulevard
Rotterdam, New York 12306
Phone: (518) 355-7575 ext.393, email: stommasone@rotterdamny.org

Project NEPA Classification: 24 CFR 58.36 (Environmental Assessment)

Environmental Finding:	<input 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	 Thomas J. King

Environmental Assessment Prepared By: Consultant: Tetra Tech, Inc.
Address: 1999 Harrison Street, Suite 500
Address: Oakland, CA 94612

CERTIFICATION OF NEPA CLASSIFICATION

It is the finding of the New York State Housing Trust Fund Corporation that the activity(ies) proposed in its 2015 NYS CDBG-DR project, the Rotterdam District #5 Wellheads are:

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 statues 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 statues 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

Thomas J. King

Assistant General Counsel and Certifying Officer

February 4, 2016

Date

CERTIFICATION OF SEQRA CLASSIFICATION

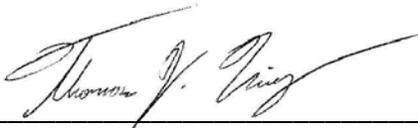
It is the finding of the New York State Housing Trust Fund Corporation that the activity(ies) proposed in its 2015 NYS CDBG-DR project, the Rotterdam District #5 Wellheads constitute a:

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

Thomas J. King

Assistant General Counsel and Certifying Officer

February 4, 2016

Date

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

The Rotterdam Water District #5 Wellhead facility is on Rice Road near Schermerhorn Road, Town of Rotterdam, Schenectady County, New York. The facility serves most of the Town of Rotterdam. The Town of Rotterdam is proposing to drill a new well at this existing facility. The casing of the new well would be elevated between 2 and 5 feet above the 500-year floodplain and at least 3 feet above the flood-of-record elevation. The Rotterdam Water District #5 Well Head Project (Project) would involve establishing a well connection to existing pipes; installing a chlorinator, motor, and pump; and constructing a new building to house the pump and equipment, and a paved access road. The new well, with connection to an existing backup generator for power, is designed to be a self-sufficient drinking water supply facility for the town if the other wells become inoperative for any reason. Under normal conditions, the pump would be powered by commercially available electricity, but it would be wired through an automatic transfer switch to the well field's existing emergency backup, a diesel-powered generator with its own fuel storage tank. The new building design would be similar to the design of the existing building that houses Well #4. Diesel fuel for the generator would be stored in a 2,000-gallon above ground storage tank (AST) on the existing well field facility. The chemicals for the chlorinator also would be stored off-site, at the existing facility, to the west of the Project site.

The well would be drilled approximately 120 feet southeast of Well #4 (See **Appendix A, Figures, Project Area**). The well would be installed in accordance with American Water Works Association (AWWA) A100 "Standard for Water Wells" and with the New York State Sanitary Code, Appendix 5-D. The annular space between casing and soil would be grouted with cement/bentonite, according to AWWA standard A100-06 to prevent surface runoff from entering the borehole and reaching the aquifer. The finished well would be equipped with a standard lineshaft, vertical, turbine pump and would be approximately 95.5 feet deep from the top of the casing to the bottom of the 24-inch diameter screen. The well would be in a 100-year floodplain, would be elevated, and constructed in accordance with the New York State Department of Health (NYSDOH) requirements. Exposed piping from the well would be ductile iron with grooved-end and rubber gasket joints, and buried piping would be ductile iron having push-on or mechanical joints with rubber gaskets. All piping, fittings and joints would be National Sanitation Foundation (NSF)-approved for potable water use. (See **Figure 1, Site Plan**, at the end of this narrative.)

No changes to the potable water system or the number of people using the system would be made. The Project would not include a storm sewer, allowing all rain and runoff to dissipate naturally. There are no dry wells, retention ponds, leach fields or on-site recharge basins.

The Project would disturb approximately 0.7 acre of previously undeveloped land on a 9.38-acre parcel (Parcel number 38 owned by Water District #5). The Project site would provide enough space to assure the appropriate grade of the fill (at a three-to-one slope) that would raise the level of the well between 2 and 5 feet above the 500-year floodplain and at least 3 feet above the flood-of-record elevation. The disturbance would involve the construction of a

900-square foot well house for Well #5 in Water District #5, construction of a paved access road, and grading and filling to elevate the well house for Well #5. The proposed access road would slope up from the existing well field road to an elevation 6 inches below the proposed well house #5 finished floor. The proposed access road elevation at the well house would be 6 inches above the 500-year flood elevation. The paved surface would cover approximately 2,900 square feet. The proposed access road would be constructed prior to the installation of the drinking water supply well and would provide access for the drilling equipment and limit the amount of ground disturbance during construction.

While the proposed well is only 200 feet from the Mohawk River, it is not expected to require testing for Ground Water under Direct Influence of surface water (GWUDI); however, the plans and specifications for the well have been submitted to NYSDOH for review. The Town of Rotterdam well field is permitted to produce 10 million gallons per day (6,944 gallons per minute), a pumping rate that has been determined to not adversely affect the City of Schenectady well field, a half-mile away. The purpose of the new well is to provide redundancy, rather than added capacity, so that the well field could still produce up to the permitted 10 million gallons per day if one well was out of service.

The Project is in Wellhead Protection Zone 1, the most protective designation. The Project would be consistent with the regulations for this protection zone including:

1. All land uses and development activities other than those directly connected with the pumping and treatment of public water supplies is prohibited (with the exception of existing single family residences); and
2. The handling of hazardous, toxic, or other waste substances is prohibited.

This Project would ensure that Rotterdam Water District #5 has a reliable supply of potable water for residents during a flood event, would provide additional capacity for the town, and would benefit residents of the Town of Rotterdam.

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

The primary drinking water sources for the Town of Rotterdam are located in the floodplain and were nearly flooded during recent storms. Most of the Town of Rotterdam is served by the Rotterdam well fields, on the north side of Rice Road abutting the Mohawk River, just inside the 500-year floodplain. This well field needs flood protection to prevent failure from major storms. The Rotterdam District #5 Well Head facility is in the 100-year floodplain in the Town of Rotterdam, Schenectady County, New York, and was almost compromised by flooding during Hurricane Irene and Tropical Storm Lee. This proposal includes developing resilient infrastructure (water supply, electric supply, wastewater, and road systems). According to the Rotterdam Junction Brownfield Opportunity Area (BOA) Nomination Study (2013), the absence of protected wellheads is one of the constraints on future development.

The purpose of this Project is to create a well head and other drinking water infrastructure protected from flooding to ensure uninterrupted supply of clean, safe drinking water. The Project would help ensure that critical facilities continue to operate during major storm events through redundant backup systems (e.g., generators, pumps, and connecting supply waterlines).

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

Rotterdam was settled by the Dutch in 1661. It was formally established as a Town in 1820. The Town contains a mix of residential neighborhoods, retail, service corridors, industry, open spaces, and agriculture. Because Rotterdam has historically been oriented toward the Mohawk River, many of its critical natural, economic, recreational, historic, and residential assets are located in the flood-prone portions of the Community. (Source: 2.)

Rotterdam has instituted regulatory reforms to protect lives and property in the event of flooding. Zoning is present in Rotterdam, and periodic updates have designated waterfront areas that restrict new development in the flood zones. Updates to the zoning code have been instituted to protect wellhead areas and foster recreational enhancements. (City of Schenectady and Town of Rotterdam NY Rising Community Reconstruction Plan) As with other municipalities and planning agencies, the Town of Rotterdam is seeking to increase the resiliency of its infrastructure and its capability to provide essential services during emergencies and abnormal climate events. Similar projects including installation of emergency generators, upgrades to emergency operation centers and shelters, raising roads that serve as evacuation routes, and improvements to stormwater management facilities are being planned and implemented throughout the State.

The following resources in the compliance determinations table that would not be affected by the Project were eliminated from detailed discussion: Coastal Barrier Resources, Coastal Zone Management, Explosive and Flammable Hazards, Noise Abatement and Control, Wetlands Protection, Wild and Scenic Rivers, and Environmental Justice. These resources either were not present at the Project site, or no populations that could be affected would be introduced by the Project. Similarly, the following resources in the environmental assessment impact evaluation table that would not be affected by the Project were eliminated from detailed study: Energy Consumption, Employment and Income Patterns, Demographic Character Changes, Displacement, Educational and Cultural Facilities, Health Care and Social Services, Solid Waste Disposal / Recycling, Parks, and Open Space and Recreation.

Funding Information

Estimated Total HUD Funded Amount: \$1,042,601

Estimated Total Project Cost (HUD and non-HUD funds) [24 CFR 58.32(d)]: \$1,042,601

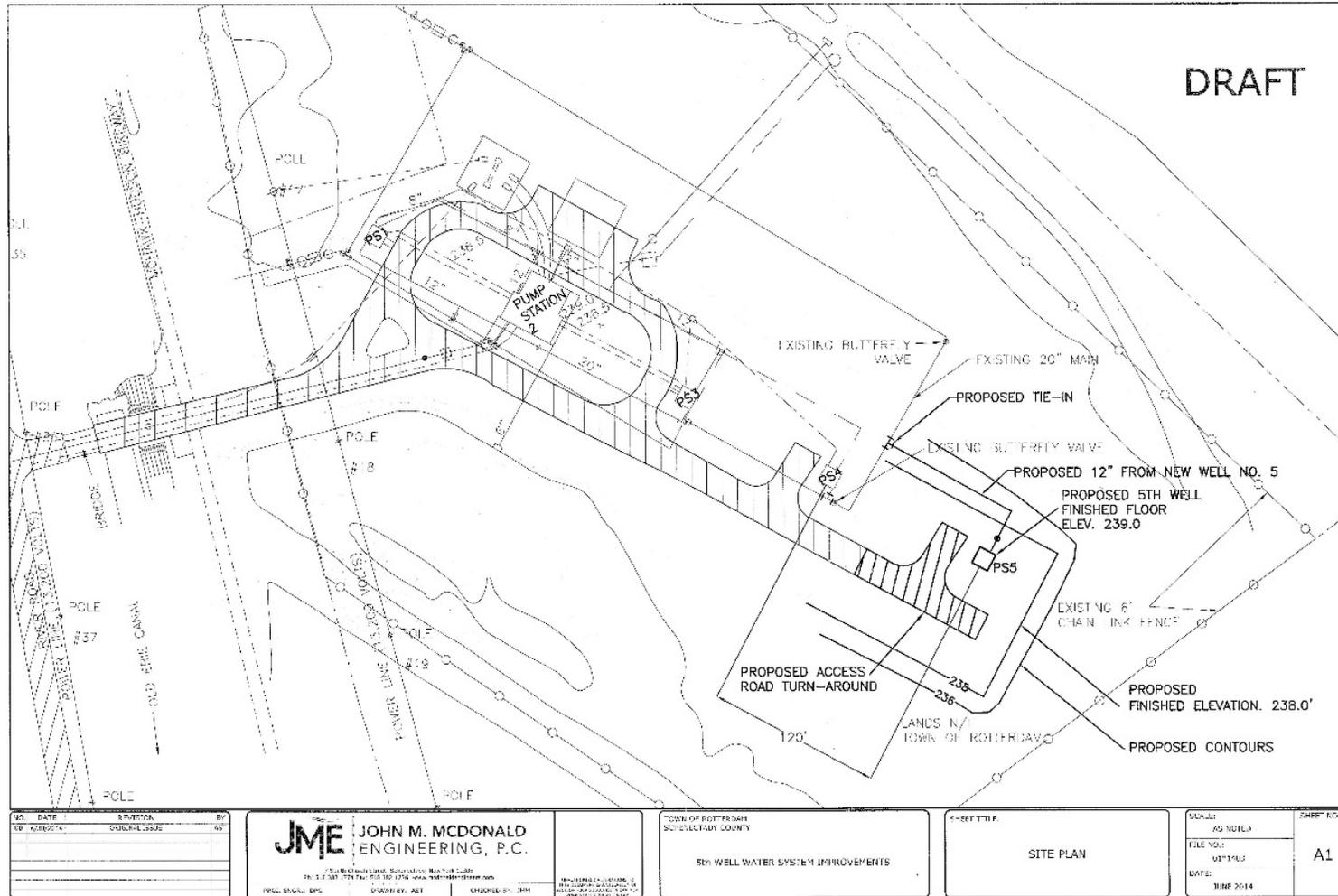


Figure 1 – Site Plan

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 or 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 HUD guidance in Fact Sheet #D1, the National Plan of Integrated Airport Systems (NPIAS) was reviewed for civilian, commercial service airports near the Project site, as projects within 2,500 feet of a civil airport require consultation with the appropriate civil airport operator. There are no military airports within 15,000 feet of the Project site, and it is not within 2,500 feet of any civil airport. (See Appendix A , Figures, Airports.) Source: 3, 4
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"/>	The Project site is not in a Coastal Barrier Resources Area as defined by the state’s Coastal Zone Management Program. (See Appendix A , Figures, Coastal Barrier Resources.) Source: 5, 6
Flood Insurance Flood Disaster Protection Act of 1973 and National Flood Insurance Reform Act of 1994 [42 USC 4001-4128 and 42 USC	Yes No <input checked="" type="checkbox"/> <input type="checkbox"/>	The Project site is in Special Flood Hazard Area (SFHA) Zone AE (areas of 100-year flood where base flood elevation have been determined), as indicated on the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM)

5154a]		<p>Community Panel Number 36093C0153D, dated January 8, 2014. Areas designated as an SFHA are those subject to inundation by the 1 percent annual chance flood (e.g., a 100-year flood), also known as the base flood. (See Appendix A, Figures, Flood Zones, and Appendix B, Floodplains.) A local floodplain development permit would be obtained prior to construction activities.</p> <p>Flood insurance must be obtained and maintained in perpetuity for any proposed structure funded in whole or in part with CDBG-DR grant funds located in the floodplain. Therefore, flood insurance for the Project would be obtained and maintained in perpetuity. (See Appendix B, for a copy of the Town of Rotterdam’s coverage for flood Insurance from Travelers, which includes the Rice Road Facility.) This requirement would no longer apply if evidence is provided to GOSR that FEMA has issued a map revision or amendment removing the well house from the floodplain. The town intends to apply to FEMA for a Letter of Map Amendment (LOMA) to the effective National Flood Insurance Program (NFIP) map for the Project, since the Project would raise the well house above the floodplain.</p> <p>Source: 7</p>
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STATUTES, EXECUTIVE ORDERS, AND REGULATIONS LISTED AT 24 CFR 50.4 & 58.5

<p>Clean Air</p> <p>Clean Air Act, as amended, particularly section 176(c) & (d); 40 CFR Parts 6, 51, 93</p>	<p>Yes No</p> <p><input type="checkbox"/> <input checked="" type="checkbox"/></p>	<p>The Project site is not included in the most recent listing of nonattainment or maintenance areas for inhalable particulate matter (PM2.5) or the 2008 8-hour ozone standard, as defined by the us Environmental Protection Agency (EPA) Green Book Nonattainment Areas for Criteria Pollutants. It is listed as Marginal for the 1997 8-hour ozone standard.</p>
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		<p>The Project would not require an NYS Air Registration, Air Facility Permit, or Federal Clean Air Act Title IV or Title V Permit. The Project activities would not substantively affect air quality.</p> <p>The Project is of a size that is consistent with the New York State Implementation Plan (SIP).</p> <p>Implementation of standard best management practices (BMP) would control dust and other emissions during construction. Air quality impacts would be short term and localized. Air quality effects of permanent increases in traffic would be minimal. (See Appendix A, Figures, Nonattainment Areas.)</p> <p>Source: 8</p>
<p>Coastal Zone Management</p> <p>Coastal Zone Management Act, sections 307(c) & (d)</p>	<p>Yes No</p> <p><input type="checkbox"/> <input checked="" type="checkbox"/></p>	<p>The Project site is not in a coastal zone as defined by the state's Coastal Zone Management Program. (See Appendix A, Figures, Coastal Boundary Map.)</p> <p>Source: 5</p>
<p>Contamination and Toxic Substances</p> <p>24 CFR Part 50.3(i) & 58.5(i)(2)</p>	<p>Yes No</p> <p><input type="checkbox"/> <input checked="" type="checkbox"/></p>	<p>The Project site has been previously disturbed but is undeveloped. No hazardous or solid waste storage is evident on the site, and the Project would not expose new populations to hazards or nuisances because no new populations would reside on the Project site. A search of the NYSDEC Bulk Storage Program Database identified six petroleum bulk storage facilities within 1 mile of the Project site. (See Appendix A, Figures, Bulk Storage Facilities.) A search of the NYSDEC Remedial Site Database, containing records of the sites being addressed under one of DER's remedial programs (State Superfund, Brownfield Cleanup, Environmental Restoration and Voluntary Cleanup, the Registry of Inactive Hazardous Waste Disposal Sites, and</p>

		<p>Institutional and Engineering Controls), identified no remedial sites within 1 mile of the Project site. (See Appendix A, Figures, Remediation Sites.) EPA’s NEPAassist mapping tool identified eight Resource Conservation and Recovery Act facilities, one NPDES General Permit Covered Facility, and one facility with an NPDES Individual permit for parking lot runoff. The Project site was not identified in any of the databases searched.</p> <p>Source: 9, 10, 11</p>
<p>Endangered Species</p> <p>Endangered Species Act of 1973, particularly section 7; 50 CFR Part 402</p>	<p>Yes No</p> <p><input type="checkbox"/> <input checked="" type="checkbox"/></p>	<p>The US Fish and Wildlife Service (USFWS) online review process, completed on October 21, 2015, indicated there is only one threatened or endangered species on the USFWS official list of species that may occur in the boundary of or may be affected by the project, the proposed endangered northern long-eared bat (<i>Myotis septentrionalis</i>).</p> <p>On October 29, the USFWS concurred with the determination that the project may affect, but is not likely to adversely affect the northern long-eared bat.</p> <p>Several migratory birds of concern that could be affected by the proposed Project also were identified in the online review process.</p> <p>In response to the October 21 query, the USFWS stated that there were no known hibernacula or known roosts near the Project. The USFWS recommended doing tree removal in winter to avoid any potential for impacting any bats that could be present, and that practice would be beneficial to migratory birds; however, there are no trees requiring removal on the Project site.</p> <p>In response to the December 22, 2015, New</p>

		<p>York Natural Heritage Program (NYNHP) inquiry regarding potential rare or state-listed animals or plants near the Project site, the NHP stated that it has no records of rare or state-listed animals or plants, or significant natural communities at the Project site or in its immediate vicinity. (See Appendix C USFWS and NYNHP Correspondence, and Appendix A, Figures, Selected Protected Species)</p> <p>Source: 12</p>
<p>Explosive and Flammable Hazards</p> <p>24 CFR Part 51 Subpart C</p>	<p>Yes No <input type="checkbox"/> <input checked="" type="checkbox"/></p>	<p>The Project will not introduce housing or sensitive public uses at the site that could be exposed to explosive or flammable hazards.</p>
<p>Farmlands Protection</p> <p>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>The soils at the Project site are identified as Prime Farmland soils and are also in a New York state agricultural district. A Farmland Conversion Rating Impact Form was prepared and submitted to the Natural Resources Conservation Service (NRCS) on December 18, 2015. Approximately 0.7 acre (7.5 percent of the 9.38-acre parcel) of Prime Farmland soils would be disturbed. On January 13, 2016, the NRCS determined that the Project falls under the small acreage exemption of 3 acres or less because the area of disturbance is limited to 0.7 acres. According to Part 523.11 E of the Farmland Protection Policy Act (FPPA) Manual, an AD 1006 is not required for this Project and it is exempt. (See Appendix D, Soils, and Appendix A, Figures, Protected Soils and Agricultural Districts.)</p> <p>Source: 14</p>
<p>Floodplain Management</p> <p>Executive Order 11988, particularly section 2(a); 24 CFR Part 55</p>	<p>Yes No <input checked="" type="checkbox"/> <input type="checkbox"/></p>	<p>The Project site is within SFHA Zone AE (areas of 100-year flood where base flood elevation have been determined), as indicated on the Federal Emergency Management Agency (FEMA) Flood</p>

	<p>Insurance Rate Map (FIRM) Community Panel Number 36093C0153D, dated January 8, 2014. Areas designated as an SFHA are those subject to inundation by the 1 percent annual chance flood (e.g., a 100-year flood), also known as the base flood.</p> <p>When the Federal government determines it will participate in actions taking place in floodplains, it must inform those who may be put at greater or continued risk. The early floodplain notice for the Project was published on December 10, 2015, in the Schenectady Daily Gazette (see Appendix B, Floodplains, for the affidavit of publication and Appendix A, Figures, Flood Zones). Citizens who may be affected by activities in floodplains and those who have an interest in the protection of the natural environment had the opportunity to express their concerns and provide information about these areas by December 24, 2015. This notice initiates the eight-step decision making process for complying with the floodplain management requirements of 24 CFR 55.20.</p> <p>This project does not meet any of the exceptions at 24 CFR 55.12 and therefore required an 8-step analysis of the direct and indirect impacts associated with the construction, occupancy, and modification of the floodplain (Appendix B; Floodplains for the affidavit of publication and Appendix A, Figures, Flood Zones). Alternatives to proposed location for the Project were reviewed in the 8-step analysis, which determined that there are no practicable alternatives. The direct and indirect impacts associated with the development within the floodplain would be minimal because the area that would be permanently affected would be the area of the structure,</p>
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		<p>approximately 900 square feet. Source: 7</p>
<p>Historic Preservation</p> <p>National Historic Preservation Act of 1966, particularly sections 106 and 110; 36 CFR Part 800; Tribal notification for new ground disturbance.</p>	<p>Yes No <input type="checkbox"/> <input checked="" type="checkbox"/></p>	<p>Consultation with the New York State Historic Preservation Office (SHPO) and the Division for Historic Preservation (DHP) in the Office of Parks, Recreation and Historic Preservation (OPRHP) in accordance with Section 106 of the National Historic Preservation Act of 1966 was initiated through the Cultural Resource Information System (CRIS) on September 10, 2015. A consolidated response was provided on September 21, 2015, requesting a Phase I archaeological survey.</p> <p>A Phase IA/IB Archeological Investigation was completed for the Project in October 2015. The Phase IA literature review found that the Project area is considered to have a low sensitivity for the presence of prehistoric cultural remains and low sensitivity for the presence of historic cultural remains. The investigation determined that extensive disturbance from the former gravel mining and adjacent Pump Station facilities' construction and operation had likely erased any traces of prior occupations. The Phase IB archeological fieldwork confirmed the presence of stripped soils across the proposed Project area. No significant cultural resources were identified during the Phase IB fieldwork. It concluded that significant cultural resources do not exist in the Project area and recommended no further investigation. (See Appendix E, SHPO Correspondence and Phase IA/IB Archeological Investigation.)</p> <p>The SHPO provided its final opinion on December 21, 2015, that no historic properties would be affected by the Project. (See Appendix E, SHPO Correspondence and</p>

		<p>Phase IA/IB Archeological Investigation.)</p> <p>The Saint Regis Mohawk Tribe, Stockbridge-Munsee Community Band of Mohican Indians, Mohawk Nation Akwesasne Territory, and Delaware Tribe of Indians were identified as possible consulting parties. Each was sent a letter on October 20, 2015, with the site description, photographs, site plan, and map. The Saint Regis Mohawk Tribal Historic Preservation Office (THPO) stated on October 29, 2015, that the Project would have no effect on cultural properties of concern. An email on October 22, 2015, from the Stockbridge-Munsee Mohican THPO confirms that the Stockbridge-Munsee Mohican Tribe does not have significant cultural resource concerns. No response was received from the other tribes as of the time of publication of this EA. (See Appendix F, Tribal Correspondence.)</p> <p>Source: 15, 16</p>
<p>Noise Abatement and Control</p> <p>Noise Control Act of 1972, as amended by the Quiet Communities Act of 1978; 24 CFR Part 51 Subpart B</p>	<p>Yes No</p> <p><input type="checkbox"/> <input checked="" type="checkbox"/></p>	<p>No noise-sensitive receptors are present or proposed at the Project site.</p>
<p>Sole Source Aquifers</p> <p>Safe Drinking Water Act of 1974, as amended, particularly section 1424(e); 40 CFR Part 149</p>	<p>Yes No</p> <p><input checked="" type="checkbox"/> <input type="checkbox"/></p>	<p>The Project site is within the bounds of the Schenectady-Niskayuna Sole Source Aquifer Designated Area. (See Appendix A, Figures, Sole Source Aquifers.) Consultation with the EPA on December 1, 2015, determined that the Project satisfies the requirements of Section 1424(e) of the Safe Drinking Water Act (SDWA). (See Appendix G for the sole source aquifer consultation letters.) The project is within in Wellhead Protection Zone I, and would be consistent with the regulations for this protection zone including:</p>

		<p>1. All land uses and development activities other than those directly connected with the pumping and treatment of public water supplies is prohibited (with the exception of existing single family residences); and</p> <p>2. The handling of hazardous, toxic, or other waste substances is prohibited.</p> <p>Source: 11, 17</p>
<p>Wetlands Protection</p> <p>Executive Order 11990, particularly sections 2 and 5</p>	<p>Yes No</p> <p><input type="checkbox"/> <input checked="" type="checkbox"/></p>	<p>The Project site is not on or adjacent to wetlands, as identified by NYSDEC and NWI. (See Appendix A, Figures, Freshwater Wetlands and Tidal-Coastal Wetlands.)</p> <p>Source: 18, 19, 20</p>
<p>Wild and Scenic Rivers</p> <p>Wild and Scenic Rivers Act of 1968, particularly section 7(b) and (c)</p>	<p>Yes No</p> <p><input type="checkbox"/> <input checked="" type="checkbox"/></p>	<p>There are no state or federally designated wild and scenic rivers at or in the vicinity of the project. (See Appendix A, Figures, Wild and Scenic Rivers.)</p> <p>Source: 21, 22, 23</p>
<p>ENVIRONMENTAL JUSTICE</p>		
<p>Environmental Justice</p> <p>Executive Order 12898</p>	<p>Yes No</p> <p><input type="checkbox"/> <input checked="" type="checkbox"/></p>	<p>The project site is not in or adjacent to areas with environmental justice populations, as defined by NYSDEC based on data from the 2000 U.S. Census. (See Appendix A, Figures, Potential Environmental Justice Areas).</p> <p>Source: 24</p>

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 or 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	1	<p>The Project site is currently owned by Water District #5 and would not require the acquisition of new land or changes to land use plans or zoning. The vision statement for the Rotterdam Comprehensive Plan includes providing for the health safety and well-being of its citizens, and calls for the protection of aquifers and wellhead protection zones by continuing to implement Watershed Rules and Regulations and improving wellhead protection zone mapping.</p> <p>The Project is part of the City of Schenectady and Town of Rotterdam New York Rising Community Reconstruction Plan and is consistent with the plan goals to Protect wellheads and other drinking water infrastructure from flooding to ensure an uninterrupted supply of clean, safe drinking water.</p> <p>Source: 2, 25</p>
Soil Suitability/ Slope/ Erosion/ Drainage/ Storm Water Runoff	3	<p>The Project site is relatively flat, with less than 5 percent slope. (See Appendix H, Topographic Map.) The casing of the new well would be elevated between 2 and 5 feet</p>

	<p>above the 500-year floodplain and at least 3 feet above the flood of record elevation, using clean fill at a 3:1 slope. This slope would ensure the stability of the Project site against erosion. The contract for the earthwork for the Project would include specifications on the imported fill material, including off-site testing of soil materials prior to being transported to the site, to ensure that it does not contain hazardous or toxic materials, as defined by the NYSDEC. The Project would not create a source of erosion on or off the site. The annular space between casing and soil would be grouted with cement/bentonite, according to AWWA standard AI 00-06 to prevent surface runoff from entering the borehole and reaching the aquifer. The well would be constructed in accordance with the New York State Department of Health (NYSDOH) requirements.</p> <p>The access road would be constructed prior to the installation of the drinking water supply well. The road would provide access for the drilling equipment and limit the amount of ground disturbance.</p> <p>The soil at the site (Howard gravelly silt loam, 3 to 8 percent slopes [82.9 percent]; Howard gravelly silt loam, 0 to 3 percent slopes [5.3 percent]; and Hamlin silt loam [11.8 percent]) is not limited for construction purposes. The soils on the majority of the Project site have a moderate potential soil-induced electrochemical or chemical action that corrodes or weakens concrete and a high potential for corrosion of uncoated steel. They are poorly suited to mechanical surface preparation but are only somewhat limited for gravel and paved roads.</p> <p>A State Pollutant Discharge Elimination System (SPDES) General Stormwater Permit would not be required because the amount of ground disturbance at the site would be less than 1 acre.</p> <p>The only impervious surface that would be created on the site would be the 900-square foot (0.02 acre, 2.9 percent of the 0.7-acre Project site) well house and the 2,900 square-foot extension of the paved road to the Project site (10.0 percent of the 0.7-acre Project site). Rain and runoff from the majority of the Project site would dissipate naturally.</p>
--	---

		Source: 14
Hazards and Nuisances including Site Safety and Noise	2	<p>Diesel fuel for the generator would be stored in an existing, permitted 2,000 gallon AST on the existing well field facility. Chemicals for the chlorinator also would be stored off-site at the existing well field facility to the west of the Project site.</p> <p>Because the Project site would not be inhabited, there would be no changes in human exposure to hazards or nuisances.</p> <p>Source: 26</p>
Energy Consumption	2	<p>The project would not result in additional energy consumption because the new well would provide redundancy, rather than added capacity. The pump and generator would operate if another well is out of service or experienced a reduction in productivity, so the well field would not require additional energy. No impacts would occur to existing nearby suppliers.</p>

Environmental Assessment Factor	Impact Code	Impact Evaluation
SOCIOECONOMIC		
Employment and Income Patterns	2	There would be a temporary minor increase in employment during construction and no increase in long-term employment.
Demographic Character Changes, Displacement	2	Because the Project site is uninhabited and no population changes would result, there would be no demographic, character, or displacement impacts.

Environmental Assessment Factor	Impact Code	Impact Evaluation
COMMUNITY FACILITIES AND SERVICES		
Educational and Cultural Facilities	2	Because the Project involves no changes in population, there would be no impact on demand for educational or cultural facilities.
Commercial Facilities	2	Because the Project involves no changes in population, there would be no impact on demand for commercial facilities.

Health Care and Social Services	2	Because the Project involves no changes in population, there would be no impact on demand for health care and social services.
Solid Waste Disposal / Recycling	2	There would be no increase in solid waste disposal or recycling from operation of the Project. Construction may result in a temporary increase in solid waste.
Waste Water / Sanitary Sewers	2	The proposed Project would not generate wastewater and sewage. The wastewater and sewage generated at the existing well field would continue to occur at the existing operator's restroom that has one sink and one water closet, and is not located on the Project site.
Water Supply	1	<p>The Town of Rotterdam's water originates from the Great Flats Aquifer, adjacent to the Mohawk River. Water from the aquifer is pumped into the system through a series of four wells in Water District #5, on Rice Road in the Town of Rotterdam. Pumping capacity is 10,000, 000 gallons per day (gpd), and a maximum peak day averages 9,100,000 gallons. Water District #5 provides 5.2 million gallons of storage capacity and serves a population of approximately 26,000. Over 90 percent of the accounts in Water District #5 are unmetered residential accounts.</p> <p>The Project would ensure that the Rotterdam Water District has a reliable supply of potable water for residents during a flood, would provide additional capacity for the town, and would benefit residents of the Town of Rotterdam. It would not adversely affect the City of Schenectady well field, a half-mile away, because the new well would provide redundancy, rather than added capacity.</p> <p>Source: 13</p>
Public Safety - Police, Fire and Emergency Medical	2	Because the Project involves no changes in population, there would be no impact on demand for police, fire, or emergency medical services.
Parks, Open Space and Recreation	2	Because the Project involves no changes in population, there would be no impact on demand for parks, open space, or other recreational facilities.
Transportation and Accessibility	2	Because the Project involves no changes in population, there would be no impact on use of transportation

		infrastructure.
--	--	-----------------

Environmental Assessment Factor	Impact Code	Impact Evaluation
NATURAL FEATURES		
Unique Natural Features, Water Resources	2	The Project site is on undeveloped but previously disturbed land in an existing rural area and contains no unique natural features or water resources. Source: 7, 14, 17, 18, 19, 20, 21, 22, 27
Vegetation, Wildlife	3	Consultation with the USFWS found that the proposed endangered northern long-eared bat may occur in the boundary of or may be affected by the project. On October 29, the USFWS concurred with the determination that the project may affect, but is not likely to adversely affect the northern long-eared bat. Several migratory birds of concern that could be affected by the proposed Project also were identified in the online review process. The USFWS recommended doing tree removal in winter to avoid any potential for impacting any bats that could be present, and that practice would be beneficial to migratory birds; however, there are no trees requiring removal on the Project site. (See Appendix C , USFWS and NYNHP Correspondence, and Appendix A , Figures, Selected Protected Species.) Source: 12,
Other Factors	2	No additional factors would be impacted by the project, and no additional impacts would occur.

Additional Studies Performed:

A Phase IA/IB Archeological Investigation was completed for the Project in October 2015

Field Inspection (Date and completed by):

The Phase IB Archeological Field Investigation was done on September 18, 2015 with a site walkover, visual surface survey and fieldwork in the Project area.

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

1. New York State. 2013. State of New York Action Plan for Community Development Block Grant Program Disaster Recovery (Action Plan, issued April 25, 2013, amended July 3, 2012) New York State. 2013.
2. New York State. 2014. City of Schenectady and Town of Rotterdam NY Rising Community Reconstruction Plan. March 2014).
3. Federal Aviation Administration. Report to Congress – National Plan of Integrated Airport Systems. Internet Website:
http://www.faa.gov/airports/planning_capacity/npias/reports/media/npias-2015-2019-report-appendix-b-part-4.pdf.
4. Federal Aviation Administration. Report to Congress – National Plan of Integrated Airport Systems. Internet Website:
http://www.faa.gov/airports/planning_capacity/npias/reports/media/npias-2015-2019-report-narrative.pdf.
5. New York State Department of State, Office of Communities and Waterfronts – Coastal Boundary Map. Internet Website: http://appext20.dos.ny.gov/coastal_map_public/map.aspx.
6. US Fish and Wildlife Service. 2015. Coastal Barrier Resources Mapper – Beta. Internet Website: <http://www.fws.gov/cbra/Maps/Mapper.html>.
7. United States Federal Emergency Management Agency. Current FEMA issued Flood Maps. Internet Website:
<https://msc.fema.gov/portal/search?AddressQuery=49%20rice%20road%2C%20rotterdam%2C%20ny#searchresultsanchor>.
8. United States Environmental Protection Agency. Green Book Nonattainment Areas. Internet Website: <http://www.epa.gov/oaqps001/greenbk/ancl.html>.
9. New York State Department of Environmental Conservation Bulk Storage Database Search. Internet Website: <http://www.dec.ny.gov/cfm/external/derexternal/index.cfm?pageid=4>.
10. New York State Department of Environmental Conservation Environmental Site Remediation Database Search. Internet Website:
<http://www.dec.ny.gov/cfm/external/derexternal/index.cfm?pageid=3>.
11. United States Environmental Protection Agency. 2015. NEPAssist Internet Mapping Tool. <http://nepassisttool.epa.gov/nepassist/nepamap.aspx?wherestr=Rotterdam%2C+NY>.
12. US Fish and Wildlife Service. 2015. Letter of response to October 22, 2015, letter. October 29, 2015.
13. Town of Rotterdam. 2014. Annual Water Quality Report for 2014, Water District #3 and Water District #5. Internet Website: <http://rotterdamny.org/blob/files.ashx?ID=16108>.
14. United States Department of Agriculture. Natural Resources Conservation Service. Internet Website: <http://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx>.

15. Saint Regis Mohawk THPO. 2015. Letter stating no concerns. October 29, 2015.
16. Stockbridge-Munsee Mohican THPO. Letter stating no concerns. October 22, 2015.
17. U.S. Environmental Protection Agency Region 2. 2007. Sole Source Aquifers for NY and NJ. September 2007. Internet Website:
http://www.epa.gov/region02/gis/data/downloads/r2sole_source_aquifer.zip.
18. U.S. Fish and Wildlife Service. 2014. National Wetlands Inventory, New York. Internet Website: <http://www.fws.gov/wetlands/Data/State-Downloads.html>.
19. New York State Department of Environmental Conservation. Regulatory Freshwater Wetlands – New York State – 2002 GIS data. Internet Website:
<http://cugir.mannlib.cornell.edu/datatheme.jsp?id=111>.
20. New York State Department of Environmental Conservation. Tidal Wetlands - NYC and Long Island - 1974. Internet Website: <https://gis.ny.gov/gisdata/inventories/details.cfm?DSID=1139>
21. National Wild and Scenic Rivers System. Internet Website: <http://www.rivers.gov/new-york.php>.
22. New York State Department of Environmental Conservation. Wild Scenic and Recreational Rivers. Internet Website: <http://www.dec.ny.gov/permits/32739.html>.
23. USDA Forest Service - Automated Lands Program. 2015. Wild and Scenic Rivers GIS data. November 30, 2015.
24. New York State Department of Environmental Conservation. Potential Environmental Justice Areas in the City of Schenectady, Schenectady County, New York. Internet Website:
http://www.dec.ny.gov/docs/permits_ej_operations_pdf/schenectadyej.pdf.
25. Town of Rotterdam Town Board. 2001. Town of Rotterdam, Schenectady County, New York, Comprehensive Plan and Final Generic Environmental Impact Statement. December 5, 2001. Internet Website:
http://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&cad=rja&uact=8&ved=0ahUKEwjKg_qe5O3JAhWKRyYKHfloAlUQFggdMAA&url=http%3A%2F%2Fdocuments.dps.ny.gov%2Fpublic%2FCommon%2FViewDoc.aspx%3FDocRefId%3D%257B2BED6A48-F3C4-418E-B90E-9E7E65BF9F4B%257D&usg=AFQjCNGD3hJAZBcQFzjmmkEvMYxUAa0Og.
26. New York State Department of Environmental Conservation. 2015. Regulation of Petroleum Tanks. Internet Website: <http://www.dec.ny.gov/chemical/2642.html>.
27. New York State Department of Environmental Conservation (NYSDEC). Environmental Assessment Form Mapping Tool. <http://www.dec.ny.gov/imsmaps/ERM/viewer.htm>.

List of Appendices

Appendix A	Figures
Appendix B	Floodplains
Appendix C	USFWS and NYNHP Correspondence
Appendix D	Soils
Appendix E	SHPO Correspondence and Phase IA/IB Archeological Investigation
Appendix F	Tribal Correspondence
Appendix G	Sole Source Aquifers
Appendix H	Topographic Map
Appendix I	SEQR Documentation

List of Permits Obtained or Required:

1. A local floodplain development permit will be obtained prior to construction activities.
2. Water Supply Permit from NYSDEC – Joint Application Form submitted to NYSDEC with Water Withdrawal Application Supplement WW-1 and engineering report.
3. Approval of Plans and Specifications from NYS Department of Health (NYSDOH) – Plans and specifications were submitted to NYSDOH along with the same permit application information submitted to NYSDEC that needs NYSDOH approval prior to issuing Water Supply Permit.
4. Local Building Permit from the Town of Rotterdam for the well house – No building permits are needed for the construction of the well. Design of the well house is underway but has not been completed. Once plans and specifications for the well house have been completed, they will be submitted to the Town of Rotterdam for issuance of the building permit.

Public Outreach [24 CFR 50.23 & 58.43]:

On February 6, 2016, a combined Notice of Finding of No Significant Impact and Intent to Request Release of Funds would be published in the Schenectady Daily Gazette. Any individual, group, or agency may submit written comments on the Environmental Review Record to:

Thomas J. King, Esq.
Director – Bureau of Environmental Review and Assessment
Assistant General Counsel
Governor’s Office of Storm Recovery
99 Washington Avenue Suite 1224
Albany, New York 12260
Office: (518) 473-0015
Mobile: (646) 417-4660
thomas.king@stormrecovery.ny.gov

Cumulative Impact Analysis [24 CFR 58.32]:

The Project is not expected to trigger cumulative impacts, including the degradation of important natural resources, socioeconomic resources, human health, recreation, quality of life issues, and cultural and historic resources. The Project is not of a scale large enough to contribute significantly to cumulative impacts. It would create positive impacts, as it would ensure that the Rotterdam Water District has a reliable supply of potable water for residents during a flood and would provide additional capacity for the town and would benefit residents of the Town of Rotterdam.

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

Proposed Project. As fully described in this Environmental Assessment, the Rotterdam District #5 Project would drill a new well at the existing well field in the Town of Rotterdam, Schenectady County, New York.

Alternative Sites Alternative. Other properties in Rotterdam would not be suitable for development because they are:

- Not owned by Wellhead District #5, or
- Too distant from the existing Rotterdam well field and the associated infrastructure.

No Action Alternative [24 CFR 58.40(e)]:

Not undertaking the Project would not be consistent with the goals and objectives of the City of Schenectady and Town of Rotterdam NYRCR and other local and state plans. The town would not develop a key component of the resilient infrastructure it needs to function during emergency situations. Without the project, the communities’ water system would continue to be vulnerable to flood damage. Under the No Action alternative, the town’s goals to minimize future impacts from flooding would be limited. Providing a self-sufficient drinking water supply facility for the town if the other wells become inoperative, with an existing backup generator for power, would be delayed.

Summary of Findings and Conclusions:

The Project would be an appropriate use of the Project site. The position of the town is that the project would enhance the resilience of the Rotterdam Water District by ensuring that the district will have potable water during a major flood event and by providing additional groundwater pumping capacity for the Town of Rotterdam. According to the Rotterdam Junction Brownfield Opportunity Area (BOA) Nomination Study (2013), the absence of protected wellheads is one of the constraints on future development. The Project would enable Rotterdam to develop the community in a more resilient way. The Project would not significantly alter the character or resources of the area. In most cases, the Project would result in potential benefits by providing a more reliable water supply for residents, businesses, and community services. The proposed Project would not result in a significant impact on the quality of the human environment or result in other direct, indirect, or cumulative impacts. The Project would comply with all relevant regulations listed in 24 CFR subparts 58.5 and 58.6.

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.

Law, Authority, or Factor	Mitigation Measure
Clean Air Act	All Project activities would comply with applicable federal, state, and local laws and regulations regarding construction emissions, including but not limited to NYCRR, NYSDEC Air Quality Management Plan, and the New York SIP. All necessary measures would be used to minimize fugitive dust emissions during activities, such as demolition of existing structures. The preferred method for dust suppression is water sprinkling.
Flood Insurance	Flood insurance must be obtained and maintained in perpetuity for any proposed structure funded in whole or in part with CDBG-DR grant funds located in the floodplain. Therefore, flood insurance for the Project would be obtained and maintained in perpetuity. This requirement would no longer apply if evidence is provided to GOSR that FEMA has issued a map revision or amendment removing the well house from the floodplain. The town intends to apply to FEMA for a Letter of Map Amendment (LOMA) to the effective

	National Flood Insurance Program (NFIP) map for the Project, since the Project would raise the well house above the floodplain.
Contamination and Toxic Substances	All Project-related solid waste generated during construction would be managed and transported in accordance with the NYS solid and hazardous waste rules.
Soil Suitability/ Slope/ Erosion/ Drainage/ Storm Water Runoff	The annular space between casing and soil would be grouted with cement/bentonite, according to AWWA standard AI 00-06 to prevent surface runoff from entering the borehole and reaching the aquifer. The well would be constructed in accordance with the New York State Department of Health (NYSDOH) requirements.
Soil Suitability/ Slope/ Erosion/ Drainage/ Storm Water Runoff	BMPs, such as silt fence and erosion prevention, would be used, if required by permits or agency discretion. State and local permitting requirements would incorporate BMPs to eliminate erosion impacts during construction.

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: February 4, 2016

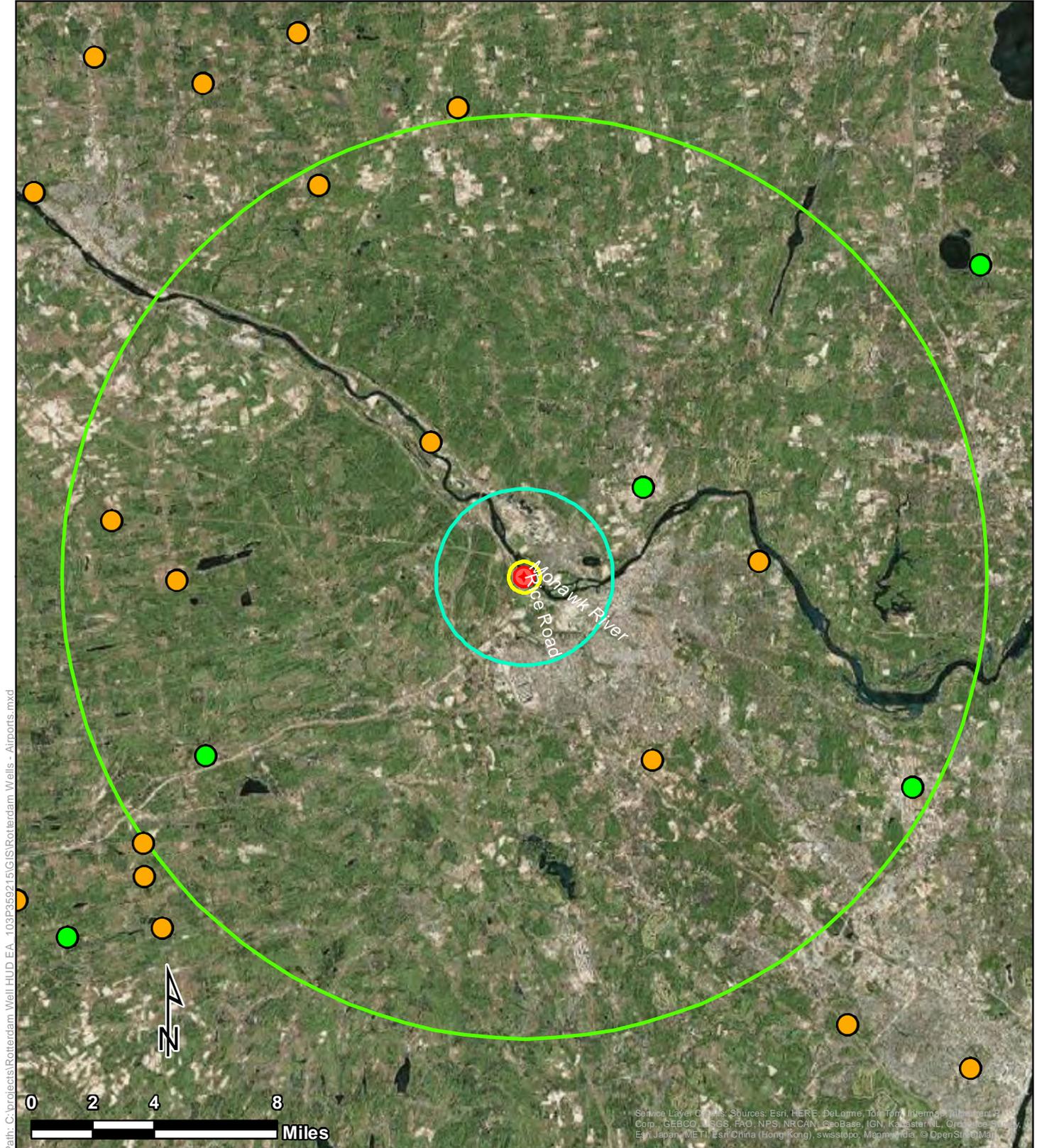
Name/Title/Organization: Genevieve Kaiser, Senior Environmental Planner, Tetra Tech, Inc.

Certifying Officer Signature:  Date: February 4, 2016

Name/Title: Thomas J. King, Assistant General Counsel and Certifying Officer, Governor's Office of Storm Recovery

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).

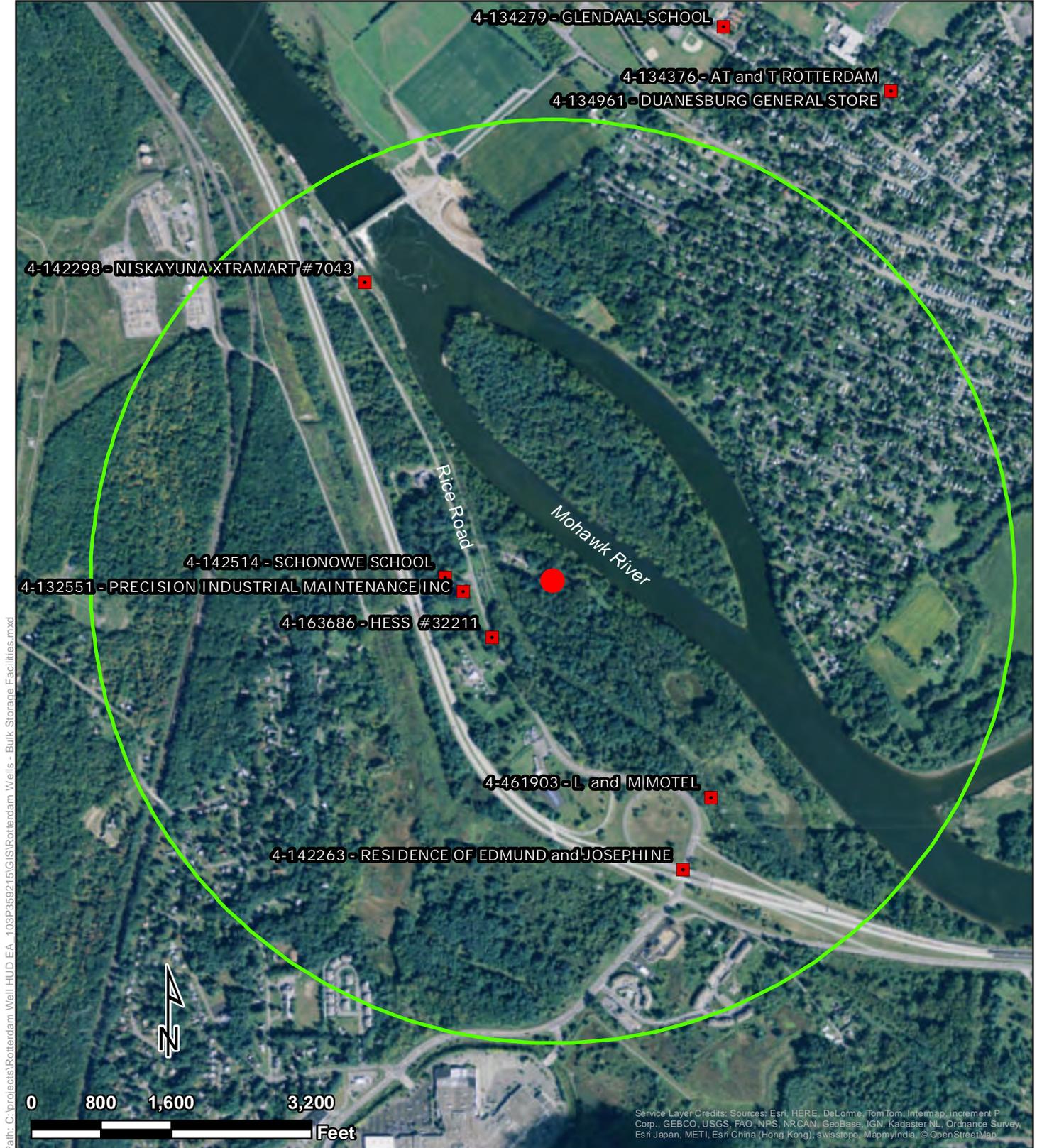
APPENDIX A
FIGURES



- Legend**
- Airports**
- Public Use
 - Private Use
 - Project Area
 - 2,500-Foot Project Site Buffer
 - 15,000-Foot Project Site Buffer
 - 15-Mile Project Site Buffer

Airports

Rotterdam District #5 Well
Town of Rotterdam,
Schenectady County, New York



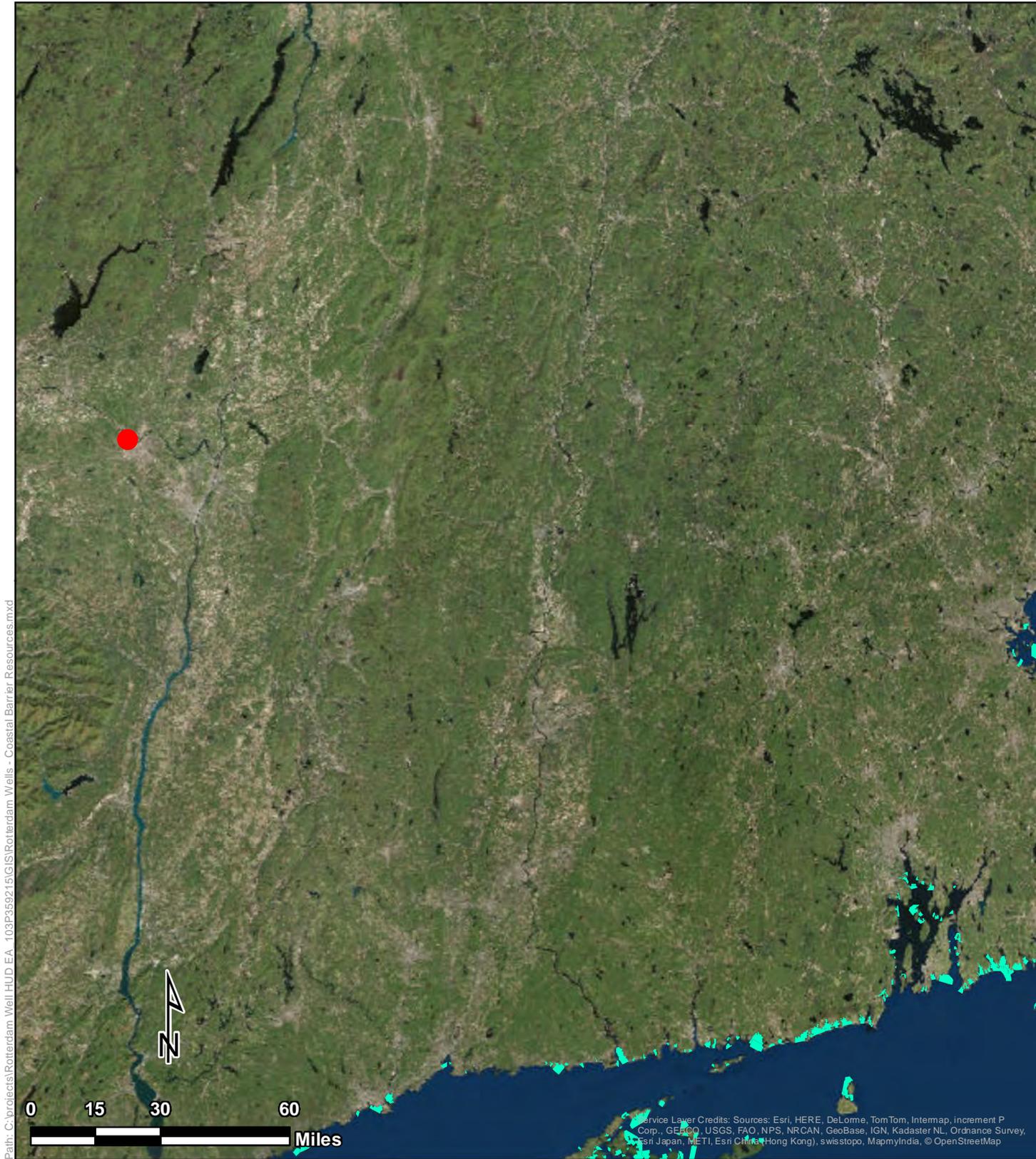
Path: C:\projects\Rotterdam Well HUD EA - 103P359215\GIS\Rotterdam Wells - Bulk Storage Facilities.mxd

Legend

- Project Area
- One Mile Project Site Buffer
- Bulk Storage Facilities**
 - Chemical Bulk Storage
 - Petroleum Bulk Storage

Bulk Storage Facilities

Rotterdam District #5 Well
Town of Rotterdam,
Schenectady County, New York



Coastal Barrier Resources

Legend

- Project Area
- CBRS Polygons

Rotterdam District #5 Well
Town of Rotterdam,
Schenectady County, New York



Welcome to the NYS Coastal Boundary Map

🖱️ 🗺️ 🖨️ 📄 Help

🔍 Search

Address:

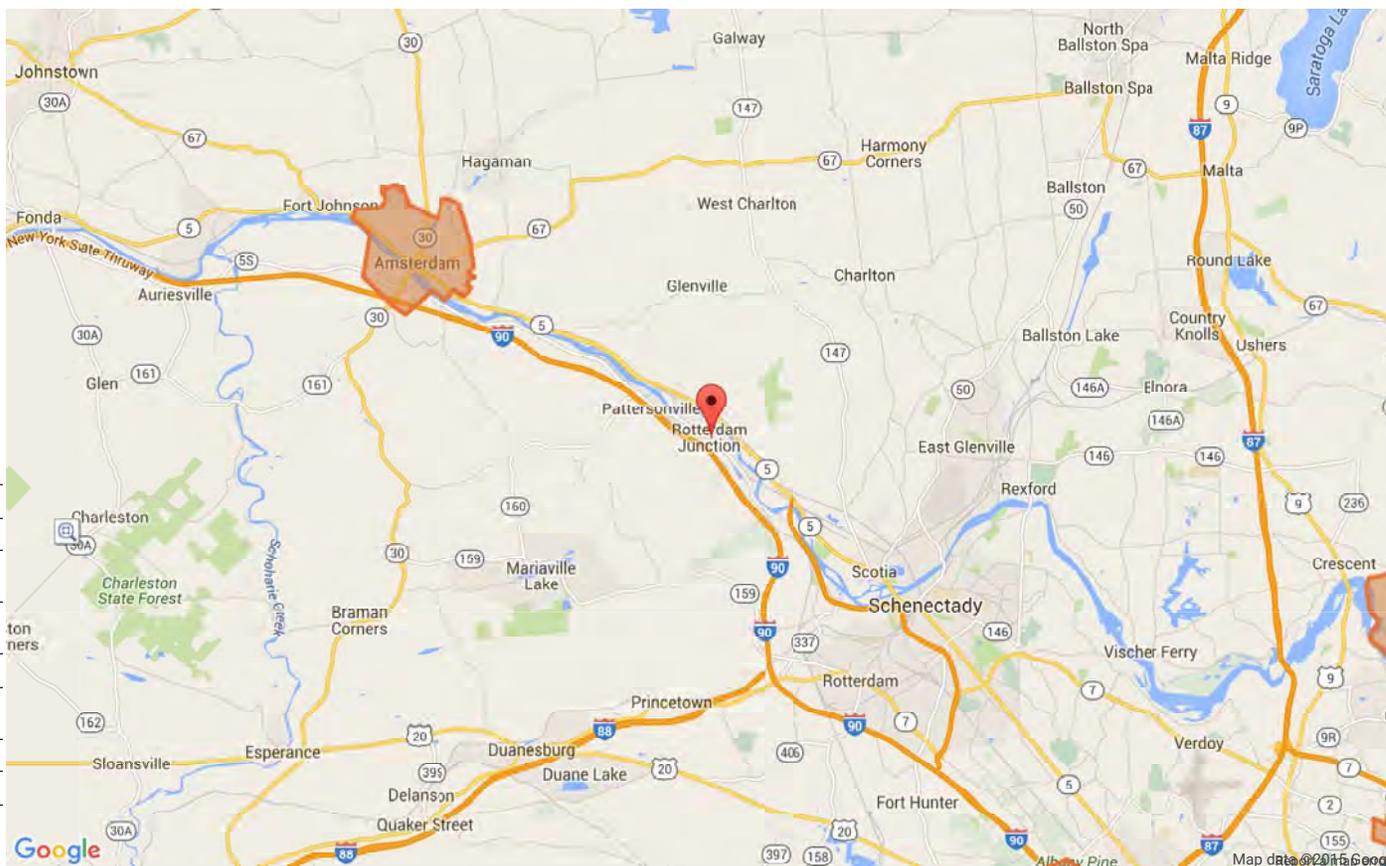
River Road, Rotterdam

Find Address

Please note that the address marker is automatically placed along the street while certain activities may take place along the waterward property boundary. Please make sure to click and drag the marker to the exact location of the proposed activity for an accurate assessment of whether or not the activity would be located within any DOS Special Management Areas.

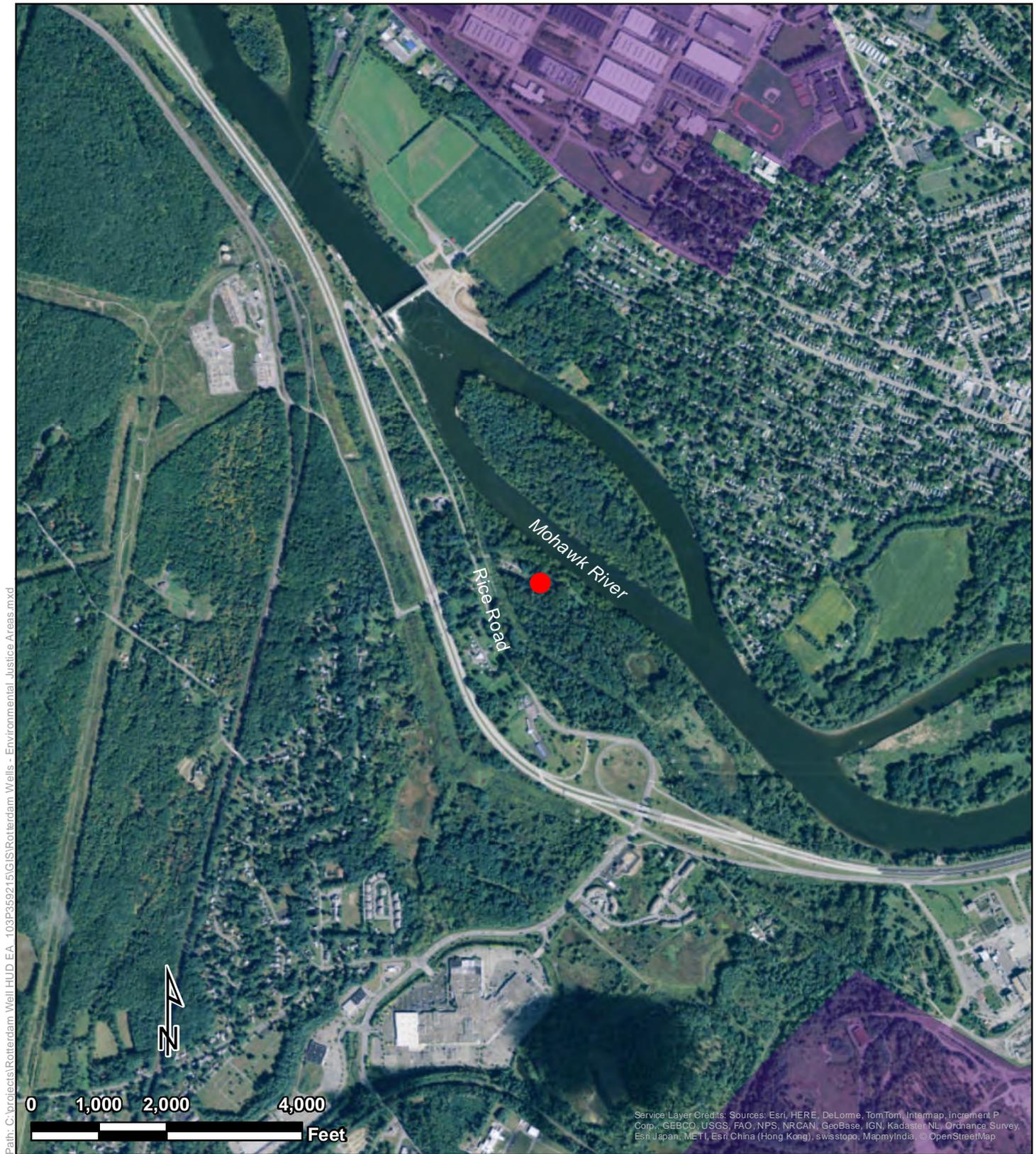
☑ Layers

- Landward Coastal Boundary
- Scenic Areas
- Local Waterfront Revitalization Areas
- Local Waterfront Revitalization Program Communities
- Significant Coastal Fish and Wildlife Habitats
- DOS Identified Canals
- Long Island Sound CMP (excludes LWRP communities)
- Federally Owned Lands
- Native American Lands



Latitude: 42.803 Longitude: -75.399

The New York State Department of State makes every effort to post accurate and reliable information on this website. The Department of State does not guarantee or warrant that the information on this web site is complete, accurate or current. The information on this website is intended solely for the purpose of electronically providing the public with general coastal consistency-related information and convenient access to data resources. The Department of State neither assumes responsibility for the use or application of any material posted on this website nor responsibility for any error, omission or other discrepancy between the electronic and printed versions of documents.



Environmental Justice Areas

- Legend**
- Project Area
 - Environmental Justice Areas

Rotterdam District #5 Well
 Town of Rotterdam,
 Schenectady County, New York



Path: C:\projects\Rotterdam Well HUD EA - 103P359215\GIS\Rotterdam Wells - Flood Zones.mxd

Service Layer Credits: Sources: Esri, HERE, DeLorme, TomTom, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, MapmyIndia, © OpenStreetMap

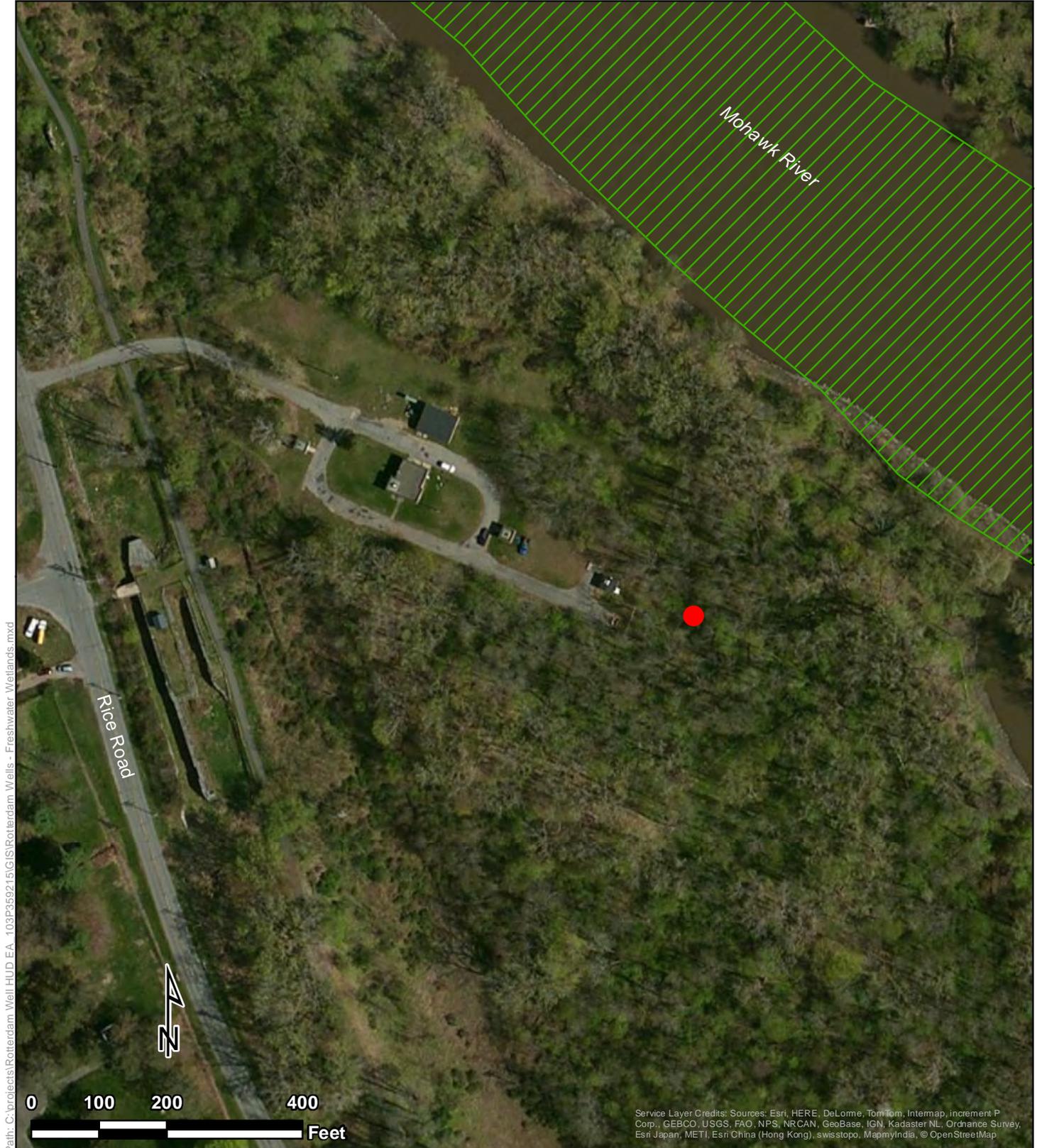
Legend

-  Project Area
-  Zone AE- within the 1% annual chance flood
-  Zone AE- floodway
-  Zone X- within the 0.2% annual chance of flood
-  Zone X- areas determined to be outside

Flood Zones

Rotterdam District #5 Well
Town of Rotterdam,
Schenectady County, New York



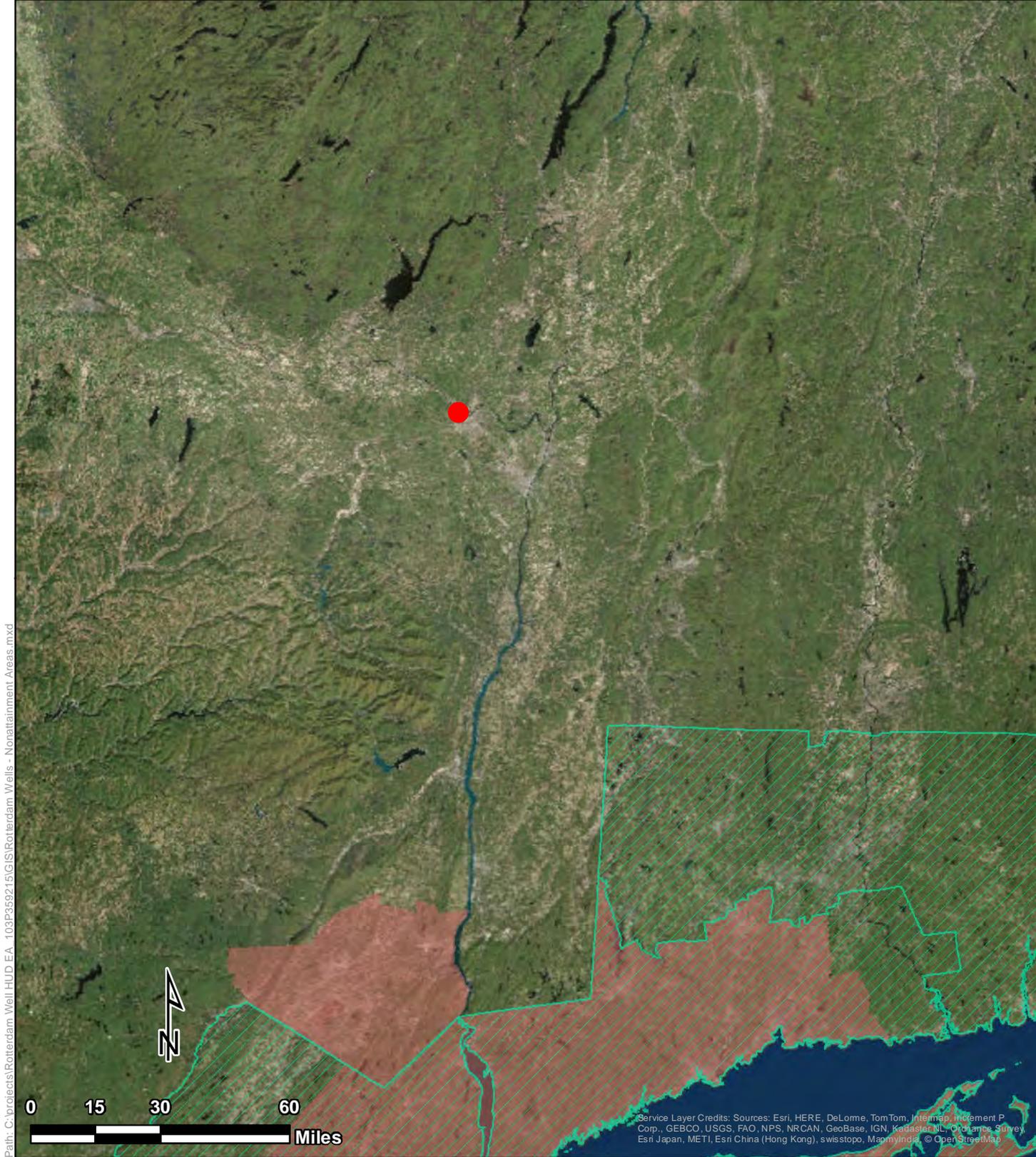


Freshwater Wetlands

Rotterdam District #5 Well
 Town of Rotterdam,
 Schenectady County, New York

- Legend**
- Project Area
 - NYS Freshwater Wetlands Buffer
 - NYS Freshwater Wetlands
 - NWI Wetlands**
 - Lake



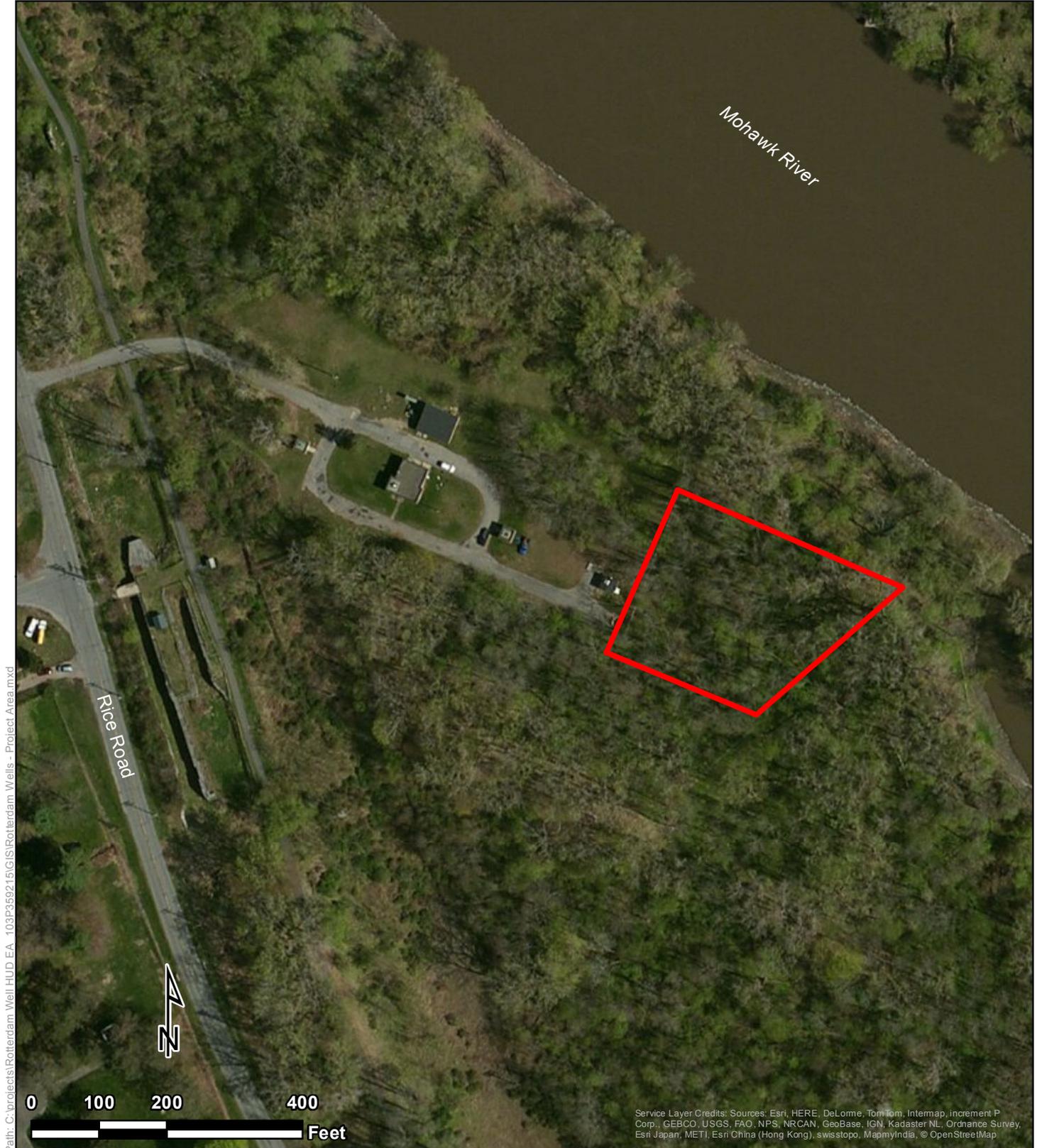


Nonattainment Areas

Rotterdam District #5 Well
 Town of Rotterdam,
 Schenectady County, New York

- Legend**
- Project Area
 - Nonattainment Areas**
 - Pb 2008 Standard
 - SO2 2010 Standard
 - Ozone 8-hour 2008 Standard
 - PM25 2006S Standard

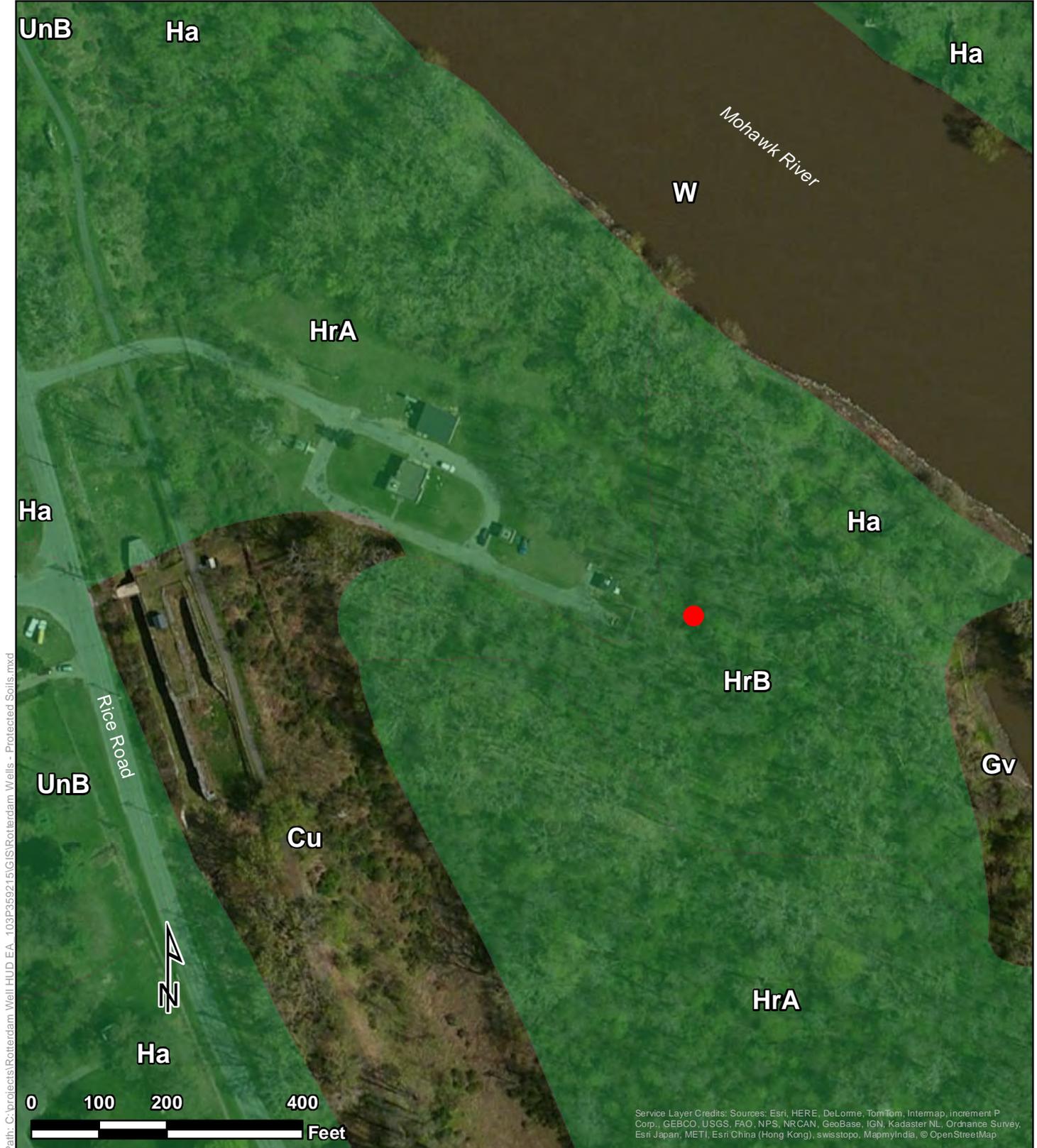




Project Area

Legend
 Project Area

Rotterdam District #5 Well
 Town of Rotterdam,
 Schenectady County, New York

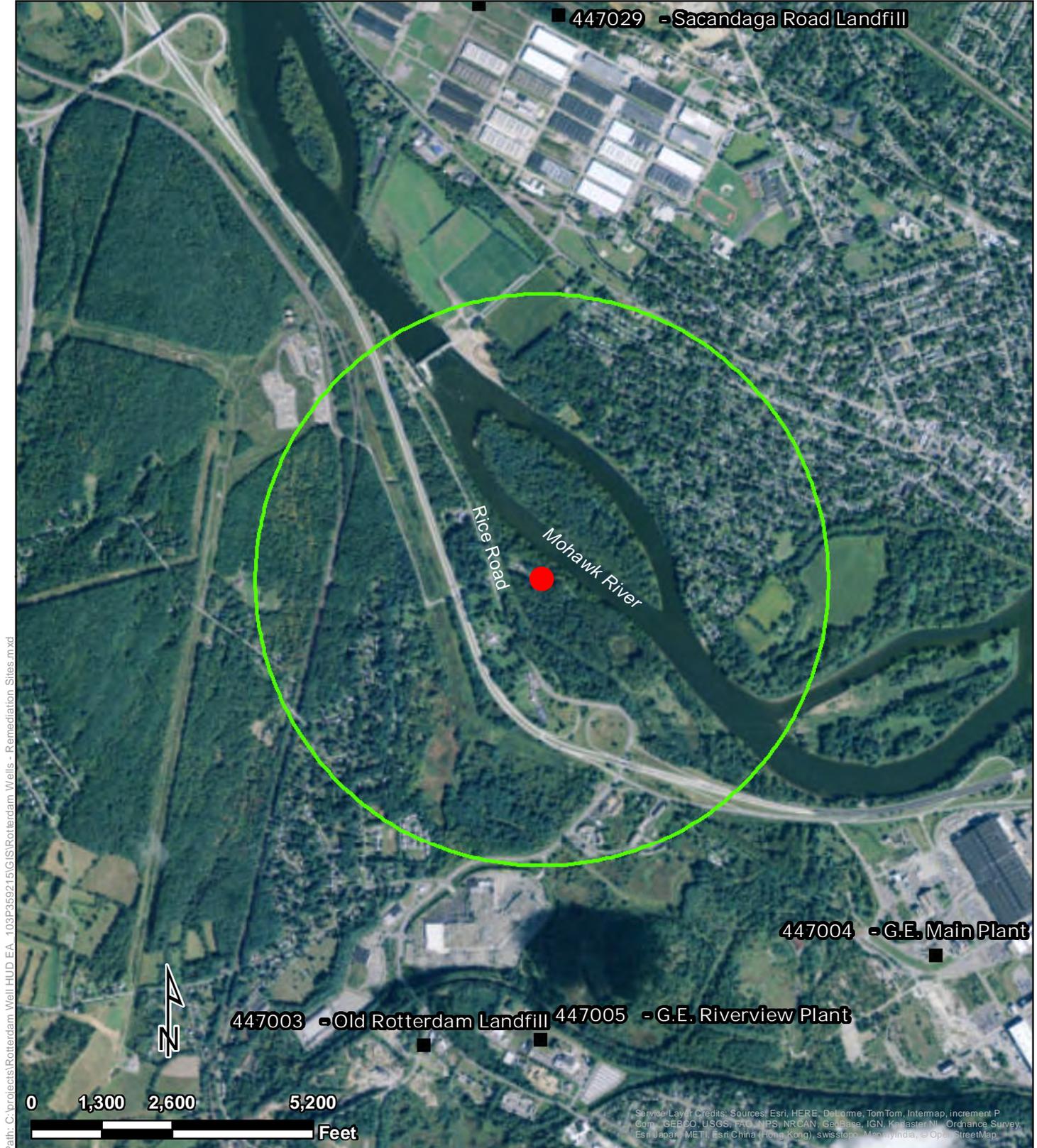


Legend

- Project Area
- Prime Farmland Soils**
- All areas are prime farmland
- Farmland of statewide importance
- Prime farmland if drained

Protected Soils

Rotterdam District #5 Well
 Town of Rotterdam,
 Schenectady County, New York



Path: C:\projects\Rotterdam Well HUD EA - 103P359215\GIS\Rotterdam Wells - Remediation Sites.mxd

Service Layer Credits: Sources: Esri, HERE, DeLorme, TomTom, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeBCo, IGN, Kartastar NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, MapboxIndia, © OpenStreetMap

Remediation Sites

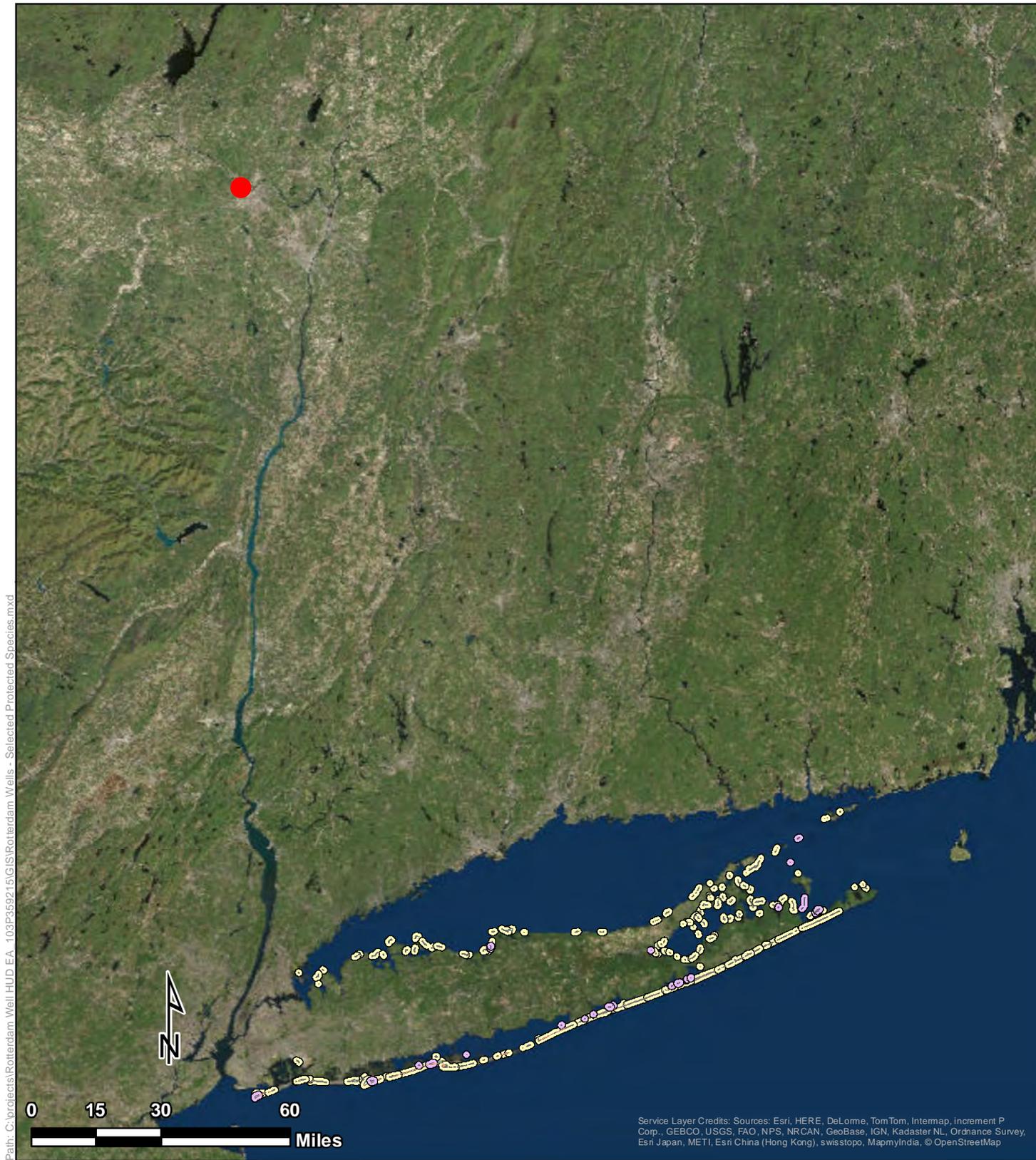
Rotterdam District #5 Well
Town of Rotterdam,
Schenectady County, New York

Legend

- Project Area
- One Mile Project Site Buffer
- State Superfund Program Hazardous Waste Sites



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Legend

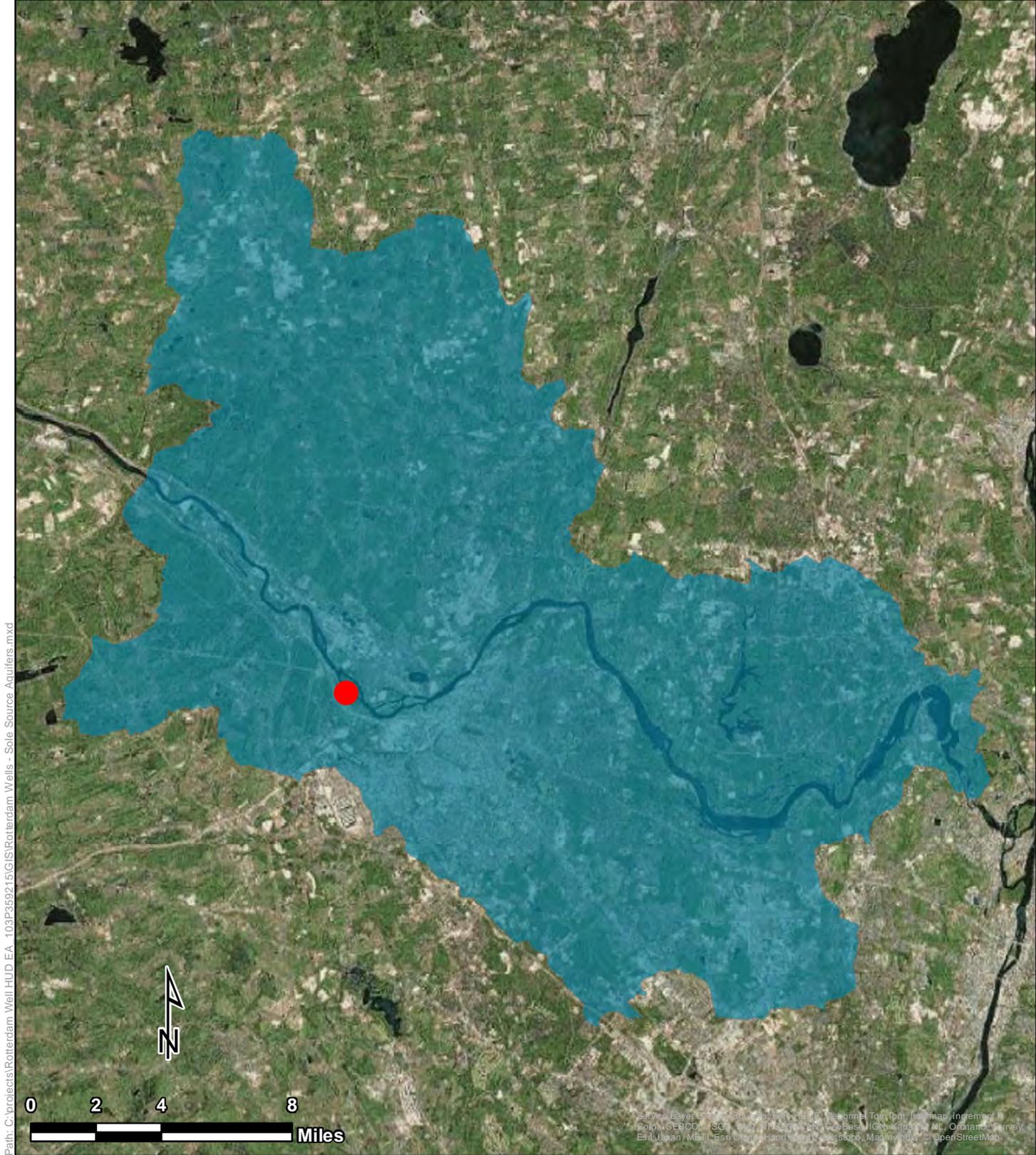
- Project Area
- Seabeach Amaranth
- Roseate Tern
- Roseate Tern 1000M Buffer
- Piping Plover
- Piping Plover Buffer

Selected Protected Species

Rotterdam District #5 Well
 Town of Rotterdam,
 Schenectady County, New York



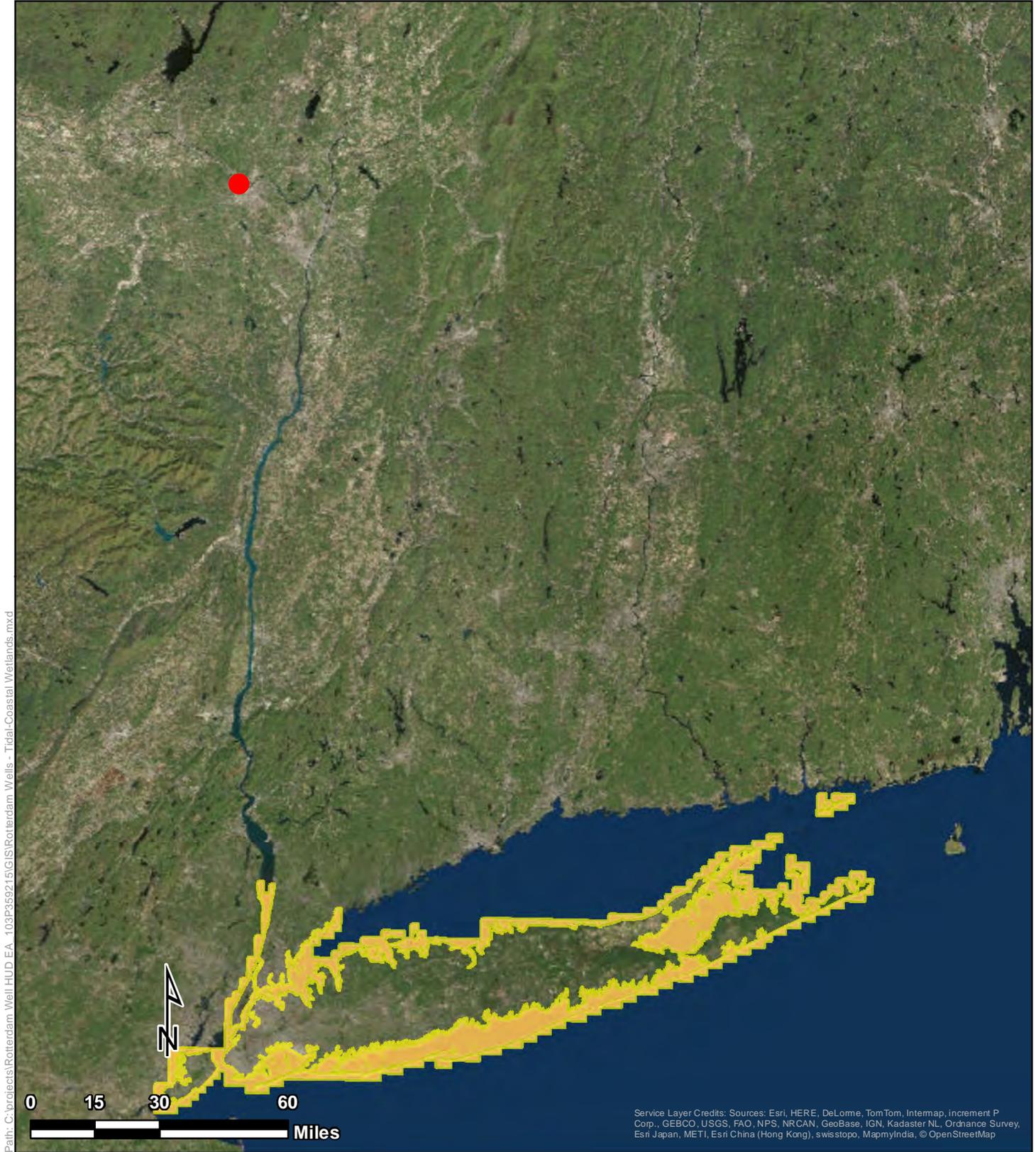
Tetra Tech, Inc



Sole Source Aquifers

- Legend**
- Project Area
 - Schenectady-Niskayuna SSA

Rotterdam District #5 Well
 Town of Rotterdam,
 Schenectady County, New York



Tidal-Coastal Wetlands

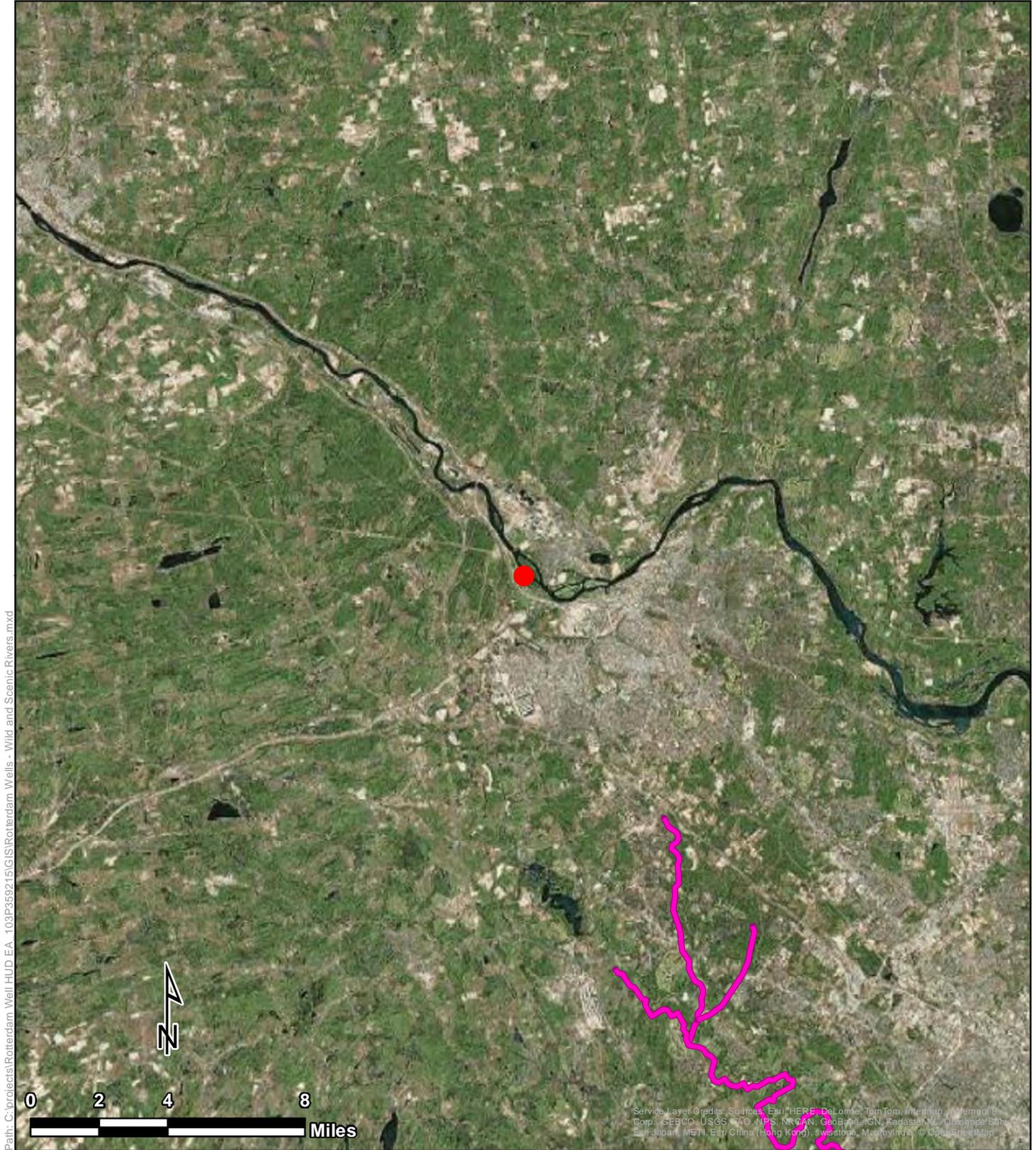
Rotterdam District #5 Well
 Town of Rotterdam,
 Schenectady County, New York

Legend

- Project Area
- Tidal - Coastal Wetlands
- Tidal - Coastal Wetlands 300ft Buffer



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Wild and Scenic Rivers

Legend

- Project Area
- Wild and Scenic Rivers

Rotterdam District #5 Well
 Town of Rotterdam,
 Schenectady County, New York



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APPENDIX B
FLOODPLAINS

NOTES TO USERS

This map is for use in administering the National Flood Insurance Program. It does not necessarily identify all areas subject to flooding, particularly from local drainage sources of small size. The **community map repository** should be consulted for possible updated or additional flood hazard information.

To obtain more detailed information in areas where **Base Flood Elevations (BFEs)** and/or **floodways** have been determined, users are encouraged to consult the Flood Profiles and Floodway Data and/or Summary of Stillwater Elevations tables contained within the Flood Insurance Study (FIS) Report that accompanies this FIRM. Users should be aware that BFEs shown on the FIRM represent rounded whole-foot elevations. These BFEs are intended for flood insurance rating purposes only and should not be used as the sole source of flood elevation information. Accordingly, flood elevation data presented in the FIS Report should be utilized in conjunction with the FIRM for purposes of construction and/or floodplain management.

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NGS Information Services
NOAA, NNGS12
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SSMC-3, #9202
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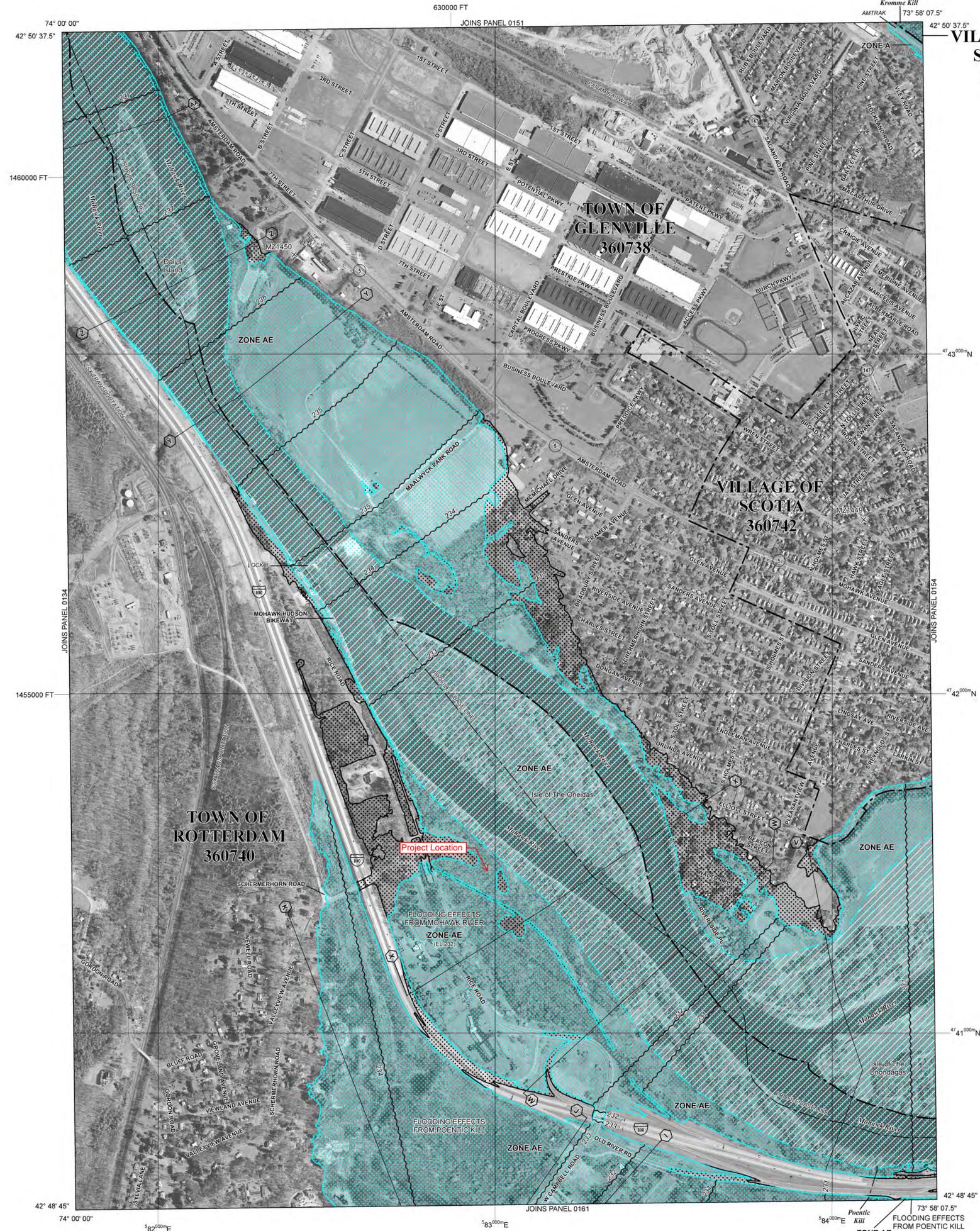
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VILLAGE OF SCOTIA 360742

LEGEND

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- OTHER AREAS**
- ZONE X** Areas determined to be outside the 0.2% annual chance floodplain.
- ZONE D** Areas in which flood hazards are undetermined, but possible.
- COASTAL BARRIER RESOURCES SYSTEM (CBRS) AREAS
- OTHERWISE PROTECTED AREAS (OPAs)
- CBRS areas and OPAs are normally located within or adjacent to Special Flood Hazard Areas.
- 1% Annual Chance Floodplain Boundary
- 0.2% Annual Chance Floodplain Boundary
- Floodway boundary
- Zone D boundary
- CBRS and OPA boundary
- Boundary dividing Special Flood Hazard Area Zones and boundary dividing Special Flood Hazard Areas of different Base Flood Elevations, flood depths, or flood velocities.
- Base Flood Elevation line and value; elevation in feet*
- Base Flood Elevation value where uniform within zone; elevation in feet*

*Referenced to the North American Vertical Datum of 1988

- Cross section line
- Transect line
- Geographic coordinates referenced to the North American Datum of 1983 (NAD 83) Western Hemisphere
- 1000-meter Universal Transverse Mercator grid values, zone 18
- 600000 FT
- 5000-foot grid ticks: New York State Plane coordinate system, East zone (FIPSZONE 3101), Transverse Mercator projection
- DX5510 X
- M.1.5
- River Mile

MAP REPOSITORIES
Refer to Map Repositories list on Map Index

EFFECTIVE DATE OF COUNTY-WIDE FLOOD INSURANCE RATE MAP
January 8, 2014

EFFECTIVE DATE(S) OF REVISION(S) TO THIS PANEL

For community map revision history prior to countywide mapping, refer to the Community Map History table located in the Flood Insurance Study report for this jurisdiction.

To determine if flood insurance is available in this community, contact your insurance agent or call the National Flood Insurance Program at 1-800-638-6620.

NATIONAL FLOOD INSURANCE PROGRAM

PANEL 0153D

FIRM FLOOD INSURANCE RATE MAP

for SCHENECTADY COUNTY, NEW YORK (ALL JURISDICTIONS)

CONTAINS:

COMMUNITY	NUMBER
GLENVILLE, TOWN OF	360738
ROTTERDAM, TOWN OF	360740
SCOTIA, VILLAGE OF	360742

PANEL 153 OF 257
MAP SUFFIX: D
(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

Notice to User: The Map Number shown below should be used when placing map orders; the Community Number shown above should be used on insurance applications for the subject community.

MAP NUMBER
36093C0153D

EFFECTIVE DATE
JANUARY 8, 2014

Federal Emergency Management Agency



One Tower Square, Hartford, Connecticut 06183

DELUXE PROPERTY COVERAGE
PART DECLARATIONS

POLICY NUMBER: H-630-0F734109-TIL-16
ISSUE DATE: 01-20-16

CAUSES OF LOSS - EARTHQUAKE - aggregate in any one policy year, for all losses covered under the Causes of Loss - Earthquake endorsement, commencing with the inception date of this policy:

Annual
Aggregate Limit

- 1. Applies at the following Building(s) numbered:

001-119 \$ 1,000,000

If more than one Annual Aggregate Limit applies in any one occurrence, the most we will pay is the highest involved Annual Aggregate Limit. The most we will pay during each annual period is the highest of the Annual Aggregate Limits shown.

CAUSES OF LOSS - BROAD FORM FLOOD - aggregate in any one policy year, for all losses covered under the Causes of Loss - Broad Form Flood endorsement, commencing with the inception date of this policy:

Annual
Aggregate Limit

- 1. Applies at the following Building(s) numbered:

001-011,013-019,022-028,050-070,074-083,
087-089,102,103,106,107,110-113 \$ 1,000,000

If more than one Annual Aggregate Limit applies in any one occurrence, the most we will pay is the highest involved Annual Aggregate Limit. The most we will pay during each annual period is the highest of the Annual Aggregate Limits shown.

EXCESS OF LOSS LIMITATION APPLIES - See Causes of Loss - Broad Form Flood endorsement.

UTILITY SERVICES

Limits of
Insurance

Direct Damage - in any one occurrence:

(See Utility Services - Direct Damage endorsement) \$ 100,000

DX TO 00 11 12

AFFIDAVIT OF PUBLICATION

STATE OF NEW YORK)
CITY AND COUNTY OF SCHENECTADY)^{ss}

Gloria Cabrera of the City of Schenectady, being duly sworn, says that she is Principal Clerk in the office of the Daily Gazette Co., published in the City of Schenectady and that the notice/advertisement, of which the annexed is a printed copy, has been regularly published in the Daily Gazette and/or Sunday Gazette as follows:

12/10/15

Sworn to or affirmed before me on 12/10/2015.

Notary Public

ALISON COOKE
COMMISSIONER OF DEEDS
MY COMMISSION EXPIRES

4/2/2017

EARLY NOTICE AND PUBLIC EXPLANATION OF A PROPOSED ACTIVITY IN A 100-YEAR FLOODPLAIN
ROTTERDAM DISTRICT #5 WELLHEAD AREA EXPANSION, TOWN OF ROTTERDAM, SCHENECTADY COUNTY, NEW YORK
Thomas King, Assistant General Counsel and Certifying Officer Governor's Office of Storm Recovery
99 Washington Avenue, Suite 1224
Albany, NY 12260
NOTIFICATION OF ACTIVITY IN A 100-YEAR FLOODPLAIN
To: All interested Agencies, Groups, and Individuals

This is to give notice that the Governor's Office of Storm Recovery (GOSR) under 24 CFR Part 58 has determined that the Rotterdam District #5 Wellhead Area Expansion Project in the Town of Rotterdam, Schenectady County, New York (Project) is located in the 100-year floodplain. GOSR is conducting an environmental review of the Project on behalf of the State of New York as the recipient of a Community Development Block Grant - Disaster Recovery (CDBG-DR) funds from the US Department of Housing and Urban Development (HUD) under 42 USC 5304(g) and 70 Fed. Reg. 62,182 (Oct. 16 2014). As required by Executive Order 11988, in accordance with HUD regulations 24 CFR 55.20 Subpart C, Procedures for Making Determinations on Floodplain Management and Protection of Wetlands, GOSR will be identifying and evaluating practicable alternatives to locating the action in the floodplain, as well as potential impacts on the floodplain.

Pursuant to the Community Development Block Grant-Disaster Recovery (CDBG-DR) Program and Federal Register Notices 78 Fed. Reg. 14329, 78 Fed. Reg. 69104, and 79 Fed. Reg. 62194 (Notices), published March 5, 2013, November 18, 2013, and October 16, 2014, respectively, the State of New York has been allocated approximately \$4.4 billion of CDBG-DR funds for storm recovery activities, including but not limited to the acquisition, demolition, reconstruction, improvement, financing and use of existing properties in storm-impacted communities and counties.

A portion of this funding is proposed to be used for the Flood Protection of the Rotterdam District #5 Well Heads Project to drill a new well and elevate the well above the 100- and 500-year floodplain at Rotterdam District #5 facility located at 49 Rice Road, Rotterdam, Schenectady County, New York. The new well would be protected by a well house similar in design to that of the existing well house and on-site building. Construction activities would include site preparation, well drilling and testing, site grading, drain installation, and site restoration post-construction. Based on the available site plan, it is estimated that the footprint of disturbance would mea-

sure approximately 172 by 185 feet and cover 0.7 acre. This area would be elevated approximately 6.5 feet above sea level to an elevation of 238.5 feet, or 0.5 feet above the 500-year floodplain. The proposed Project is designed to be a self-sufficient drinking water supply facility for the town in the event that the other wells become inoperative for any reason with an existing back-up generator for power. The well would serve as a back-up and add reliability to the water supply system. The proposed Project would benefit residents of the Town of Rotterdam. The proposed Project site is on a 9.38-acre parcel that is owned by Rotterdam Water District #5. It is currently undeveloped and wooded. The proposed Project site is surrounded on three sides by wooded areas, and is adjacent to the existing wellhead facility to the northwest. The Mohawk River is approximately 392 feet from the proposed new well.

Approximately 7.0 acres of the proposed Project parcel is within Special Flood Hazard Area (SFHA) Zone AE (areas of 100-year flood where base flood elevation have been determined), as indicated on the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) Community Panel Number 36093C0153D, dated January 8, 2014. Areas designated as a SFHA are those subject to inundation by the 1 percent annual chance flood (e.g., a 100-year flood), also known as the base flood.

There are three primary purposes for this notice. First, citizens who may be affected by activities in floodplains and those who have an interest in the protection of the natural environment should be given an opportunity to express their concerns and provide information about these areas. Second, an adequate public notice program can be an important public educational tool. The dissemination of information about floodplains can facilitate and enhance Federal efforts to reduce the risks associated with the occupancy and modification of these special areas. Third, as a matter of fairness, when the Federal government determines it will participate in actions taking place in floodplains, it must inform those who may be put at greater or continued risk.

PUBLIC COMMENTS
Any individual, group, or agency may submit written comments on the proposed action or a request for further information to: Thomas King, Assistant General Counsel and Certifying Officer Governor's Office of Storm Recovery
99 Washington Avenue, Suite 1224
Albany, NY 12260; e-mail
NYS-CDBG_DR_ER@nyshcr.

org
Attn: Thomas King, Certifying Environmental Officer
All comments received by December 24, 2015 will be considered.
Thomas King, Assistant General Counsel and Certifying Officer
December 10, 2015
12/10 2245758

Summary of 8-Step Floodplain Analysis for the Rotterdam Water District #5 Wellhead Area Expansion

Step 1: Determine if the proposed action is in a 100-year floodplain.

This proposed action (Project) is to drill a new potable water well and elevate the well above the 100- and 500-year floodplain at Rotterdam Water District #5 facility located at 49 Rice Road, Rotterdam, Schenectady County, New York. The Project would involve establishing a well connection to existing pipes; installing a chlorinator, motor, and pump; and constructing a new building to house the pump and equipment and a paved access road.

Approximately 7.0 acres of the larger parcel that includes the Project site is within Special Flood Hazard Area (SFHA) Zone AE (areas of 100-year flood where base flood elevation have been determined), as indicated on the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) Community Panel Number 36093C0153D, dated January 8, 2014. This map is attached to this document. Areas designated as a SFHA are those subject to inundation by the 1 percent annual chance flood (e.g., a 100-year flood), also known as the base flood.

Step 2: Notify the public of the intent to locate the proposed action in a floodplain.

An early public notice of proposed activity within the 100-year floodplain was published by the Governor's Office of Storm Recovery on December 10, 2015 (see attached Early Notice and Public Explanation of a Proposed Activity in a 100-Year Floodplain). The notice requested comments from the public concerning floodplain and natural resource impacts of the proposed action. The notice also indicated that the proposed action would be evaluated for potential direct and indirect impacts associated with floodplain development and, where practicable, would be designed or modified to minimize potential adverse impacts to lives, property, and natural values within the floodplain. The notice was published in the Schenectady Daily Gazette and posted at <http://www.stormrecovery.ny.gov/environmental-docs>. The required 15-day period was conducted to allow for public comments, and comments were accepted either electronically or via written correspondence. No comments were received from the early notice concerning the Project.

Step 3: Identify and evaluate practicable alternatives to locating the proposed action in a floodplain.

Most of the Town of Rotterdam is served by the Rotterdam well field, on the north side of Rice Road abutting the Mohawk River and just inside the 500-year floodplain, which nearly flooded during recent storms. To prevent failure due to major storms, the Project would create a well head and other drinking water infrastructure protected from flooding to ensure uninterrupted supply of clean, safe drinking water.

Alternatives to the proposed action considered:

Alternative 1: Replacement at an Alternative Location

Addition of a new drinking water well to provide a backup water supply at an alternative location would not be feasible. Other properties in Rotterdam would not be suitable for development because they are either not owned by Wellhead District #5 or are too distant from the existing Rotterdam well field and associated infrastructure.

Alternative 2: No Action Alternative

Not undertaking the Project would not be consistent with the goals and objectives of the City of Schenectady and Town of Rotterdam NYRCR and other local and state plans. The town would not develop a key component of the resilient infrastructure it needs to function during emergency situations. Without the project, the communities' water system would continue to be vulnerable to flood damage.

Under the No Action alternative, the town's goals to minimize future impacts from flooding would be limited. Providing a self-sufficient drinking water supply facility for the town in the event that the other wells become inoperative, with an existing backup generator for power, would be delayed.

Step 4: Identify and describe the proposed action's direct and indirect effects associated with occupying or modifying the floodplain.

The 100-year floodplain on the 0.7-acre Project site is all previously disturbed but is currently undeveloped. The Project is within Wellhead Protection Zone 1 of the Schenectady-Niskayuna Sole Source Aquifer Designated Area, which is the most protective designation. The Project would be consistent with the regulations for this protection zone including the following:

1. All land uses and development activities other than those directly connected with the pumping and treatment of public water supplies is prohibited (with the exception of existing single family residences); and
2. The handling of hazardous, toxic, or other waste substances is prohibited.

The short-term direct impacts to the 100-year floodplain would consist of grading and construction of the proposed access road, filling the Project site to the appropriate slope, and drilling and construction of the well infrastructure and well housing. Long-term direct impacts would include an increase of impermeable surface area covered by the well house and access road, approximately 900 square feet and 2,900 square feet, respectively. The Project would slightly displace the volume of floodplain capacity. However, the modification to the floodplain fringe storage capacity would result in an increase of flood elevation in the floodway fringe of less than 12 inches. Once the water in the floodplain passes by the end of the new well fill, the water would return to preexisting levels. The proposed action represents short-term impacts to previously disturbed areas and a minor increase in the storage capacity of the 100-year floodplain.

Step 5: Identify methods to minimize the potential adverse impacts within a floodplain and to restore and preserve its natural and beneficial values.

The short-term impacts would be mitigated by best management practices for debris, dust, and erosion control during construction activities. In addition, the access road would be constructed prior to the installation of the drinking water supply well. The road would provide access for the drilling equipment and limit the amount of additional ground disturbance. The proposed well facility is designed to minimize the long-term decrease in floodplain fringe storage capacity and consequent increase of flood elevation in the floodway fringe of the well facility by minimizing the modifications to the Project site. Once the water in the floodplain passes by the end of the new well fill, the water would return to preexisting levels.

Step 6: Reevaluate the proposed action to determine if it is still practicable given its floodplain effects.

The proposed project would improve the resilience of the Rotterdam Water District #5 infrastructure to future storm events by a providing self-sufficient drinking water supply facility for the town in the event that the other wells become inoperative for any reason. The proposed Project location is the only one that would be practicable due to the location of the current well field and infrastructure. Potential effects to the floodplain during construction would be minimized by best management practices and constructing the access road prior to the well facility, and a potential long-term increase of flood elevation in the floodway fringe would be localized at the Project site.

The No Action Alternative would not be practicable because without the project the community's water system would continue to be vulnerable to flood damage.

Step 7: If the only practicable alternative is locating in a floodplain, publish a final public notice.

It has been determined that there is no practicable alternative to locating the project in the floodplain. This is due to the location of the current well field and infrastructure supplying Rotterdam Junction. The modification to the floodplain fringe storage capacity would result in an increase of flood elevation in the floodway of less than 12 inches and would be localized at the Project site. Once the water in the floodplain passes by the end of the new well fill, the water would return to preexisting levels.

A final public notice was published by the Governor's Office of Storm Recovery on January 22, 2016, (see attached Final Notice and Public Explanation of a Proposed Activity in a 100-Year Floodplain) in accordance with 24 CFR Part 55 for a minimum 7-day comment period. The final notice details the reasons why the project must be located in the floodplain, a list of alternatives considered, and all mitigation measures taken to minimize adverse impacts and preserve natural and beneficial floodplain values.

All comments received during the comment period will be responded to and fully addressed prior to funds being committed to the proposed project, in compliance with Executive Order 11988 or 24 CFR Part 55.

Step 8: The proposed action can be implemented after steps 1 through 7 have been completed.

Implementation of the proposed action may require additional local and state permits, which could place additional design modifications or mitigation requirements on the project.

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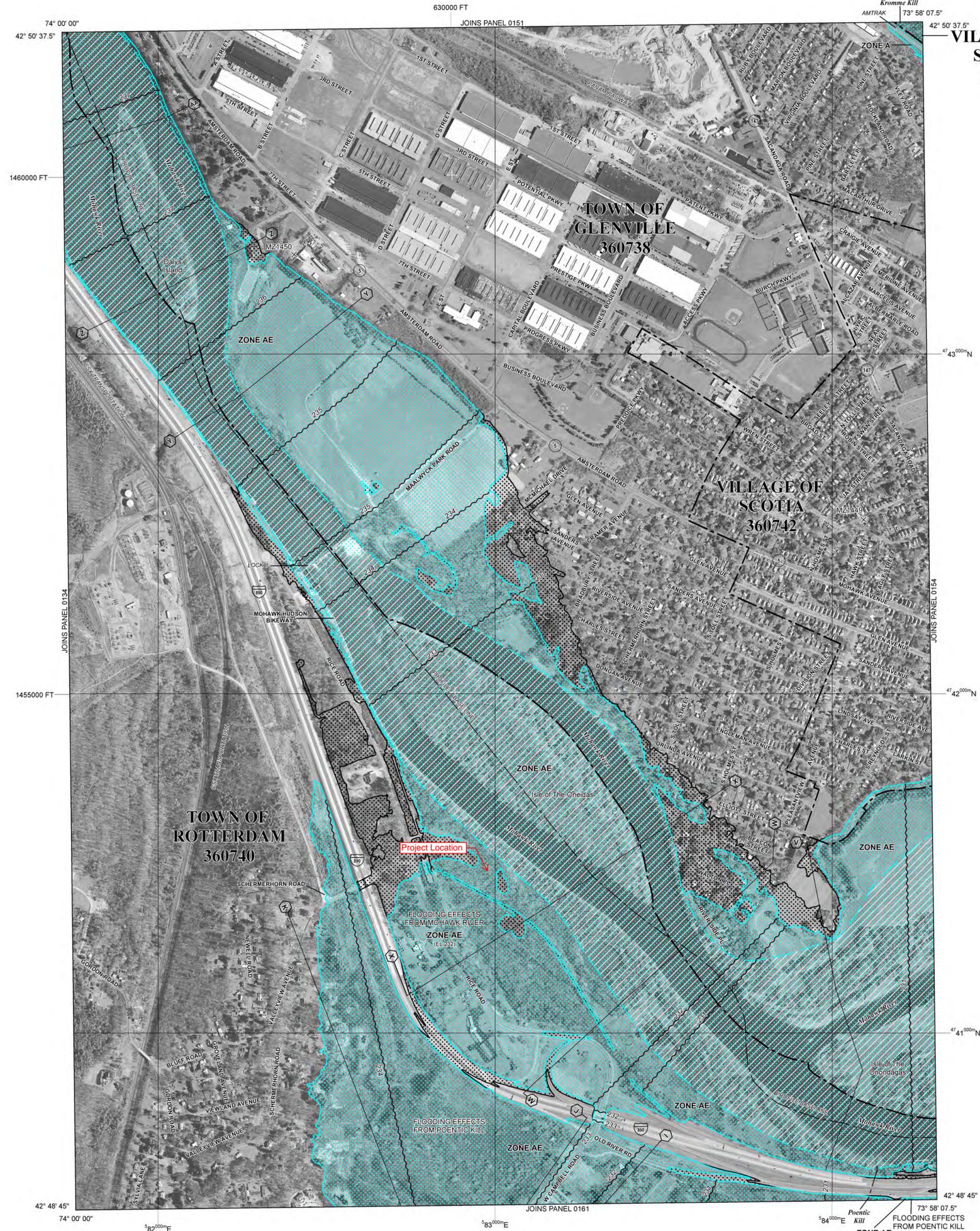
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VILLAGE OF SCOTIA 360742

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- ZONE X** Areas determined to be outside the 0.2% annual chance floodplain.
- ZONE D** Areas in which flood hazards are undetermined, but possible.
- COASTAL BARRIER RESOURCES SYSTEM (CBRS) AREAS
- OTHERWISE PROTECTED AREAS (OPAs)
- CBRS areas and OPAs are normally located within or adjacent to Special Flood Hazard Areas.
- 1% Annual Chance Floodplain Boundary
- 0.2% Annual Chance Floodplain Boundary
- Floodway boundary
- Zone D boundary
- CBRS and OPA boundary
- Boundary dividing Special Flood Hazard Area Zones and boundary dividing Special Flood Hazard Areas of different Base Flood Elevations, flood depths, or flood velocities.
- Base Flood Elevation line and value; elevation in feet*
- Base Flood Elevation value where uniform within zone; elevation in feet*

*Referenced to the North American Vertical Datum of 1988

- Cross section line
- Transect line
- Geographic coordinates referenced to the North American Datum of 1983 (NAD 83) Western Hemisphere
- 1000-meter Universal Transverse Mercator grid values, zone 18
- 600000 FT 5000-foot grid ticks: New York State Plane coordinate system, East zone (FIPSZONE 3101), Transverse Mercator projection
- DX5510 Bench mark (see explanation in Notes to Users section of this FIRM panel)
- M1.5 River Mile

MAP REPOSITORIES
Refer to Map Repositories list on Map Index

EFFECTIVE DATE OF COUNTYWIDE FLOOD INSURANCE RATE MAP
January 8, 2014

EFFECTIVE DATE(S) OF REVISION(S) TO THIS PANEL

For community map revision history prior to countywide mapping, refer to the Community Map History table located in the Flood Insurance Study report for this jurisdiction.

To determine if flood insurance is available in this community, contact your insurance agent or call the National Flood Insurance Program at 1-800-638-6620.

NATIONAL FLOOD INSURANCE PROGRAM

PANEL 0153D

FIRM FLOOD INSURANCE RATE MAP

for SCHENECTADY COUNTY, NEW YORK (ALL JURISDICTIONS)

CONTAINS:

COMMUNITY	NUMBER
GLENVILLE, TOWN OF	360738
ROTTERDAM, TOWN OF	360740
SCOTIA, VILLAGE OF	360742

PANEL 153 OF 257
MAP SUFFIX: D
(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

Notice to User: The Map Number shown below should be used when placing map orders; the Community Number shown above should be used on insurance applications for the subject community.

MAP NUMBER
36093C0153D

EFFECTIVE DATE
JANUARY 8, 2014

Federal Emergency Management Agency

**EARLY NOTICE AND PUBLIC EXPLANATION OF
A PROPOSED ACTIVITY IN A 100-YEAR FLOODPLAIN**

**ROTTERDAM WATER DISTRICT #5 WELLHEAD AREA EXPANSION,
TOWN OF ROTTERDAM, SCHENECTADY COUNTY, NEW YORK**

Thomas King, Assistant General Counsel and Certifying Officer
Governor's Office of Storm Recovery
99 Washington Avenue, Suite 1224
Albany, NY 12260

NOTIFICATION OF ACTIVITY IN A 100-YEAR FLOODPLAIN

To: All interested Agencies, Groups, and Individuals

This is to give notice that the Governor's Office of Storm Recovery (GOSR) under 24 CFR Part 58 has determined that the Rotterdam District #5 Wellhead Area Expansion Project in the Town of Rotterdam, Schenectady County, New York (Project) is located in the 100-year floodplain. GOSR is conducting an environmental review of the Project on behalf of the State of New York as the recipient of a Community Development Block Grant – Disaster Recovery (CDBG-DR) funds from the US Department of Housing and Urban Development (HUD) under 42 USC 5304(g) and 70 Fed. Reg. 62,182 (Oct. 16 2014). As required by Executive Order 11988, in accordance with HUD regulations 24 CFR 55.20 Subpart C, Procedures for Making Determinations on Floodplain Management and Protection of Wetlands, GOSR will be identifying and evaluating practicable alternatives to locating the action in the floodplain, as well as potential impacts on the floodplain.

Pursuant to the Community Development Block Grant-Disaster Recovery (CDBG-DR) Program and Federal Register Notices 78 Fed. Reg. 14329, 78 Fed. Reg. 69104, and 79 Fed. Reg. 62194 (Notices), published March 5, 2013, November 18, 2013, and October 16, 2014, respectively, the State of New York has been allocated approximately \$4.4 billion of CDBG-DR funds for storm recovery activities, including but not limited to the acquisition, demolition, reconstruction, improvement, financing and use of existing properties in storm-impacted communities and counties.

A portion of this funding will be used for the Flood Protection of the Rotterdam District #5 Well Heads Project to drill a new well and elevate the well above the 100- and 500-year floodplain at Rotterdam District #5 facility located at 49 Rice Road, Rotterdam, Schenectady County, New York. The new well will be protected by a well house similar in design to that of the existing well house and on-site building. Construction activities will include site preparation, well drilling and testing, site grading, drain installation, and site restoration post-construction. Based on the available site plan, it is estimated that the footprint of disturbance will measure approximately 172 by 185 feet and cover 0.7 acre. This area will be elevated approximately 6.5 feet above sea level to an elevation of 238.5 feet, or 0.5 feet above the 500-year floodplain. The Project is designed to be a self-sufficient drinking water supply facility for the town in the event that the other wells become inoperative for any reason with an existing back-up generator for power. The well will serve as a back-up and add reliability to the water supply system. The Project would benefit residents of the Town of Rotterdam.

The Project site is on a 9.38-acre parcel that is owned by Rotterdam Water District #5. It is currently undeveloped and wooded. The Project site is surrounded on three sides by wooded areas, and is adjacent to the existing wellhead facility to the northwest. The Mohawk River is approximately 392 feet from the proposed new well.

Approximately 7.0 acres of the Project parcel is within Special Flood Hazard Area (SFHA) Zone AE (areas of 100-year flood where base flood elevation have been determined), as indicated on the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) Community Panel Number 36093C0153D, dated January 8, 2014. Areas designated as a SFHA are those subject to inundation by the 1 percent annual chance flood (e.g., a 100-year flood), also known as the base flood.

There are three primary purposes for this notice. First, citizens who may be affected by activities in

floodplains and those who have an interest in the protection of the natural environment should be given an opportunity to express their concerns and provide information about these areas. Second, an adequate public notice program can be an important public educational tool. The dissemination of information about floodplains can facilitate and enhance Federal efforts to reduce the risks associated with the occupancy and modification of these special areas. Third, as a matter of fairness, when the Federal government determines it will participate in actions taking place in floodplains, it must inform those who may be put at greater or continued risk.

PUBLIC COMMENTS

Any individual, group, or agency may submit written comments on the proposed action or a request for further information to: Thomas King, Assistant General Counsel and Certifying Environmental Officer

Governor's Office of Storm Recovery
99 Washington Avenue, Suite 1224
Albany, NY 12260; e-mail NYSCDBG_DR_ER@nyshcr.org
Attn: Thomas King, Certifying Environmental Officer

All comments received by **December 24, 2015** will be considered.

Thomas King, Assistant General Counsel and Certifying Officer

December 10, 2015



Governor's Office of Storm Recovery



Andrew M. Cuomo
Governor

Lisa Bova-Hiatt
Executive Director

FINAL NOTICE AND PUBLIC EXPLANATION OF A PROPOSED ACTIVITY IN A 100-YEAR FLOODPLAIN

ROTTERDAM WATER DISTRICT #5 WELLHEAD AREA EXPANSION, TOWN OF ROTTERDAM, SCHENECTADY COUNTY, NEW YORK

Thomas King, Assistant General Counsel and Certifying Officer
Governor's Office of Storm Recovery
99 Washington Avenue, Suite 1224
Albany, NY 12260

NOTIFICATION OF ACTIVITY IN A 100-YEAR FLOODPLAIN

To: All interested Agencies, Groups, and Individuals

This is to give notice that the Governor's Office of Storm Recovery (GOSR) has conducted an evaluation as required by Executive Order 11988 in accordance with U.S. Department of Housing and Urban Renewal (HUD) regulations under 24 CFR 55.20 Subpart C - Procedures for Making Determinations on Floodplain Management and Protection of Wetlands, to determine the potential effects that its activity in the floodplain would have on the human environment.

Pursuant to the Community Development Block Grant-Disaster Recovery (CDBG-DR) Program and Federal Register Notices 78 Fed. Reg. 14329, 78 Fed. Reg. 69104, and 79 Fed. Reg. 62194 (Notices), published March 5, 2013, November 18, 2013, and October 16, 2014, respectively, the State of New York has been allocated approximately \$4.4 billion of CDBG-DR funds for storm recovery activities, including but not limited to the acquisition, demolition, reconstruction, improvement, financing and use of existing properties in storm-impacted communities and counties.

A portion of this funding is proposed be used for the Flood Protection of the Rotterdam Water District #5 Wellhead Facility to drill a new well and elevate the well above the 100- and 500-year floodplain at Rotterdam District #5 facility located at 49 Rice Road, Rotterdam, Schenectady County, New York. The new well would be protected by a well house similar in design to that of the existing well house and on-site building. Construction activities would include site preparation, well drilling and testing, site grading, drain installation, and site restoration post-construction. Based on the available site plan, it is estimated that the footprint of disturbance would measure approximately 172 by 185 feet and cover 0.7 acre. This area would be elevated approximately 6.5 feet above sea level to an elevation of 238.5 feet, or 0.5 feet above the 500-year floodplain. The proposed Project is designed to be a self-sufficient drinking water supply facility for the town in the event that the other wells become inoperative for any reason with an existing back-up generator for power. The well would serve as a back-up and add

reliability to the water supply system. The proposed Project would benefit residents of the Town of Rotterdam.

The proposed Project is on a 9.38-acre parcel that is owned by Rotterdam Water District #5. It is currently undeveloped and wooded. The proposed Project site is surrounded on three sides by wooded areas, and is adjacent to the existing wellhead facility to the northwest. The Mohawk River is approximately 392 feet from the proposed new well.

Approximately 7.0 acres of the proposed Project parcel is within Special Flood Hazard Area (SFHA) Zone AE (areas of 100-year flood where base flood elevation have been determined), including the Project site, as indicated on the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) Community Panel Number 36093C0153D, dated January 8, 2014. Areas designated as a SFHA are those subject to inundation by the 1 percent annual chance flood (e.g., a 100-year flood), also known as the base flood.

There are three primary purposes for this notice. First, citizens who may be affected by activities in floodplains and those who have an interest in the protection of the natural environment should be given an opportunity to express their concerns and provide information about these areas. Second, an adequate public notice program can be an important public educational tool. The dissemination of information about floodplains can facilitate and enhance Federal efforts to reduce the risks associated with the occupancy and modification of these special areas. Third, as a matter of fairness, when the Federal government determines it will participate in actions taking place in floodplains, it must inform those who may be put at greater or continued risk.

FLOODPLAIN MANAGEMENT PLAN

GOSR has reevaluated the alternatives to project activities in the floodplain and has determined that there is no practicable alternative. A copy of the 8-step floodplain analysis summary documenting compliance with Executive Order 11988 can be viewed online at <http://www.stormrecovery.ny.gov/environmental-docs>.

PUBLIC COMMENTS

An early notice of activity in a 100-year floodplain was published on December 10, 2015. The comment period was held open until December 31, 2015 in order to address a typo in the notice that closed the comment period on December 24, 2015. Any individual, group, or agency may submit written comments on the proposed action or a request for further information to: Thomas King, Assistant General Counsel and Certifying Environmental Officer.

Governor's Office of Storm Recovery
99 Washington Avenue, Suite 1224
Albany, NY 12260; e-mail NYSCDBG_DR_ER@nyshcr.org
Attn: Thomas King, Certifying Environmental Officer

All comments received by **January 29, 2016** will be considered.

Thomas King, Assistant General Counsel and Certifying Officer

January 22, 2016

APPENDIX C
USFWS AND NYNHP
CORRESPONDENCE



United States Department of the Interior

FISH AND WILDLIFE SERVICE

3817 Luker Road
Cortland, NY 13045



October 29, 2015

Thomas J. King, Esq.
Governor's Office of Storm Recovery
NYS Homes & Community Renewal
25 Beaver Street
New York, NY 10004

Dear Mr. King:

This responds to your October 22, 2015, letter regarding a proposed construction of a well, well house, and associated infrastructure in the Town of Rotterdam, Schenectady County, New York. We understand that U.S. Department of Housing and Urban Development's (HUD) will be funding the proposed project.

As you are aware, federal agencies have responsibilities under Section 7 of the Endangered Species Act (ESA) (87 Stat. 884, as amended; 16 U.S.C. 1531 *et seq.*) to consult with the U.S. Fish and Wildlife Service (Service) regarding projects that may affect federally-listed species or designated critical habitat, and confer with the Service regarding projects that are likely to jeopardize federally-proposed species and/or adversely modify proposed critical habitat. We understand that New York State Homes & Community Renewal (NYSHCR) has been designated HUD's non-federal representative for the purposes of completing informal consultation pursuant to Section 7(a)(2) of the ESA.

On behalf of HUD, the NYSHCR determined the proposed project "may affect, but is not likely to adversely affect," the federally-listed threatened northern long-eared bat (*Myotis septentrionalis*). Given the project location, small acreage of tree removal (less than 1 acre), and proposed winter clearing of trees (November 1 - March 31) to avoid any chance of direct effects to this species, we concur with your determination.

No further coordination or consultation under the ESA is required with the Service at this time. Should project plans change, or if additional information on listed or proposed species or critical habitat becomes available, this determination may be reconsidered. The most recent compilation of federally-listed and proposed endangered and threatened species in New York is available for your information. Until the proposed project is complete, we recommend that you check our

website every 90 days from the date of this letter to ensure that listed species presence/absence information for the proposed project is current.*

The above comments pertaining to endangered species under our jurisdiction are provided pursuant to the ESA. This response does not preclude additional Service comments under other legislation.

Any additional information regarding the proposed project and its potential to impact listed species should be coordinated with both this office and with the New York State Department of Environmental Conservation.

Thank you for your time. If you require additional information or assistance please contact Robyn Niver at 607-753-9334. Future correspondence with us on this project should reference project file 160101.

Sincerely,


for David A. Stilwell
Field Supervisor

*Additional information referred to above may be found on our website at:
<http://www.fws.gov/northeast/nyfo/es/section7.htm>.

cc: NYSDEC, Schenectady, NY (Env. Permits)



Governor's Office of Storm Recovery



Andrew M. Cuomo
Governor

Lisa Bova-Hiatt
Interim Executive Director

October 22, 2015

Robyn A. Niver
Endangered Species Biologist USFWS
New York Field Office
Cortland, NY 13045

Re: Determination and Request for Concurrence under Section 7 of the Endangered Species Act for the Rotterdam Well Field District #5 Wellhead Facility Project, Town of Rotterdam, Schenectady County, NY

Dear Ms. Niver:

The Governor's Office of Storm Recovery (GOSR), acting under the auspices of New York State Homes and Community Renewal's (HCR) Housing Trust Fund Corporation (HTFC), on behalf of the Department of Housing & Urban Development (HUD), is preparing an Environmental Assessment (EA) for the construction of a well, well house, and associated infrastructure in the Town of Rotterdam, Schenectady County, New York. Well #5 would be constructed at 49 Rice Road, Rotterdam, New York 12306 (see **Figure 1**). The project entails drilling a new well and installing a casing 5 feet above the 500-year flood level, establishing a well connection to existing pipes, installing a motor and pump, constructing a new building to house the pump and equipment, and an access road. Fill would be used to elevate the well casing. GOSR is acting as HUD's non-federal representative for the purposes of conducting consultation pursuant to Section 7 of the Endangered Species Act.

The purpose of this letter is to provide the U.S. Fish and Wildlife Service – New York Field Office (USFWS) notice of the proposed project and to document compliance with Section 7 of the Endangered Species Act.

Project Overview

During Hurricane Irene and Tropical Storm Lee, floodwaters from the Mohawk River overwhelmed Rotterdam. Floodwaters from the Mohawk inundated residences, businesses, and infrastructure. The local water and sewer systems, which were damaged during both storms, continue to be vulnerable to flood damage. The community of Rotterdam is preparing to act now to minimize future impacts from flooding. This includes developing resilient water supply infrastructure.

The position of the town is that the project would enhance the resilience of the Rotterdam Water District by ensuring that the district will have potable water during a major flood event and by providing additional groundwater pumping capacity for the Town of Rotterdam. The proposed project also includes establishing a well connection to existing pipes, installing a motor and pump, and constructing a new building to house

the pump and equipment. The new building design is similar to the design of the existing building that houses Well #4.

Compliance

According to the USFWS IPaC Trust Resource Report and list of threatened and endangered species, there is one threatened species that is potentially associated with the project site – the Northern Long Eared Bat (NLEB) (see attached list). In addition, there are several migratory birds of concern that could potentially be affected by the proposed project (see attached list). The official species list for the proposed project indicated that there is no critical habitat in the project area. As the proposed project would result in the removal of trees, but is located in an area with no known hibernacula or maternity roosts, GOSR will only approve the project subject to the condition that trees are removed between November 1 and March 31. On this basis, GOSR has determined that the proposed action is not likely to adversely affect NLEB or migratory birds. We request your concurrence with this determination.

If you have questions or require additional information regarding this request, please contact me at (646) 417-4660 or thomas.king@stormrecovery.ny.gov. Thank you for your time and consideration.

Sincerely,



Thomas J. King, Esq.
Certifying Officer
Governor's Office of Storm Recovery
NYS Homes and Community Renewal

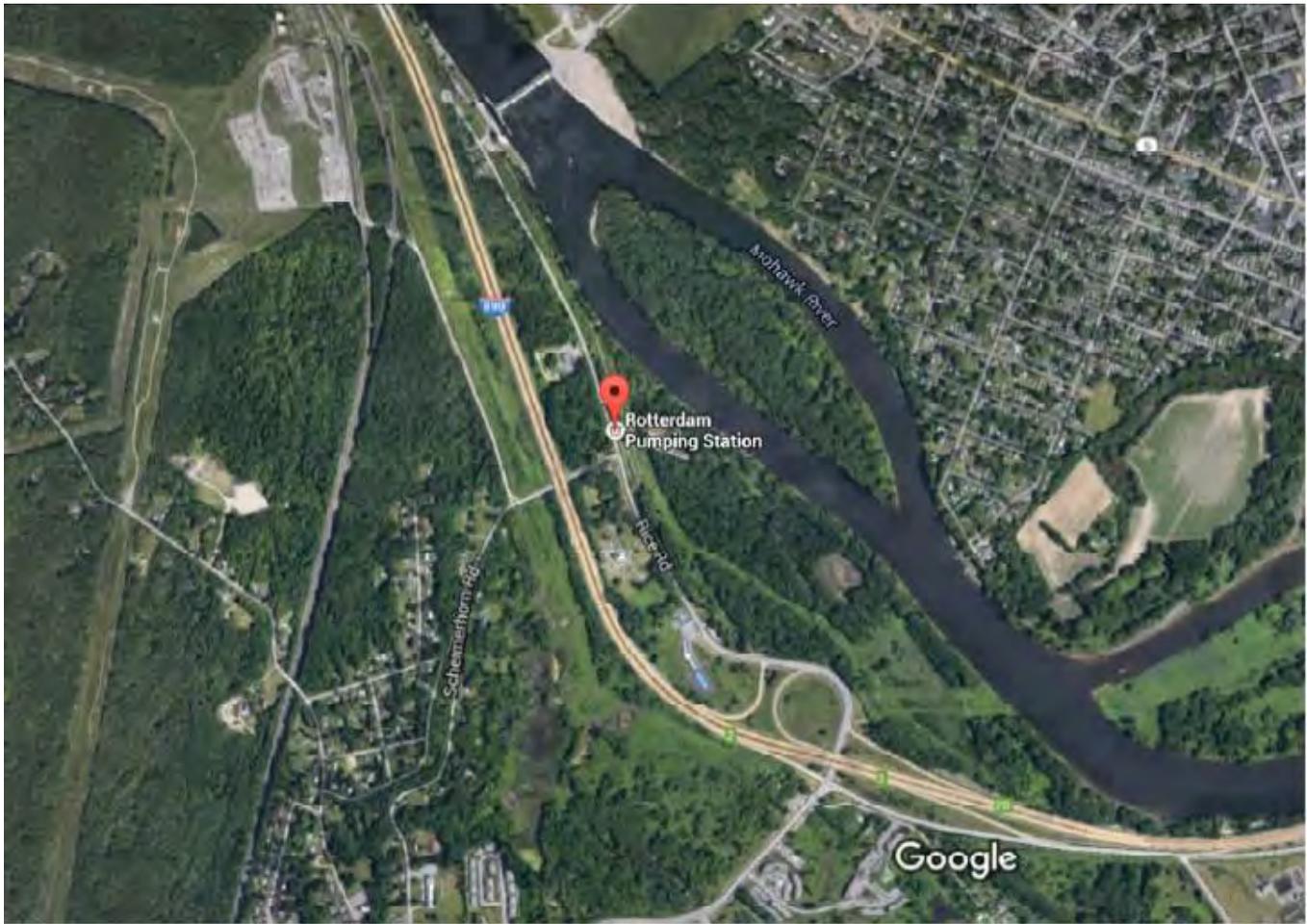


Figure 1



United States Department of the Interior



FISH AND WILDLIFE SERVICE
New York Ecological Services Field Office
3817 LUKER ROAD
CORTLAND, NY 13045
PHONE: (607)753-9334 FAX: (607)753-9699
URL: www.fws.gov/northeast/nyfo/es/section7.htm

Consultation Code: 05E1NY00-2016-SLI-0156

October 21, 2015

Event Code: 05E1NY00-2016-E-00269

Project Name: Rotterdam District #5 Wellhead

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>

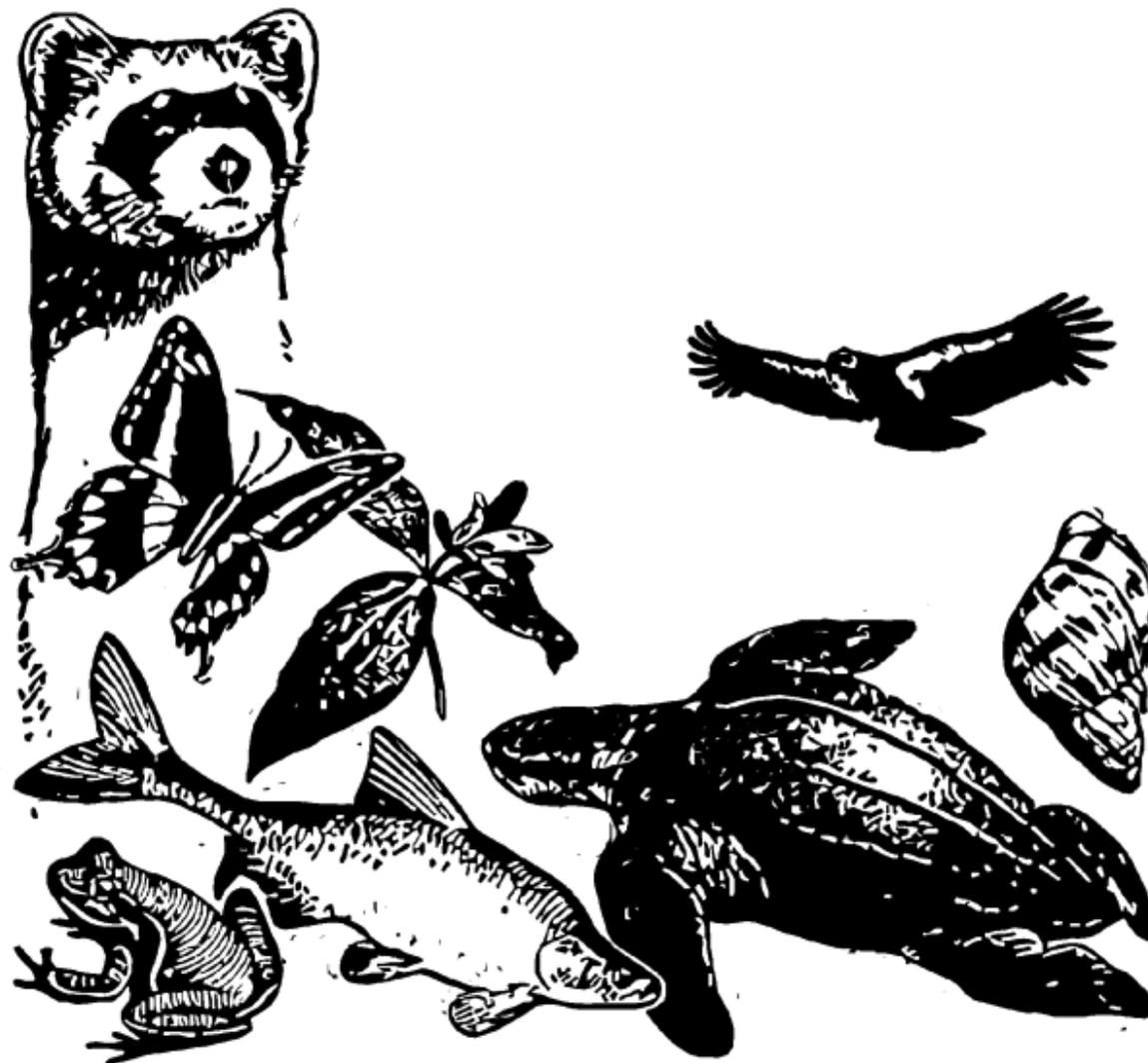
Please be aware that bald and golden eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 *et seq.*), and projects affecting these species may require development of an eagle conservation plan (

Rotterdam District #5 Wellhead

IPaC Trust Resource Report

Generated October 21, 2015 03:05 PM MDT

This report is for informational purposes only and should not be used for planning or analyzing project-level impacts. For projects that require FWS review, please return to this project on the IPaC website and request an official species list from the Regulatory Documents page.



US Fish & Wildlife Service

IPaC Trust Resource Report



Project Description

NAME

Rotterdam District #5 Wellhead

PROJECT CODE

NN7GZ-5ATHB-EM3BA-J6GMR-GLPLC4

LOCATION

Schenectady County, New York

DESCRIPTION

The project entails drilling a new well and installing a casing 5 feet above the 500-year flood level, establishing a well connection to existing pipes, installing a motor and pump, constructing a new building to house the pump and equipment, and an access road. Fill would be used to elevate the well casing.



U.S. Fish & Wildlife Contact Information

Species in this report are managed by:

New York Ecological Services Field Office

3817 Luker Road

Cortland, NY 13045-9349

(607) 753-9334

Endangered Species

Proposed, candidate, threatened, and endangered species that are managed by the [Endangered Species Program](#) and should be considered as part of an effect analysis for this project.

This unofficial species list is for informational purposes only and does not fulfill the requirements under [Section 7](#) of the Endangered Species Act, which states that Federal agencies are required to "request of the Secretary of Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action." This requirement applies to projects which are conducted, permitted or licensed by any Federal agency.

A letter from the local office and a species list which fulfills this requirement can be obtained by returning to this project on the IPaC website and requesting an official species list on the Regulatory Documents page.

Mammals

Northern Long-eared Bat *Myotis septentrionalis*

Threatened

CRITICAL HABITAT

No critical habitat has been designated for this species.

<https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?sPCODE=A0JE>

Critical Habitats

Potential effects to critical habitat(s) within the project area must be analyzed along with the endangered species themselves.

There is no critical habitat within this project area

Migratory Birds

Birds are protected by the [Migratory Bird Treaty Act](#) and the Bald and Golden Eagle Protection Act.

Any activity which results in the take of migratory birds or eagles is prohibited unless authorized by the U.S. Fish and Wildlife Service (1). There are no provisions for allowing the take of migratory birds that are unintentionally killed or injured.

You are responsible for complying with the appropriate regulations for the protection of birds as part of this project. This involves analyzing potential impacts and implementing appropriate conservation measures for all project activities.

<p>American Bittern <i>Botaurus lentiginosus</i> Season: Breeding https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=B0F3</p>	Bird of conservation concern
<p>Bald Eagle <i>Haliaeetus leucocephalus</i> Year-round https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=B008</p>	Bird of conservation concern
<p>Black-billed Cuckoo <i>Coccyzus erythrophthalmus</i> Season: Breeding https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=B0HI</p>	Bird of conservation concern
<p>Black-crowned Night-heron <i>Nycticorax nycticorax</i> Season: Breeding https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=B0EU</p>	Bird of conservation concern
<p>Blue-winged Warbler <i>Vermivora pinus</i> Season: Breeding</p>	Bird of conservation concern
<p>Canada Warbler <i>Wilsonia canadensis</i> Season: Breeding</p>	Bird of conservation concern
<p>Golden-winged Warbler <i>Vermivora chrysoptera</i> Season: Breeding https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=B0G4</p>	Bird of conservation concern
<p>Peregrine Falcon <i>Falco peregrinus</i> Season: Breeding https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=B0FU</p>	Bird of conservation concern
<p>Pied-billed Grebe <i>Podilymbus podiceps</i> Season: Breeding</p>	Bird of conservation concern
<p>Prairie Warbler <i>Dendroica discolor</i> Season: Breeding</p>	Bird of conservation concern
<p>Red-headed Woodpecker <i>Melanerpes erythrocephalus</i> Season: Breeding</p>	Bird of conservation concern
<p>Short-eared Owl <i>Asio flammeus</i> Season: Wintering https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=B0HD</p>	Bird of conservation concern

Wood Thrush *Hylocichla mustelina*
Season: Breeding

Bird of conservation concern

Refuges

Any activity proposed on [National Wildlife Refuge](#) lands must undergo a 'Compatibility Determination' conducted by the Refuge. If your project overlaps or otherwise impacts a Refuge, please contact that Refuge to discuss the authorization process.

There are no refuges within this project area

Wetlands

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

Project proponents should discuss the relationship of these requirements to their project with the Regulatory Program of the appropriate [U.S. Army Corps of Engineers District](#).

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.

There are no wetlands identified in this project area

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



United States Department of Interior
Fish and Wildlife Service

Project name: Rotterdam District #5 Wellhead

Official Species List

Provided by:

New York Ecological Services Field Office

3817 LUKER ROAD

CORTLAND, NY 13045

(607) 753-9334

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

Consultation Code: 05E1NY00-2016-SLI-0156

Event Code: 05E1NY00-2016-E-00269

Project Type: WATER SUPPLY / DELIVERY

Project Name: Rotterdam District #5 Wellhead

Project Description: The project entails drilling a new well and installing a casing 5 feet above the 500-year flood level, establishing a well connection to existing pipes, installing a motor and pump, constructing a new building to house the pump and equipment, and an access road. Fill would be used to elevate the well casing.

Please Note: The FWS office may have modified the Project Name and/or Project Description, so it may be different from what was submitted in your previous request. If the Consultation Code matches, the FWS considers this to be the same project. Contact the office in the 'Provided by' section of your previous Official Species list if you have any questions or concerns.



United States Department of Interior
Fish and Wildlife Service

Project name: Rotterdam District #5 Wellhead

Project Location Map:



Project Coordinates: MULTIPOLYGON (((-73.98660863272703 42.82305189461853, -73.98419840877565 42.82163124774311, -73.98629723428374 42.820265386045286, -73.98710064226755 42.82193273823319, -73.98662731663366 42.822074346895356, -73.98691380320153 42.8225494187474, -73.98731862117783 42.8224078111734, -73.98752414415048 42.822759545517606, -73.98660863272703 42.82305189461853)))

Project Counties: Schenectady, NY



United States Department of Interior
Fish and Wildlife Service

Project name: Rotterdam District #5 Wellhead

Endangered Species Act Species List

There are a total of 1 threatened or endangered species on your 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. Critical habitats listed under the **Has Critical Habitat** column may or may not lie within your project area. See the **Critical habitats within your project area** section further below for critical habitat that lies within your project. Please contact the designated FWS office if you have questions.

Mammals	Status	Has Critical Habitat	Condition(s)
Northern long-eared Bat (<i>Myotis septentrionalis</i>)	Threatened		

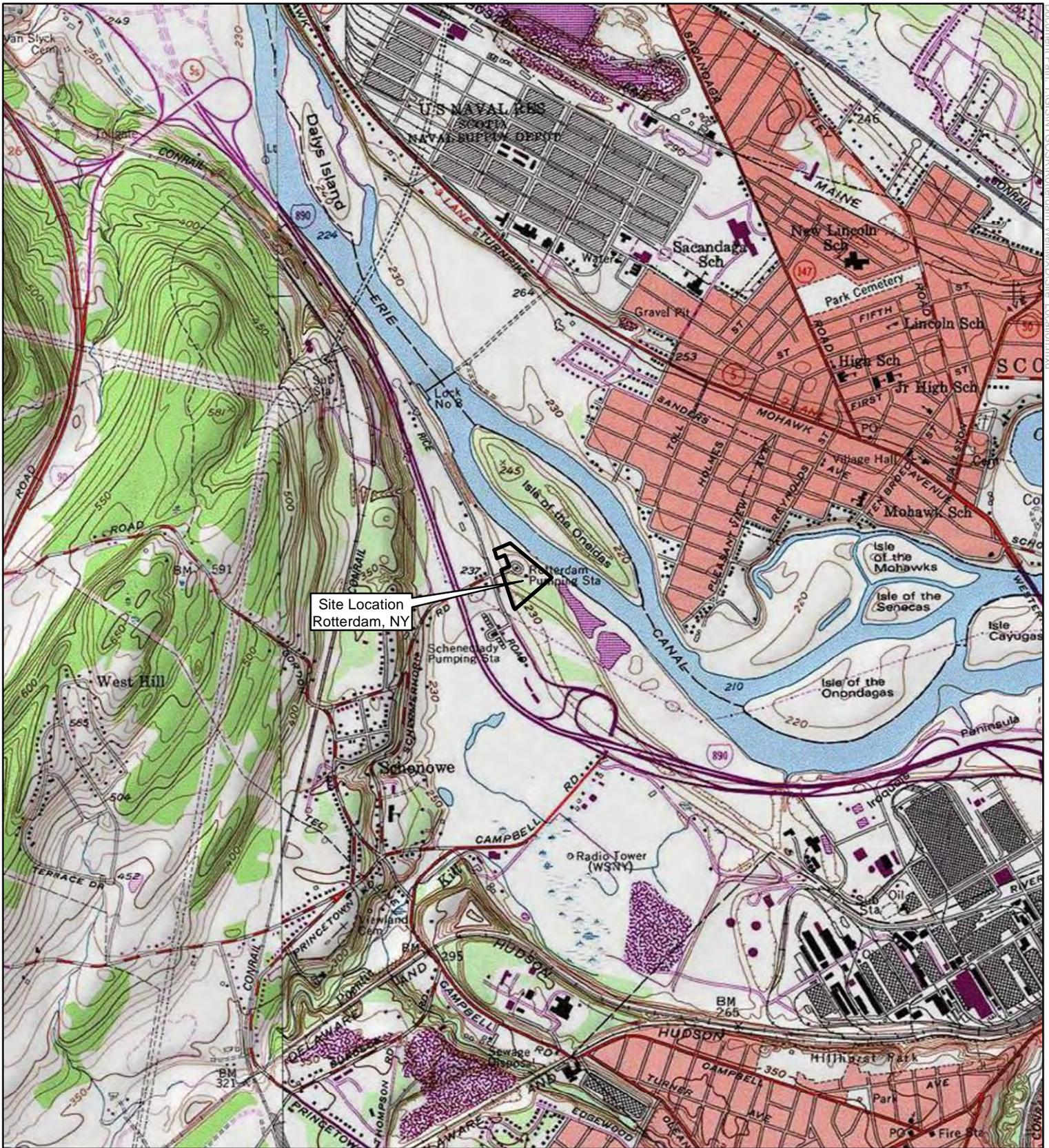


United States Department of Interior
Fish and Wildlife Service

Project name: Rotterdam District #5 Wellhead

Critical habitats that lie within your project area

There are no critical habitats within your project area.



Site Location
Rotterdam, NY



Legend

 Property Boundary



USGS 7.5 Minute Topographic Quad: Schenectady, NY 1981

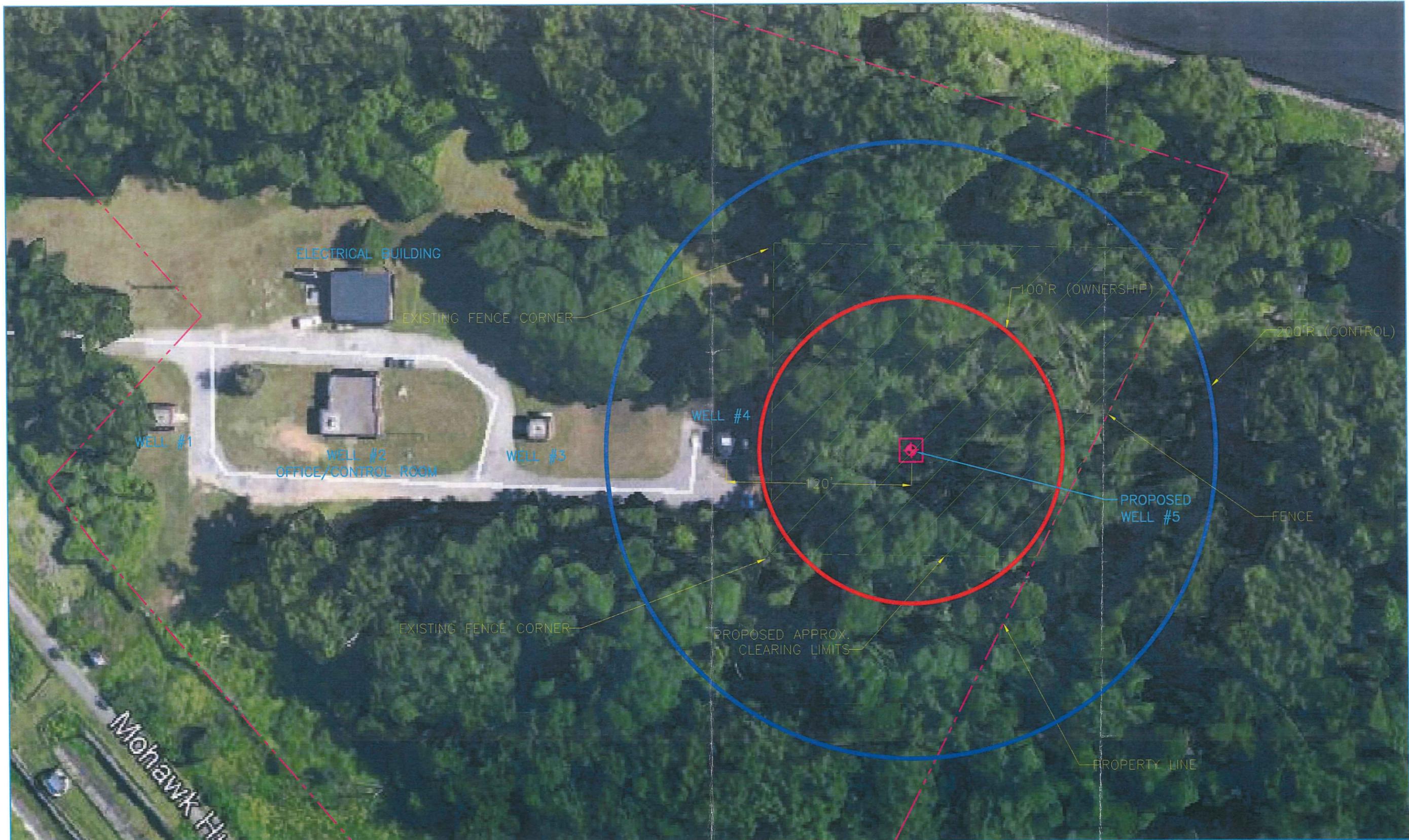
Service Layer Credits: Sources: Esri, HERE, DeLorme, USGS, Intermap, increment P Corp., NRCAN, Esri Japan, METI, Esri China (Hong Kong), Esri (Thailand), TomTom,



Rotterdam District No. 5
Well Heads Flood Protection

Site Location

Rotterdam, NY



NO.	DATE	REVISION	BY
00	6/30/2014	ORIGINAL ISSUE	AST

JME JOHN M. MCDONALD
ENGINEERING, P.C.

7 South Church Street Schenectady, New York 12305
Ph: 518 382 1774 Fax: 518 382 1776 www.mcdonaldengineers.com

PROJ. ENGR.: DPC

DRAWN BY: AST

CHECKED BY: JMM

UNAUTHORIZED ALTERATIONS TO
THIS DOCUMENT IS A VIOLATION OF
SECTION 7209 SUBDIVISION 2 OF NEW
YORK STATE EDUCATION LAW.

TOWN OF ROTTERDAM
SCHENECTADY COUNTY

5th WELL WATER SYSTEM IMPROVEMENTS

SHEET TITLE:

AERIAL PLAN

SCALE:
AS NOTED

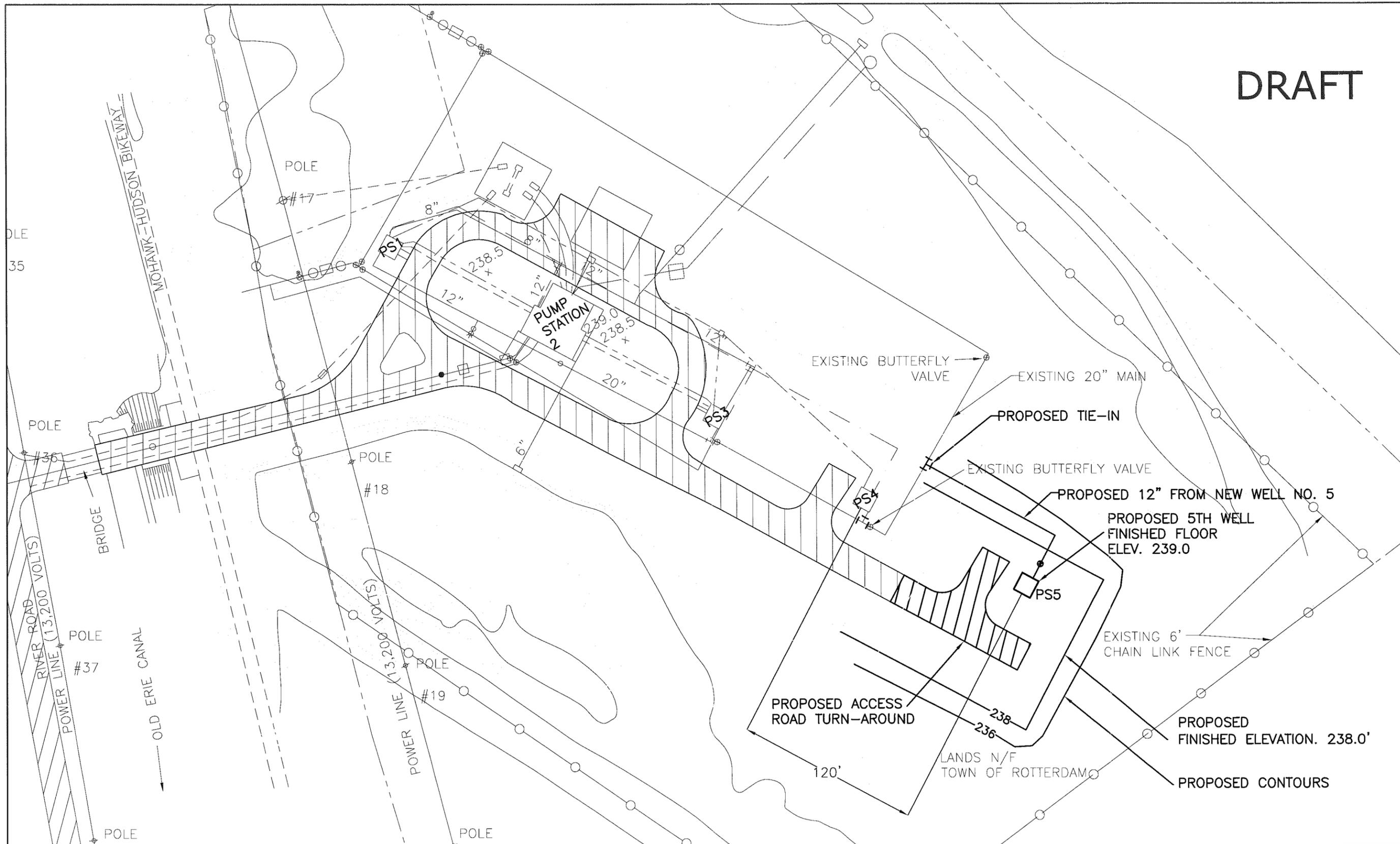
FILE NO.:
01*1403

DATE:
JUNE 2014

SHEET NO.:

A1

DRAFT



NO.	DATE	REVISION	BY
00	6/30/2014	ORIGINAL ISSUE	AST

JME JOHN M. MCDONALD
ENGINEERING, P.C.

7 South Church Street Schenectady, New York 12305
Ph: 518 382 1774 Fax: 518 382 1776 www.mcdonaldengineers.com

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PROJ. ENGR.: DPC DRAWN BY: AST CHECKED BY: JMM

TOWN OF ROTTERDAM
SCHENECTADY COUNTY

5th WELL WATER SYSTEM IMPROVEMENTS

SHEET TITLE:
SITE PLAN

SCALE:
AS NOTED

FILE NO.:
01*1403

DATE:
JUNE 2014

SHEET NO.:
A1



Governor's Office of Storm Recovery



Andrew M. Cuomo
Governor

Lisa Bova-Hiatt
Executive Director

December 22, 2015

Nicholas Conrad
New York State Department of Environmental Conservation
Division of Fish, Wildlife & Marine Resources
New York Natural Heritage Program – Information Services
625 Broadway, 5th Floor
Albany, New York 12233-4757
VIA EMAIL: nick.conrad@dec.ny.gov

Re: Natural Heritage Compliance Process Well Field District #5 Wellhead Facility,
Town of Rotterdam, Schenectady County, NY

Dear Mr. Conrad:

The Governor's Office of Storm Recovery (GOSR), acting under the auspices of New York State Homes and Community Renewal's (HCR) Housing Trust Fund Corporation (HTFC), on behalf of the Department of Housing & Urban Development (HUD), is preparing an Environmental Assessment (EA) for the construction of a well, well house, and associated infrastructure in the Town of Rotterdam, Schenectady County, New York. Well #5 would be constructed at 49 Rice Road, Rotterdam, New York 12306. The project entails drilling a new well and installing a casing above the 500-year flood level, establishing a well connection to existing pipes, installing a motor and pump, constructing a new building to house the pump and equipment, and an access road. GOSR also is preparing documentation under the State Environmental Quality Review Act (SEQRA).

The purpose of this letter is to request a search of the files of the New York Natural Heritage Program for records of the occurrence of any rare animals, plants, and natural communities and/or significant wildlife habitats in the vicinity of this project. The information we receive from you will be used in SEQRA documentation and/or any permit applications. We will retain the confidentiality, as needed, of any information received.

Program Overview

During Hurricane Irene and Tropical Storm Lee, floodwaters from the Mohawk River

overwhelmed Schenectady and Rotterdam. The level of the Mohawk River rose as high as 28 feet above flood stage in the Stockade and East Front Street neighborhoods in Schenectady. Floodwaters inundated residences, businesses, and infrastructure. The damage was so significant that some residents were unable to return to their homes for six to nine months. The communities' water and sewer systems, which were damaged during both storms, continue to be vulnerable to flood damage. The communities of Rotterdam and Schenectady are preparing to act now to minimize future impacts from flooding. This includes developing resilient infrastructure (water supply, electricity supply, wastewater, and road systems).

The primary drinking water sources for the Town of Rotterdam are located in the floodplain and nearly flooded during recent storms. Most of the Town of Rotterdam is served by the Rotterdam well fields, on the north side of Rice Road abutting the Mohawk River. This well field needs flood protection to prevent failure due to major storms. The Rotterdam District #5 Well Head facility is in the 100-year floodplain in the Town of Rotterdam, Schenectady County, New York, and was almost compromised by flooding during Hurricane Irene and Tropical Storm Lee. According to the Rotterdam Junction Brownfield Opportunity Area (BOA) Nomination Study (2013), the absence of protected wellheads is one of the constraints on future development.

The purpose of this Project is to create a well head and other drinking water infrastructure protected from flooding to ensure uninterrupted supply of clean, safe drinking water. The Project would help ensure that critical facilities continue to operate during major storm events through redundant backup systems (e.g., generators, pumps, and connecting supply waterlines). The new well (Well #5) would be drilled approximately 120 feet southeast of Well #4. The project location is shown on attached **Figure 1, Project Location Map, Figure 2, Topographic Map, and Figure 3, Project Area Map.**

The New York Rising Community Reconstruction Planning Committee and members of the public consider the absence of protected wellheads to be one of the constraints on future development and, therefore, an important project for enhancing flood disaster mitigation, preparedness, and response and recovery efforts in both a local and regional capacity.

Compliance

According to information reviewed from the New York State Environmental Resource Mapper, no natural communities or rare plants or animals are known to exist in the project area (see **Figure 4**). However, if the proposed project would result in the removal of trees, GOSR respectfully requests that the New York Natural Heritage Program review its records of concern for any rare or state-listed animals or plants, or significant natural communities, at this site or in its immediate vicinity.

According to the US Fish and Wildlife Service (USFWS), there is one threatened species that is potentially associated with the project area – the northern long-eared bat. In

addition, there are several migratory birds of concern that could potentially be affected by the proposed project. In a letter on November 9, 2015, the USFWS that the project may but is not likely to affect the federally-listed threatened northern long-eared bat and no further coordination or consultation is required under the Endangered Species Act. In order to avoid any chance of direct effects to this species, GOSR will only approve the project subject to the condition that trees are removed between November 1 and March 31.

If you have questions or require additional information regarding this request, please contact me at (518) 474-0647 or Alicia.Shultz@nyshcr.org. Thank you for your time and consideration.

Sincerely,



Alicia Shultz
Community Developer - Environmental Services
New York State Homes and Community Renewal
38-40 State Street, Hampton Plaza
Albany NY 12207

cc:

Governor's Office of Storm Recovery

Enclosures:

Figure 1: Project Location Map

Figure 2. Topographic Map

Figure 3: Project Area Map

Figure 4: Environmental Resource Mapper Findings

Figure 5: Flood Zones Map

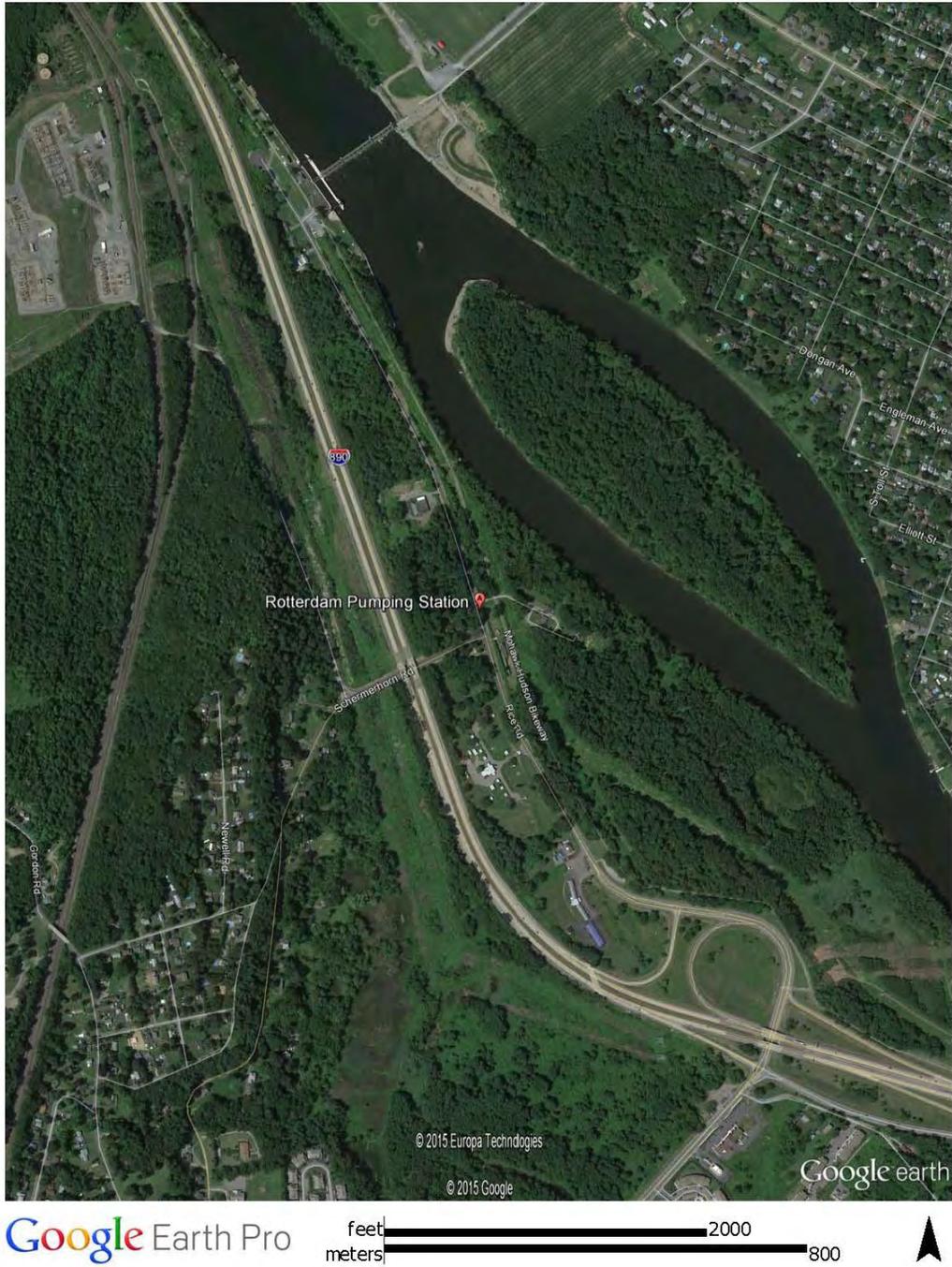
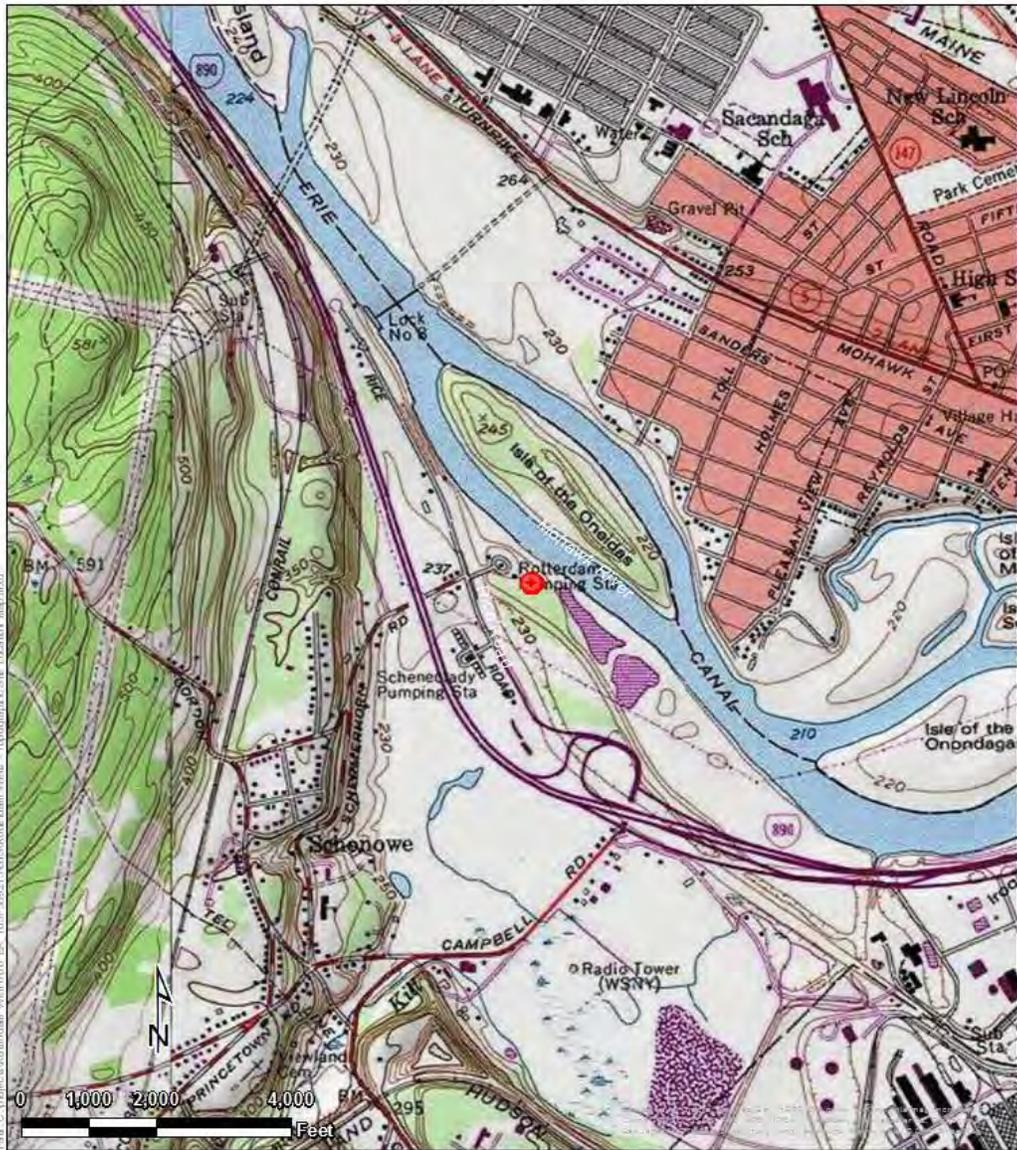


Figure 1. Project Location Map



Topographic Map

Rotterdam District #5 Well
Town of Rotterdam,
Schenectady County, New York

Legend

 Project Area



Figure 2. Topographic Map

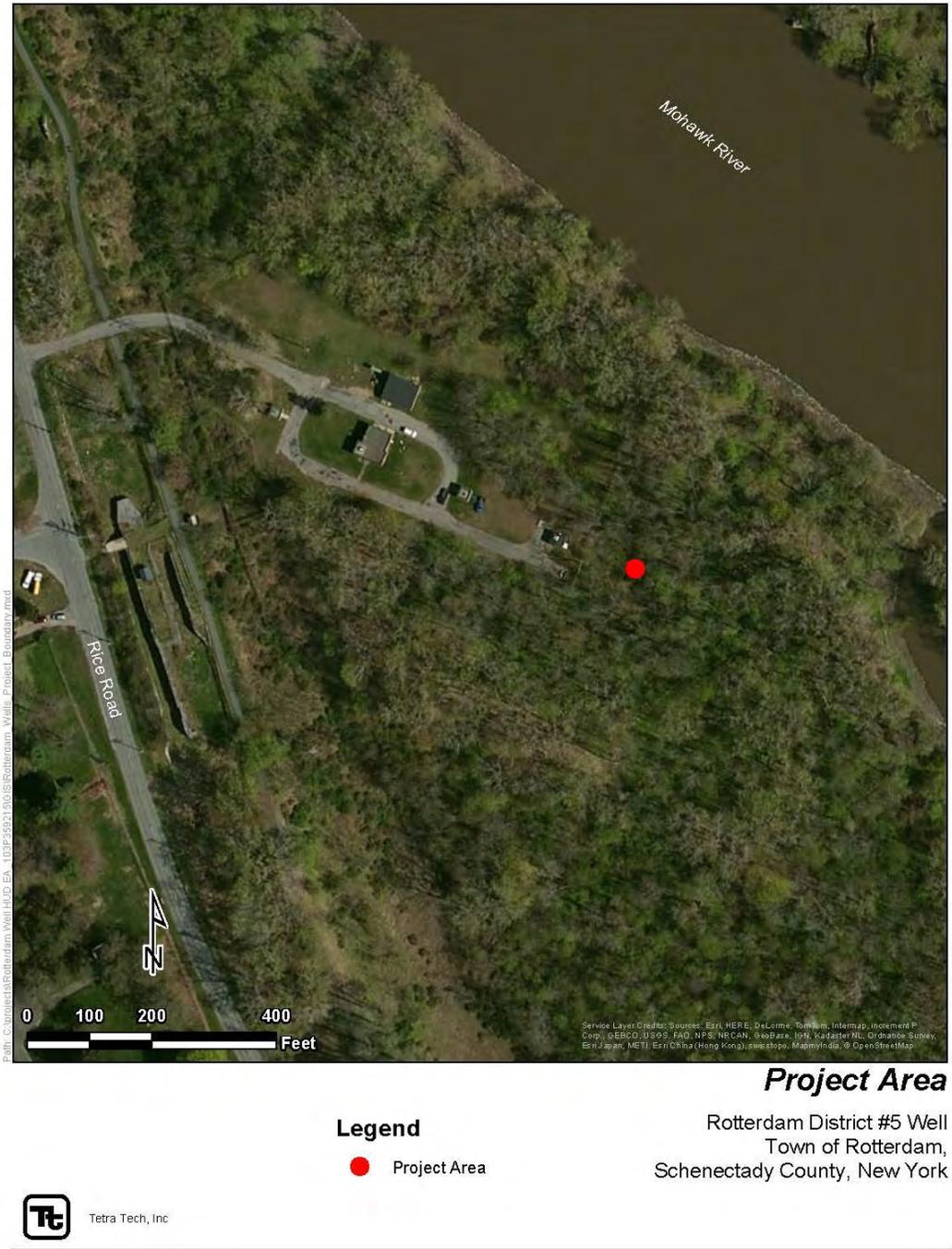
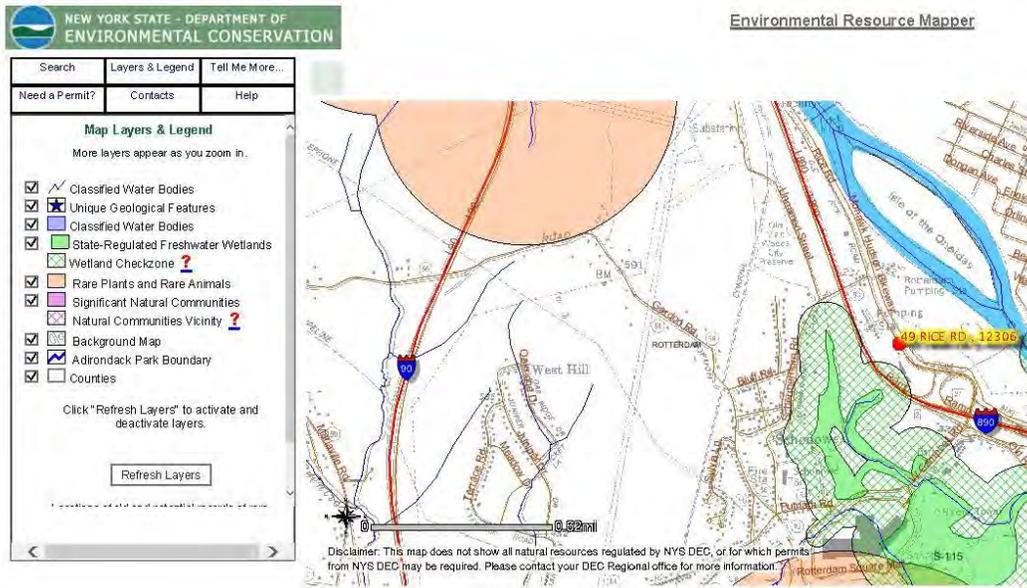


Figure 3. Project Area Map



Click on a record # to zoom to or highlight that address

Record #	Address	Score
1	49 RICE RD , 12306	100

<http://www.dec.ny.gov/imsmaps/ERM/viewer.htm>

12/21/2015

Figure 4. Environmental Resource Mapper Findings

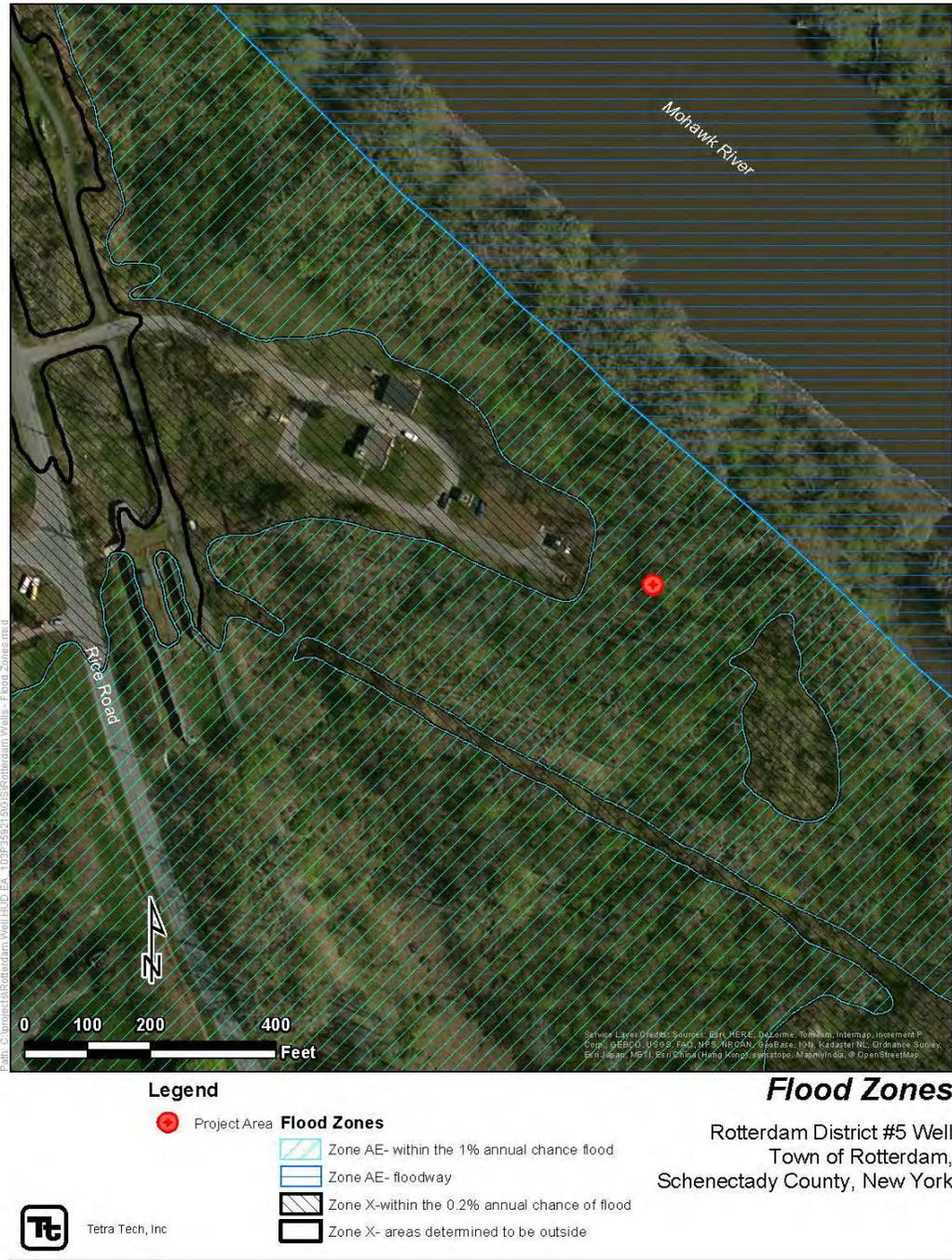
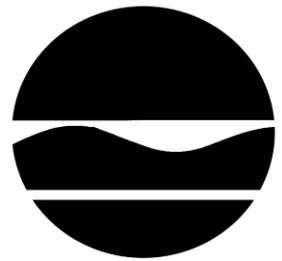


Figure 5: Flood Zones Map

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
Division of Fish, Wildlife & Marine Resources
New York Natural Heritage Program
625 Broadway, 5th Floor, Albany, New York 12233-4757
Phone: (518) 402-8935 • **Fax:** (518) 402-8925
Website: www.dec.ny.gov



January 15, 2016

Alicia Shultz
New York State Homes & Community Renewal
38-40 State Street, Hampton Plaza
Albany, NY 12207

Re: Rotterdam District #5 Wellhead Facility at 49 Rice Road
Town/City: Rotterdam. County: Schenectady.

Dear Alicia 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 your 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 appropriate NYS DEC Regional Office, Division of Environmental Permits, as listed at www.dec.ny.gov/about/39381.html.

Sincerely,

A handwritten signature in black ink that reads "Andrea Chaloux".

Andrea Chaloux
Environmental Review Specialist
New York Natural Heritage Program



Governor's Office of Storm Recovery



Andrew M. Cuomo
Governor

Lisa Bova-Hiatt
Executive Director

December 22, 2015

Nicholas Conrad
New York State Department of Environmental Conservation
Division of Fish, Wildlife & Marine Resources
New York Natural Heritage Program – Information Services
625 Broadway, 5th Floor
Albany, New York 12233-4757
VIA EMAIL: nick.conrad@dec.ny.gov

Re: Natural Heritage Compliance Process Well Field District #5 Wellhead Facility,
Town of Rotterdam, Schenectady County, NY

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Compliance

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According to the US Fish and Wildlife Service (USFWS), there is one threatened species that is potentially associated with the project area – the northern long-eared bat. In

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If you have questions or require additional information regarding this request, please contact me at (518) 474-0647 or Alicia.Shultz@nyshcr.org. Thank you for your time and consideration.

Sincerely,

A handwritten signature in cursive script that reads "Alicia Shultz".

Alicia Shultz
Community Developer - Environmental Services
New York State Homes and Community Renewal
38-40 State Street, Hampton Plaza
Albany NY 12207

cc:

Governor's Office of Storm Recovery

Enclosures:

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Figure 2. Topographic Map

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Figure 4: Environmental Resource Mapper Findings

Figure 5: Flood Zones Map

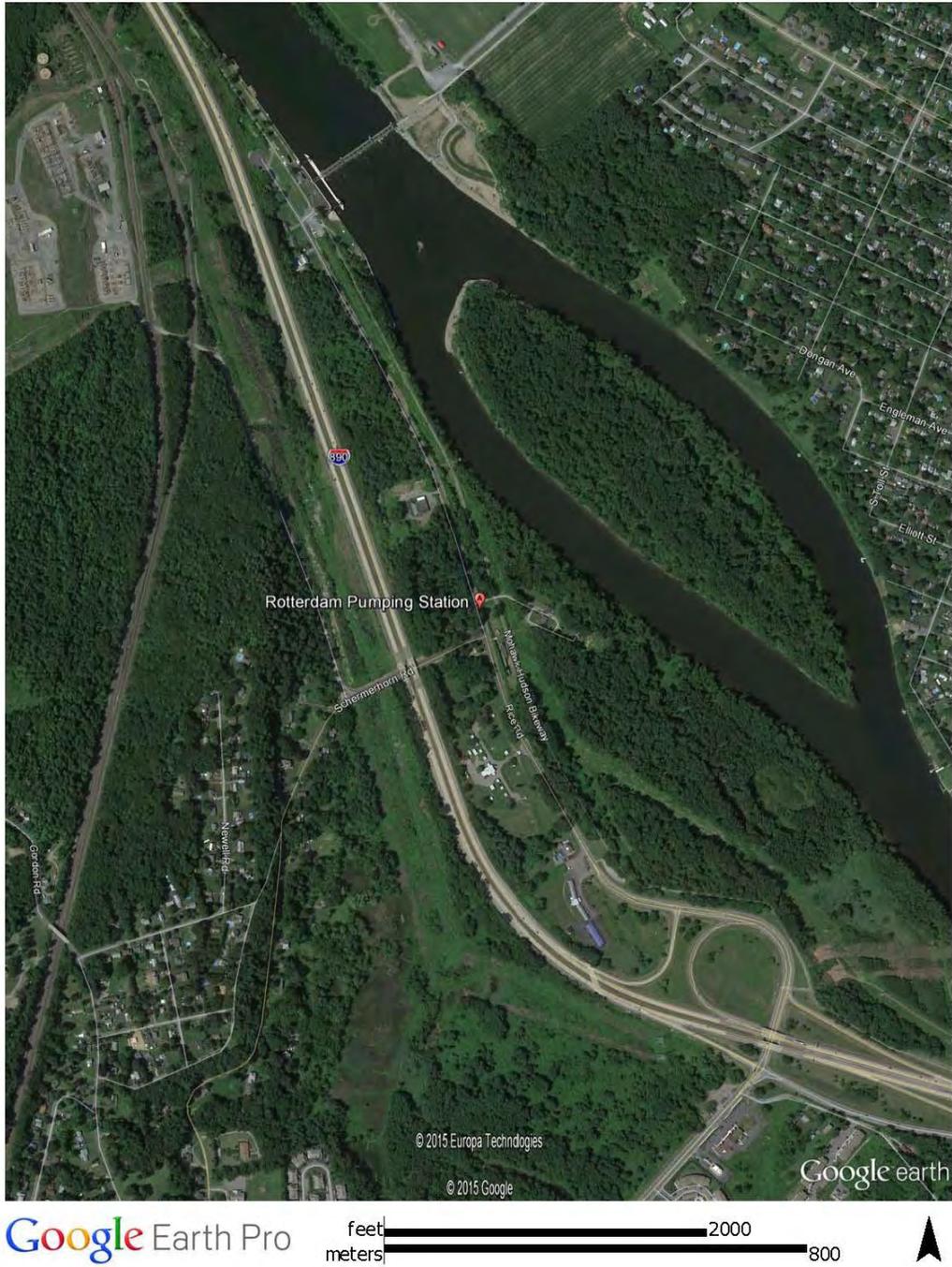
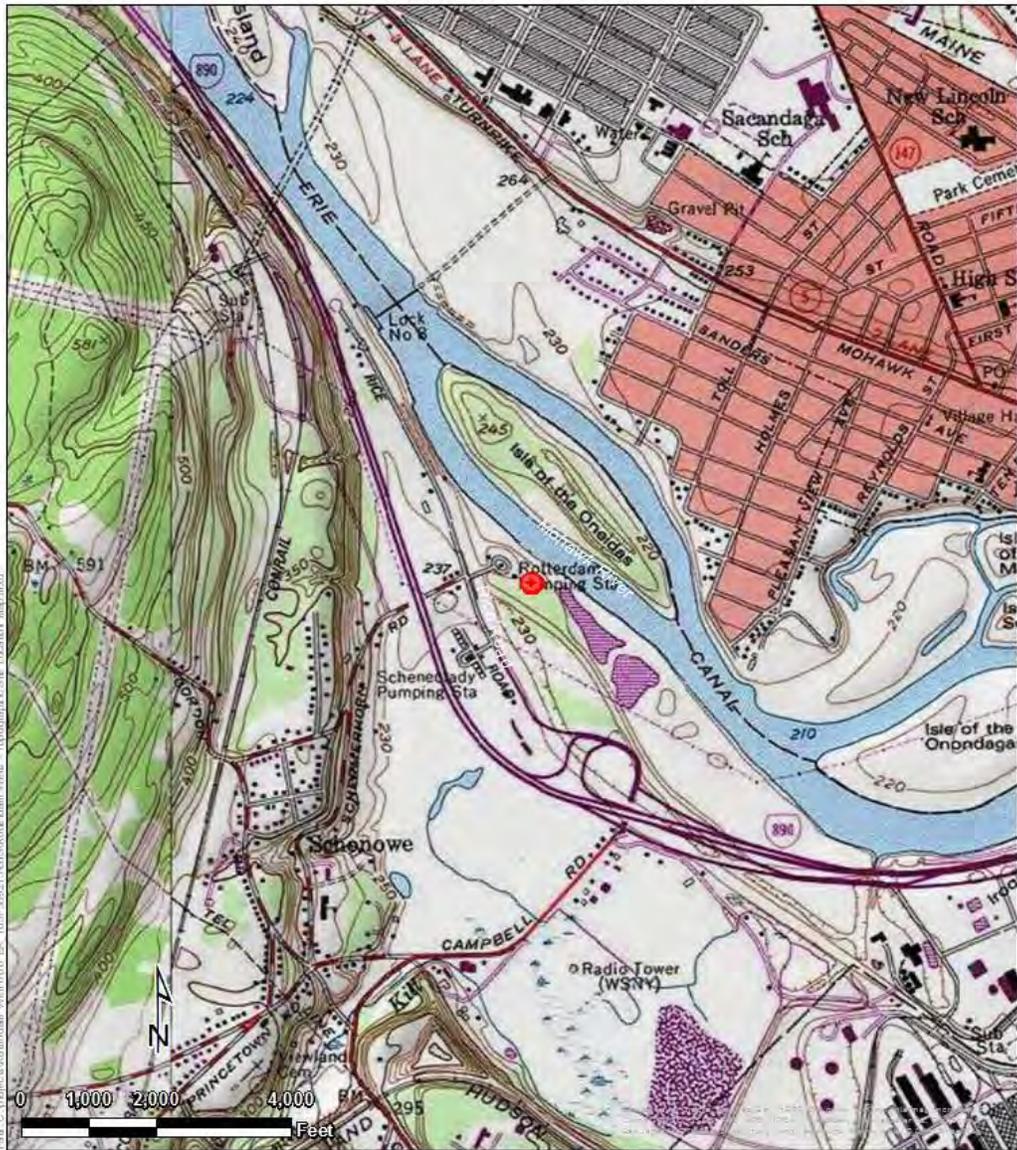


Figure 1. Project Location Map



Topographic Map

Rotterdam District #5 Well
Town of Rotterdam,
Schenectady County, New York

Legend

-  Project Area



Figure 2. Topographic Map

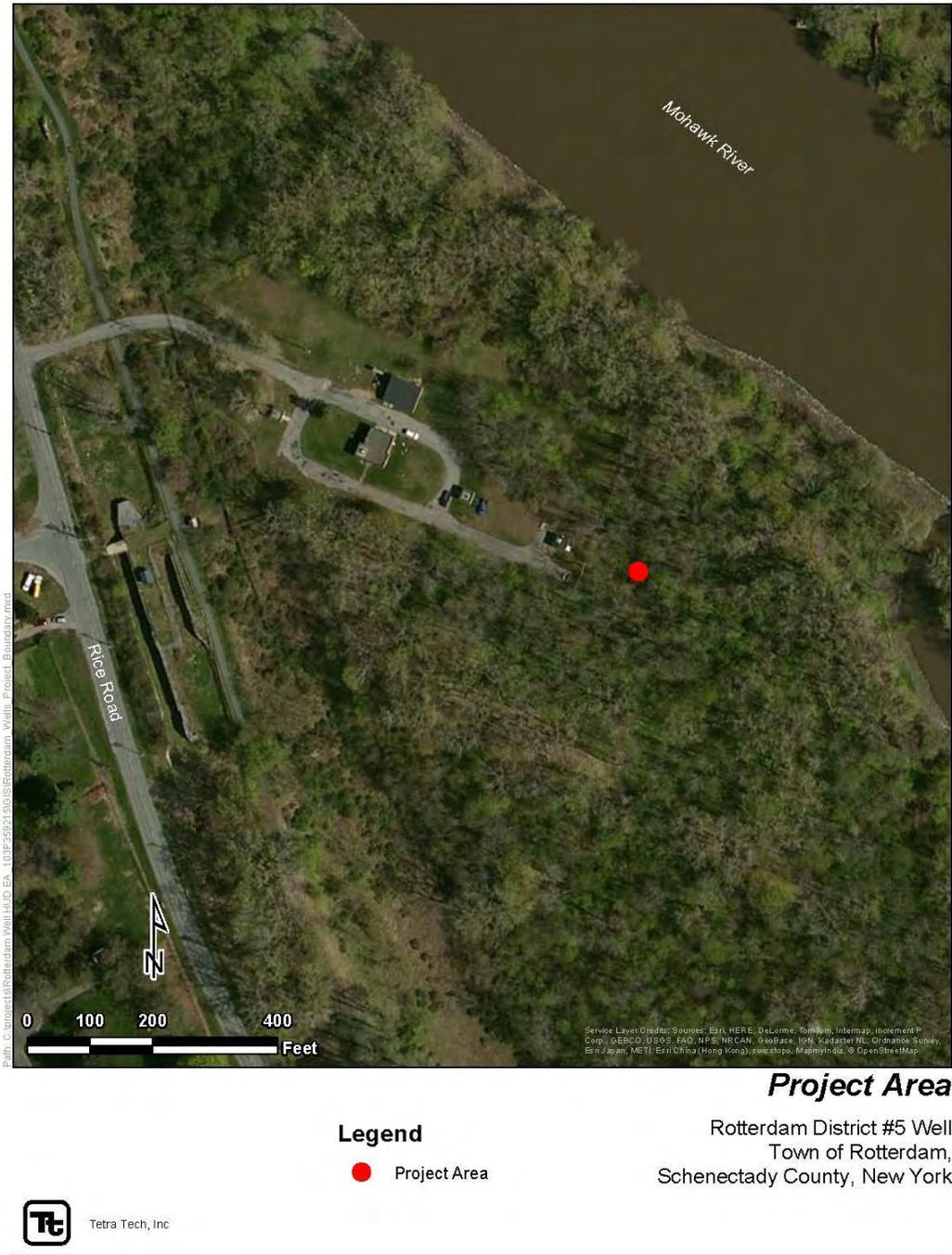
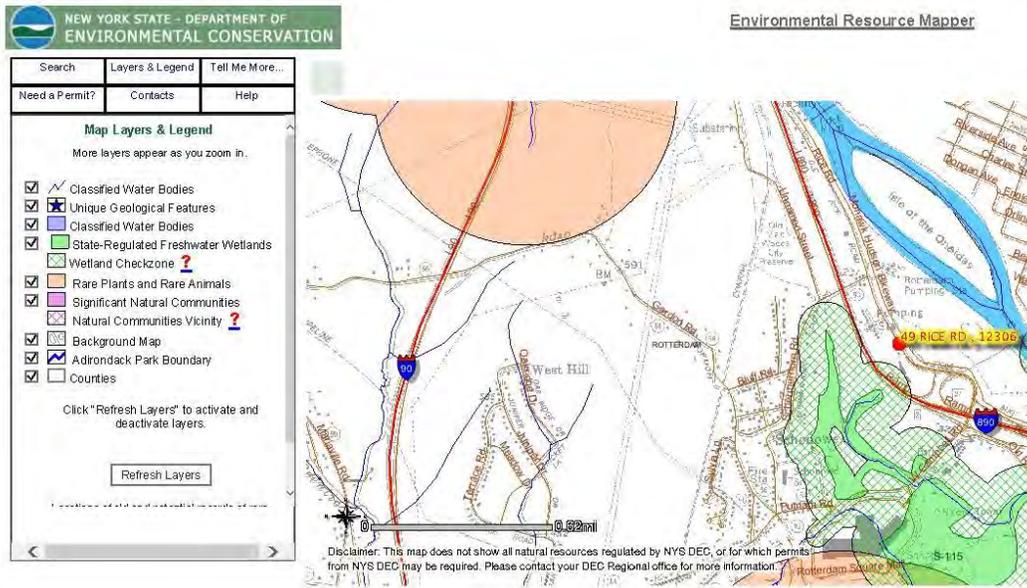


Figure 3. Project Area Map



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12/21/2015

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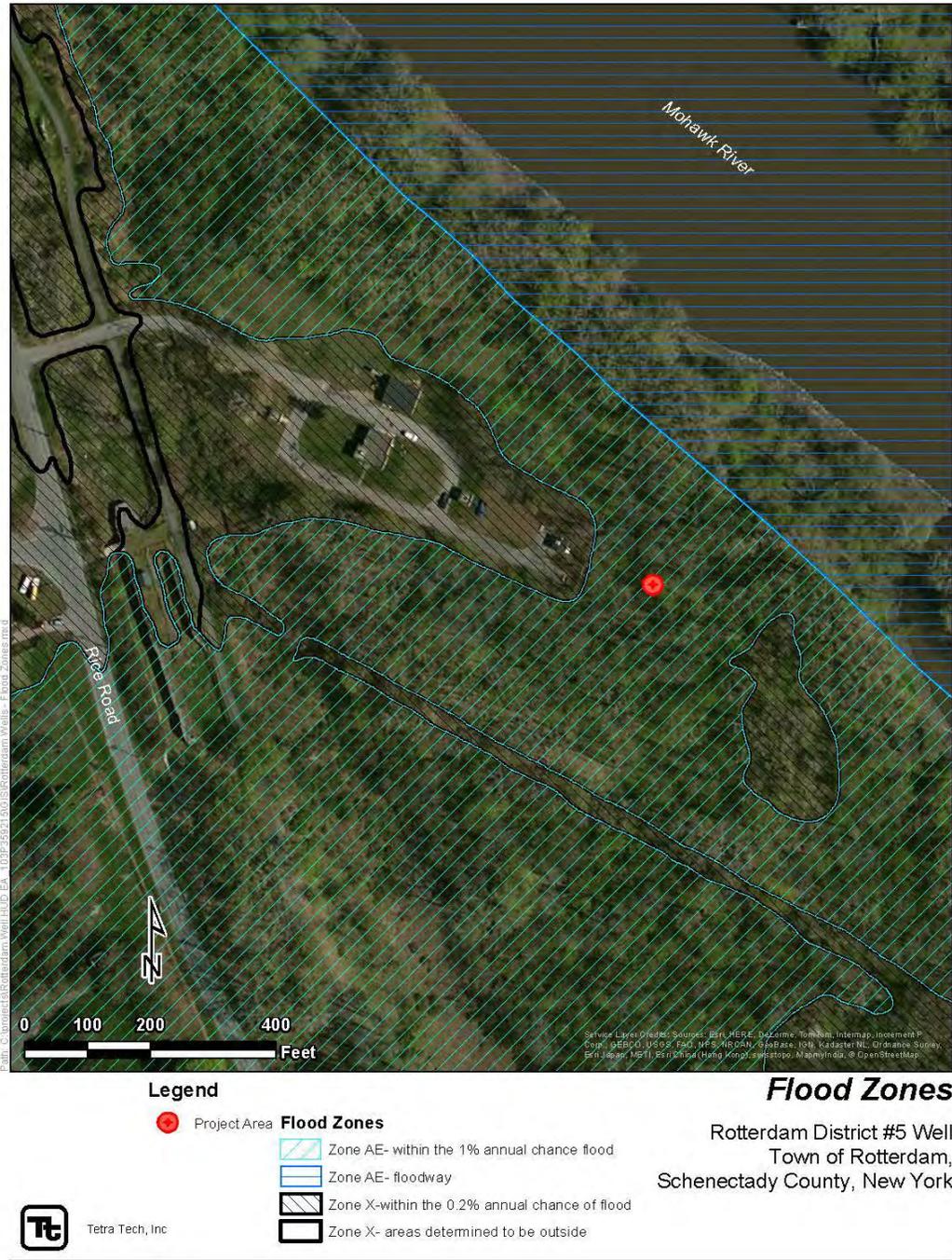


Figure 5: Flood Zones Map

APPENDIX D
SOILS



Natural Resources
Conservation Service

441 South Salina St.
Suite 354
Syracuse, NY 13212
315-477-6506
kathryn.duncan@ny.usda.gov

January 13, 2016

Asst. General Council Governor's Office of Storm Recovery
c/o Thomas King, Esq.
99 Washington Ave. Suite 1224
Albany, NY 12260

Re: Rotterdam District #5 Wellhead Facility, Schenectady Co.
NRCS FPPA review

Mr. King,

I have received your request dated December 21, 2015, with the information needed to complete a Farmland Conversion Impact Rating (AD-1006) for the project cited above. After reviewing the documentation and the short description you provided I will be issuing an exemption from the Farmland Protection Policy Act (FPPA) provision.

While the site does include a soil map unit that is listed as prime farmland, the project is exempt because your description and map limits the disturbance to the site to 0.7 acres therefore the project falls under the small acreage exemption because it is less than 3 acres. According to Part 523.11 E of the Farmland Protection Policy Act Manual an AD-1006 is not required for this project. Please provide this letter of exemption to the Federal Agency who is providing funding for the project.

If you have any questions about this determination please feel free to contact me.

Kathryn Duncan
Cartographer



Governor's Office of Storm Recovery



Andrew M. Cuomo
Governor

Lisa Bova-Hiatt
Executive Director

December 21, 2015

Thomas Lacko
District Conservationist
SCOTIA PROGRAM DELIVERY POINT
24 HETCHELTOWN RD
SCOTIA, NY 12302-5500

Re: U.S. Department of Agriculture Farmland Conversion Impact Rating.

Dear Mr. Lacko:

The Governor's Office of Storm Recovery (GOSR), an office of New York State Homes and Community Renewal's (HCR) Housing Trust Fund Corporation (HTFC), on behalf of the Department of Housing & Urban Development (HUD), is currently preparing an Environmental Assessment (EA) for the drilling and completion of a new water supply well at the Rotterdam District #5 Wellhead Facility in the Town of Rotterdam, Schenectady County, NY (see Figures 1 and 2). GOSR is acting as HUD's non-federal representative for the purposes of conducting consultation pursuant to the Farmland Protection Policy Act (FPPA). The proposed project includes the build-up of a well platform above the 500-year floodplain; a well connection to existing pipes; installing a chlorinator, motor, and pump; and constructing a new building to house the pump and equipment and a paved access road (see Figure 3). The project would disturb approximately 0.7 acres on a 9.38-acre parcel (Parcel number 38, owned by Water District #5). Tree clearing not shown in the figures has already occurred on the parcel. The proposed Project would not include any new tree clearing.

The purpose of this letter is to provide the Natural Resources Conservation Service (NRCS) notice of the proposed project and to document FPPA compliance. The soils on the parcel are shown as prime farmland (See Figure 4). Please find attached the Form AD-1066 for your review and use.

If you have questions or require additional information regarding this request, please contact me at (646) 417-4660 or thomas.king@stormrecovery.ny.gov. Thank you for your time and consideration.

Sincerely,

A handwritten signature in black ink, appearing to read "Thomas J. King". The signature is fluid and cursive, with a long horizontal stroke extending to the right.

Thomas J. King, Esq.
Director – Bureau of Environmental Review and Assessment
Assistant General Counsel Governor’s Office of Storm Recovery
99 Washington Avenue Suite 1224
Albany, New York 12260

CC:

Peter Gibbs (USDA – by email)
Dianna Stanton (USDA – by email)
Seymour VanderVeen (USDA – by email)
Greg Kist (USDA – by email)

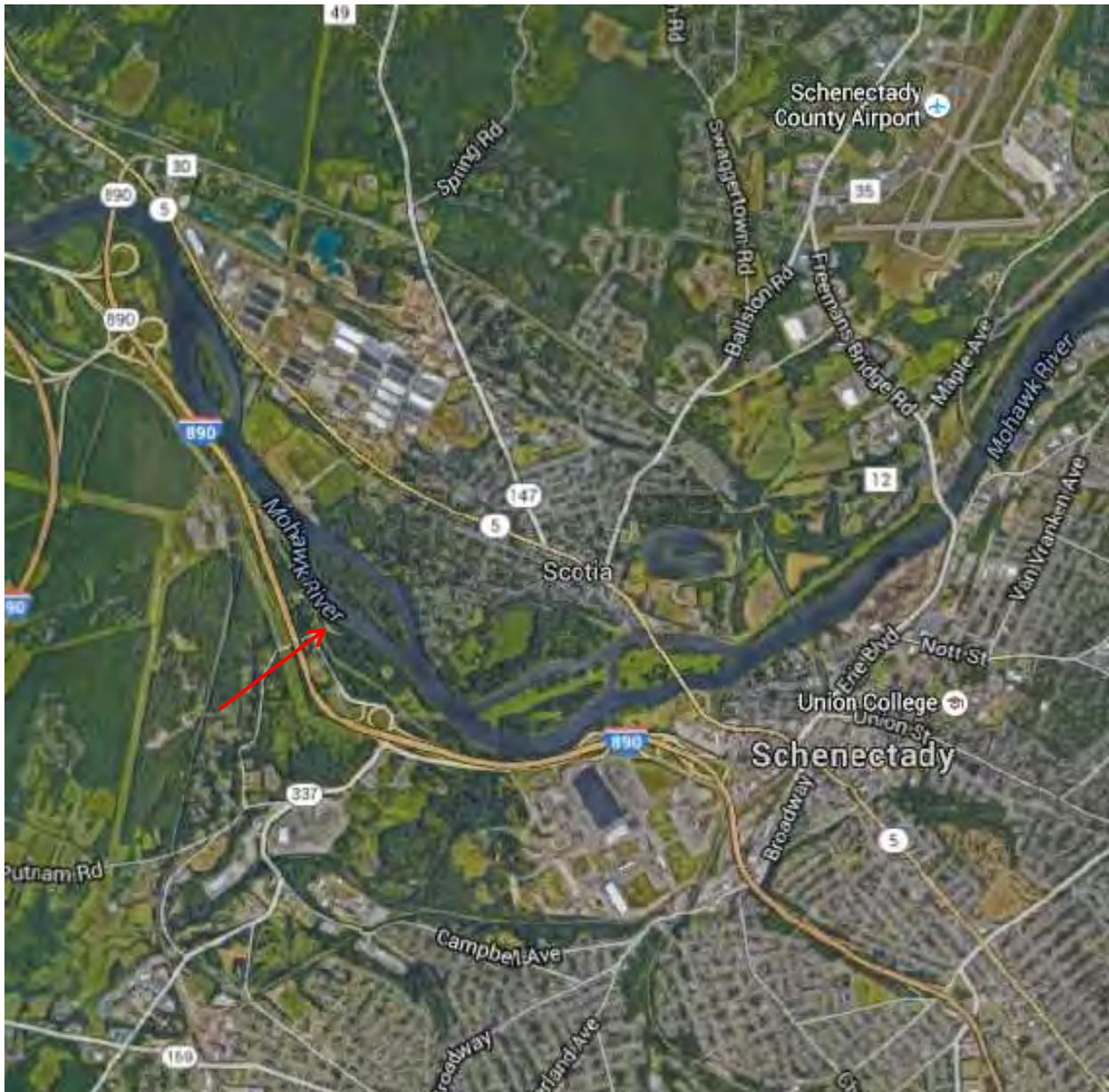
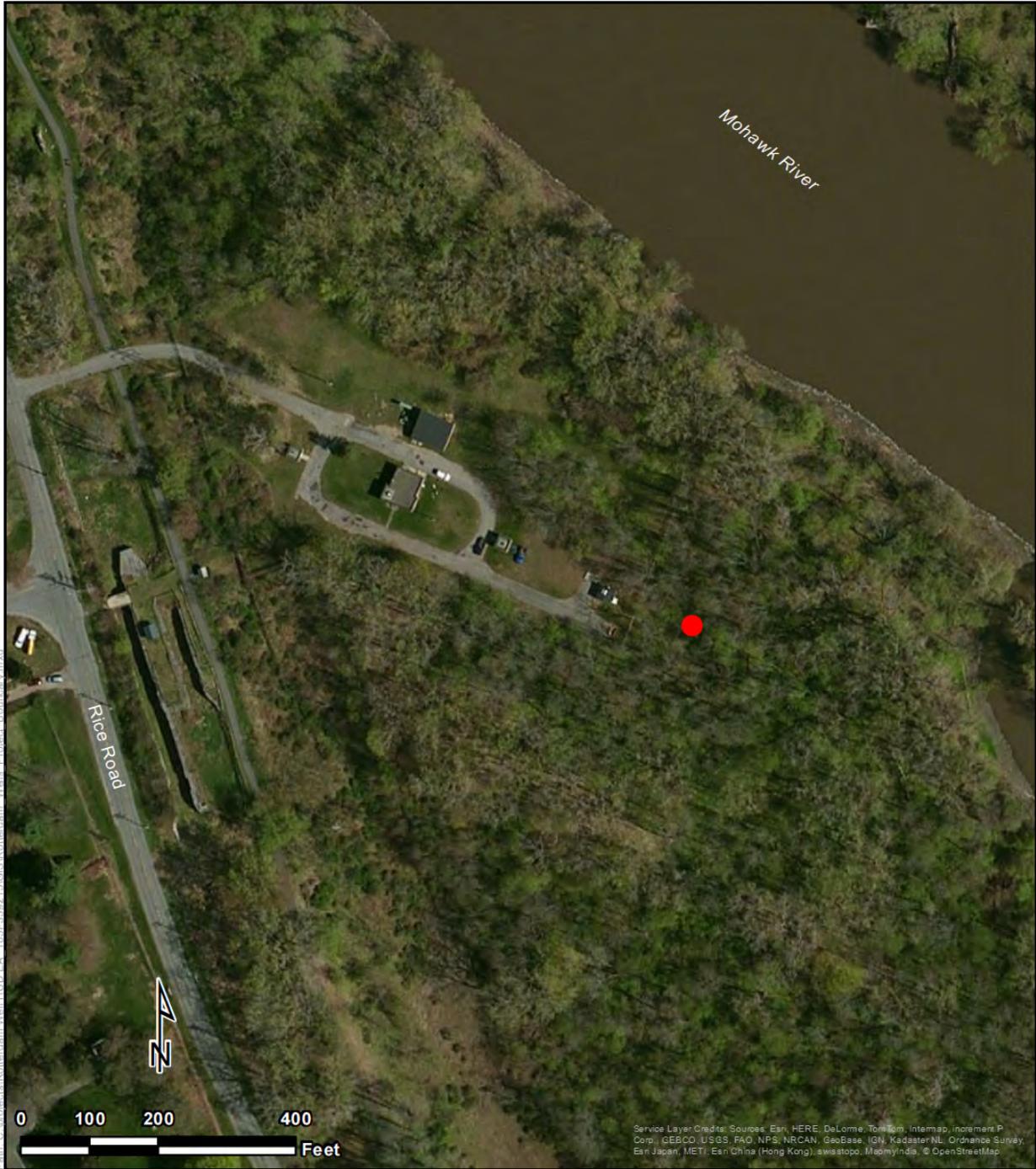


Figure 1: Location of Rotterdam District #5 Wellhead Facility



Project Area

Rotterdam District #5 Well
 Town of Rotterdam,
 Schenectady County, New York

Legend

● Project Area



Tetra Tech, Inc

Figure 2: Location of Proposed Well Site at Rotterdam District #5 Wellhead Facility

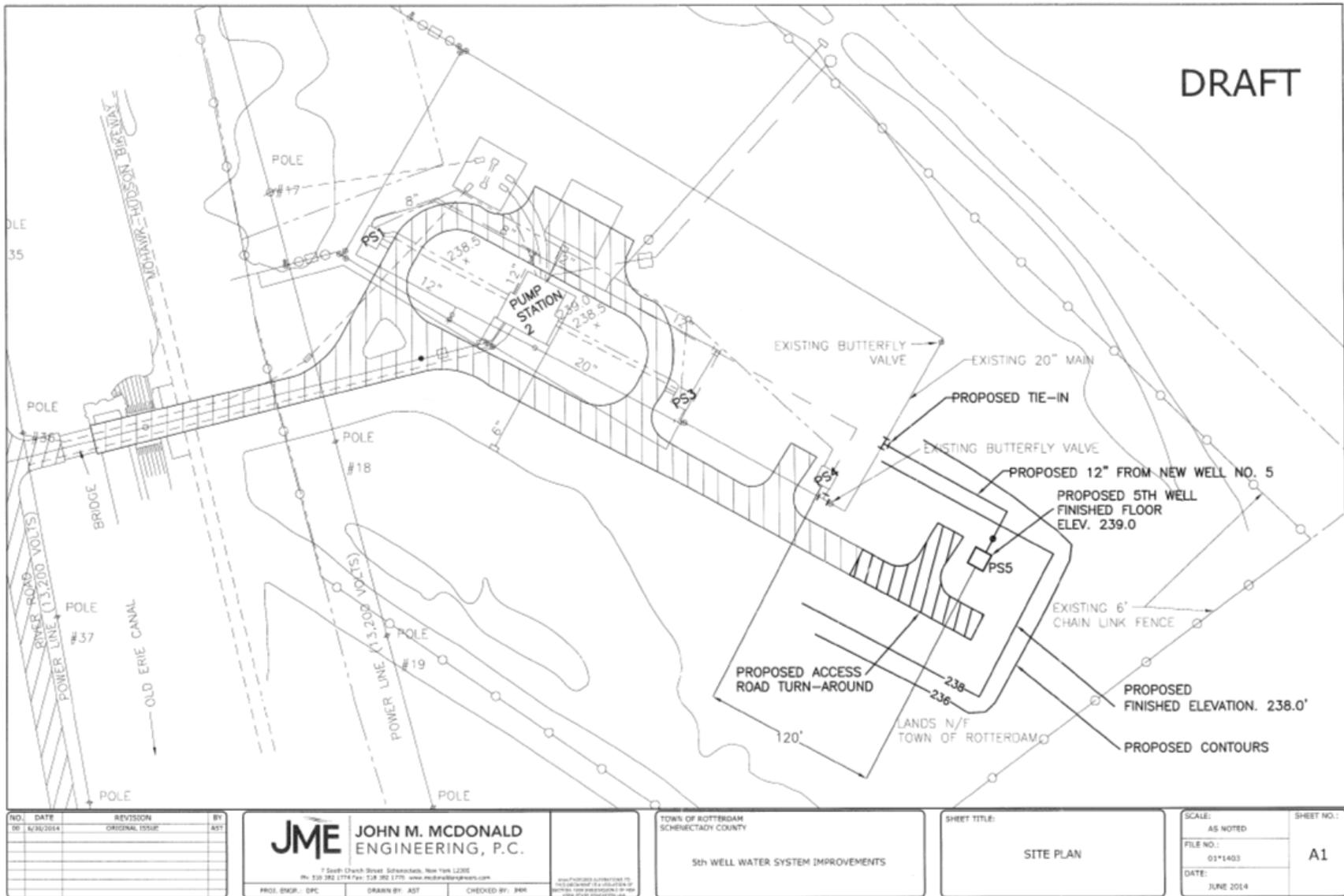
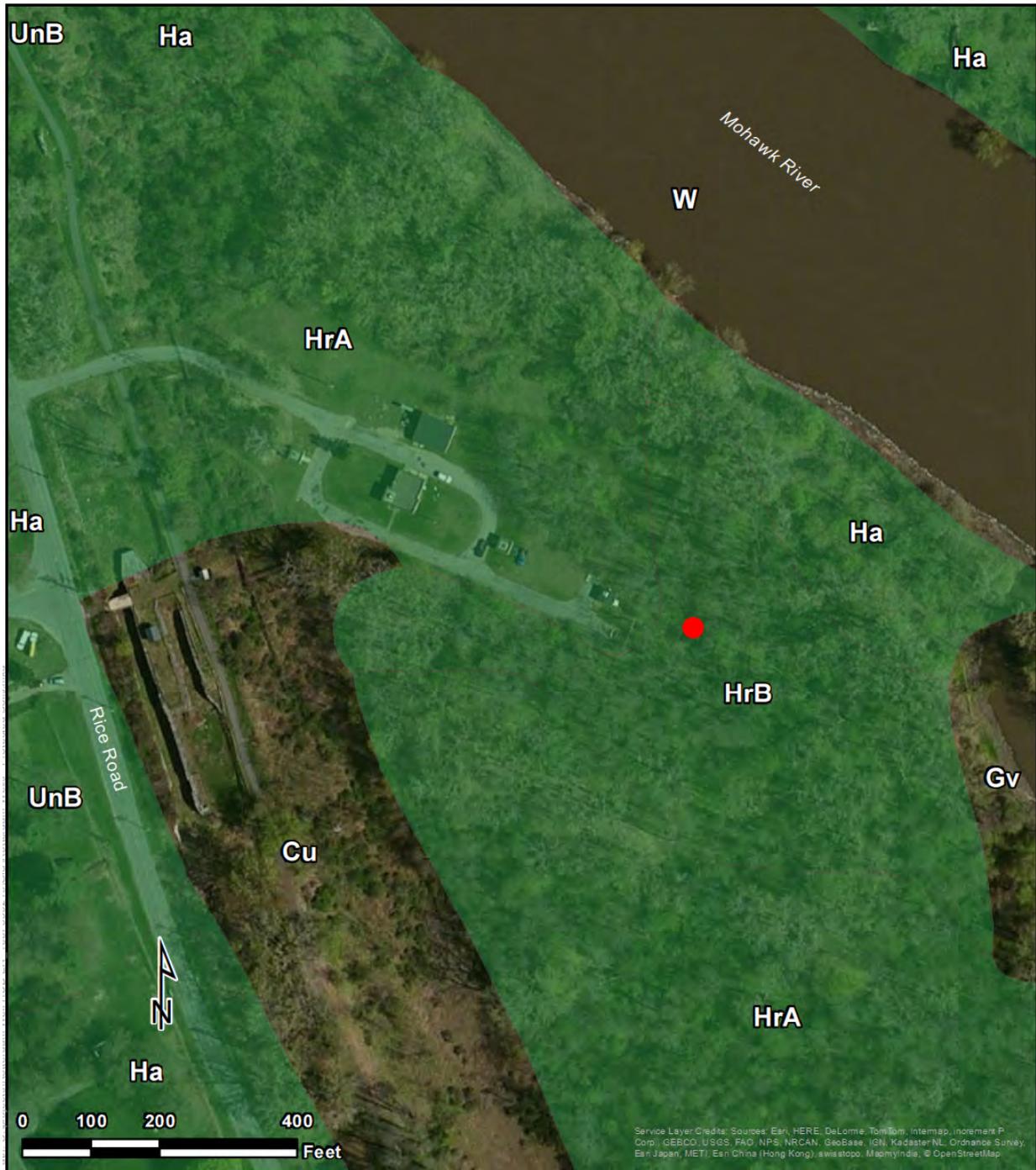


Figure 3: Proposed Siteplan for New Well.



Legend

● Project Area

Prime Farmland Soils

■ All areas are prime farmland

■ Farmland of statewide importance

■ Prime farmland if drained

Protected Soils

Rotterdam District #5 Well
Town of Rotterdam,
Schenectady County, New York



Figure 4: Soils present at Proposed Well Site.

FARMLAND CONVERSION IMPACT RATING

PART I (To be completed by Federal Agency)		Date Of Land Evaluation Request December 16, 2015				
Name of Project Rotterdam District #5 Wellhead Facility		Federal Agency Involved HUD through NYGOSR				
Proposed Land Use Water Supply Well		County and State Schenectady, New York				
PART II (To be completed by NRCS)		Date Request Received By NRCS		Person Completing Form:		
Does the site contain Prime, Unique, Statewide or Local Important Farmland? <i>(If no, the FPPA does not apply - do not complete additional parts of this form)</i>		YES <input type="checkbox"/>	NO <input type="checkbox"/>	Acres Irrigated		
Major Crop(s)		Farmable Land In Govt. Jurisdiction Acres: %		Average Farm Size		
Name of Land Evaluation System Used		Name of State or Local Site Assessment System		Amount of Farmland As Defined in FPPA Acres: %		
				Date Land Evaluation Returned by NRCS		
PART III (To be completed by Federal Agency)		Alternative Site Rating				
		Site A	Site B	Site C	Site D	
A. Total Acres To Be Converted Directly		0.7				
B. Total Acres To Be Converted Indirectly						
C. Total Acres In Site		9.38				
PART IV (To be completed by NRCS) Land Evaluation Information						
A. Total Acres Prime And Unique Farmland						
B. Total Acres Statewide Important or Local Important Farmland						
C. Percentage Of Farmland in County Or Local Govt. Unit To Be Converted						
D. Percentage Of Farmland in Govt. Jurisdiction With Same Or Higher Relative Value						
PART V (To be completed by NRCS) Land Evaluation Criterion Relative Value of Farmland To Be Converted (Scale of 0 to 100 Points)						
PART VI (To be completed by Federal Agency) Site Assessment Criteria <i>(Criteria are explained in 7 CFR 658.5 b. For Corridor project use form NRCS-CPA-106)</i>		Maximum Points	Site A	Site B	Site C	Site D
1. Area In Non-urban Use		(15)				
2. Perimeter In Non-urban Use		(10)				
3. Percent Of Site Being Farmed		(20)				
4. Protection Provided By State and Local Government		(20)				
5. Distance From Urban Built-up Area		(15)				
6. Distance To Urban Support Services		(15)				
7. Size Of Present Farm Unit Compared To Average		(10)				
8. Creation Of Non-farmable Farmland		(10)				
9. Availability Of Farm Support Services		(5)				
10. On-Farm Investments		(20)				
11. Effects Of Conversion On Farm Support Services		(10)				
12. Compatibility With Existing Agricultural Use		(10)				
TOTAL SITE ASSESSMENT POINTS		160	0	0	0	0
PART VII (To be completed by Federal Agency)						
Relative Value Of Farmland (From Part V)		100	0	0	0	0
Total Site Assessment (From Part VI above or local site assessment)		160	0	0	0	0
TOTAL POINTS (Total of above 2 lines)		260	0	0	0	0
Site Selected:		Date Of Selection		Was A Local Site Assessment Used?		
				YES <input type="checkbox"/> NO <input type="checkbox"/>		
Reason For Selection:						
Name of Federal agency representative completing this form:					Date:	

(See Instructions on reverse side)

STEPS IN THE PROCESSING THE FARMLAND AND CONVERSION IMPACT RATING FORM

- Step 1 - Federal agencies (or Federally funded projects) involved in proposed projects that may convert farmland, as defined in the Farmland Protection Policy Act (FPPA) to nonagricultural uses, will initially complete Parts I and III of the form. For Corridor type projects, the Federal agency shall use form NRCS-CPA-106 in place of form AD-1006. The Land Evaluation and Site Assessment (LESA) process may also be accessed by visiting the FPPA website, <http://fppa.nrcs.usda.gov/lesa/>.
- Step 2 - Originator (Federal Agency) will send one original copy of the form together with appropriate scaled maps indicating location(s) of project site(s), to the Natural Resources Conservation Service (NRCS) local Field Office or USDA Service Center and retain a copy for their files. (NRCS has offices in most counties in the U.S. The USDA Office Information Locator may be found at http://offices.usda.gov/scripts/ndISAPI.dll/oip_public/USA_map, or the offices can usually be found in the Phone Book under U.S. Government, Department of Agriculture. A list of field offices is available from the NRCS State Conservationist and State Office in each State.)
- Step 3 - NRCS will, within 10 working days after receipt of the completed form, make a determination as to whether the site(s) of the proposed project contains prime, unique, statewide or local important farmland. (When a site visit or land evaluation system design is needed, NRCS will respond within 30 working days.
- Step 4 - For sites where farmland covered by the FPPA will be converted by the proposed project, NRCS will complete Parts II, IV and V of the form.
- Step 5 - NRCS will return the original copy of the form to the Federal agency involved in the project, and retain a file copy for NRCS records.
- Step 6 - The Federal agency involved in the proposed project will complete Parts VI and VII of the form and return the form with the final selected site to the servicing NRCS office.
- Step 7 - The Federal agency providing financial or technical assistance to the proposed project will make a determination as to whether the proposed conversion is consistent with the FPPA.

INSTRUCTIONS FOR COMPLETING THE FARMLAND CONVERSION IMPACT RATING FORM

(For Federal Agency)

Part I: When completing the "County and State" questions, list all the local governments that are responsible for local land use controls where site(s) are to be evaluated.

Part III: When completing item B (Total Acres To Be Converted Indirectly), include the following:

1. Acres not being directly converted but that would no longer be capable of being farmed after the conversion, because the conversion would restrict access to them or other major change in the ability to use the land for agriculture.
2. Acres planned to receive services from an infrastructure project as indicated in the project justification (e.g. highways, utilities planned build out capacity) that will cause a direct conversion.

Part VI: Do not complete Part VI using the standard format if a State or Local site assessment is used. With local and NRCS assistance, use the local Land Evaluation and Site Assessment (LESA).

1. Assign the maximum points for each site assessment criterion as shown in § 658.5(b) of CFR. In cases of corridor-type project such as transportation, power line and flood control, criteria #5 and #6 will not apply and will, be weighted zero, however, criterion #8 will be weighed a maximum of 25 points and criterion #11 a maximum of 25 points.
2. Federal agencies may assign relative weights among the 12 site assessment criteria other than those shown on the FPPA rule after submitting individual agency FPPA policy for review and comment to NRCS. In all cases where other weights are assigned, relative adjustments must be made to maintain the maximum total points at 160. For project sites where the total points equal or exceed 160, consider alternative actions, as appropriate, that could reduce adverse impacts (e.g. Alternative Sites, Modifications or Mitigation).

Part VII: In computing the "Total Site Assessment Points" where a State or local site assessment is used and the total maximum number of points is other than 160, convert the site assessment points to a base of 160.

Example: if the Site Assessment maximum is 200 points, and the alternative Site "A" is rated 180 points:

$$\frac{\text{Total points assigned Site A}}{\text{Maximum points possible}} = \frac{180}{200} \times 160 = 144 \text{ points for Site A}$$

For assistance in completing this form or FPPA process, contact the local NRCS Field Office or USDA Service Center.

NRCS employees, consult the FPPA Manual and/or policy for additional instructions to complete the AD-1006 form.

SOIL INFORMATION

Ha - HAMLIN SERIES

The Hamlin series consists of very deep, well drained soils formed in alluvium on flood plains and high bottoms. Permeability is moderate in the solum and substratum. Slope ranges from 0 to 3 percent.

TAXONOMIC CLASS: Coarse-silty, mixed, active, mesic Dystric Fluventic Eutrudepts

GEOGRAPHIC SETTING: The Hamlin soils are nearly level soils on floodplains and high bottoms. The soils formed in post glacial alluvium mainly from areas of siltstone, shale and limestone. Mean annual precipitation ranges from 30 to 45 inches, mean annual air temperature from 46 degrees to 50 degrees Fahrenheit. and growing season from 120 to 180 days.

DRAINAGE AND PERMEABILITY: Hamlin soils are well drained. The potential for surface runoff is very low to low. Permeability is moderate in the solum and substratum.

USE AND VEGETATION: Mostly cleared and used for forage and truck crops. Flooding is a hazard for the more intensive uses. Native vegetation consists of the more demanding species of northern hardwoods.

HrA and HrB - HOWARD SERIES

Howard soils consist of very deep, well drained and somewhat excessively drained soils formed in medium textured glacial outwash deposits. The soils are on valley terraces, outwash plains, kame moraines, and eskers. Slope ranges from 0 to 70 percent.

TAXONOMIC CLASS: Loamy-skeletal, mixed, active, mesic Glossic Hapludalfs

GEOGRAPHIC SETTING: Howard soils are nearly level to rolling soils of outwash plains and valley trains and rolling to very steep soils of kames, eskers and terraces faces. Slope ranges from 0 to 70 percent. These soils developed in glacial outwash deposits containing significant amounts of limestone rock fragments and a broad range in other rock fragments of sedimentary and igneous origin. Mean annual precipitation ranges from 26 to 46 inches, mean annual temperature ranges from 45 degrees to 50 degrees Fahrenheit, and the mean frost-free season ranges from 120 to 160 days. The elevation ranges from 95 to 1800 feet above sea level.

DRAINAGE AND SATURATED HYDRAULIC CONDUCTIVITY: Somewhat excessively drained to well drained. The potential for surface runoff is negligible to very high. Saturated hydraulic conductivity is moderately high or high in the solum and very high in the substratum.

USE AND VEGETATION: Most areas have been cleared and are used for growing corn, small grains, hay, vegetables, and fruit. Steep areas are in pasture or are wooded. Woodlots contain sugar maple, beech, oak, white ash, black cherry, and white pine.

APPENDIX E
SHPO CORRESPONDENCE AND PHASE IA/IB
ARCHEOLOGICAL INVESTIGATION



Parks, Recreation, and Historic Preservation

ANDREW M. CUOMO
Governor

ROSE HARVEY
Commissioner

December 21, 2015

Thomas King, Certifying Officer
Governor's Office of Storm Recovery (GOSR)
99 Washington Ave, Suite 1224
Albany, NY 12231

Re: GOSR/ HUD/ NY State CDBG Disaster Recovery
Rotterdam District #5 Well Heads Flood Protection
49 Rice Rd, Rotterdam

15PR05262

Dear Mr. King:

Thank you for requesting the comments of the New York State Historic Preservation Office (SHPO). We have reviewed the submitted materials 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 Environmental Conservation Law Article 8).

Based on this review, it is the opinion of SHPO that there will be No Historic Properties Affected by the proposed undertaking.

If I can be of further assistance, please contact me at (518) 268-2187 or Larry.moss@parks.ny.gov.

Sincerely,

Larry K Moss, Historic Preservation Technical Specialist

CC: Chris Borstel, Tetrattech
Genevieve Kaiser, Tetrattech
Jim Turner, Stratacrm
Joseph Fischl, Tetrattech
Alicia Schultz, NYS HCR

PO Box 37, 70 Pleasant Hill Road
Mountainville, NY 10953

(845) 534-5959 FAX: (845) 534-5999
www.tectonicengineering.com

PHASE IA/IB ARCHEOLOGICAL INVESTIGATION

ROTTERDAM DISTRICT #5 WELL HEADS,
ROTTERDAM, SCENECTADY COUNTY,
NEW YORK

October 2015

Tectonic Engineering and Surveying Consultants, P.C.
70 Pleasant Hill Road
Mountainville, New York

Phase IA/IB Archeological Investigation: Rotterdam District #5 Well Heads

MANAGEMENT SUMMARY

This report presents the findings of a Phase I Archeological Survey conducted on behalf of the Town of Rotterdam (Subrecipient) for the Flood Protection of the Rotterdam District #5 Well Heads project in Rotterdam, Schenectady County, New York. The Governor's Office of Storm Recovery (GOSR), operating under auspices of New York State Homes and Community Renewal's Housing Trust Fund Corporation, is the Responsible Entity for direct administration of the U.S. Dept. of Housing & Urban Development (HUD) Community Development Block Grant – Disaster Recovery (CDBG-DR) funds. The project is part of the New York Rising Community Reconstruction Program and is receiving funding to drill a new well and elevate the casing five (5) feet above the 500-year floodplain. The new well will ensure that the Rotterdam Water District will have potable water during a flood event and will provide additional capacity for the Town. The Rotterdam District #5 well head facility serves most of the Town of Rotterdam, and was almost compromised by flooding during Hurricane Irene and Tropical Storm Lee. The results of the Phase IA background and literature search suggest that the proposed Project Area (PA) has a low sensitivity for precontact and historic cultural resources. According to the results of the Phase IB field investigation, significant cultural resources do not exist within the Project Area. Tectonic Engineering & Surveying Consultants, P.C. (Tectonic) and STRATA Cultural Resource Management, LLC (STRATA) recommend no further investigation.

Involved Agencies: GOSR; NYSHPO; New York State Department of Environmental Conservation (NYSDEC); NYS Department of Health, Bureau of Water Supply Protection; U.S. Fish and Wildlife Service (USFWS); Schenectady County Department of Public Health Services; Schenectady County Department of Economic Development and Planning; Schenectady County Groundwater Management, and the Town of Rotterdam

Phase of Survey: Phase I

Project Name and Location:

Name and ID#: Rotterdam District #5 Well Heads

Location: 49 Rice Road

Minor Civil Division: Town of Rotterdam

County: Schenectady County

Survey Area: 0.75 acres (0.2h)

USGS 7.5 Minute Quadrangle Map: Schenectady, NY (1980) (**Map 1**)

Archeological Survey Overview

Number of Shovel Test Pits: A single shovel test pit (STP).

Depth of Shovel Test Pit: 30 cm

Results of Archeological Survey

Number & name of prehistoric sites identified: None

Number & name of historic sites identified: None

Number & name of sites recommended for Phase II/Avoidance: None

Results of Architectural Survey

Number of historic buildings/structures/cemeteries within project area: None

Number of historic buildings/structures/cemeteries adjacent to project area: None

Number of previously determined NR listed or eligible buildings/ structures/ cemeteries/ districts: None

Report Author(s): STRATA Cultural Resource Management, LLC

Date of Report: October 16, 2015

Phase IA/IB Archeological Investigation: Rotterdam District #5 Well Heads

PHASE IA ARCHEOLOGICAL SENSITIVITY ASSESSMENT

PROJECT INFORMATION

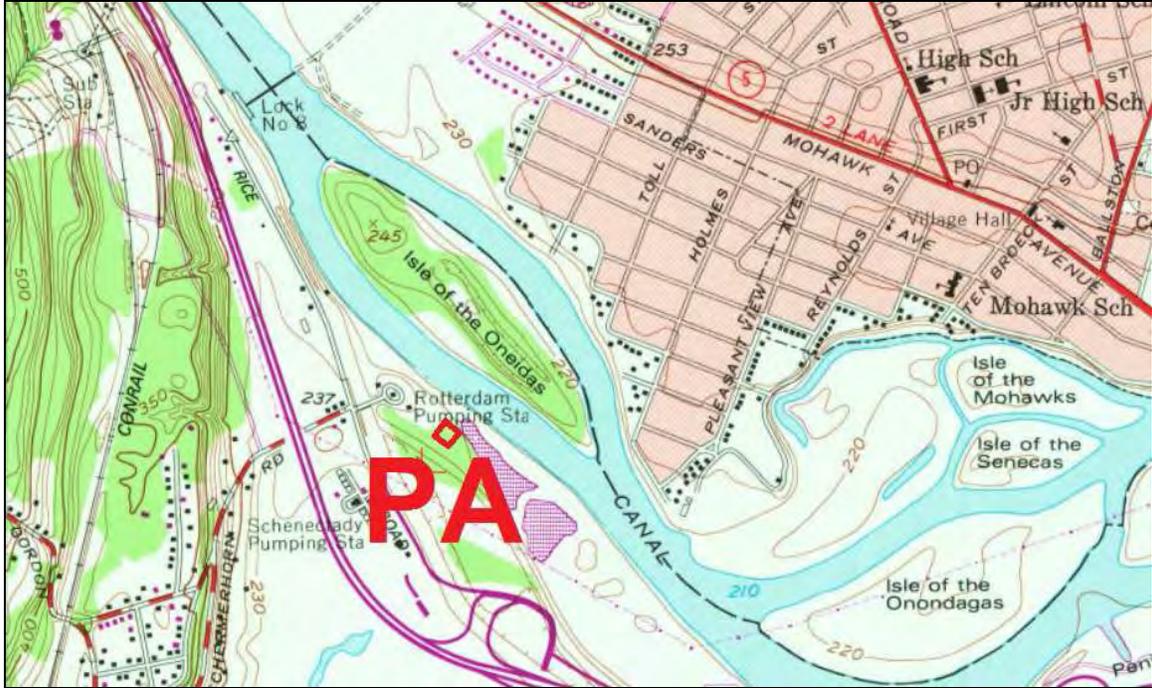
The Rotterdam District #5 well head facility is located on Rice Road in the Town of Rotterdam, Schenectady County, New York (**Photo 1**). This facility, which serves most of the Town of Rotterdam, is located within the 500-year floodplain and was almost compromised by flooding during Hurricane Irene and Tropical Storm Lee. The aim of this project is to drill a new well and elevate the casing five (5) feet above the 500-year floodplain. Ground disturbance is approximately 0.75 acres. Proposed activities include establishing a well connection to existing pipes, installing a motor and pump, and constructing a new building to house the pump and equipment. The new building design is similar to that of the existing Well #4 building.

The Property contains several existing pump station buildings and related facilities (**Map 2**). These buildings lie on a level property several feet higher in elevation than the Project Area. The Mohawk River flows less than 200 feet to the north.



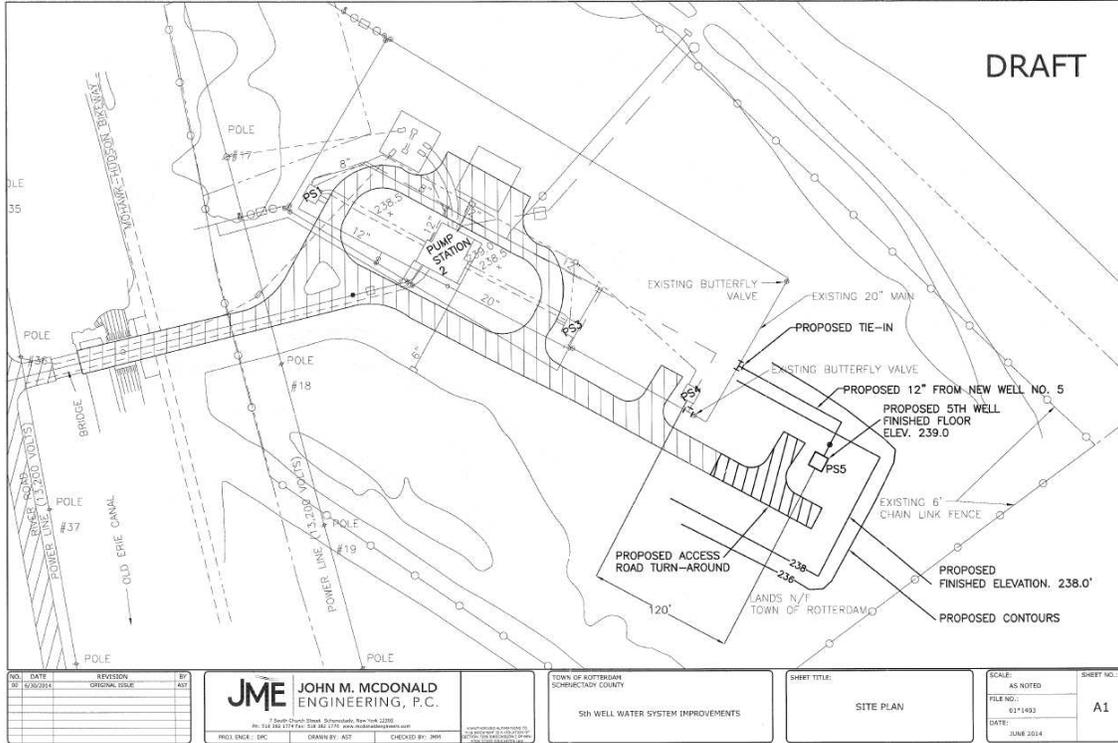
Photo 1: Aerial view of Project Area (Google Earth 2015).

Phase IA/IB Archeological Investigation: Rotterdam District #5 Well Heads

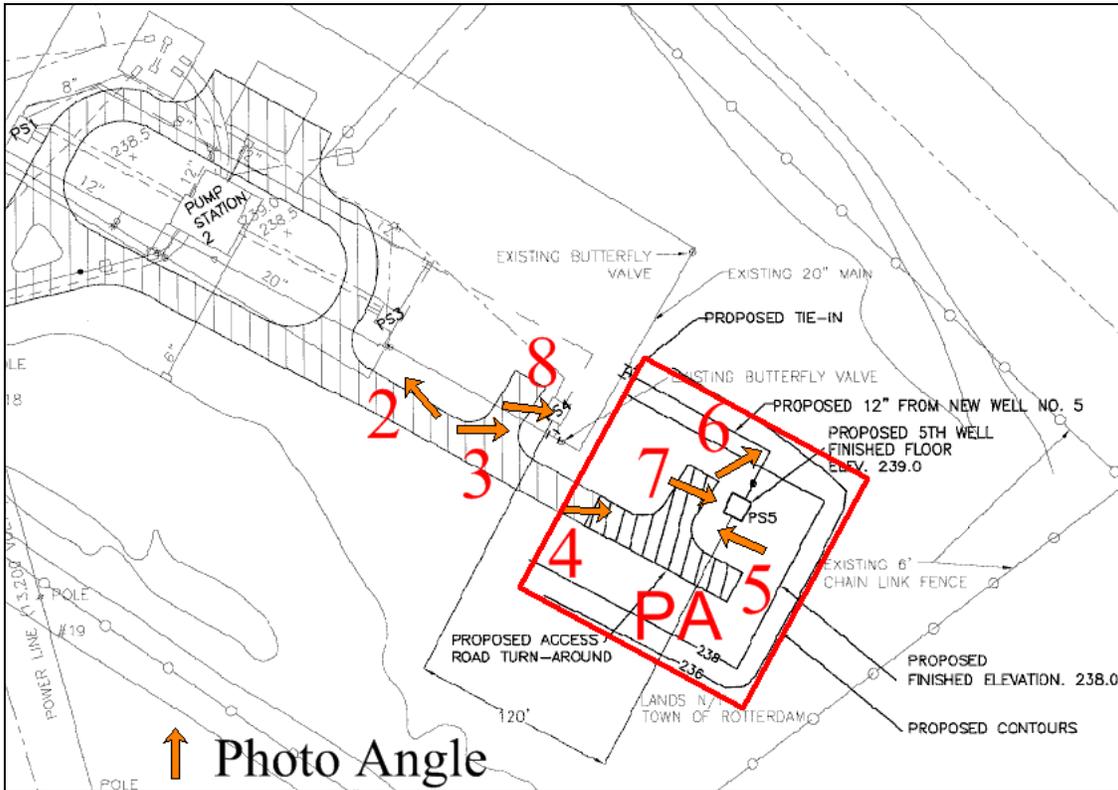


Map 1: 1980 USGS 7.5' Topographic Quadrangle showing location of Project Area (Schenectady, NY).

Phase IA/IB Archeological Investigation: Rotterdam District #5 Well Heads



Map 2: Project Area with existing conditions.



Map 3: Report Photo Angles.

Phase IA/IB Archeological Investigation: Rotterdam District #5 Well Heads



Photo 2: View northwest toward Well #3 pump station with Pump Station 2 at rear.



Photo 3: View east toward Pump Station 4 with proposed Well #5 Project Area at right rear.

Phase IA/IB Archeological Investigation: Rotterdam District #5 Well Heads



Photo 4: View east across proposed Well #5 Project Area.



Photo 5: View northwest across Project Area toward Pump Station 4.

Phase IA/IB Archeological Investigation: Rotterdam District #5 Well Heads



Photo 6: View of gravel ground surface suggesting prior topsoil stripping.



Photo 7: View of shovel test containing sand and gravel.

Phase IA/IB Archeological Investigation: Rotterdam District #5 Well Heads



Photo 8: View east inside Pump Station 4 showing pump atop Well #4.

Phase IA/IB Archeological Investigation: Rotterdam District #5 Well Heads

Bedrock and Surficial Geology

The Project Area lies within a formation of Canajoharie Shale. The surficial geology of the Project Area consists of recent alluvial deposits.

Soils and Drainage

Soils within the Project Area consist exclusively of Howard gravelly silt loam (**HrA, HrB**) (Map 4) (Table 1) (USDA 1994).



Map 4: Project Area soils (<http://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx>).

Table 1: Project Area soils (USDA 1994).

Name	Soil Horizon Depth	Color	Texture, Inclusions	Slope %	Drainage	Description
Howard gravelly silt loam soils (HrA)	A 0-9 in (0-23 cm) B 9-19 in (23-48 cm) C 19-50 in (48-127 cm) D 50-60 in (127-152 cm) E 60-64 in (152-163 cm)	V Dk Gr Br Strong Br Dk Br Dk Br Dk Br	Gravelly Silt Loam V. Gr. Sandy Loam V. Gr. Sandy Loam V. Gr. Sandy Loam V. Gr. Loamy Sand	0-3%	Well drained	Glacial outwash terraces and kames

Phase IA/IB Archeological Investigation: Rotterdam District #5 Well Heads

Current Conditions and Previous Disturbance

The Project Area is currently an open area with low vegetative growth. The ground surface shows little sign of soil development and is mostly gravel. The site appears to have been previously stripped of its topsoil overburden, possibly in association with the historic gravel mining to the east and/or to use as fill for the construction of the adjacent Pump Station facilities.

LITERATURE REVIEW

Site File Search

A site file search conducted at the Office of Parks, Recreation and Historic Preservation (OPRHP) identified one New York State Museum (NYSM) site and no OPRHP sites within 500 feet of the Project Area. The NYSM site #6931 is a large A.C. Parker site that covers the west bank of the Mohawk River and is described as "traces of occupation".

National Register Listed and Eligible Properties

There are two National Register Listed and one Eligible (NRE) properties within 500 feet of the Project Area. The circa 1842 Lock 23 lies to the northwest of the Project Area while the NYS Barge Canal lies to the north. The NRE Old Erie Canal lies to the west.

Previous surveys

There has been one prior archeological investigation conducted within 500 feet of the Project Area. This was a Hartgen Archeological Associates, Inc. survey for two water main lines that crossed the Old Erie Canal and Clinton's Ditch. Remains of these historic constructions were encountered during excavations.

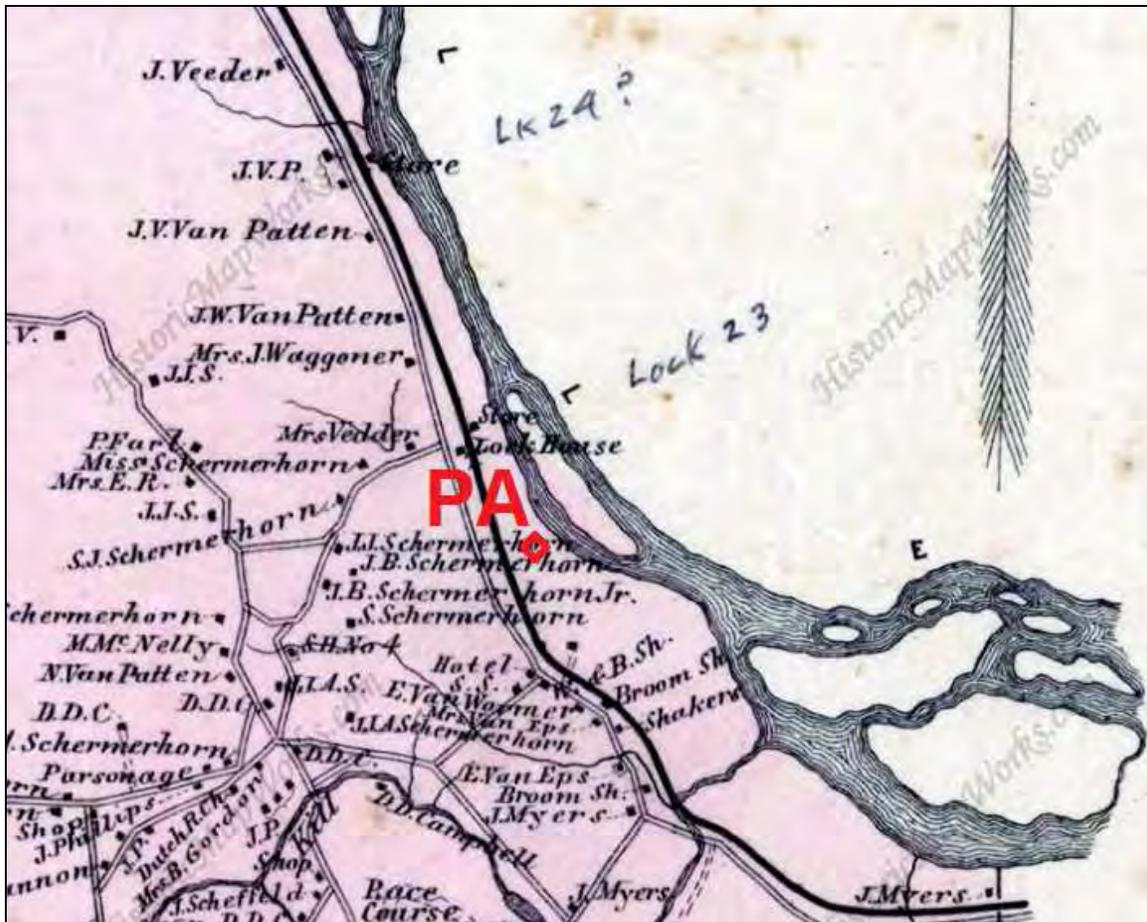
Historic Map Review

Several historic maps were reviewed to characterize the development of the Project Area. The earliest map from 1866 shows the Project Area adjacent to lands occupied by members of the Schermerhorn family (**Map 5**). To the west is the Erie Canal, an important transportation route of the day, with a Lock House to the northwest.

The second historic map from 1893 shows the Project Area with no significant constructions in its vicinity (**Map 6**).

Map 1 above dates from 1980, and shows gravel mining in the lands immediately adjacent to the Project Area. The stripping disturbance observed across the Project Area may be associated with this mining activity.

Phase IA/IB Archeological Investigation: Rotterdam District #5 Well Heads



Map 5: 1866 Map of Schenectady County, New York (L. Fagan).

Phase IA/IB Archeological Investigation: Rotterdam District #5 Well Heads



Map 6: 1893 USGS Topographic Quadrangle (Amsterdam, NY).

Phase IA/IB Archeological Investigation: Rotterdam District #5 Well Heads

SENSITIVITY ASSESSMENT

Prehistoric Sensitivity

The Project Area is considered to have a low sensitivity for the presence of prehistoric cultural remains. While the location within the narrow Mohawk River valley would suggest a high sensitivity for the presence of precontact cultural resources, the extensive disturbance across the site including gravel mining activities and other suspected impacts associated with the construction and operation of the adjacent Pump Station facilities have likely erased any traces of prior occupations.

Historic Sensitivity

The Project Area is considered to have low sensitivity for the presence of historic cultural remains. Again, the extensive disturbance from the former gravel mining and adjacent Pump Station facilities' construction and operation have likely erased any traces of prior occupations.

TESTING RECOMMENDATIONS

As a result of the Phase IA background and literature search, subsurface archeological testing was recommended for level portions of the Project Area within the proposed Limits of Disturbance to confirm prior disturbance.

PHASE IB FIELD INVESTIGATION

The Phase IB Field Investigation was conducted on September 18, 2015 with a site walkover, visual surface survey and fieldwork within the Project Area by Jim Turner, the Principal Investigator.

Shovel Testing Results

A single shovel test pit (STP) was excavated within the Project Area in the vicinity of the proposed Well Head #5. The test produced sand and gravel without an upper topsoil stratum indicating that the site had been previously stripped of surface soils down to the glacial alluvium that flanks the banks of the Mohawk River. An inspection of the level Project Area indicated that the stripping extended across the entire Project Area and was characterized by a sand and gravel surface layer that stunted vegetation growth. No cultural resources were identified within the Project Area.

RECOMMENDATIONS

The Phase IA Literature Review and Sensitivity Assessment indicated a low sensitivity for precontact and historic cultural resources due to prior disturbance related to a former gravel mining operation and the construction and operation of the adjacent Pump Station facilities. The Phase IB Archeological Fieldwork confirmed the presence of stripped soils across the proposed Project Area. No significant cultural resources were identified during the Phase IB fieldwork. Therefore, it is concluded that significant cultural resources do not exist within the Project Area and no further investigation is recommended.

Phase IA/IB Archeological Investigation: Rotterdam District #5 Well Heads

BIBLIOGRAPHY

Fagan, L.

1866 *Map of Schenectady County, New York.*

United States Geographic Survey

1893 Amsterdam 15' Topographic Quadrangle.

1980 Rotterdam Junction 7.5' Topographic Quadrangle.



Parks, Recreation and Historic Preservation

ANDREW M. CUOMO
Governor

ROSE HARVEY
Commissioner

ARCHAEOLOGY COMMENTS

Phase I Archaeological Survey Recommendation 15PR05262 - Rotterdam District #5 Well Heads Flood Protection

Based on available information, your project is located in an archaeologically sensitive area. Therefore, the Office of Parks, Recreation and Historic Preservation (OPRHP) recommends that a Phase I archaeological survey is warranted for all portions of the project that will involve ground disturbance, unless substantial prior ground disturbance can be documented. If you consider the entire project area to be disturbed, documentation of the disturbance will need to be reviewed by OPRHP. Examples of disturbance include mining activities and multiple episodes of building construction and demolition.

Documentation of ground disturbance should include a description of the disturbance with confirming evidence. Confirmation can include current photographs and/or older photographs of the project area which illustrate the disturbance (approximately keyed to a project area map), past maps or site plans that accurately record previous disturbances, or current soil borings that verify past disruptions to the land. Agricultural activity is not considered to be substantial ground disturbance.

Please note that in areas with alluvial soils or fill archaeological deposits may exist below the depth of superficial disturbances such as pavement or even deeper disturbances, depending on the thickness of the alluvium or fill. Evaluation of the possible impact of prior disturbance on archaeological sites must consider the depth of potentially culture-bearing deposits and the depth of planned disturbance by the proposed project.

A Phase I survey is designed to determine the presence or absence of archaeological sites or other cultural resources in the project's area of potential effect. The OPRHP can provide standards for conducting cultural resource investigations upon request. Cultural resource surveys and survey reports that meet these standards will be accepted and approved by the OPRHP.

Our office does not conduct cultural resources surveys. A 36 CFR 61 qualified archaeologist should be retained to conduct the Phase I survey. Many archaeological consulting firms advertise their availability in the yellow pages. The services of qualified archaeologists can also be obtained by contacting local, regional, or statewide professional archaeological organizations. Phase I surveys can be expected to vary in cost per mile of right-of-way or by the number of acres impacted. We encourage you to contact a number of consulting firms and compare examples of each firm's work to obtain the best product.

Please also be aware that a Section 233 permit from the New York State Education Department (SED) may be necessary before archaeological fieldwork is conducted on State-owned land. If any portion of the project includes the lands of New York State you should contact the SED before initiating survey activities. The SED contact is Christina B. Rieth and she can be reached at (518) 402-5975. Section 233 permits are not required for projects on private land.

If you have any questions concerning archaeology, please contact Daniel Bagrow at 518-268-2160 or dan.bagrow@parks.ny.gov



[My Projects \(1\)](#) [My Submissions \(0\)](#) [My Information Requests \(1\)](#) [My Consolidated Responses \(2\)](#) [My Questions/Answers \(0\)](#)

My Projects (1)

[My Open Projects](#) [Refresh Grid](#)

View	Date Created	Type	Number	Name	Status	Details
	09/10/2015	Consultation	15PR05262	Rotterdam District #5 Well Heads Flood Protection	Open	

Consultation Project Details

Consultation: 15PR05262
Status: Open Close

Project: Rotterdam District #5 Well Heads Flood Protection

- Overview
- Submissions (3)
- USNs (1)
- Surveys (1)
- Agencies (2)
- Contacts (5)
- Photos (4)
- Atts. (7)
- Agmts. (0)
- Q & A (0)
- Corr. (2)
- MCDs (1)

Submissions Overview (3)

Submissions

Status	Submission	Type	Date Recv	Date Due	Description	Review Summary
Closed	15PR05262.001	Initial	08/23/2015	09/22/2015	Initial Consultation Submission	Larry Moss (Technical Services), Complete Daniel Bagrow (Archaeology), Complete Linda Mackey (Survey and Evaluation), Complete
Closed	15PR05262.002	Unrequested	11/10/2015	12/10/2015	Phase II/IB, photographs and figures	Daniel Bagrow (Archaeology), Complete
Open	15PR05262.003	Requested	11/20/2015	12/20/2015	Please submit the archaeological survey using the Survey Wizard process which is accessible via the green gear icon. This process involves additional steps not necessary for standard file attachment. This process will insure that the survey can be added to our GIS and digital library.	Daniel Bagrow (Archaeology), Complete Larry Moss (Technical Services), Incomplete



Consultation Project Details

Consultation: 15PR05262
Consultation Project Details

Consultation: 15PR05262

Status: Open

Close

Project: Rotterdam District #5 Well Heads Flood Protection

- Overview
- Submissions (3)
- USNs (1)
- Surveys (1)
- Agencies (2)
- Contacts (5)
- Photos (4)
- Atts. (7)
- Agmts. (0)
- Q & A (0)
- Corr. (2)
- MCDs (1)

Correspondence

View	Type	Mode	Token	Date Sent	Sent By	Sent To
	Consolidated Response - Submission	Email	GU1M9XLCXTRI	09/21/2015	Larry Moss	Chris Borstel
	Consolidated Response - Submission	Email	5KLUUJWIJS4J	11/20/2015	Daniel Bagrow	Alicia Schultz

Submission Status Close

View and/or Address a Response

Project 15PR05262: Rotterdam District #5 Well Heads Flood Protection (GU1M9XLCXTRI)

Please accept the following information below as the consolidated response from NYS SHPO for the above referenced submission.

Review Responses

Reviewer	Review Type	Response
Daniel Bagrow	Archaeology	In order for SHPO to complete our evaluation of the Archaeological sensitivity of your project, we need further information. Please review the specific information request(s) below and click the Process button to respond to each request.

Information Requests

Status	Reviewer	Review Type	Request Type	Request Entity	Request Item	Request Description
Information Requested	Daniel Bagrow	Archaeology	Request a New Attachment, Photo, or Survey for this Consultation Project		Survey	Recommend Phase 1 Archaeological Survey

Attachments

Attachment	Reviewer	Review Type	Type	Name	Description
	Daniel Bagrow	Archaeology	Document	Information about recommended Phase 1 Archaeological Survey	

Submission Status Close

View and/or Address a Response

Project 15PR05262: Rotterdam District #5 Well Heads Flood Protection (5KLUUJWIJS4J)

Please accept the following information below as the consolidated response from NYS SHPO for the above referenced submission.

Review Responses

Reviewer	Review Type	Response
Daniel Bagrow	Archaeology	In order for SHPO to complete our evaluation of the Archaeological sensitivity of your project, we need further information. Please review the specific information request(s) below and click the Process button to respond to each request.

CRIS Alert

All information requests have been addressed. Completed requests can be edited using the Process button. You can continue within CRIS by choosing another menu option.

Information Requests

Status	Reviewer	Request Item	Request Description
Processed	Daniel Bagrow	Consultation Project	Please submit the archaeological survey using the Survey Wizard process which is accessible via the green gear icon. This process involves additional steps not necessary for standard file attachment. This process will insure that the survey can be added to our GIS and digital library.

Attachments

Attachment	Reviewer	Review Type	Type	Name	Description
No Attachment Records					



Submission Status Close

View and/or Address a Response

Project 15PR05262: Rotterdam District #5 Well Heads Flood Protection (5KLUUJWIJS4J)

Please accept the following information below as the consolidated response from NYS SHPO for the above referenced submission.

Review Responses

Reviewer	Review Type	Response
Daniel Bagrow	Archaeology	In order for SHPO to complete our evaluation of the Archaeological sensitivity of your project, we need further information. Please review the specific information request(s) below and click the Process button to respond to each request.

Information Requests

Status	Reviewer	Review Type	Request Type	Request Entity	Request Item	Request Description
Processed	Daniel Bagrow	Archaeology	Request a New Attachment, Photo, or Survey for this Consultation Project		Survey	Please submit the archaeological survey using the Survey Wizard process which is accessible via the green gear icon. This process involves additional steps not necessary for standard file attachment. This process will insure that the survey can be added to our GIS and digital library.

Attachments

Attachment	Reviewer	Review Type	Type	Name	Description
No Attachment Records					

APPENDIX F
TRIBAL
CORRESPONDENCE



St. Regis Mohawk Tribe

October 29, 2015

Thomas King
Certifying Environmental Officer
Govenour's Office of Storm Recovery
99 Washington Ave. Suite 1224
Albany Ny, 12260

Re: Rotterdam District #5 Well Heads Flood Protection

She:kon Mr. Foster

This letter is in response to a request for a Section 106 consultation between your agency and the Saint Regis Mohawk Tribe. The following project(s) that you requested my office to consult on is considered to have "No Effect" in regards to cultural properties of concern to the Saint Regis Mohawk Tribe.

Rotterdam District #5 Well Heads Flood Protection, Schenectady NY

The St. Regis Mohawk Tribe requests to be immediately contacted in the event any inadvertent discoveries of human remains, funerary objects, sacred objects and objects of cultural patrimony are made during the scope of this project.

Should you or your office have any further questions in regards to these comments please feel free to contact my office at your earliest convenience.

Nia:wen,

A handwritten signature in cursive script, appearing to read "Arnold L. Printup III".

Arnold L Printup
Saint Regis Mohawk Tribe
Tribal Historic Preservation Office
1(518)358-2272 Ext. 2163

From: [Bonney Hartley](#)
To: [King, Thomas J \(STORMRECOVERY\)](#)
Subject: RE: New York State CDBG Disaster Recovery Program: Rotterdam Well No. 5 Project
Date: Thursday, October 22, 2015 11:16:37 AM

Dear Tom:

I've completed review of the Rotterdam Well #5 project in Rotterdam, New York and confirm on behalf of Stockbridge-Munsee Mohican Tribe that we do not have significant cultural resource concerns with the project. This is due to the testing results shown in the Phase 1A/1B report that show the soil is previously disturbed.

No further information is needed.

However, as always, should cultural materials inadvertently be discovered during project testing we request immediate notification.

Thank you,
Bonney

Bonney Hartley
Tribal Historic Preservation Officer
Stockbridge-Munsee Mohican Tribal Historic Preservation
New York Office
65 1st Street
Troy, NY 12180
(518) 244-3164
Bonney.Hartley@mohican-nsn.gov
www.mohican-nsn.gov
Physical Address: 37 1st Street

From: King, Thomas J (STORMRECOVERY) [mailto:Thomas.King@stormrecovery.ny.gov]
Sent: Tuesday, October 20, 2015 6:32 PM
To: Bonney Hartley
Cc: Wally Miller; John Bock; Barthelme, Mary (STORMRECOVERY); Shultz, Alicia (NYSHCR)
Subject: New York State CDBG Disaster Recovery Program: Rotterdam Well No. 5 Project

Dear Bonney,

Please see the attached letter and archeological survey report concerning the installation of a new drinking water well in Rotterdam, New York. A paper copy will be mailed out tomorrow. Please let me know if you have any questions, comments, or feedback. Thank you kindly.

Sincerely,
Tom King

Director – Bureau of Environmental Review and Assessment *Interim*
Assistant General Counsel
Governor’s Office of Storm Recovery
99 Washington Avenue Suite 1224
Albany, New York 12260
Office: (518) 473-0015
Mobile: (646) 417-4660
Thomas.King@StormRecovery.NY.Gov



Governor's Office of Storm Recovery



Andrew M. Cuomo
Governor

Lisa Bova-Hiatt
Interim Executive Director

October 20, 2015

Chief Chet Brooks
Delaware Tribe of Indians
Delaware Tribal Headquarters
5100 Tuxedo Blvd.
Bartlesville, OK 74006

CC: Ms. Susan Bachor
Historic Preservation Representative, Delaware Tribe of Indians

Re: **Grant Name:** HUD CDBG-DR
Grantee: NYS Homes and Community Renewal
Undertaking: Rotterdam District #5 Well Heads Flood Protection,
Town of Rotterdam, Schenectady County, New York
Invitation for Consultation

Dear Chief Brooks:

Pursuant to the Disaster Relief Appropriations Act, 2013 (Public Law 113-2) and the Housing and Community Development Act (42 U.S.C. § 5301 et seq.), the Governor's Office of Storm Recovery (GOSR) is acting under the auspices of New York State Homes and Community Renewal's Housing Trust Fund Corporation as a recipient of Community Development Block Grant – Disaster Recovery (“CDBG-DR”) funds from the United States Department of Housing and Urban Development (“HUD”). GOSR is the entity responsible for compliance with the HUD environmental review procedures set forth in 24 CFR Part 58 tasked with assuring compliance with environmental laws including the National Historic Preservation Act (NHPA). GOSR is acting on behalf of HUD in providing the enclosed project information and inviting this discussion with your Tribe to respond with any concerns or comments.

New York State Homes and Community Renewal (HCR), on behalf of the Department of Housing & Urban Development (HUD), is currently reviewing an application that involves the construction of a well, well house, and associated infrastructure in the existing Rotterdam, New York, Well Field #5, 49 Rice Road, Rotterdam, NY, 12306. The project entails drilling a new well and installing a casing 5 feet above the 500-year flood level, establishing a well connection to existing pipes, installing a motor and pump, and constructing a new building to house the pump and equipment. The purpose of the project is to enhance the resilience of the Rotterdam Water District by ensuring that the district will have potable water during a major flood event and to provide additional groundwater pumping capacity.

The undertaking involves construction in an undeveloped section of the existing Rotterdam District #5 facility. The area of potential effects (APE) for the project is estimated to measure 172 by 185 feet and to cover 0.7 acre. A review of the inventoried archeological resources in the New York Cultural Resources Information System (NY CRIS) determined that there are no known archeological sites in the APE and that the nearest known inventoried localities are approximately 750 feet northwest of the proposed well location.



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Pursuant to NHPA Section 106, GOSR has initiated consultation with the State Historic Preservation Office (SHPO) concerning this Project and its potential to affect historic resources that are listed on or eligible for listing on the NRHP as Consultation No. 15PR05262. SHPO requested a Phase 1 survey. This survey was performed on September 18, 2015 and is attached for your review and consideration.

With this letter, GOSR respectfully submits for your review the attached documentation for the proposed project(s) described herein. If the project areas encompass historic properties of religious or cultural significance to your Nation, please respond within 15 days or sooner. Additionally, please indicate if there are other sources of information or other parties, Nations, Tribes, or members of the public you believe should be included in the consultation process. Please respond by email or in writing to the address listed below.

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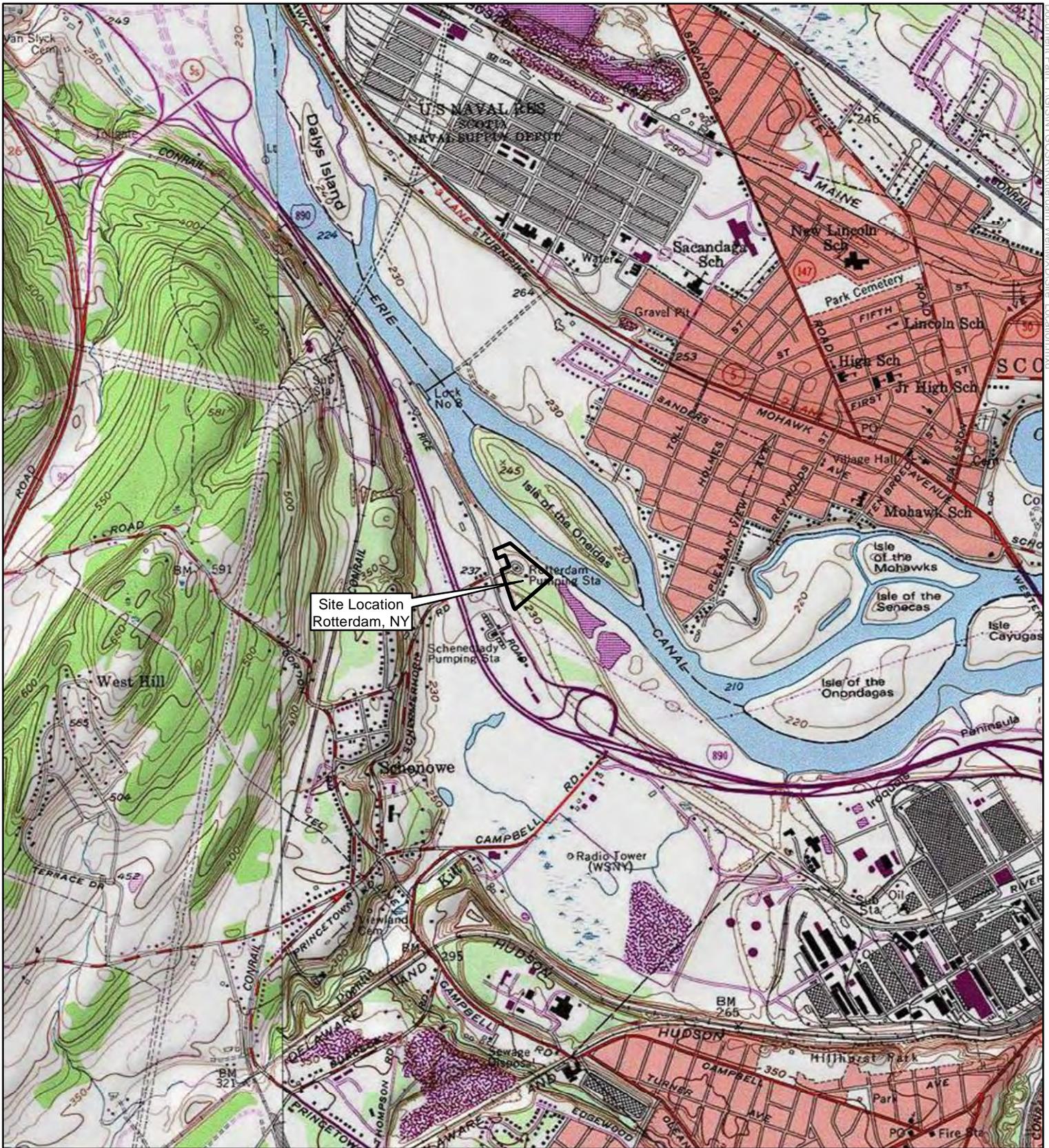
Mr. Thomas King
Certifying Environmental Officer
Governor's Office of Storm Recovery
99 Washington Avenue, Suite 1224
Albany, New York 12260

If any questions should arise concerning this matter, please contact me (518) 473-0015 or at Thomas.King@stormrecovery.ny.gov.

Sincerely,

Thomas J. King
Certifying Officer

Attachments



Site Location
Rotterdam, NY



Legend

 Property Boundary



USGS 7.5 Minute Topographic Quad: Schenectady, NY 1981

Service Layer Credits: Sources: Esri, HERE, DeLorme, USGS, Intermap, increment P Corp., NRCAN, Esri Japan, METI, Esri China (Hong Kong), Esri (Thailand), TomTom,



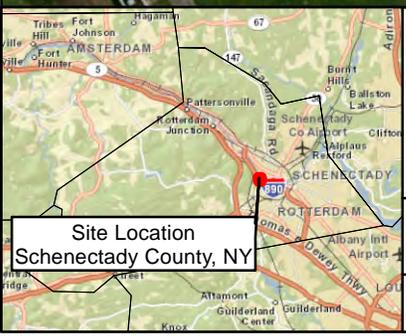
Rotterdam District No. 5
Well Heads Flood Protection

Site Location

Rotterdam, NY



Notes:
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Legend

-  Property Boundary
-  Area of Potential Effects

0 50 100 200 300 Feet 

Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and




**Rotterdam District No. 5
Well Heads Flood Protection**

Area of Potential Effects

Rotterdam, NY



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Andrew M. Cuomo
Governor

Lisa Bova-Hiatt
Interim Executive Director

September 9, 2015

John Bonafide
Director, Technical Preservation Bureau
Division for Historic Preservation
NYS Office of Parks, Recreation & Historic Preservation
P.O. Box 189 – Peebles Island State Park
Waterford, NY 12188-0189

Re: Section 106 Compliance
Rotterdam District #5 Well Heads Flood Protection
Town of Rotterdam, Schenectady County, NY

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GOSR processes environmental reviews for projects funded with HUD CDBG-DR on a case-by-case basis. A consultation request for the project described herein will also be sent to the Tribal Historic Preservation Office for the Delaware Tribe of Indians, Mohawk Nation, Saint Regis Mohawk Tribe, and the Stockbridge-Munsee Community Band of Mohicans. In accordance with Section 101(d)(6)(B) of the National Historic Preservation Act (NHPA) of 1966, as amended (16 U.S.C. 470a), and its implementing regulations, 36 Code of Federal Regulations (CFR) Part 800, this letter serves as notification of the proposed action.

Area of Potential Effects: GOSR proposes to fund the application for the Rotterdam District #5 Well Heads Flood Protection project, 49 Rice Road, Town of Rotterdam, Schenectady County, New York. A map depicting the Area of Potential Effects (APE) is enclosed with this letter. The APE has been identified as the



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Proposed Project Description: According to the Town of Rotterdam “Annual Water Quality Report for 2014” (<http://rotterdamny.org/blob/files.ashx?ID=16108>), the Water District #5 well field serves most of the Town of Rotterdam with four existing wells that pump groundwater from the Great Flats Aquifer. The permitted pumping capacity from the well field is 10 million gallons per day, and the average daily demand is 3.64 million gallons. The facility is located in the 500-year floodplain and was almost compromised by flooding during Hurricane Irene and Tropical Storm Lee in 2011. The aim of the Rotterdam District #5 Well Heads Flood Protection project (Proposed Project) is to drill a new well and elevate the casing 5 feet above the 500-year flood plain. The new well will ensure that the Rotterdam Water District will have potable water during a flood event and will provide additional capacity for the Town. As this infrastructure improvement will enhance the resiliency of the Town of Rotterdam, the town has applied to GOSR under the NYRCR Program to fund the Proposed Project.

Project activities include establishing a well connection to existing pipes, installing a motor and pump, and constructing a new building to house the pump and equipment. The new well, Well #5, is proposed to be located 120 feet southeast of existing Well #4. The new building will be similar in design to that of the existing building housing Well #4. Construction activities will include site preparation, well drilling and testing, site grading, drain installation, and site restoration post-construction.

The Proposed Project involves clearing and grubbing, drilling a new groundwater well, installation of a pump, construction of a new well house, grading and site restoration. Based on the available site plan (attached), which depicts the proposed location of the well, well house, and toe-of-slope for grading around the well house, it is estimated that the APE will measure approximately 172 by 185 feet and cover 0.7 acre. The APE includes an assumed 20-foot buffer zone as a work area outside the proposed finish-grade toe-of-slope.

The APE is located at the southeastern end of the existing Water District #5 well field facility on property currently owned by the district. The facility currently consists of five buildings, including three small well houses and two somewhat larger service buildings, all clad in brick and one story in height. The southerly service building (which may also contain a well) and the two flanking well houses to the northwest and southeast were constructed in circa 1954, based upon evidence from historical aerial images and the 1954



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According to the New York Cultural Resources Information System (NY CRIS), five inventoried properties are situated within 0.25 mile of the proposed project, including two archeological sites, to the northwest; the National Register of Historic Places (NRHP)-listed Enlarged Lock No. 23 Old Erie Canal, to the west; and the NRHP-listed New York State Barge Canal Historic District, to the east (see attached table). One inventoried property, a group of three houses dating to ca. 1900, was demolished about a decade ago. Based on the area's proximity to inventoried archeological sites, including the aforementioned two sites situated approximately 750 feet to the northwest of the proposed well, NY CRIS also shows the Proposed Project as situated within a zone of archeological sensitivity. This categorization is consistent with the project's location on level, well-drained terrain approximately 300 feet from the Mohawk River.

The purpose of this letter is to initiate consultation pursuant to Section 106 of the National Historic Preservation Act (NHPA) per the implementing regulations at 36 Code of Federal Regulations (CFR) Part 800. GOSR respectfully requests your review of the proposed project described herein. If the APE encompasses historic properties of religious or cultural significance, please respond within 15 days or sooner. Please respond by email or in writing to the address listed below.

Mr. Thomas King
Director – Bureau of Environmental Review and Assessment Interim
Assistant General Counsel
Governor's Office of Storm Recovery
99 Washington Avenue Suite 1224
Albany, New York 12260
Office: (518) 473-0015



Governor's Office of Storm Recovery



Andrew M. Cuomo
Governor

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If you have any questions or require additional information regarding this request, please feel free to contact me at (646) 417-4660 or via email at Thomas.King@stormrecovery.ny.gov. Thank you for your time and consideration.

Sincerely,

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Assistant General Counsel and Certifying Officer

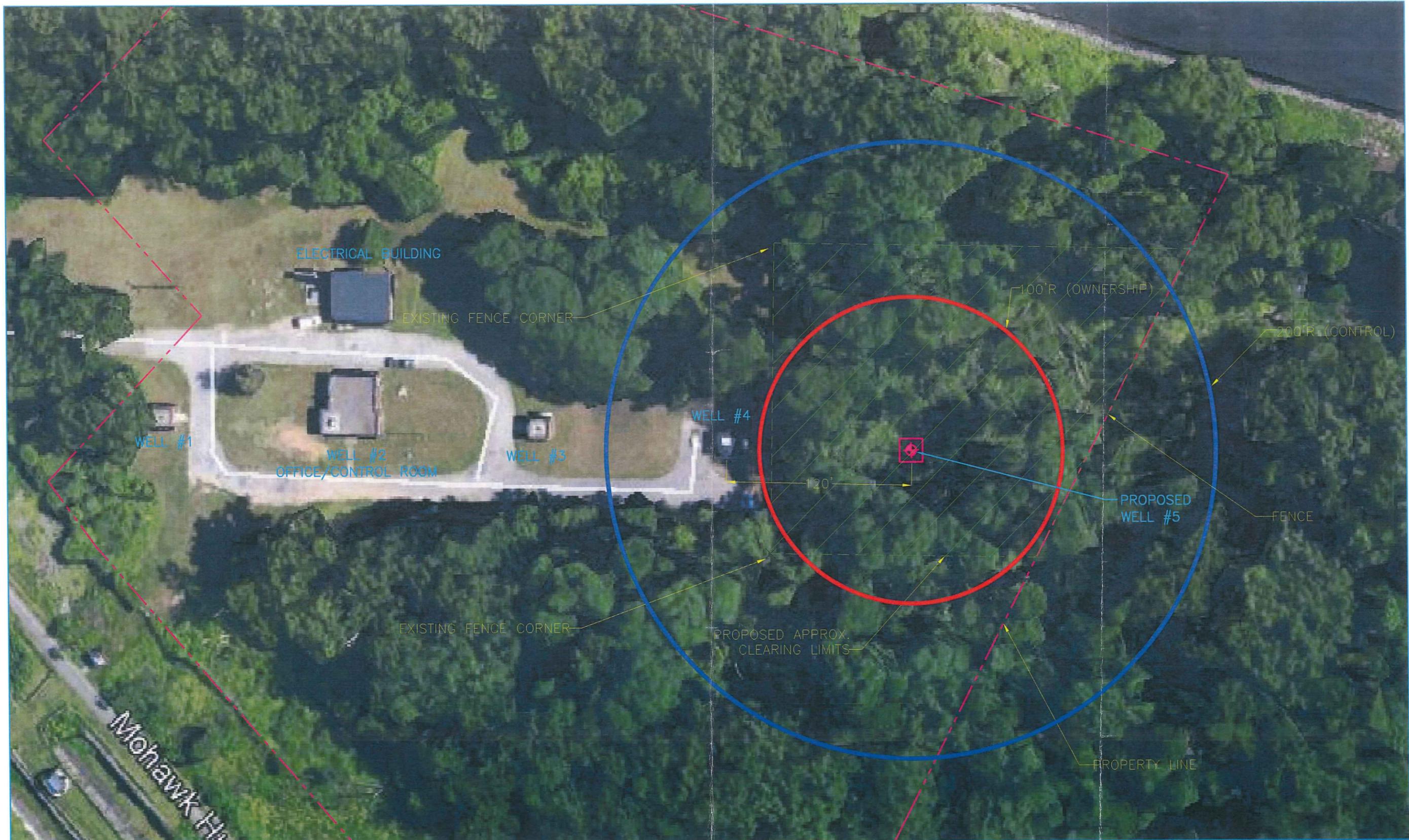
Enclosures:
NY CRIS Inventoried Properties in Project Vicinity (table)
Project Location Map
Area of Potential Effects Map
Aerial and Site Plan

Table 1: Cultural Resources Recorded by the New York Cultural Resources Information System (NY-CRIS) within 0.25 mile of the Rotterdam District #5 Well Heads Flood Protection Project

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USN 09305.000134 (NYSM 6279)	Unnamed archeological site	SUNY Albany Mohawk Valley survey; no site form data.	Undetermined.
USN 09305.000258	GEP Locus 2 Site	Prehistoric lithic scatter with a chert core and flakes; period unknown.	Undetermined.
07NR05814 (USN 09305.000271) (NRIS No. 08000145)	Enlarged Lock No. 23 Old Erie Canal	Barge lock constructed during the first enlargement of the original Erie Canal; period of significance 1841-1918.	NRHP-listed under Criteria A and C.
14NR06559 (USN 00104.000641) (NRIS No. 14000860)	New York State Barge Canal Historic District	20 th -century network of canals, canalized rivers, and lakes connecting the Atlantic Ocean with the Great Lakes; period of significance 1905-1963.	NRHP-listed under Criteria A and C.

Note: USN – Unique Site Number, assigned by the New York Office of Parks, Recreation and Historic Preservation (OPRHP); NYSM – New York State Museum site number; NRIS – National Register Information System, inventory numbers assigned by the National Register of Historic Places (NRHP)

Source: OPRHP / NY-CRIS, 9/4/2015



NO.	DATE	REVISION	BY
00	6/30/2014	ORIGINAL ISSUE	AST

JME JOHN M. MCDONALD
ENGINEERING, P.C.

7 South Church Street Schenectady, New York 12305
Ph: 518 382 1774 Fax: 518 382 1776 www.mcdonaldengineers.com

PROJ. ENGR.: DPC

DRAWN BY: AST

CHECKED BY: JMM

UNAUTHORIZED ALTERATIONS TO
THIS DOCUMENT IS A VIOLATION OF
SECTION 7209 SUBDIVISION 2 OF NEW
YORK STATE EDUCATION LAW.

TOWN OF ROTTERDAM
SCHENECTADY COUNTY

5th WELL WATER SYSTEM IMPROVEMENTS

SHEET TITLE:

AERIAL PLAN

SCALE:
AS NOTED

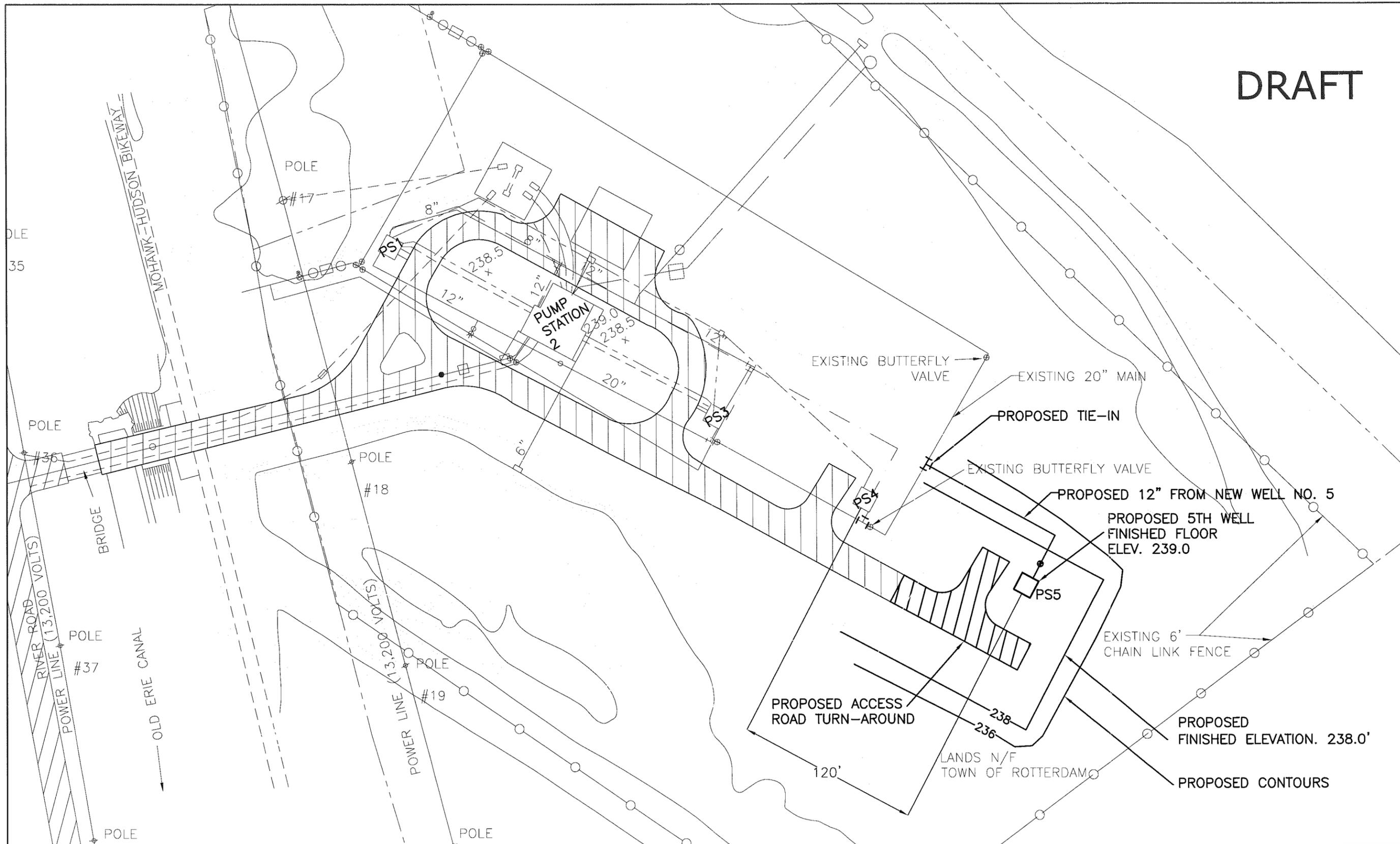
FILE NO.:
01*1403

DATE:
JUNE 2014

SHEET NO.:

A1

DRAFT



NO.	DATE	REVISION	BY
00	6/30/2014	ORIGINAL ISSUE	AST

JME JOHN M. MCDONALD
ENGINEERING, P.C.

7 South Church Street Schenectady, New York 12305
Ph: 518 382 1774 Fax: 518 382 1776 www.mcdonaldengineers.com

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PROJ. ENGR.: DPC DRAWN BY: AST CHECKED BY: JMM

TOWN OF ROTTERDAM
SCHENECTADY COUNTY

5th WELL WATER SYSTEM IMPROVEMENTS

SHEET TITLE:

SITE PLAN

SCALE:
AS NOTED

FILE NO.:
01*1403

DATE:
JUNE 2014

SHEET NO.:
A1



Governor's Office of Storm Recovery



Andrew M. Cuomo
Governor

Lisa Bova-Hiatt
Interim Executive Director

October 20, 2015

Mohawk Nation Council of Chiefs
Of Haudenosaunee Six Nations Confederacy
Akwesasne Mohawk Territory
P.O. Box 366
Via Rooseveltown, New York 13683-0366

Re: **Grant Name:** HUD CDBG-DR
Grantee: NYS Homes and Community Renewal
Undertaking: Rotterdam District #5 Well Heads Flood Protection,
Town of Rotterdam, Schenectady County, New York
Invitation for Consultation

To the Mohawk Nation Council of Chiefs:

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The undertaking involves construction in an undeveloped section of the existing Rotterdam District #5 facility. The area of potential effects (APE) for the project is estimated to measure 172 by 185 feet and to cover 0.7 acre. A review of the inventoried archeological resources in the New York Cultural Resources Information System (NY CRIS) determined that there are no known archeological sites in the APE and that the nearest known inventoried localities are approximately 750 feet northwest of the proposed well location.



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Interim Executive Director

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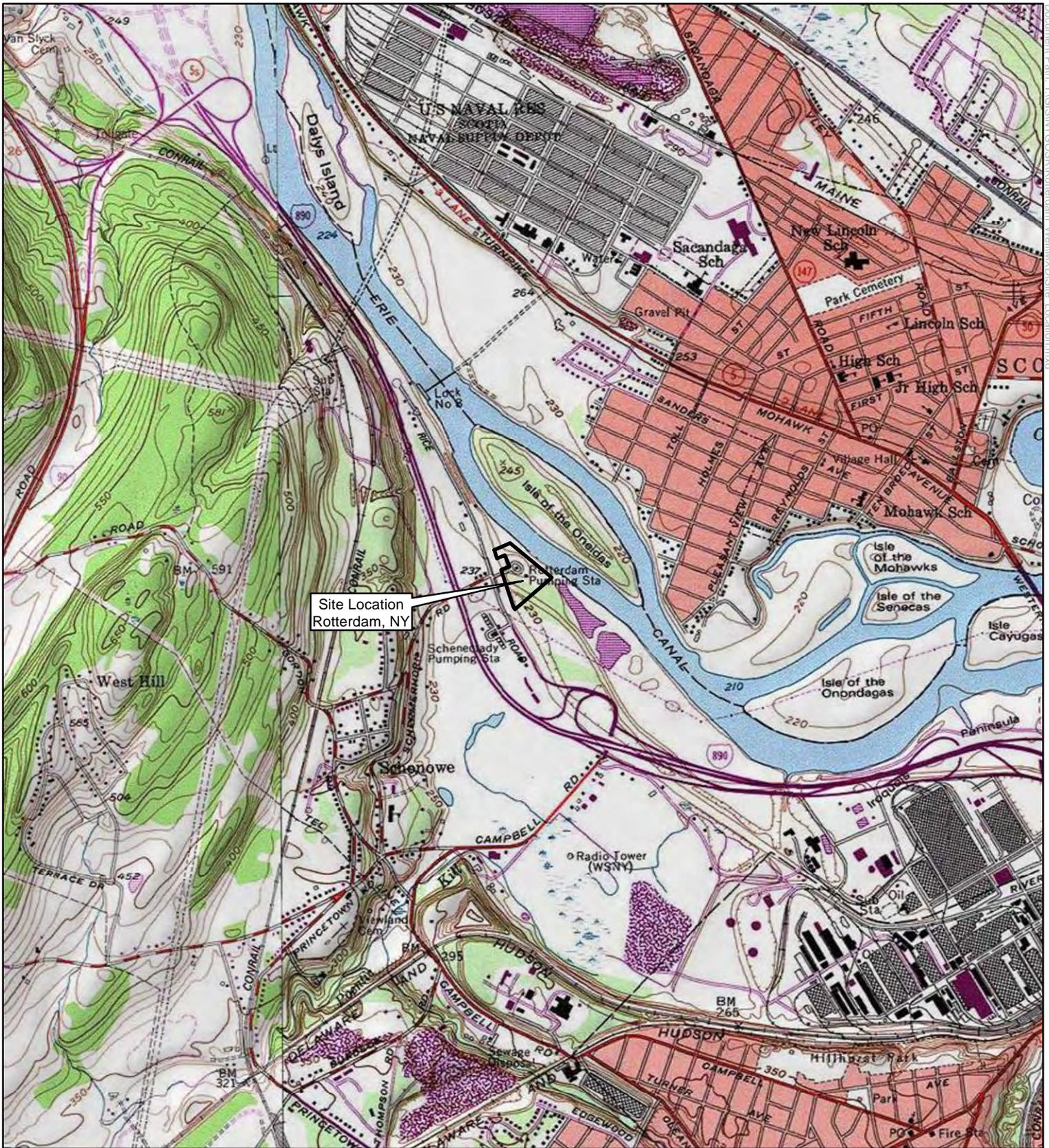
Mr. Thomas King
Certifying Environmental Officer
Governor's Office of Storm Recovery
99 Washington Avenue, Suite 1224
Albany, New York 12260

If any questions should arise concerning this matter, please contact me (518) 473-0015 or at Thomas.King@stormrecovery.ny.gov.

Sincerely,

Thomas J. King
Certifying Officer

Attachments



Site Location
Rotterdam, NY



Legend

 Property Boundary



USGS 7.5 Minute Topographic Quad: Schenectady, NY 1981

Service Layer Credits: Sources: Esri, HERE, DeLorme, USGS, Intermap, increment P Corp., NRCAN, Esri Japan, METI, Esri China (Hong Kong), Esri (Thailand), TomTom,



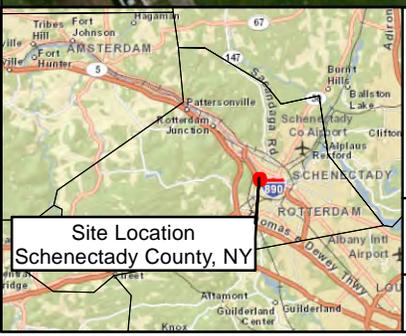
Rotterdam District No. 5
Well Heads Flood Protection

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Rotterdam, NY



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Legend

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- Area of Potential Effects

0 50 100 200 300 Feet

Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and




**Rotterdam District No. 5
Well Heads Flood Protection**

Area of Potential Effects

Rotterdam, NY



Governor's Office of Storm Recovery



Andrew M. Cuomo
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Lisa Bova-Hiatt
Interim Executive Director

September 9, 2015

John Bonafide
Director, Technical Preservation Bureau
Division for Historic Preservation
NYS Office of Parks, Recreation & Historic Preservation
P.O. Box 189 – Peebles Island State Park
Waterford, NY 12188-0189

Re: Section 106 Compliance
Rotterdam District #5 Well Heads Flood Protection
Town of Rotterdam, Schenectady County, NY

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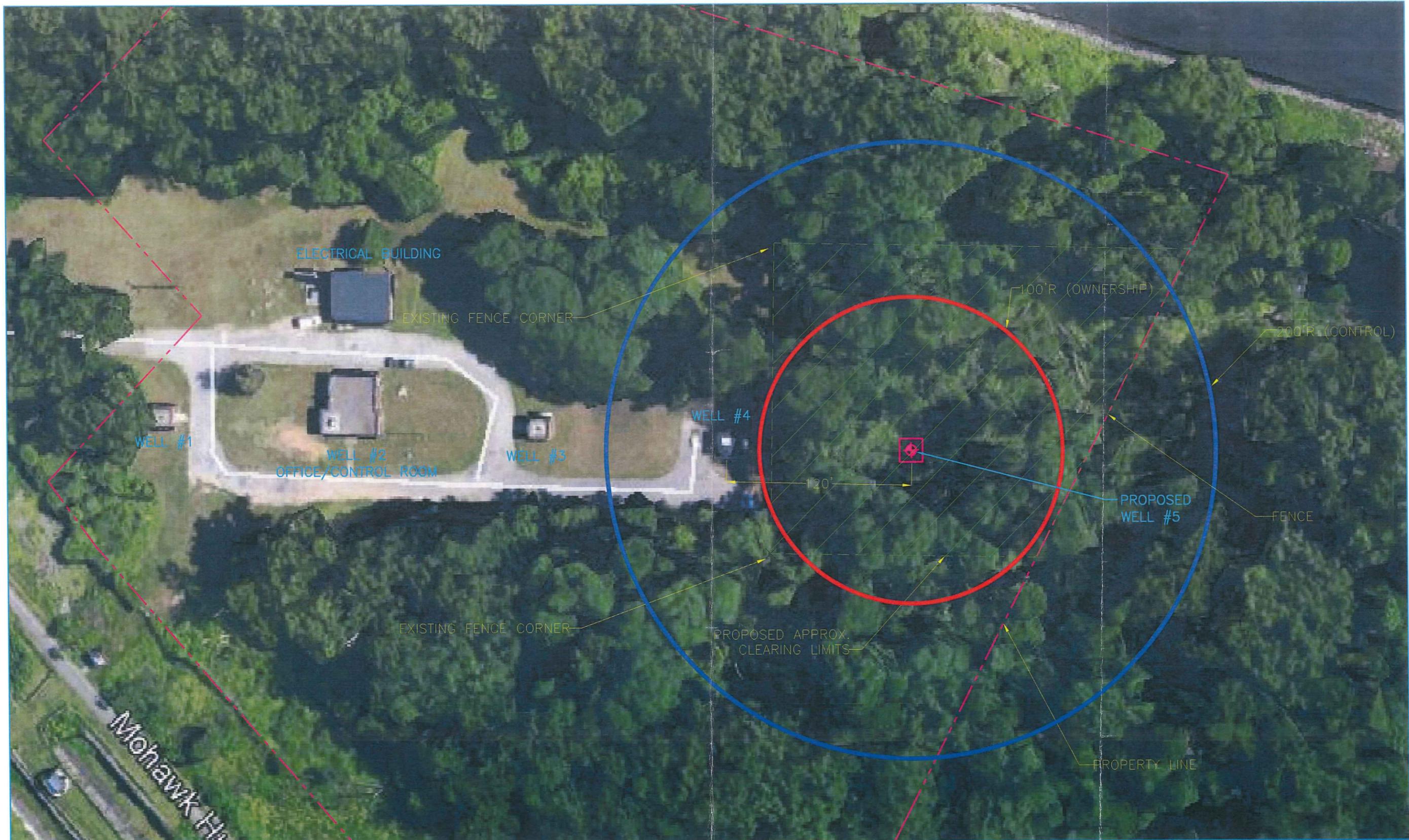
Enclosures:
NY CRIS Inventoried Properties in Project Vicinity (table)
Project Location Map
Area of Potential Effects Map
Aerial and Site Plan

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USN 09305.000134 (NYSM 6279)	Unnamed archeological site	SUNY Albany Mohawk Valley survey; no site form data.	Undetermined.
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07NR05814 (USN 09305.000271) (NRIS No. 08000145)	Enlarged Lock No. 23 Old Erie Canal	Barge lock constructed during the first enlargement of the original Erie Canal; period of significance 1841-1918.	NRHP-listed under Criteria A and C.
14NR06559 (USN 00104.000641) (NRIS No. 14000860)	New York State Barge Canal Historic District	20 th -century network of canals, canalized rivers, and lakes connecting the Atlantic Ocean with the Great Lakes; period of significance 1905-1963.	NRHP-listed under Criteria A and C.

Note: USN – Unique Site Number, assigned by the New York Office of Parks, Recreation and Historic Preservation (OPRHP); NYSM – New York State Museum site number; NRIS – National Register Information System, inventory numbers assigned by the National Register of Historic Places (NRHP)

Source: OPRHP / NY-CRIS, 9/4/2015



NO.	DATE	REVISION	BY
00	6/30/2014	ORIGINAL ISSUE	AST

JME JOHN M. MCDONALD
ENGINEERING, P.C.

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PROJ. ENGR.: DPC

DRAWN BY: AST

CHECKED BY: JMM

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TOWN OF ROTTERDAM
SCHENECTADY COUNTY

5th WELL WATER SYSTEM IMPROVEMENTS

SHEET TITLE:

AERIAL PLAN

SCALE:
AS NOTED

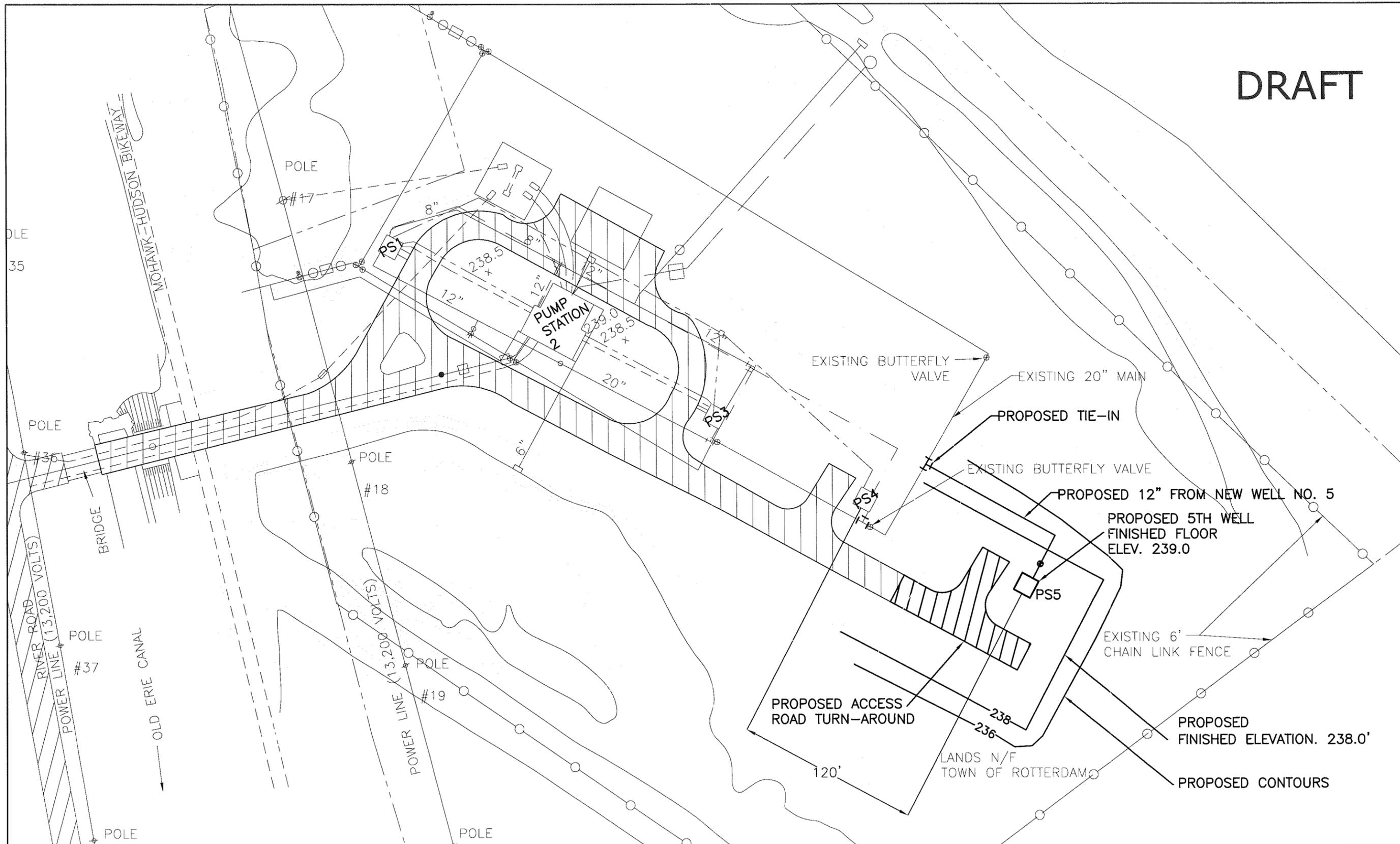
FILE NO.:
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TOWN OF ROTTERDAM
SCHENECTADY COUNTY

5th WELL WATER SYSTEM IMPROVEMENTS

SHEET TITLE:

SITE PLAN

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A1



Governor's Office of Storm Recovery



Andrew M. Cuomo
Governor

Lisa Bova-Hiatt
Interim Executive Director

October 20, 2015

Chief Ron LaFrance, Jr.
Saint Regis Mohawk Tribe
412 State Route 37
Akwesasne, NY 13655

CC: Mr. Arnold Printup
THPO, Saint Regis Mohawk Tribe

Re: **Grant Name:** HUD CDBG-DR
Grantee: NYS Homes and Community Renewal
Undertaking: Rotterdam District #5 Well Heads Flood Protection,
Town of Rotterdam, Schenectady County, New York
Invitation for Consultation

Dear Chief LaFrance:

Pursuant to the Disaster Relief Appropriations Act, 2013 (Public Law 113-2) and the Housing and Community Development Act (42 U.S.C. § 5301 et seq.), the Governor's Office of Storm Recovery (GOSR) is acting under the auspices of New York State Homes and Community Renewal's Housing Trust Fund Corporation as a recipient of Community Development Block Grant – Disaster Recovery ("CDBG-DR") funds from the United States Department of Housing and Urban Development ("HUD"). GOSR is the entity responsible for compliance with the HUD environmental review procedures set forth in 24 CFR Part 58 tasked with assuring compliance with environmental laws including the National Historic Preservation Act (NHPA). GOSR is acting on behalf of HUD in providing the enclosed project information and inviting this discussion with your Tribe to respond with any concerns or comments.

New York State Homes and Community Renewal (HCR), on behalf of the Department of Housing & Urban Development (HUD), is currently reviewing an application that involves the construction of a well, well house, and associated infrastructure in the existing Rotterdam, New York, Well Field #5, 49 Rice Road, Rotterdam, NY, 12306. The project entails drilling a new well and installing a casing 5 feet above the 500-year flood level, establishing a well connection to existing pipes, installing a motor and pump, and constructing a new building to house the pump and equipment. The purpose of the project is to enhance the resilience of the Rotterdam Water District by ensuring that the district will have potable water during a major flood event and to provide additional groundwater pumping capacity.

The undertaking involves construction in an undeveloped section of the existing Rotterdam District #5 facility. The area of potential effects (APE) for the project is estimated to measure 172 by 185 feet and to cover 0.7 acre. A review of the inventoried archeological resources in the New York Cultural Resources Information System (NY CRIS) determined that there are no known archeological sites in the APE and that the nearest known inventoried localities are approximately 750 feet northwest of the proposed well location.

Pursuant to NHPA Section 106, GOSR has initiated consultation with the State Historic Preservation Office (SHPO)



Governor's Office of Storm Recovery



Andrew M. Cuomo
Governor

Lisa Bova-Hiatt
Interim Executive Director

concerning this Project and its potential to affect historic resources that are listed on or eligible for listing on the NRHP as Consultation No. 15PR05262. SHPO requested a Phase 1 survey. This survey was performed on September 18, 2015 and is attached for your review and consideration.

With this letter, GOSR respectfully submits for your review the attached documentation for the proposed project(s) described herein. If the project areas encompass historic properties of religious or cultural significance to your Nation, please respond within 15 days or sooner. Additionally, please indicate if there are other sources of information or other parties, Nations, Tribes, or members of the public you believe should be included in the consultation process. Please respond by email or in writing to the address listed below.

Address for mail correspondence:

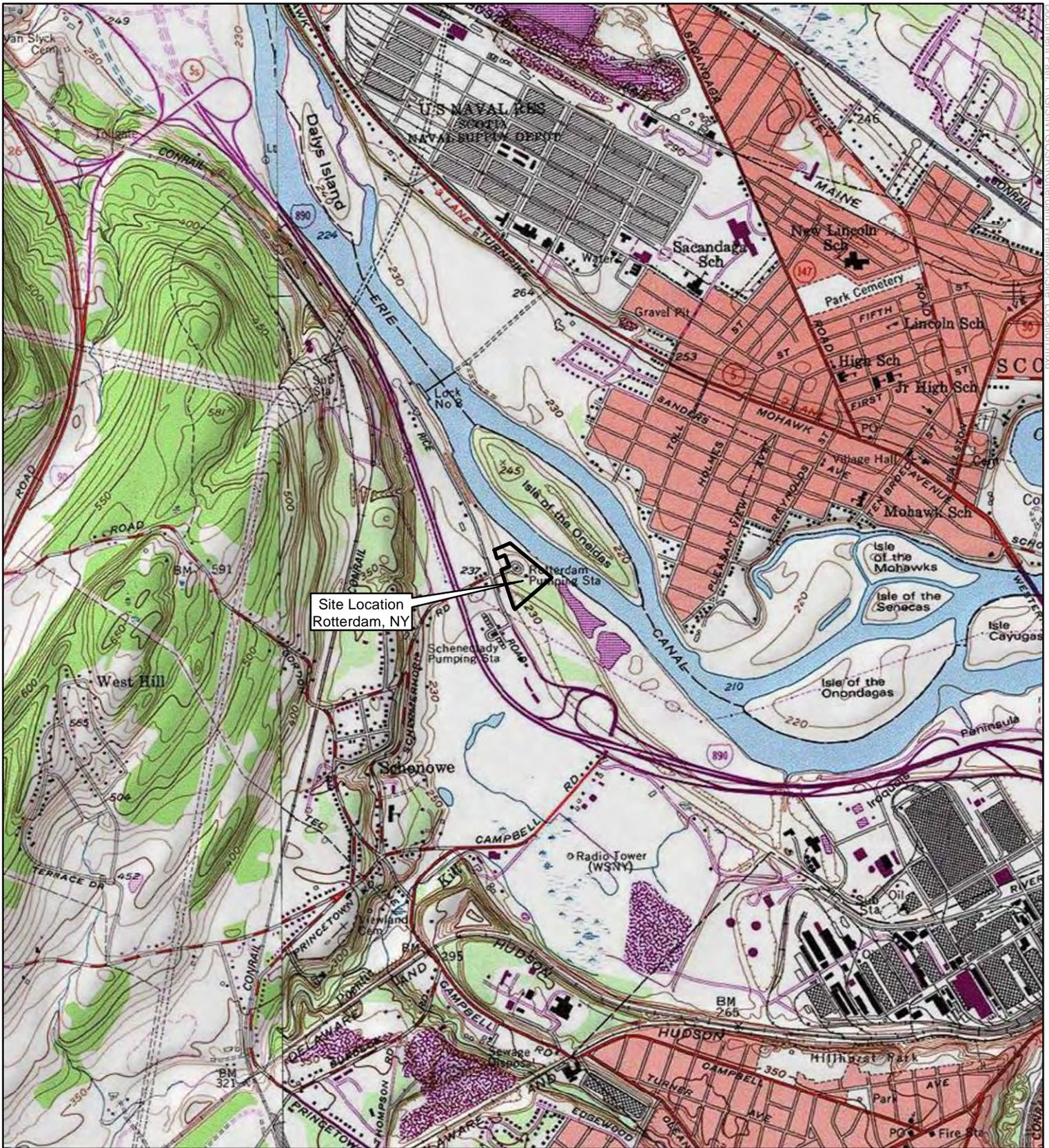
Mr. Thomas King
Certifying Environmental Officer
Governor's Office of Storm Recovery
99 Washington Avenue, Suite 1224
Albany, New York 12260

If any questions should arise concerning this matter, please contact me (518) 473-0015 or at Thomas.King@stormrecovery.ny.gov.

Sincerely,

Thomas J. King
Certifying Officer

Attachments



Site Location
Rotterdam, NY



Legend

 Property Boundary



USGS 7.5 Minute Topographic Quad: Schenectady, NY 1981

Service Layer Credits: Sources: Esri, HERE, DeLorme, USGS, Intermap, increment P Corp., NRCAN, Esri Japan, METI, Esri China (Hong Kong), Esri (Thailand), TomTom,



Rotterdam District No. 5
Well Heads Flood Protection

Site Location

Rotterdam, NY



Notes:
 1. APE equals anticipated limits of disturbance resulting from tree removal and grading around the planned location of the well plus a buffer of 20 feet beyond the proposed toe of slope.



Legend

-  Property Boundary
-  Area of Potential Effects

0 50 100 200 300 Feet 

Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and




**Rotterdam District No. 5
Well Heads Flood Protection**

Area of Potential Effects

Rotterdam, NY



Governor's Office of Storm Recovery



Andrew M. Cuomo
Governor

Lisa Bova-Hiatt
Interim Executive Director

September 9, 2015

John Bonafide
Director, Technical Preservation Bureau
Division for Historic Preservation
NYS Office of Parks, Recreation & Historic Preservation
P.O. Box 189 – Peebles Island State Park
Waterford, NY 12188-0189

Re: Section 106 Compliance
Rotterdam District #5 Well Heads Flood Protection
Town of Rotterdam, Schenectady County, NY

Dear Mr. Bonafide:

Pursuant to the Disaster Relief Appropriations Act, 2013 (Public Law 113-2) and the Housing and Community Development Act (42 U.S.C. § 5301 et seq.), the Governor's Office of Storm Recovery (GOSR) is acting under the auspices of New York State Homes and Community Renewal's Housing Trust Fund Corporation as a recipient of Community Development Block Grant – Disaster Recovery ("CDBG-DR") funds from the United States Department of Housing and Urban Development ("HUD"). GOSR is the entity responsible for compliance with the HUD environmental review procedures set forth in 24 CFR Part 58. GOSR is acting on behalf of HUD in providing the enclosed project information and request for consultation.

GOSR processes environmental reviews for projects funded with HUD CDBG-DR on a case-by-case basis. A consultation request for the project described herein will also be sent to the Tribal Historic Preservation Office for the Delaware Tribe of Indians, Mohawk Nation, Saint Regis Mohawk Tribe, and the Stockbridge-Munsee Community Band of Mohicans. In accordance with Section 101(d)(6)(B) of the National Historic Preservation Act (NHPA) of 1966, as amended (16 U.S.C. 470a), and its implementing regulations, 36 Code of Federal Regulations (CFR) Part 800, this letter serves as notification of the proposed action.

Area of Potential Effects: GOSR proposes to fund the application for the Rotterdam District #5 Well Heads Flood Protection project, 49 Rice Road, Town of Rotterdam, Schenectady County, New York. A map depicting the Area of Potential Effects (APE) is enclosed with this letter. The APE has been identified as the



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Interim Executive Director

limits of ground disturbance associated with construction of the project, which is assumed to be the toe-of-slope for the finished project grade, plus a 20-foot horizontal buffer on the north, east, and south. The west end of the project is assumed to be contiguous with the existing Water District #5 well field facility.

Proposed Project Description: According to the Town of Rotterdam “Annual Water Quality Report for 2014” (<http://rotterdamny.org/blob/files.ashx?ID=16108>), the Water District #5 well field serves most of the Town of Rotterdam with four existing wells that pump groundwater from the Great Flats Aquifer. The permitted pumping capacity from the well field is 10 million gallons per day, and the average daily demand is 3.64 million gallons. The facility is located in the 500-year floodplain and was almost compromised by flooding during Hurricane Irene and Tropical Storm Lee in 2011. The aim of the Rotterdam District #5 Well Heads Flood Protection project (Proposed Project) is to drill a new well and elevate the casing 5 feet above the 500-year flood plain. The new well will ensure that the Rotterdam Water District will have potable water during a flood event and will provide additional capacity for the Town. As this infrastructure improvement will enhance the resiliency of the Town of Rotterdam, the town has applied to GOSR under the NYRCR Program to fund the Proposed Project.

Project activities include establishing a well connection to existing pipes, installing a motor and pump, and constructing a new building to house the pump and equipment. The new well, Well #5, is proposed to be located 120 feet southeast of existing Well #4. The new building will be similar in design to that of the existing building housing Well #4. Construction activities will include site preparation, well drilling and testing, site grading, drain installation, and site restoration post-construction.

The Proposed Project involves clearing and grubbing, drilling a new groundwater well, installation of a pump, construction of a new well house, grading and site restoration. Based on the available site plan (attached), which depicts the proposed location of the well, well house, and toe-of-slope for grading around the well house, it is estimated that the APE will measure approximately 172 by 185 feet and cover 0.7 acre. The APE includes an assumed 20-foot buffer zone as a work area outside the proposed finish-grade toe-of-slope.

The APE is located at the southeastern end of the existing Water District #5 well field facility on property currently owned by the district. The facility currently consists of five buildings, including three small well houses and two somewhat larger service buildings, all clad in brick and one story in height. The southerly service building (which may also contain a well) and the two flanking well houses to the northwest and southeast were constructed in circa 1954, based upon evidence from historical aerial images and the 1954



Governor's Office of Storm Recovery



Andrew M. Cuomo
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Interim Executive Director

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According to the New York Cultural Resources Information System (NY CRIS), five inventoried properties are situated within 0.25 mile of the proposed project, including two archeological sites, to the northwest; the National Register of Historic Places (NRHP)-listed Enlarged Lock No. 23 Old Erie Canal, to the west; and the NRHP-listed New York State Barge Canal Historic District, to the east (see attached table). One inventoried property, a group of three houses dating to ca. 1900, was demolished about a decade ago. Based on the area's proximity to inventoried archeological sites, including the aforementioned two sites situated approximately 750 feet to the northwest of the proposed well, NY CRIS also shows the Proposed Project as situated within a zone of archeological sensitivity. This categorization is consistent with the project's location on level, well-drained terrain approximately 300 feet from the Mohawk River.

The purpose of this letter is to initiate consultation pursuant to Section 106 of the National Historic Preservation Act (NHPA) per the implementing regulations at 36 Code of Federal Regulations (CFR) Part 800. GOSR respectfully requests your review of the proposed project described herein. If the APE encompasses historic properties of religious or cultural significance, please respond within 15 days or sooner. Please respond by email or in writing to the address listed below.

Mr. Thomas King
Director – Bureau of Environmental Review and Assessment Interim
Assistant General Counsel
Governor's Office of Storm Recovery
99 Washington Avenue Suite 1224
Albany, New York 12260
Office: (518) 473-0015



Governor's Office of Storm Recovery



Andrew M. Cuomo
Governor

Lisa Bova-Hiatt
Interim Executive Director

If you have any questions or require additional information regarding this request, please feel free to contact me at (646) 417-4660 or via email at Thomas.King@stormrecovery.ny.gov. Thank you for your time and consideration.

Sincerely,

Thomas J. King
Assistant General Counsel and Certifying Officer

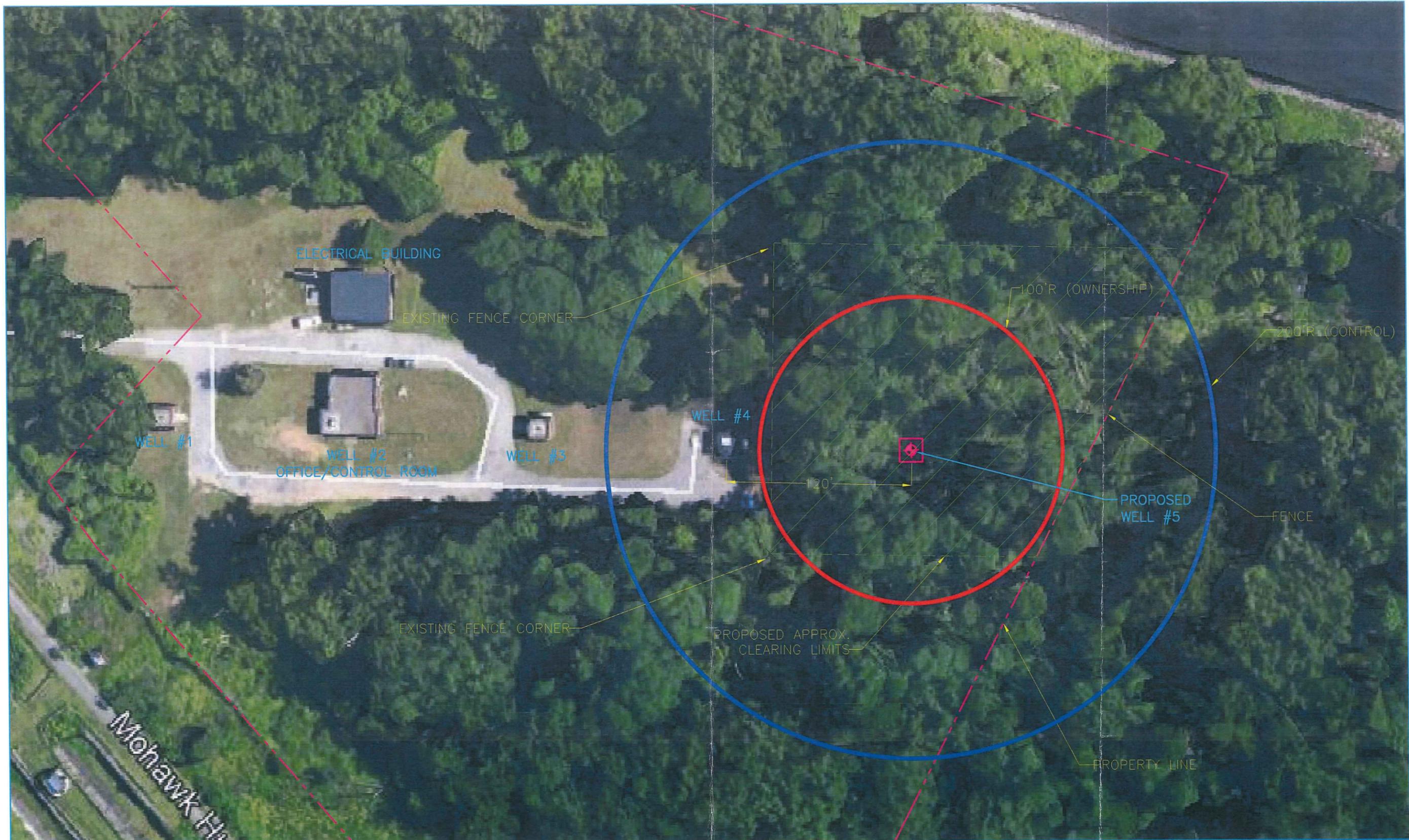
Enclosures:
NY CRIS Inventoried Properties in Project Vicinity (table)
Project Location Map
Area of Potential Effects Map
Aerial and Site Plan

Table 1: Cultural Resources Recorded by the New York Cultural Resources Information System (NY-CRIS) within 0.25 mile of the Rotterdam District #5 Well Heads Flood Protection Project

State ID	Name	Description	NRHP Status
USN 09305.000060	Schermerhorn Rd Dwellings	Three 2-story brick houses, ca. 1900; said to have been housing for City of Schenectady well field workers.	Undetermined. Demolished ca. 2005 per Google Earth imagery.
USN 09305.000134 (NYSM 6279)	Unnamed archeological site	SUNY Albany Mohawk Valley survey; no site form data.	Undetermined.
USN 09305.000258	GEP Locus 2 Site	Prehistoric lithic scatter with a chert core and flakes; period unknown.	Undetermined.
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Note: USN – Unique Site Number, assigned by the New York Office of Parks, Recreation and Historic Preservation (OPRHP); NYSM – New York State Museum site number; NRIS – National Register Information System, inventory numbers assigned by the National Register of Historic Places (NRHP)

Source: OPRHP / NY-CRIS, 9/4/2015



NO.	DATE	REVISION	BY
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JME JOHN M. MCDONALD
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PROJ. ENGR.: DPC

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TOWN OF ROTTERDAM
SCHENECTADY COUNTY

5th WELL WATER SYSTEM IMPROVEMENTS

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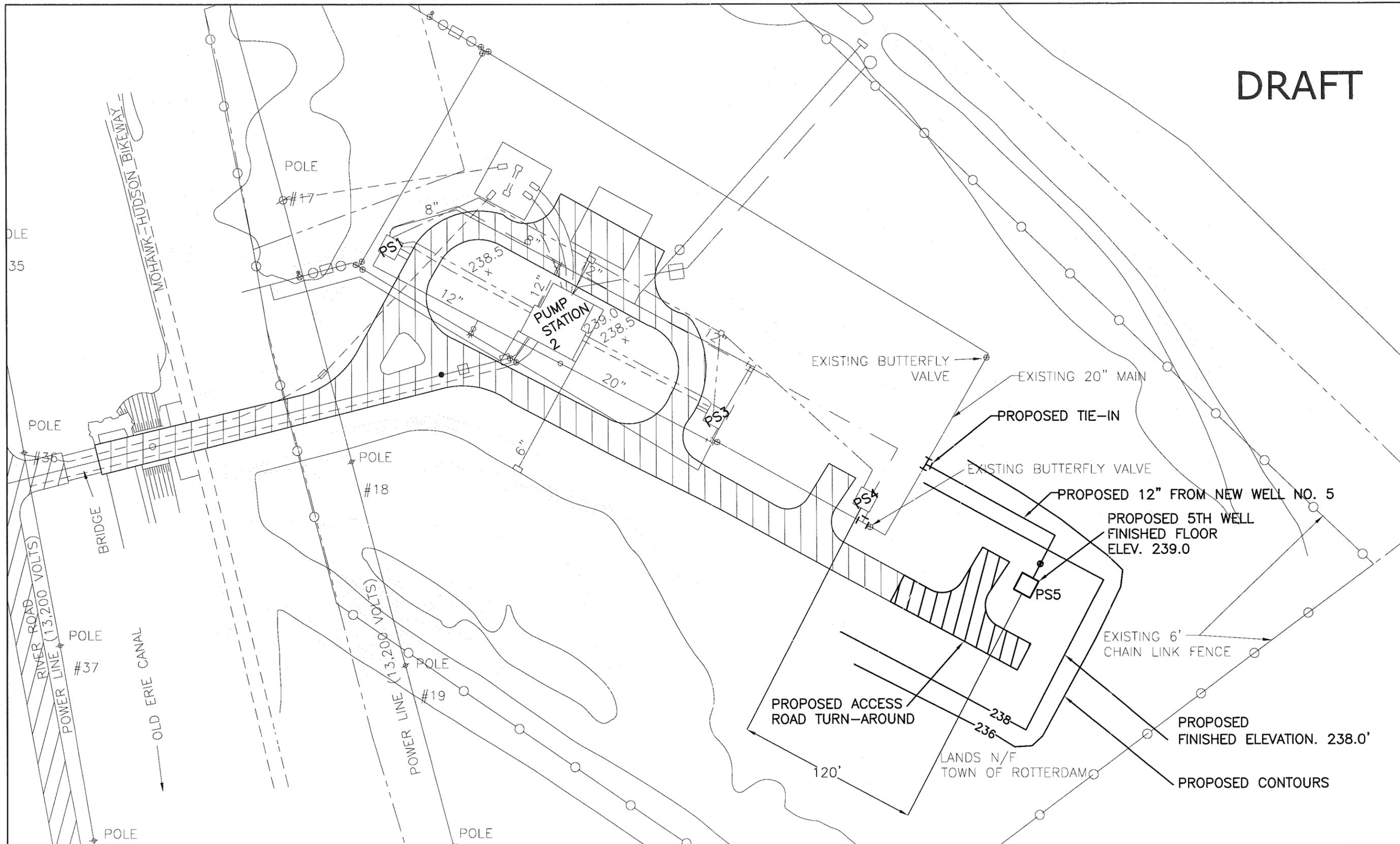
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TOWN OF ROTTERDAM
SCHENECTADY COUNTY

5th WELL WATER SYSTEM IMPROVEMENTS

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FILE NO.:
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A1



Governor's Office of Storm Recovery



Andrew M. Cuomo
Governor

Lisa Bova-Hiatt
Interim Executive Director

October 20, 2015

President Wallace A. Miller
Stockbridge-Munsee Community
Band of Mohican Indians
N8476 Moh He Con Nuck Road
Bowler, WI 54416

CC: Ms. Bonney Hartley, THPO
Stockbridge-Munsee Community, Band of Mohican Indians

Re: **Grant Name:** HUD CDBG-DR
Grantee: NYS Homes and Community Renewal
Undertaking: Rotterdam District #5 Well Heads Flood Protection,
Town of Rotterdam, Schenectady County, New York
Invitation for Consultation

Dear President Miller:

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The undertaking involves construction in an undeveloped section of the existing Rotterdam District #5 facility. The area of potential effects (APE) for the project is estimated to measure 172 by 185 feet and to cover 0.7 acre. A review of the inventoried archeological resources in the New York Cultural Resources Information System (NY CRIS) determined that there are no known archeological sites in the APE and that the nearest known inventoried localities are approximately 750 feet northwest of the proposed well location.



Governor's Office of Storm Recovery



Andrew M. Cuomo
Governor

Lisa Bova-Hiatt
Interim Executive Director

Pursuant to NHPA Section 106, GOSR has consulted with the State Historic Preservation Office (SHPO) concerning this Project and its potential to affect historic resources that are listed on or eligible for listing on the NRHP as Consultation No. 15PR05262. SHPO requested a Phase 1 survey. This survey was performed on September 18, 2015 and is attached for your review and consideration.

With this letter, GOSR respectfully submits for your review the attached documentation for the proposed project(s) described herein. If the project areas encompass historic properties of religious or cultural significance to your Nation, please respond within 15 days or sooner. Additionally, please indicate if there are other sources of information or other parties, Nations, Tribes, or members of the public you believe should be included in the consultation process. Please respond by email or in writing to the address listed below.

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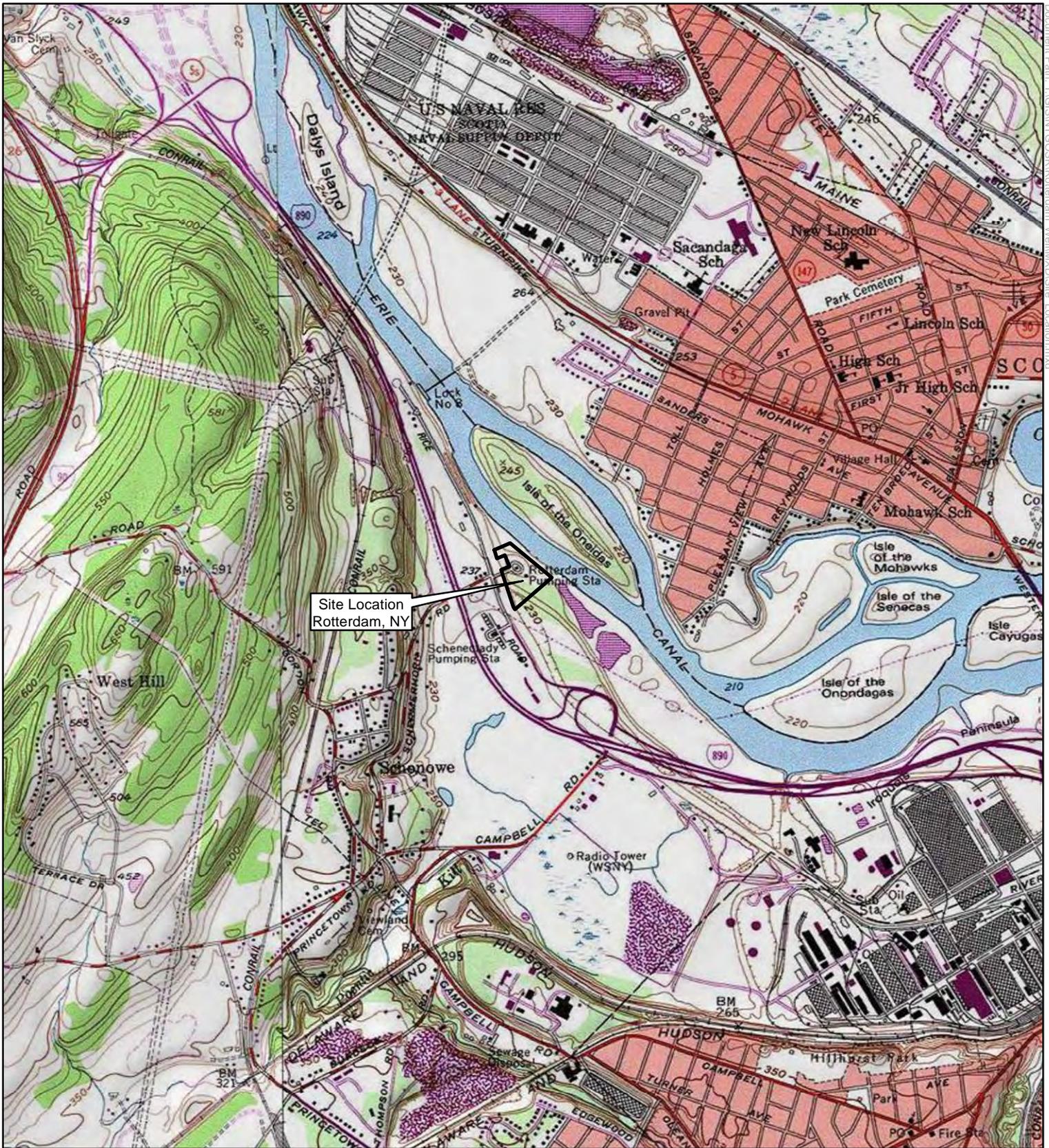
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Certifying Environmental Officer
Governor's Office of Storm Recovery
99 Washington Avenue, Suite 1224
Albany, New York 12260

If any questions should arise concerning this matter, please contact me (518) 473-0015 or at Thomas.King@stormrecovery.ny.gov.

Sincerely,

Thomas J. King
Certifying Officer

Attachments



Site Location
Rotterdam, NY



Legend

 Property Boundary



USGS 7.5 Minute Topographic Quad: Schenectady, NY 1981

Service Layer Credits: Sources: Esri, HERE, DeLorme, USGS, Intermap, increment P Corp., NRCAN, Esri Japan, METI, Esri China (Hong Kong), Esri (Thailand), TomTom,



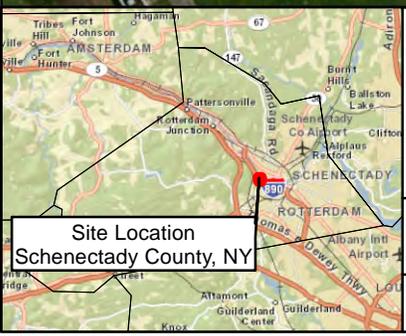
Rotterdam District No. 5
Well Heads Flood Protection

Site Location

Rotterdam, NY



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Legend

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- Area of Potential Effects

0 50 100 200 300 Feet

Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and

Rotterdam District No. 5
Well Heads Flood Protection

Area of Potential Effects

Rotterdam, NY



Governor's Office of Storm Recovery



Andrew M. Cuomo
Governor

Lisa Bova-Hiatt
Interim Executive Director

September 9, 2015

John Bonafide
Director, Technical Preservation Bureau
Division for Historic Preservation
NYS Office of Parks, Recreation & Historic Preservation
P.O. Box 189 – Peebles Island State Park
Waterford, NY 12188-0189

Re: Section 106 Compliance
Rotterdam District #5 Well Heads Flood Protection
Town of Rotterdam, Schenectady County, NY

Dear Mr. Bonafide:

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Governor's Office of Storm Recovery



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edition of the USGS 7.5-minute *Schenectady, NY* quadrangle map. The northerly service building and the most southeasterly well house, for Well #4, were constructed later, sometime prior to 1997 based on available aerial imagery. A loop drive connects the facility's buildings and extends west to Rice Road. The Mohawk-Hudson Bikeway, which is built on the towpath of the Old Erie Canal, is located on the west side of the facility, and the preserved remnants of Enlarged Lock No. 23 of the canal stand to the west just beyond the bikeway. The Natural Resources Conservation Service maps soils at the property as well-drained Howard gravelly silt loam, 0 to 3 percent slopes (HrA).

According to the New York Cultural Resources Information System (NY CRIS), five inventoried properties are situated within 0.25 mile of the proposed project, including two archeological sites, to the northwest; the National Register of Historic Places (NRHP)-listed Enlarged Lock No. 23 Old Erie Canal, to the west; and the NRHP-listed New York State Barge Canal Historic District, to the east (see attached table). One inventoried property, a group of three houses dating to ca. 1900, was demolished about a decade ago. Based on the area's proximity to inventoried archeological sites, including the aforementioned two sites situated approximately 750 feet to the northwest of the proposed well, NY CRIS also shows the Proposed Project as situated within a zone of archeological sensitivity. This categorization is consistent with the project's location on level, well-drained terrain approximately 300 feet from the Mohawk River.

The purpose of this letter is to initiate consultation pursuant to Section 106 of the National Historic Preservation Act (NHPA) per the implementing regulations at 36 Code of Federal Regulations (CFR) Part 800. GOSR respectfully requests your review of the proposed project described herein. If the APE encompasses historic properties of religious or cultural significance, please respond within 15 days or sooner. Please respond by email or in writing to the address listed below.

Mr. Thomas King
Director – Bureau of Environmental Review and Assessment Interim
Assistant General Counsel
Governor's Office of Storm Recovery
99 Washington Avenue Suite 1224
Albany, New York 12260
Office: (518) 473-0015



Governor's Office of Storm Recovery



Andrew M. Cuomo
Governor

Lisa Bova-Hiatt
Interim Executive Director

If you have any questions or require additional information regarding this request, please feel free to contact me at (646) 417-4660 or via email at Thomas.King@stormrecovery.ny.gov. Thank you for your time and consideration.

Sincerely,

Thomas J. King
Assistant General Counsel and Certifying Officer

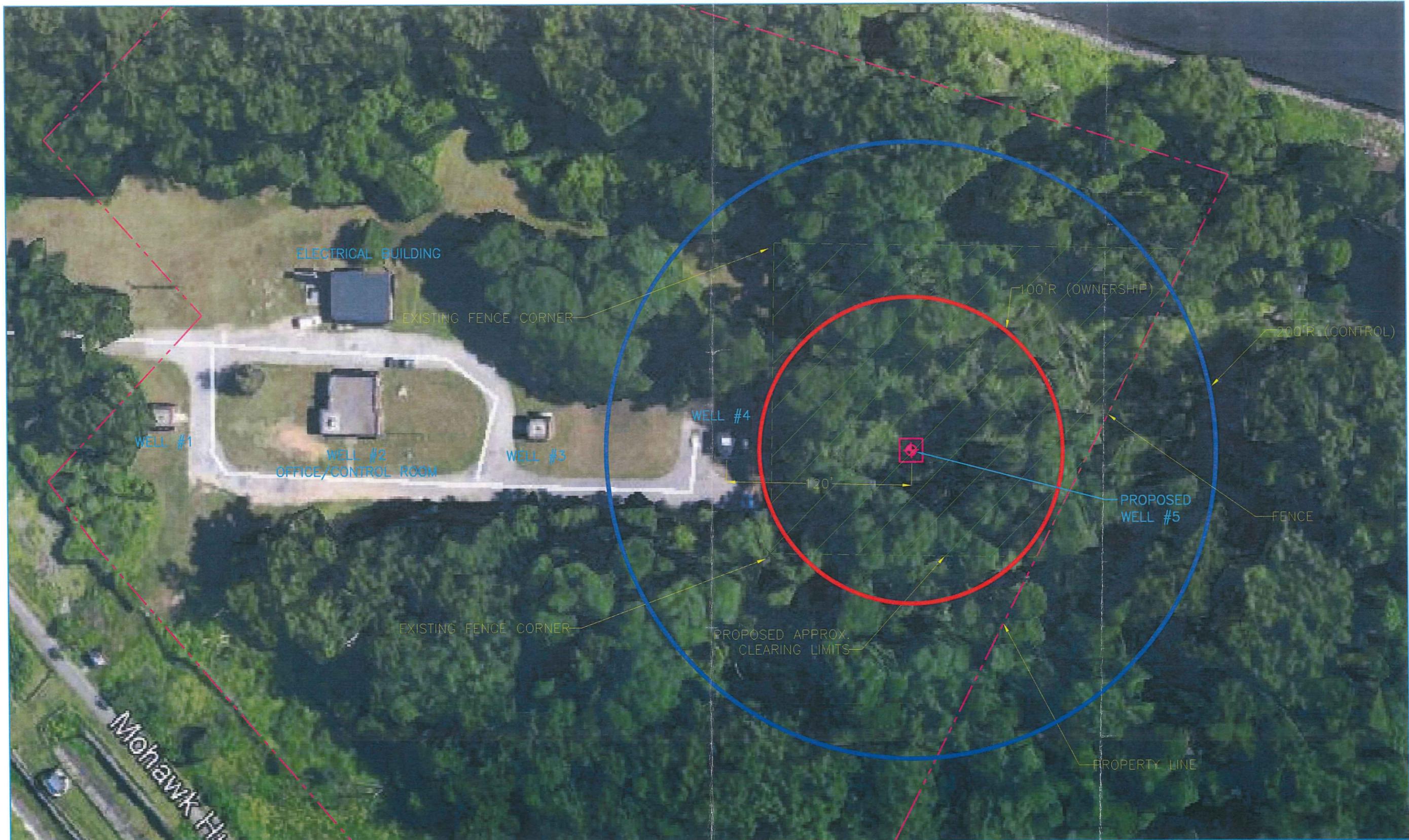
Enclosures:
NY CRIS Inventoried Properties in Project Vicinity (table)
Project Location Map
Area of Potential Effects Map
Aerial and Site Plan

Table 1: Cultural Resources Recorded by the New York Cultural Resources Information System (NY-CRIS) within 0.25 mile of the Rotterdam District #5 Well Heads Flood Protection Project

State ID	Name	Description	NRHP Status
USN 09305.000060	Schermerhorn Rd Dwellings	Three 2-story brick houses, ca. 1900; said to have been housing for City of Schenectady well field workers.	Undetermined. Demolished ca. 2005 per Google Earth imagery.
USN 09305.000134 (NYSM 6279)	Unnamed archeological site	SUNY Albany Mohawk Valley survey; no site form data.	Undetermined.
USN 09305.000258	GEP Locus 2 Site	Prehistoric lithic scatter with a chert core and flakes; period unknown.	Undetermined.
07NR05814 (USN 09305.000271) (NRIS No. 08000145)	Enlarged Lock No. 23 Old Erie Canal	Barge lock constructed during the first enlargement of the original Erie Canal; period of significance 1841-1918.	NRHP-listed under Criteria A and C.
14NR06559 (USN 00104.000641) (NRIS No. 14000860)	New York State Barge Canal Historic District	20 th -century network of canals, canalized rivers, and lakes connecting the Atlantic Ocean with the Great Lakes; period of significance 1905-1963.	NRHP-listed under Criteria A and C.

Note: USN – Unique Site Number, assigned by the New York Office of Parks, Recreation and Historic Preservation (OPRHP); NYSM – New York State Museum site number; NRIS – National Register Information System, inventory numbers assigned by the National Register of Historic Places (NRHP)

Source: OPRHP / NY-CRIS, 9/4/2015



NO.	DATE	REVISION	BY
00	6/30/2014	ORIGINAL ISSUE	AST

JME JOHN M. MCDONALD
ENGINEERING, P.C.

7 South Church Street Schenectady, New York 12305
Ph: 518 382 1774 Fax: 518 382 1776 www.mcdonaldengineers.com

PROJ. ENGR.: DPC

DRAWN BY: AST

CHECKED BY: JMM

UNAUTHORIZED ALTERATIONS TO
THIS DOCUMENT IS A VIOLATION OF
SECTION 7209 SUBDIVISION 2 OF NEW
YORK STATE EDUCATION LAW.

TOWN OF ROTTERDAM
SCHENECTADY COUNTY

5th WELL WATER SYSTEM IMPROVEMENTS

SHEET TITLE:

AERIAL PLAN

SCALE:
AS NOTED

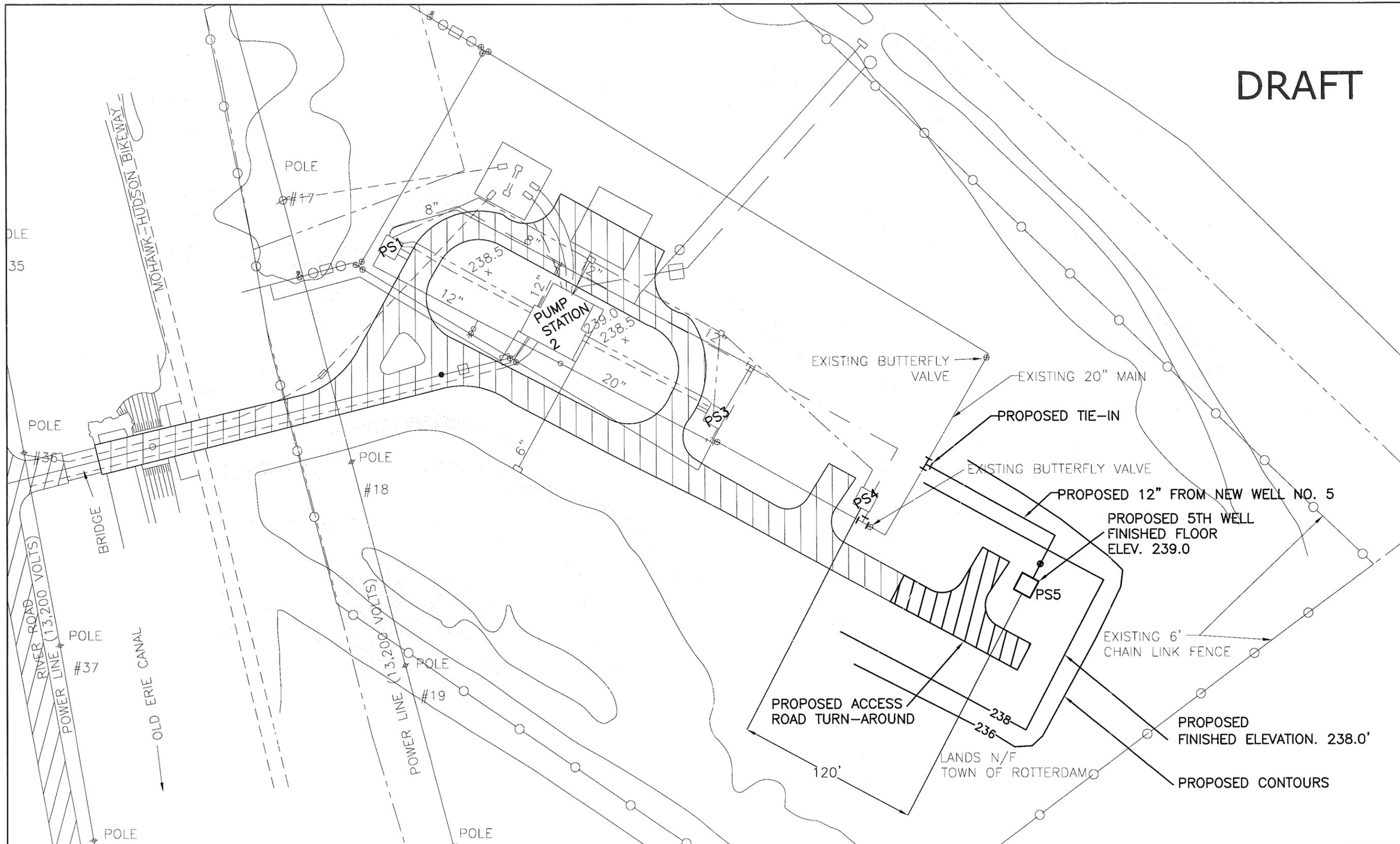
FILE NO.:
01*1403

DATE:
JUNE 2014

SHEET NO.:

A1

DRAFT



NO.	DATE	REVISION	BY
00	6/30/2014	ORIGINAL ISSUE	AST

JME JOHN M. MCDONALD
ENGINEERING, P.C.

7 South Church Street Schenectady, New York 12305
Ph: 518 382 1774 Fax: 518 382 1776 www.mcdonaldengineers.com

UNAUTHORIZED ALTERATIONS TO THIS DOCUMENT IS A VIOLATION OF SECTION 7209 SUBDIVISION 2 OF NEW YORK STATE EDUCATION LAW

PROJ. ENGR.: DPC DRAWN BY: AST CHECKED BY: JMM

TOWN OF ROTTERDAM
SCHENECTADY COUNTY

5th WELL WATER SYSTEM IMPROVEMENTS

SHEET TITLE:
SITE PLAN

SCALE:
AS NOTED

FILE NO.:
01*1403

DATE:
JUNE 2014

SHEET NO.:
A1

APPENDIX G
SOLE SOURCE AQUIFERS



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 2

290 BROADWAY

NEW YORK, NY 10007-1866

DEC 16 2015

Mr. Thomas J. King
Certifying Officer
Governor's Office of Storm Recovery
25 Beaver Street
New York, NY 10004

Dear Mr. King:

This is in response to your letter dated November 12, 2015 requesting a Sole Source Aquifer review of the proposed "Rotterdam Well Field District #5 Wellhead Facility" project in the Town of Rotterdam, Schenectady County, New York. The project is to receive funding from the U.S. Department of Housing and Urban Development's Community Development Block Grant-Disaster Recovery program. The project is located in the Schenectady-Niskayuna Aquifer System, designated by the Environmental Protection Agency (EPA) as a Sole Source Aquifer on January 14, 1985 (citation 50 FR 2022). Therefore, our review has been conducted in accordance with Section 1424(e) of the Safe Drinking Water Act (SDWA).

The town of Rotterdam proposes to construct a new well (Well 5) with a capacity of 3 million gallons per day (mgd) at the town's existing well field site on Rice Road. The new well will serve as a backup and add reliability to the water supply system. Well 5 will be located in line with the existing four wells approximately 120 feet east of Well 4, and will be contained in a new well house facility. We understand that the new well is designed to be a self-sufficient drinking water supply facility for the town in the event that the other wells become inoperative for any reason, with an existing backup generator for power. The project includes installation of a chlorinator, motor and pump and the construction of a paved access road. Under normal conditions, the pump will be powered electrically, but it will be wired through an automatic transfer switch to the well field's existing emergency backup – a diesel-powered generator with its own storage tank.

We understand that the well will be installed in accordance with American Water Works Association (AWWA) A100 "Standard for Water Wells" and with the New York State Sanitary Code, Appendix 5-D. The annular space between casing and soil will be grouted with cement/bentonite, according to AWWA standard A100-06, thereby preventing surface runoff from entering the borehole and reaching the aquifer. The finished well will be equipped with a standard lineshaft vertical turbine pump, and will be approximately 95.5 feet deep from the top of the casing to the bottom of the 24-inch diameter screen. The information provided states that the casing of the new well will be elevated between 2.5 and 5.0 feet above the 500-year flood plain, and at least 3 feet above the flood of record elevation. Although the well will be located in

a 100-year flood zone, it will be elevated and constructed in accordance with the New York State Department of Health (NYSDOH) requirements.

While the proposed well is only 200 feet from the Mohawk River, it is not expected to require testing for Ground Water Under Direct Influence of surface water (GWUDI); however, the plans and specifications for the well have been submitted to NYSDOH for review. We understand that the Town of Rotterdam well field is permitted to produce 10 mgd (6,944 gallons per minute), a pumping rate that has been determined not to adversely affect the City of Schenectady well field, which is a half-mile away. We further understand that the new well will provide redundancy, rather than added capacity, so that the well field can still produce up to the permitted 10 mgd if one well is out of service.

We note that the project would disturb approximately 0.7 acre of previously undisturbed land on a 9.38-acre parcel. The project site currently has no impervious surface area. The disturbance would involve the construction of a 900-square-foot well house for Well #5, construction of a paved access road, as well as grading, and filling to elevate the well house for Well #5. The access road will be constructed prior to the installation of the drinking water supply well. The road will provide access for the drilling equipment and limit the amount of ground disturbance. The project is within Wellhead Protection Zone 1 which is the most protective. We understand that the project will be consistent with the regulations for this protection zone including the following:

- (1) all land uses and development activities other than those directly connected with the pumping and treatment of public water supplies is prohibited (with the exception of existing single family residences); and
- (2) the handling of hazardous, toxic, or other waste substances is prohibited.

The chemicals for the chlorinator would be stored on the project site. We understand that no additional fuel storage tanks will be necessary. We note that exposed piping from the well will be ductile iron with grooved-end and rubber gasket joints; buried piping will be ductile iron having push-on or mechanical joints with rubber gaskets; and that all piping, fittings and joints will be National Sanitation Foundation (NSF)-approved for potable water use.

The information provided indicates that the wastewater and sewage disposal needs for this project will be met by the existing onsite holding tank. We note that the holding tank is pumped out regularly. We further note that no changes to the system or the number of people using the system will be made. We understand that there is no storm sewer, and that all rain and runoff dissipate naturally. There are no dry wells, retention ponds, leach fields or onsite recharge basins.

Based on the information provided, the project satisfies the requirements of 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.

At this time, EPA offers the following comments to minimize environmental impacts and to create a more sustainable project.

Clean Diesel:

Implement diesel controls, cleaner fuel, and cleaner construction practices for on-road and off-road equipment used for transportation, soil movement, or other construction activities, including:

- Strategies and technologies that reduce unnecessary idling, including auxiliary power units, the use of electric equipment, and strict enforcement of idling limits; and
- Use of clean diesel through add-on control technologies like diesel particulate filters and diesel oxidation catalysts, repowers, or newer, cleaner equipment.

For more information on diesel emission controls in construction projects, please see: <http://www.northeastdiesel.org/pdf/NEDC-Construction-Contract-Spec.pdf>

Stormwater:

We emphasize the importance of Low Impact Development (LID) principles such as minimizing effective imperviousness to create site drainage, and the planting of native and non-invasive vegetation on the project site for stormwater management purposes. Other LID practices can include bioretention facilities, rain gardens, vegetated rooftops, rain barrels, and permeable pavements. For further information, please see the following website:

<http://water.epa.gov/polwaste/green/>

Encourage cost-efficient, environmentally friendly landscaping:

There are many benefits to making greener landscaping choices. For additional information, please see the following website:

<http://www2.epa.gov/greenerproducts/identifying-greener-landscaping-choices>

Energy-Efficiency:

Energy-efficient technologies should be incorporated into all aspects of the project when possible. Please see the following website: <http://www.energystar.gov>

If you have any questions concerning this matter or would like additional information, please feel free to contact Rajini Ramakrishnan of my staff at (212) 637-3731.

Sincerely yours,



Grace Musumeci, Chief
Environmental Review Section



Governor's Office of Storm Recovery



Andrew M. Cuomo
Governor

Lisa Bova-Hiatt
Interim Executive Director

November 12, 2015

Ms. Grace Musumeci
U.S. Environmental Protection Agency
Region II Main Regional Office
290 Broadway, 25th Floor New York, NY 10007

Re: Sole Source Aquifer Consultation for CDBG-DR Funding Application for Rotterdam Well Field District #5 Wellhead Facility, Town of Rotterdam, Schenectady County, New York

Dear Ms. Musumeci:

The New York State Governor's Office of Storm Recovery (GOSR) received a funding application for the Rotterdam Well Field District #5 Wellhead Facility Project, for the construction of a well, well house, and associated infrastructure in the Town of Rotterdam, Schenectady County, New York. Well #5 would be constructed at 49 Rice Road, Rotterdam, New York 12306. The project entails drilling a new well and installing a casing between 2.5 to 5 feet above the 500-year flood level, establishing a well connection to existing pipes, installing a motor and pump, constructing a new building to house the pump and equipment, and an access road. Fill would be used to elevate the new well house as well as the well casing. Please see the attached project description.

Pursuant to the Disaster Relief Appropriations Act, 2013 (Public Law 113-2) and the Housing and Community Development Act (42 U.S.C. § 5301 et seq.), GOSR is acting under the auspices of New York State Homes and Community Renewal's Housing Trust Fund Corporation as a recipient of Community Development Block Grant – Disaster Recovery (CDBG-DR) funds from the United States Department of Housing and Urban Development (HUD) and is the entity responsible for compliance with the HUD NEPA environmental review procedures set forth in 24 C.F.R. Part 58. 24 C.F.R. Part 58 requires GOSR to review projects for conformance with the Safe Drinking Water Act of 1974 (42 U.S.C. 201, 300(f) et seq., and 21 U.S.C. 349) as amended, and Environmental Protection Agency (EPA) regulations pertaining to Sole Source Aquifers found at 40 C.F.R. Part 149

In accordance with the Memorandum of Understanding ("MOU") between EPA and HUD dated August 24, 1990, GOSR hereby requests an Initial Screen/Preliminary Review for the project. Please review the attached documentation, including Attachment 2.A and 3 to the MOU. Responses can be sent to me via email at thomas.king@stormrecovery.ny.gov. In accordance with the MOU, please respond within fifteen days. If you have any questions, please call me at (646) 417-4660.

Sincerely,

Thomas J. King
Certifying Officer
Governor's Office of Storm Recovery
NYS Homes and Community Renewal

ATTACHMENT 2.A

NON-HOUSING/PROJECT ACTIVITY INITIAL SCREEN CRITERIA

The following list of criteria questions are to be used as an initial screen to determine which **non-housing** projects/activities should be forwarded to the Environmental Protection Agency (EPA) for Preliminary Sole Source Aquifer (SSA) Review. (For housing projects/activities see Attachment 2.B) If any of the questions are answered affirmatively, Attachment 3, SSA Preliminary Review Requirements, should also be completed. The application/final statement, this Attachment, Attachment 3, and any other pertinent information should than be forwarded to EPA at the address below.

Any project/activity not meeting the criteria in this Attachment, but suspected of having a potential adverse effect on the Sole Source Aquifer should also be forwarded. Contact EPA if you have any questions.

Chief, Environmental Impacts Branch
USEPA Region II
26 Federal Plaza, Room 500
New York, New York 10278
(212) 264-1840

CRITERIA QUESTIONS	YES	NO	NA
1. Is the project/activity located within a currently designated or proposed groundwater sensitive area such as a special Ground Water Protection Area, Critical Supply Area, Wellhead Protection Area etc.? [This information can be obtained from the County or Regional planning board, the local health department, the State health department or the State environmental agency.] See the attached Figure 4.	X	___	___
2. Is the project/activity located within a one half mile radius (2640 feet) of a current or proposed public water supply well or wellfield? [This information can be obtained from the local health department, the State health department or the State environmental agency.] The project includes the installation of a new drinking water supply well within the Rotterdam Water District well field. The locations of the supply wells and the proposed new well (Well #5) are shown in the attached Figure 6. The City of Schenectady has drinking water wells nearby on parcel 38.3-8 (see attached Figure 3).	X	___	___

3. Will the project/activity include or directly cause: (check appropriate items)

- construction or expansion of solid waste disposal, recycling or conversion facilities ___ **X** ___
- construction or expansion or closure of landfills ___ **X** ___
- construction or expansion of water supply facilities [define]
The new well will serve as backup and add reliability to the water supply system. ___ ___ **X**
- construction or expansion of on-site wastewater treatment plants or sewage trunk lines [define] ___ **X** ___
- construction or expansion of gas or petroleum trunk lines greater than 1320 feet ___ **X** ___
- construction or expansion of railroad spurs or similar extensions ___ **X** ___
- construction or expansion of municipal sewage treatment plants ___ **X** ___

4. Will the project/activity include storage or handling of any hazardous constituents as listed in Attachment 4, Hazardous Constituents?
Chemicals for chlorination. **X** ___ ___

5. Will the project/activity include bulk storage of petroleum in underground or above ground tanks in excess of 1100 gallons? (Please give what assurance they are done in a proper manner) ___ **X** ___

6. Will the project/activity require a federal or state discharge elimination permit or modification of an existing permit? ___ **X** ___

This attachment was completed by:

Name: Genevieve Kaiser

Title: Senior Environmental Planner/GIS Specialist

Address: 1765 Lombardy Drive
Boulder, CO 80304

Telephone number: 720-273-7249

Date: 11/04/15

ATTACHMENT 3

SSA PRELIMINARY REVIEW INFORMATION REQUIREMENTS

Where currently available, the information in this Attachment should be provided to the Environmental Protection Agency (see address below) along with the application/final statement; Attachment 2.A, Non-Housing Initial Screen Criteria or Attachment 2.B, Housing Initial Screen Criteria; and any other information which may be pertinent to a Sole Source Aquifer review. Where applicable, indicate the source of your information.

Chief, Environmental Impacts Branch
USEPA Region II
26 Federal Plaza, Room 500
New York, New York 10278
(212) 264-1840

ENCLOSED
YES NO

I. Project/Activity Location

1. Provide the geographic location and total acreage of the project/activity site. Include a site location map which identifies the site in relation to the surrounding area. [Examples of maps which can be used include: 1:24,000 or 1:25,000 U.S. Geological Survey quadrangle sheet, Hagstroms Street Map.]

Project 0.7 acre, see attached Figures 1 and 2.

X **—**

2. If applicable, identify which groundwater sensitive areas (Special Ground Water Protection Area, Critical Supply Area, Wellhead Protection Area etc.) the project/activity is located within or adjacent to. [This information may be obtained from the County or Regional planning board, the local health department, the State health department or the State environmental agency.]

Schenectady-Niskayuna SSA, Wellhead Protection Zone 1, Great Flats Aquifer, see attached Figure 4.

X **—**

II. Nature of Project/Activity

3. Provide a general narrative describing the project/activity including but not limited to: type of facility; type of activities to be conducted; number and type of units; number of residents etc. Provide the general layout of the project/activity site and a site-plan if available.

See attached project description.

X **—**

III. Public Water Supply

4. Provide a description of plans to provide water supply.

The town of Rotterdam proposes to construct a new well (Well 5) with a capacity of 3 mgd at the town's existing well field site on Rice Road. Well 5 will be located in line with the existing four wells approximately 120 feet east from the existing Well 4 and will be contained in a new well house facility. The well will serve as a back-up and add reliability to the water supply system. The work for this project includes site work, test well installation, production well installation, associated site piping and a well house.

X —

5. Provide the location of nearby existing or proposed public water supply wells or wellfields within a one half mile radius (2640 feet) of the project/activity. Provide the name of the supplier(s) of those wells or wellfields. This information should be available from the local health department, State health department or the State environmental agency.

The City of Schenectady well field is located on parcel 38.3-8 within 2640 feet of the project (see attached Figure 3). The location of public drinking water supply wells are located on the attached Figure 5.

X —

IV. Wastewater and Sewage Disposal

6. Provide a description of plans to handle wastewater and sewage disposal. If the project/activity is to be served by existing public sanitary sewers provide the name of the sewer district.

The existing onsite holding tank will continue to serve the facilities building. The holding tank is pumped out regularly. No changes to the system or the number of person using the system will be made.

X —

7. Provide a description of plans to handle storm water runoff.

There is no storm sewer system; all rain and runoff dissipate naturally.

X —

8. Identify the location, design, size of any on-site recharge basins, dry wells, leaching fields, retention ponds etc.

There are no dry wells, retention ponds, leach fields or on site recharge basins.

X —

This form was completed by:

Name: Genevieve Kaiser
Title: Senior Environmental Planner/GIS Specialist
Address: 1765 Lombardy Drive
Boulder, CO 80304
Telephone number: 720-273-7249
Date: 11/04/15

Project Location

The Rotterdam Water District #5 Well facility is located at 49 Rice Road near Schermerhorn Road, Town of Rotterdam, Schenectady County, New York (**Figures 1 and 2**). The facility serves most of the Town of Rotterdam. The Project would disturb approximately 0.7 acres of previously undisturbed land on a 9.38-acre parcel (Parcel number 38.-3-19) owned by Water District #5 (**Figure 3**).

The project site is within the bounds of the Schenectady-Niskayuna Sole Source Aquifer Designated Area (**Figure 4**) and within Wellhead Protection Zone I (**Figure 5**).

Adjoining properties include undeveloped land to the southeast, north and northwest, river frontage and the Mohawk River to the northeast, and the Mohawk Hudson Bikeway and Rice Road to the west. Further west of Rice Road are parcels owned by the City of Schenectady, Interstate 890, and Old Maids Woods City Preserve.

The topography of the site slopes slightly down toward the Mohawk River. The project site currently has no impervious area.

Project Description

The project is to drill a new well at the Rotterdam Water District #5 well facility. The casing of the new well would be elevated between 2.5 and 5.0 feet above the 500-year flood plain and at least 3 feet above the flood of record elevation. The well will be located in a 100-year flood zone and elevated and constructed in accordance with the New York State Department of Health. The Rotterdam District #5 Well Head Project would involve establishing a well connection to existing pipes; installing a chlorinator, motor, and pump; constructing a new building to house the pump and equipment, and constructing a paved access road. The well house design for Well #5 would be similar to the design of the well house for Well #4 (**Figure 6**) with a concrete floor. The chemicals for the chlorinator would be stored on the Project site. The Project is designed to be a self-sufficient drinking water supply facility for the town in the event that the other wells become inoperative for any reason with an existing back-up generator for power. The 5th well will be located in line with the existing four wells. The well will serve as a back-up and add reliability to the water supply system. The Project would benefit residents of the Town of Rotterdam.

The project site would be cleared to provide enough space to assure the appropriate grade of the fill that would raise the level of the well above the 500-year flood plain. Well 5 lies at the 100-year flood zone, in accordance with the New York State Department of Health requirements, Well 5 will be elevated at least 3 feet above the flood of record elevation, which is greater than the 100-yr flood elevation. The disturbance would involve construction of a 900 square foot well house for Well #5, construction of a paved access road, grading, and filling to elevate the well house for Well #5. The access road will be constructed prior to the installation of the drinking water supply well. The road will provide access for the drilling equipment and limit the

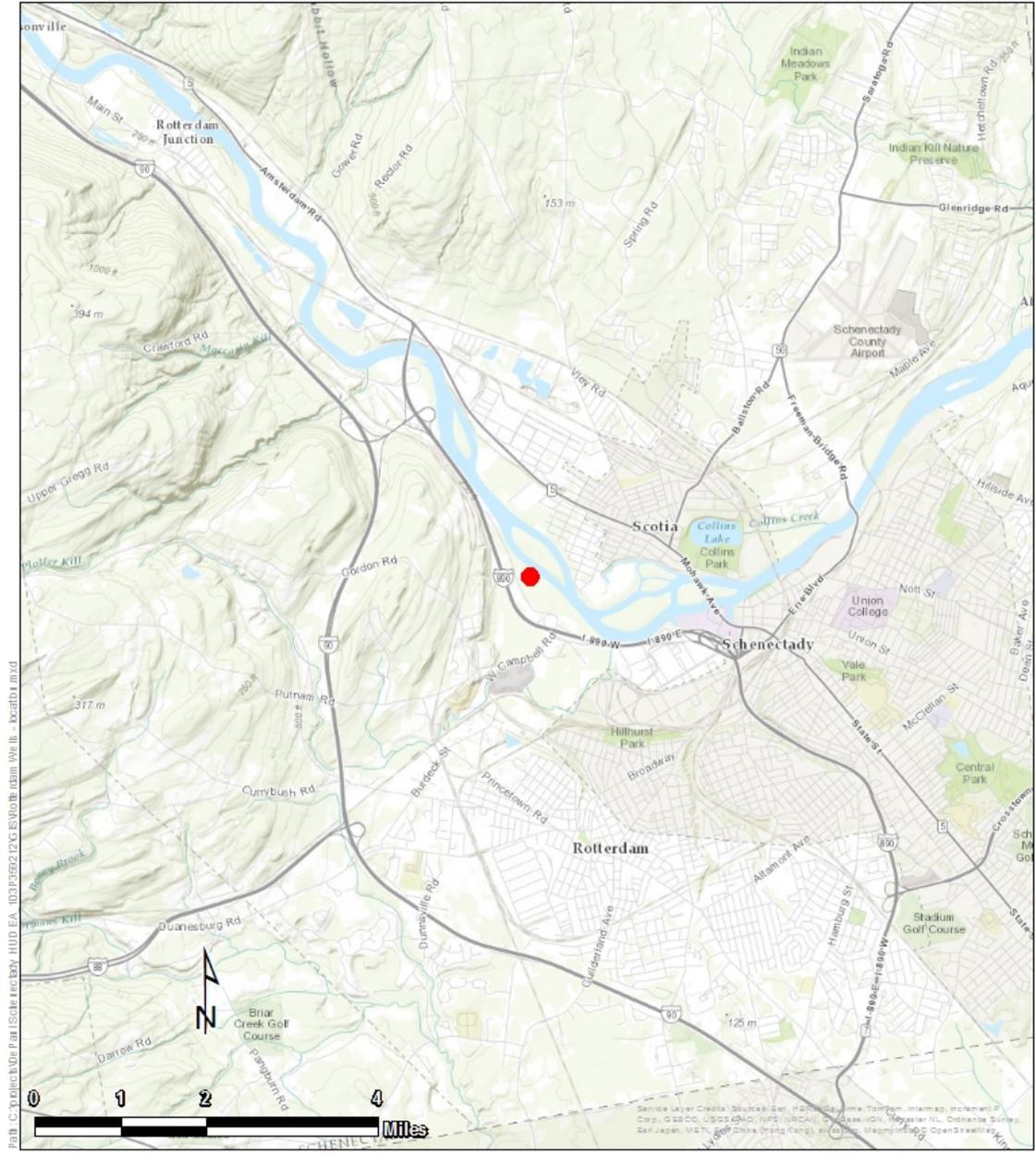
amount of ground disturbance. Minimal additional impervious surface would be created. Well #5 will be drilled approximately 120 feet southeast of Well #4.

No land acquisition is anticipated at this time.

The project is within Wellhead Protection Zone I (**Figure 5**), which is the most protective. The project would be consistent with the regulations for this protection zone:

- All land uses and development activities other than those directly connected with the pumping and treatment of public water supplies is prohibited (with the exception of existing single family residences) and
- The handling of hazardous, toxic, or other waste substances is prohibited.

No filling, excavation, or dredging is permitted in any manner without prior site plan review and specific approval by the appropriate Municipal Water Purveyor. Conditions for approval shall include certification and concurrence from the Local Water Purveyor that the activity shall not contravene water quality standards as set forth in the regulations promulgated under authority of New York State Public Health Law, Section 1100 and the New York State Environmental Conservation Law, Article 17, and amendments thereto, based upon an environmental assessment specifically addressing the need for the activity and its potential impact.



Site Location

Rotterdam District #5 Well
 Town of Rotterdam,
 Schenectady County, New York

Legend

- Approximate Well Location



Figure 1 – Site Location



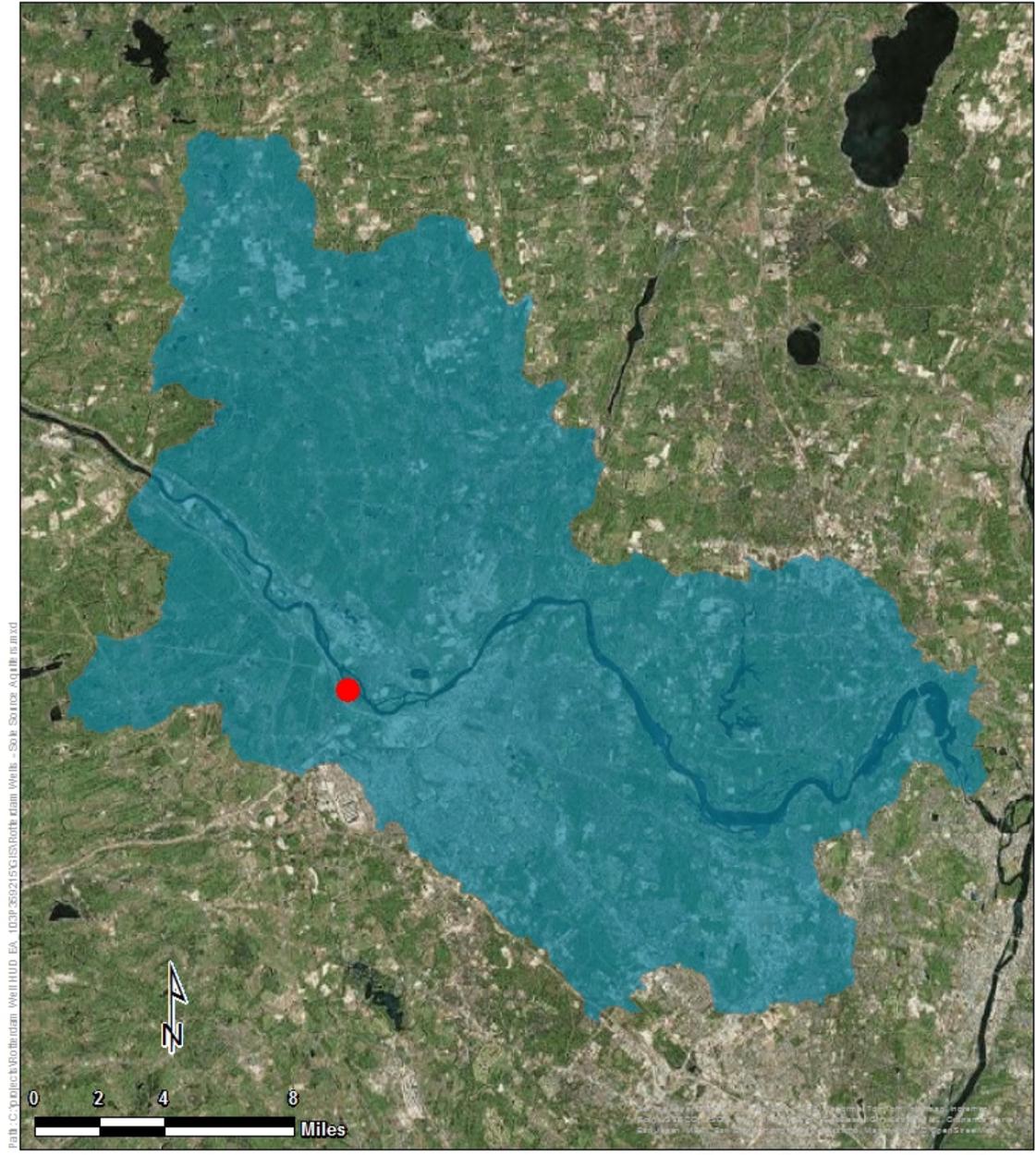
Project Area

Rotterdam District #5 Well
 Town of Rotterdam,
 Schenectady County, New York

- Legend**
- Approximate Well Location
 - Approximate Disturbance Area



Figure 2 – Rotterdam Well Head District #5 Facility



Sole Source Aquifers

- Legend**
- Project Area
 - Schenectady-Niskayuna SSA

Rotterdam District #5 Well
 Town of Rotterdam,
 Schenectady County, New York



Figure 4 – Sole Source Aquifer Map.

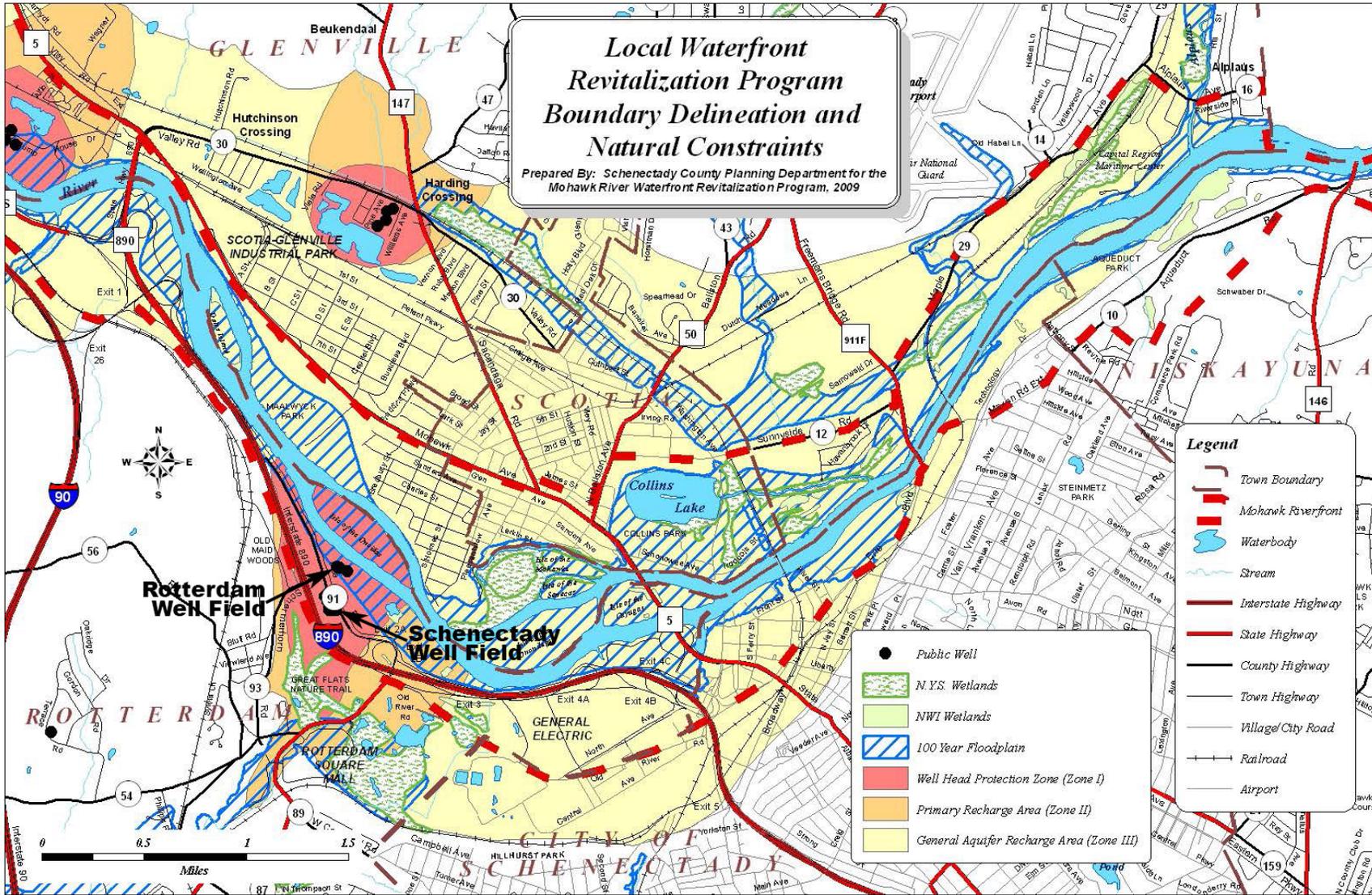


Figure 5 – Groundwater Protection Zone Boundaries and Location of Water Supply Wells

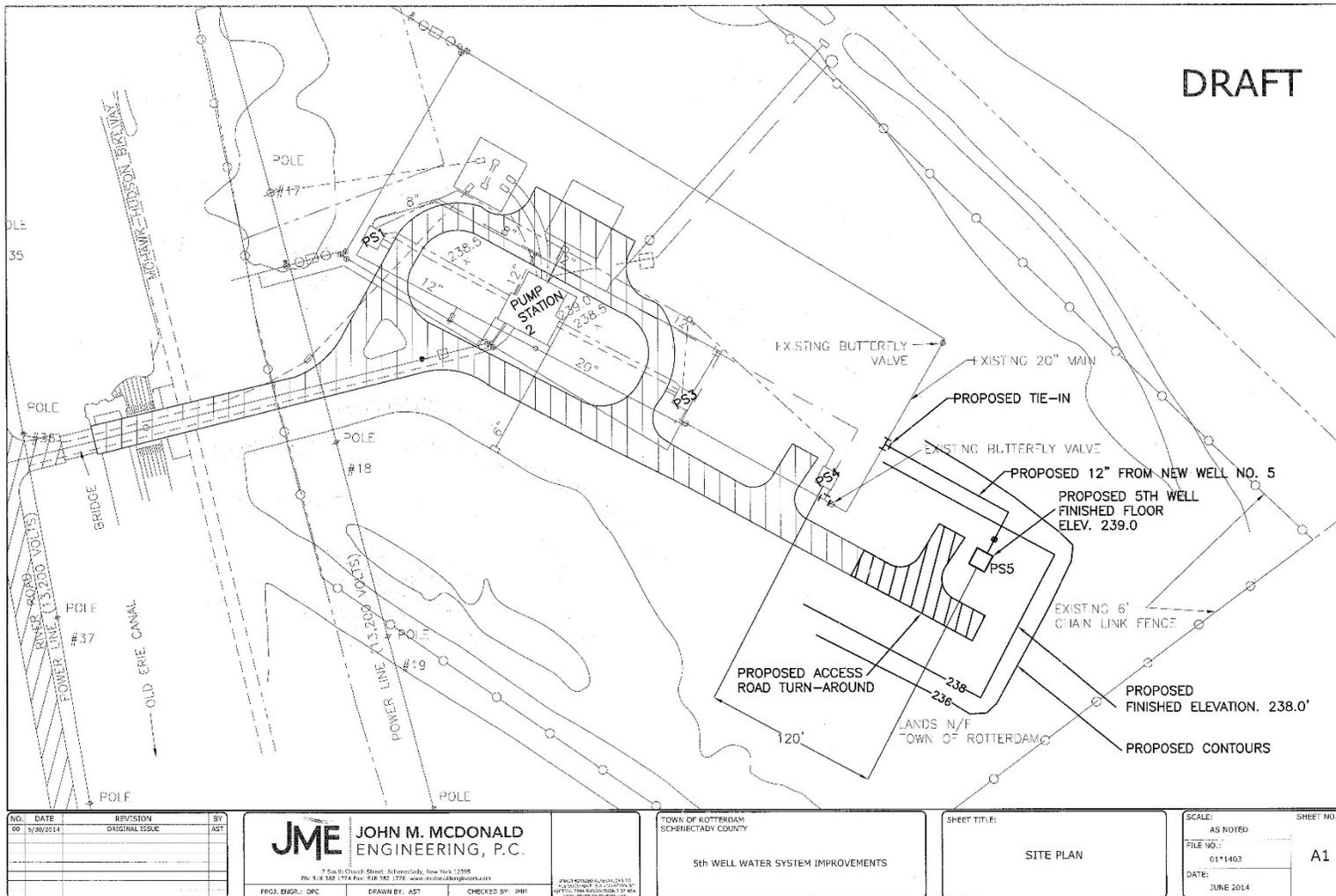
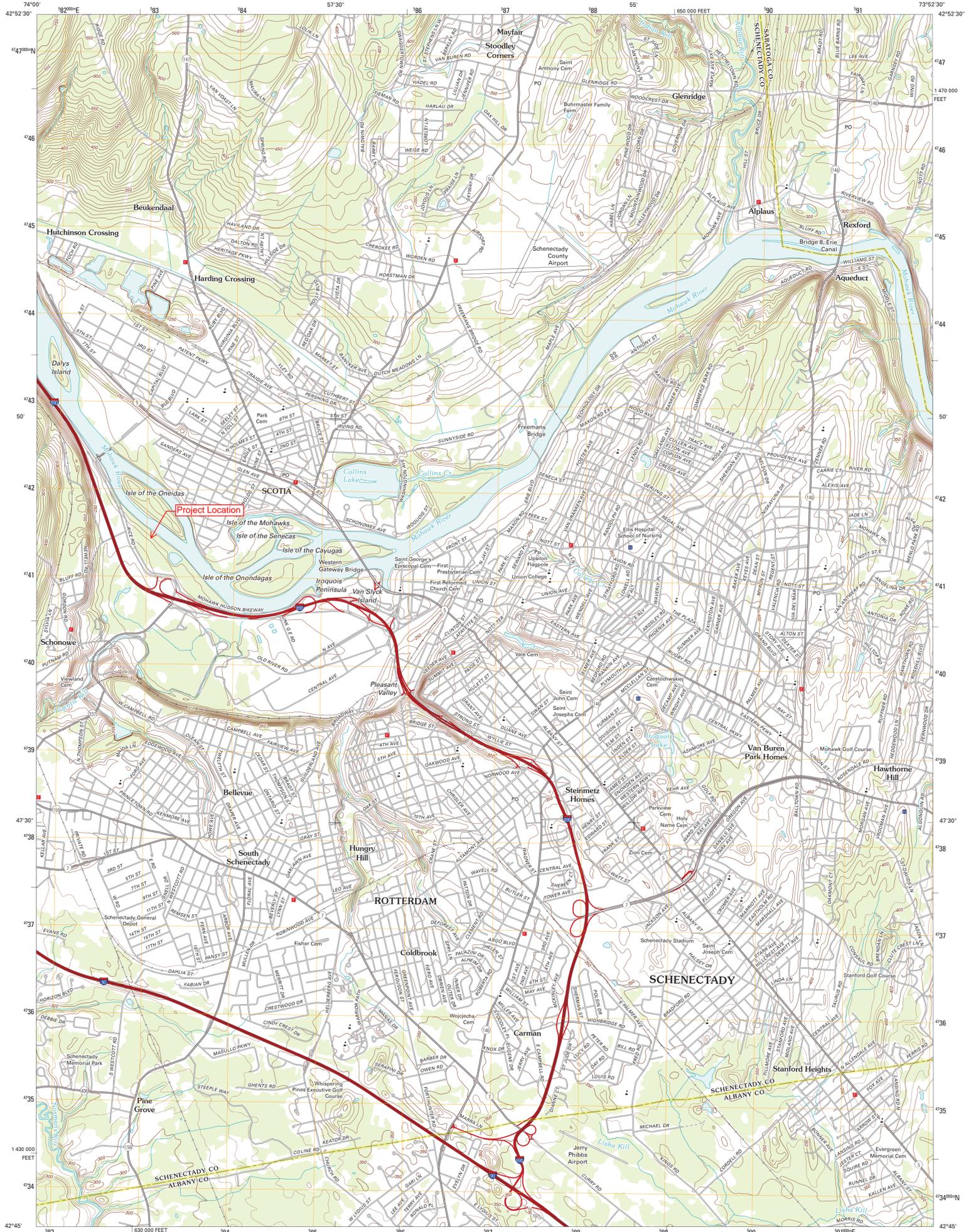


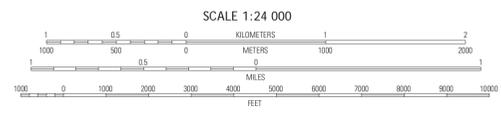
Figure 6 – Schematic of Renovations

APPENDIX H
TOPOGRAPHIC MAP



Produced by the United States Geological Survey
North American Datum of 1983 (NAD83)
World Geodetic System of 1984 (WGS84). Projection and
1 000-meter grid: Universal Transverse Mercator, Zone 18T
10 000-foot ticks: New York Coordinate System of 1983 (east
zone)

Imagery: NAIP, October 2011
Roads: ©2006-2012 TomTom
Names: ©2012
Hydrography: National Hydrography Dataset, 2011
Contours: National Elevation Dataset, 1998
Boundaries: Census, IBWC, IBC, USGS, 1972 - 2012



CONTOUR INTERVAL 10 FEET
NORTH AMERICAN VERTICAL DATUM OF 1988

This map was produced to conform with the
National Geospatial Program US Topo Product Standard, 2011.
A metadata file associated with this product is draft version 6.6.7



QUADRANGLE LOCATION

Pattersonville	Burnt Hills	Round Lake
Rotterdam Junction	Schenectady	Niskayuna
Altamont	Yonkersville	Albany



SCENECTADY, NY
2013

ADJOINING 7.5 QUADRANGLES

APPENDIX I
SEQRA DOCUMENTATION

*Full Environmental Assessment Form
Part 1 - Project and Setting*

Instructions for Completing Part 1

Part 1 is to be completed by the applicant or project sponsor. Responses become part of the application for approval or funding, are subject to public review, and may be subject to further verification.

Complete Part 1 based on information currently available. If additional research or investigation would be needed to fully respond to any item, please answer as thoroughly as possible based on current information; indicate whether missing information does not exist, or is not reasonably available to the sponsor; and, when possible, generally describe work or studies which would be necessary to update or fully develop that information.

Applicants/sponsors must complete all items in Sections A & B. In Sections C, D & E, most items contain an initial question that must be answered either "Yes" or "No". If the answer to the initial question is "Yes", complete the sub-questions that follow. If the answer to the initial question is "No", proceed to the next question. Section F allows the project sponsor to identify and attach any additional information. Section G requires the name and signature of the project sponsor to verify that the information contained in Part 1 is accurate and complete.

A. Project and Sponsor Information.

Name of Action or Project: Rotterdam District #5 Wellhead		
Project Location (describe, and attach a general location map): 49 Rice Road, Rotterdam, NY		
Brief Description of Proposed Action (include purpose or need): The Proposed Action consists of drilling a new well at the Rotterdam District #5 Wellhead facility located at 49 Rice Road, and elevating the casing between 2 to 5 feet above the 500-year flood plain and at least 3 feet above the flood-of-record elevation. The new well will ensure that the Rotterdam District #5 Wellhead facility will have potable water should one or more of the other wells go offline due to a storm event or other reason. Project activities will involve establishing a well connection to existing pipes; installing a chlorinator, motor and pump; and constructing a new building to house the pump and equipment, and a paved access road. The new well, with connection to an existing backup generator for power, is designed to be a self-sufficient drinking water supply facility for the town in the event that other wells become inoperative for any reason. Under normal conditions, the pump would be powered electrically, but it would be wired through an automatic transfer switch to the well field's existing emergency backup, a diesel-powered generator with its own storage tank. The new building design is similar to the design of the existing building that houses Well #4. The location of the new well house will be elevated approximately 11 feet above the existing grade with certified fill to an elevation of 243 feet above sea level, 2 to 5 feet above the 500-year floodplain. It will be installed in accordance with American Water Works Association (AWWA) A1 00 "Standard for Water Wells" and with the New York State Sanitary Code.		
Name of Applicant/Sponsor: Steven Tommasone, Supervisor, Town of Rotterdam, NY	Telephone: 518-355-7585	E-Mail: stommasone@rotterdamny.org
Address: John F. Kirvin Government Center, 1100 Sunrise Blvd		
City/PO: Rotterdam	State: NY	Zip Code: 12306
Project Contact (if not same as sponsor; give name and title/role):	Telephone:	E-Mail: hbuffardi
Address:		
City/PO:	State:	Zip Code:
Property Owner (if not same as sponsor): The Town of Rotterdam Water District #5	Telephone:	E-Mail:
Address:		
City/PO:	State:	Zip Code:

B. Government Approvals

B. Government Approvals, Funding, or Sponsorship. (“Funding” includes grants, loans, tax relief, and any other forms of financial assistance.)		
Government Entity	If Yes: Identify Agency and Approval(s) Required	Application Date (Actual or projected)
a. City Council, Town Board, <input type="checkbox"/> Yes <input type="checkbox"/> No or Village Board of Trustees		
b. City, Town or Village <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Planning Board or Commission	Town of Rotterdam: Site Plan Approval, Town Board Approval, Floodplain Development Permit, Building Permit	
c. City Council, Town or <input type="checkbox"/> Yes <input type="checkbox"/> No Village Zoning Board of Appeals		
d. Other local agencies <input type="checkbox"/> Yes <input type="checkbox"/> No		
e. County agencies <input type="checkbox"/> Yes <input type="checkbox"/> No		
f. Regional agencies <input type="checkbox"/> Yes <input type="checkbox"/> No		
g. State agencies <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	NYSDEC: Water Supply Permit, Joint Application Form with Water Withdrawal Application Supplement WW-1 and engineering report; NYSDOH Approval of Plans and Specifications	
h. Federal agencies <input type="checkbox"/> Yes <input type="checkbox"/> No		
i. Coastal Resources.		
i. Is the project site within a Coastal Area, or the waterfront area of a Designated Inland Waterway?		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
ii. Is the project site located in a community with an approved Local Waterfront Revitalization Program?		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
iii. Is the project site within a Coastal Erosion Hazard Area?		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

C. Planning and Zoning

C.1. Planning and zoning actions.	
Will administrative or legislative adoption, or amendment of a plan, local law, ordinance, rule or regulation be the only approval(s) which must be granted to enable the proposed action to proceed?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<ul style="list-style-type: none"> • If Yes, complete sections C, F and G. • If No, proceed to question C.2 and complete all remaining sections and questions in Part 1 	
C.2. Adopted land use plans.	
a. Do any municipally- adopted (city, town, village or county) comprehensive land use plan(s) include the site where the proposed action would be located?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
If Yes, does the comprehensive plan include specific recommendations for the site where the proposed action would be located?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
b. Is the site of the proposed action within any local or regional special planning district (for example: Greenway Brownfield Opportunity Area (BOA); designated State or Federal heritage area; watershed management plan; or other?)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
If Yes, identify the plan(s): New York State Heritage Areas: Mohawk Valley Heritage Corridor	

c. Is the proposed action located wholly or partially within an area listed in an adopted municipal open space plan, or an adopted municipal farmland protection plan?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
If Yes, identify the plan(s): Town of Rotterdam Comprehensive Plan - designated for well head protection	

C.3. Zoning

a. Is the site of the proposed action located in a municipality with an adopted zoning law or ordinance. Yes No
 If Yes, what is the zoning classification(s) including any applicable overlay district?
 Industrial District _____

b. Is the use permitted or allowed by a special or conditional use permit? Yes No

c. Is a zoning change requested as part of the proposed action? Yes No
 If Yes,
 i. What is the proposed new zoning for the site? _____

C.4. Existing community services.

a. In what school district is the project site located? Schalmont Central School District

b. What police or other public protection forces serve the project site?
Rotterdam Police Department, Scotia Police Department

c. Which fire protection and emergency medical services serve the project site?
Rotterdam Fire Department, Rotterdam Emergency Medical Services (REMS), Scotia Fire Department

d. What parks serve the project site?
Old Maids Woods City Preserve, Maalwyck Park

D. Project Details

D.1. Proposed and Potential Development

a. What is the general nature of the proposed action (e.g., residential, industrial, commercial, recreational; if mixed, include all components)?
Public Utility

b. a. Total acreage of the site of the proposed action? 9.38 acres
 b. Total acreage to be physically disturbed? approximately 0.7 acres
 c. Total acreage (project site and any contiguous properties) owned or controlled by the applicant or project sponsor? 9.38 acres

c. Is the proposed action an expansion of an existing project or use? Yes No
 i. If Yes, what is the approximate percentage of the proposed expansion and identify the units (e.g., acres, miles, housing units, square feet)? % 7.5 Units: acres

d. Is the proposed action a subdivision, or does it include a subdivision? Yes No
 If Yes,
 i. Purpose or type of subdivision? (e.g., residential, industrial, commercial; if mixed, specify types) _____
 ii. Is a cluster/conservation layout proposed? Yes No
 iii. Number of lots proposed? _____
 iv. Minimum and maximum proposed lot sizes? Minimum _____ Maximum _____

e. Will proposed action be constructed in multiple phases? Yes No
 i. If No, anticipated period of construction: _____ months
 ii. If Yes:
 • Total number of phases anticipated _____
 • Anticipated commencement date of phase 1 (including demolition) _____ month _____ year
 • Anticipated completion date of final phase _____ month _____ year
 • Generally describe connections or relationships among phases, including any contingencies where progress of one phase may determine timing or duration of future phases: _____

f. Does the project include new residential uses? Yes No
 If Yes, show numbers of units proposed.

	<u>One Family</u>	<u>Two Family</u>	<u>Three Family</u>	<u>Multiple Family (four or more)</u>
Initial Phase	_____	_____	_____	_____
At completion	_____	_____	_____	_____
of all phases	_____	_____	_____	_____

g. Does the proposed action include new non-residential construction (including expansions)? Yes No
 If Yes,
 i. Total number of structures well housing
 ii. Dimensions (in feet) of largest proposed structure: 12.75 height; 30 width; and 30 length
 iii. Approximate extent of building space to be heated or cooled: _____ square feet

h. Does the proposed action include construction or other activities that will result in the impoundment of any liquids, such as creation of a water supply, reservoir, pond, lake, waste lagoon or other storage? Yes No
 If Yes,
 i. Purpose of the impoundment: _____
 ii. If a water impoundment, the principal source of the water: Ground water Surface water streams Other specify: _____
 iii. If other than water, identify the type of impounded/contained liquids and their source. _____
 iv. Approximate size of the proposed impoundment. Volume: _____ million gallons; surface area: _____ acres
 v. Dimensions of the proposed dam or impounding structure: _____ height; _____ length
 vi. Construction method/materials for the proposed dam or impounding structure (e.g., earth fill, rock, wood, concrete): _____

D.2. Project Operations

a. Does the proposed action include any excavation, mining, or dredging, during construction, operations, or both? Yes No
 (Not including general site preparation, grading or installation of utilities or foundations where all excavated materials will remain onsite)
 If Yes:
 i. What is the purpose of the excavation or dredging? _____
 ii. How much material (including rock, earth, sediments, etc.) is proposed to be removed from the site?
 • Volume (specify tons or cubic yards): _____
 • Over what duration of time? _____
 iii. Describe nature and characteristics of materials to be excavated or dredged, and plans to use, manage or dispose of them. _____

 iv. Will there be onsite dewatering or processing of excavated materials? Yes No
 If yes, describe. _____

 v. What is the total area to be dredged or excavated? _____ acres
 vi. What is the maximum area to be worked at any one time? _____ acres
 vii. What would be the maximum depth of excavation or dredging? _____ feet
 viii. Will the excavation require blasting? Yes No
 ix. Summarize site reclamation goals and plan: _____

b. Would the proposed action cause or result in alteration of, increase or decrease in size of, or encroachment into any existing wetland, waterbody, shoreline, beach or adjacent area? Yes No
 If Yes:
 i. Identify the wetland or waterbody which would be affected (by name, water index number, wetland map number or geographic description): _____

ii. Describe how the proposed action would affect that waterbody or wetland, e.g. excavation, fill, placement of structures, or alteration of channels, banks and shorelines. Indicate extent of activities, alterations and additions in square feet or acres:

iii. Will proposed action cause or result in disturbance to bottom sediments? Yes No

If Yes, describe: _____

iv. Will proposed action cause or result in the destruction or removal of aquatic vegetation? Yes No

If Yes:

- acres of aquatic vegetation proposed to be removed: _____
- expected acreage of aquatic vegetation remaining after project completion: _____
- purpose of proposed removal (e.g. beach clearing, invasive species control, boat access): _____
- proposed method of plant removal: _____
- if chemical/herbicide treatment will be used, specify product(s): _____

v. Describe any proposed reclamation/mitigation following disturbance: _____

c. Will the proposed action use, or create a new demand for water? Yes No

If Yes:

i. Total anticipated water usage/demand per day: _____ gallons/day

ii. Will the proposed action obtain water from an existing public water supply? Yes No

If Yes:

- Name of district or service area: _____
- Does the existing public water supply have capacity to serve the proposal? Yes No
- Is the project site in the existing district? Yes No
- Is expansion of the district needed? Yes No
- Do existing lines serve the project site? Yes No

iii. Will line extension within an existing district be necessary to supply the project? Yes No

If Yes:

- Describe extensions or capacity expansions proposed to serve this project: _____
- Source(s) of supply for the district: _____

iv. Is a new water supply district or service area proposed to be formed to serve the project site? Yes No

If, Yes:

- Applicant/sponsor for new district: _____
- Date application submitted or anticipated: _____
- Proposed source(s) of supply for new district: _____

v. If a public water supply will not be used, describe plans to provide water supply for the project: _____

vi. If water supply will be from wells (public or private), maximum pumping capacity: _____ gallons/minute.

d. Will the proposed action generate liquid wastes? Yes No

If Yes:

i. Total anticipated liquid waste generation per day: _____ gallons/day

ii. Nature of liquid wastes to be generated (e.g., sanitary wastewater, industrial; if combination, describe all components and approximate volumes or proportions of each): _____

iii. Will the proposed action use any existing public wastewater treatment facilities? Yes No

If Yes:

- Name of wastewater treatment plant to be used: _____
- Name of district: _____
- Does the existing wastewater treatment plant have capacity to serve the project? Yes No
- Is the project site in the existing district? Yes No
- Is expansion of the district needed? Yes No

• Do existing sewer lines serve the project site? Yes No
 • Will line extension within an existing district be necessary to serve the project? Yes No
 If Yes:
 • Describe extensions or capacity expansions proposed to serve this project: _____

iv. Will a new wastewater (sewage) treatment district be formed to serve the project site? Yes No
 If Yes:
 • Applicant/sponsor for new district: _____
 • Date application submitted or anticipated: _____
 • What is the receiving water for the wastewater discharge? _____
 v. If public facilities will not be used, describe plans to provide wastewater treatment for the project, including specifying proposed receiving water (name and classification if surface discharge, or describe subsurface disposal plans):

vi. Describe any plans or designs to capture, recycle or reuse liquid waste: _____

e. Will the proposed action disturb more than one acre and create stormwater runoff, either from new point sources (i.e. ditches, pipes, swales, curbs, gutters or other concentrated flows of stormwater) or non-point source (i.e. sheet flow) during construction or post construction? Yes No
 If Yes:
 i. How much impervious surface will the project create in relation to total size of project parcel?
 _____ Square feet or _____ acres (impervious surface)
 _____ Square feet or _____ acres (parcel size)
 ii. Describe types of new point sources. _____

 iii. Where will the stormwater runoff be directed (i.e. on-site stormwater management facility/structures, adjacent properties, groundwater, on-site surface water or off-site surface waters)?

 • If to surface waters, identify receiving water bodies or wetlands: _____

 • Will stormwater runoff flow to adjacent properties? Yes No

iv. Does proposed plan minimize impervious surfaces, use pervious materials or collect and re-use stormwater? Yes No

f. Does the proposed action include, or will it use on-site, one or more sources of air emissions, including fuel combustion, waste incineration, or other processes or operations? Yes No
 If Yes, identify:
 i. Mobile sources during project operations (e.g., heavy equipment, fleet or delivery vehicles)

 ii. Stationary sources during construction (e.g., power generation, structural heating, batch plant, crushers)

 iii. Stationary sources during operations (e.g., process emissions, large boilers, electric generation)

g. Will any air emission sources named in D.2.f (above), require a NY State Air Registration, Air Facility Permit, or Federal Clean Air Act Title IV or Title V Permit? Yes No
 If Yes:
 i. Is the project site located in an Air quality non-attainment area? (Area routinely or periodically fails to meet ambient air quality standards for all or some parts of the year) Yes No
 ii. In addition to emissions as calculated in the application, the project will generate:
 • _____ Tons/year (short tons) of Carbon Dioxide (CO₂)
 • _____ Tons/year (short tons) of Nitrous Oxide (N₂O)
 • _____ Tons/year (short tons) of Perfluorocarbons (PFCs)
 • _____ Tons/year (short tons) of Sulfur Hexafluoride (SF₆)
 • _____ Tons/year (short tons) of Carbon Dioxide equivalent of Hydrofluorocarbons (HFCs)
 • _____ Tons/year (short tons) of Hazardous Air Pollutants (HAPs)

h. Will the proposed action generate or emit methane (including, but not limited to, sewage treatment plants, landfills, composting facilities)? Yes No

If Yes:

i. Estimate methane generation in tons/year (metric): _____

ii. Describe any methane capture, control or elimination measures included in project design (e.g., combustion to generate heat or electricity, flaring): _____

i. Will the proposed action result in the release of air pollutants from open-air operations or processes, such as quarry or landfill operations? Yes No

If Yes: Describe operations and nature of emissions (e.g., diesel exhaust, rock particulates/dust): _____

j. Will the proposed action result in a substantial increase in traffic above present levels or generate substantial new demand for transportation facilities or services? Yes No

If Yes:

i. When is the peak traffic expected (Check all that apply): Morning Evening Weekend
 Randomly between hours of _____ to _____.

ii. For commercial activities only, projected number of semi-trailer truck trips/day: _____

iii. Parking spaces: Existing _____ Proposed _____ Net increase/decrease _____

iv. Does the proposed action include any shared use parking? Yes No

v. If the proposed action includes any modification of existing roads, creation of new roads or change in existing access, describe: _____

vi. Are public/private transportation service(s) or facilities available within ½ mile of the proposed site? Yes No

vii. Will the proposed action include access to public transportation or accommodations for use of hybrid, electric or other alternative fueled vehicles? Yes No

viii. Will the proposed action include plans for pedestrian or bicycle accommodations for connections to existing pedestrian or bicycle routes? Yes No

k. Will the proposed action (for commercial or industrial projects only) generate new or additional demand for energy? Yes No

If Yes:

i. Estimate annual electricity demand during operation of the proposed action: _____

ii. Anticipated sources/suppliers of electricity for the project (e.g., on-site combustion, on-site renewable, via grid/local utility, or other): _____

iii. Will the proposed action require a new, or an upgrade to, an existing substation? Yes No

l. Hours of operation. Answer all items which apply.

i. During Construction:		ii. During Operations:	
• Monday - Friday:	_____ 7am-5pm _____	• Monday - Friday:	_____ 24 hours per day, 7 days a week _____
• Saturday:	_____ N/A _____	• Saturday:	_____ 24 hours per day, 7 days a week _____
• Sunday:	_____ N/A _____	• Sunday:	_____ 24 hours per day, 7 days a week _____
• Holidays:	_____ N/A _____	• Holidays:	_____ 24 hours per day, 7 days a week _____

m. Will the proposed action produce noise that will exceed existing ambient noise levels during construction, operation, or both? Yes No

If yes:

i. Provide details including sources, time of day and duration: _____

ii. Will proposed action remove existing natural barriers that could act as a noise barrier or screen? Yes No
Describe: _____

n.. Will the proposed action have outdoor lighting? Yes No

If yes:

i. Describe source(s), location(s), height of fixture(s), direction/aim, and proximity to nearest occupied structures: _____

ii. Will proposed action remove existing natural barriers that could act as a light barrier or screen? Yes No
Describe: _____

o. Does the proposed action have the potential to produce odors for more than one hour per day? Yes No
If Yes, describe possible sources, potential frequency and duration of odor emissions, and proximity to nearest occupied structures: _____

p. Will the proposed action include any bulk storage of petroleum (combined capacity of over 1,100 gallons) or chemical products 185 gallons in above ground storage or any amount in underground storage? Yes No

If Yes:

i. Product(s) to be stored _____

ii. Volume(s) _____ per unit time _____ (e.g., month, year)

iii. Generally describe proposed storage facilities: _____

q. Will the proposed action (commercial, industrial and recreational projects only) use pesticides (i.e., herbicides, insecticides) during construction or operation? Yes No

If Yes:

i. Describe proposed treatment(s): _____

ii. Will the proposed action use Integrated Pest Management Practices? Yes No

r. Will the proposed action (commercial or industrial projects only) involve or require the management or disposal of solid waste (excluding hazardous materials)? Yes No

If Yes:

i. Describe any solid waste(s) to be generated during construction or operation of the facility:

- Construction: _____ tons per _____ (unit of time)
- Operation : _____ tons per _____ (unit of time)

ii. Describe any proposals for on-site minimization, recycling or reuse of materials to avoid disposal as solid waste:

- Construction: _____
- Operation: _____

iii. Proposed disposal methods/facilities for solid waste generated on-site:

- Construction: _____
- Operation: _____

s. Does the proposed action include construction or modification of a solid waste management facility? Yes No

If Yes:

i. Type of management or handling of waste proposed for the site (e.g., recycling or transfer station, composting, landfill, or other disposal activities): _____

ii. Anticipated rate of disposal/processing:

- _____ Tons/month, if transfer or other non-combustion/thermal treatment, or
- _____ Tons/hour, if combustion or thermal treatment

iii. If landfill, anticipated site life: _____ years

t. Will proposed action at the site involve the commercial generation, treatment, storage, or disposal of hazardous waste? Yes No

If Yes:

i. Name(s) of all hazardous wastes or constituents to be generated, handled or managed at facility: _____

ii. Generally describe processes or activities involving hazardous wastes or constituents: _____

iii. Specify amount to be handled or generated _____ tons/month

iv. Describe any proposals for on-site minimization, recycling or reuse of hazardous constituents: _____

v. Will any hazardous wastes be disposed at an existing offsite hazardous waste facility? Yes No

If Yes: provide name and location of facility: _____

If No: describe proposed management of any hazardous wastes which will not be sent to a hazardous waste facility: _____

E. Site and Setting of Proposed Action

E.1. Land uses on and surrounding the project site

a. Existing land uses.

i. Check all uses that occur on, adjoining and near the project site.

Urban Industrial Commercial Residential (suburban) Rural (non-farm)

Forest Agriculture Aquatic Other (specify): Grasslands

ii. If mix of uses, generally describe:

The location of the new well will be at the Rotterdam District #5 Well Field which is surrounded by stands of forest with the Mohawk River to the northeast. Minimal residential development is located along Rice Road. The surrounding landscape is largely undeveloped.

b. Land uses and covertypes on the project site.

Land use or Covertypes	Current Acreage	Acreage After Project Completion	Change (Acres +/-)
• Roads, buildings, and other paved or impervious surfaces			
• Forested			
• Meadows, grasslands or brushlands (non-agricultural, including abandoned agricultural)	0.7	0	-0.7
• Agricultural (includes active orchards, field, greenhouse etc.)			
• Surface water features (lakes, ponds, streams, rivers, etc.)			
• Wetlands (freshwater or tidal)			
• Non-vegetated (bare rock, earth or fill)			
• Other Describe: <u>Water well, motor and pump, new building to house the pump and equipment</u>	0	0.7	+0.7

c. Is the project site presently used by members of the community for public recreation? Yes No
i. If Yes: explain: _____

d. Are there any facilities serving children, the elderly, people with disabilities (e.g., schools, hospitals, licensed day care centers, or group homes) within 1500 feet of the project site? Yes No
If Yes,
i. Identify Facilities: _____

e. Does the project site contain an existing dam? Yes No
If Yes:
i. Dimensions of the dam and impoundment:
• Dam height: _____ feet
• Dam length: _____ feet
• Surface area: _____ acres
• Volume impounded: _____ gallons OR acre-feet
ii. Dam's existing hazard classification: _____
iii. Provide date and summarize results of last inspection: _____

f. Has the project site ever been used as a municipal, commercial or industrial solid waste management facility, or does the project site adjoin property which is now, or was at one time, used as a solid waste management facility? Yes No
If Yes:
i. Has the facility been formally closed? Yes No
• If yes, cite sources/documentation: _____
ii. Describe the location of the project site relative to the boundaries of the solid waste management facility: _____

iii. Describe any development constraints due to the prior solid waste activities: _____

g. Have hazardous wastes been generated, treated and/or disposed of at the site, or does the project site adjoin property which is now or was at one time used to commercially treat, store and/or dispose of hazardous waste? Yes No
If Yes:
i. Describe waste(s) handled and waste management activities, including approximate time when activities occurred: _____

h. Potential contamination history. Has there been a reported spill at the proposed project site, or have any remedial actions been conducted at or adjacent to the proposed site? Yes No
If Yes:
i. Is any portion of the site listed on the NYSDEC Spills Incidents database or Environmental Site Remediation database? Check all that apply: Yes No
 Yes – Spills Incidents database Provide DEC ID number(s): _____
 Yes – Environmental Site Remediation database Provide DEC ID number(s): _____
 Neither database
ii. If site has been subject of RCRA corrective activities, describe control measures: _____

iii. Is the project within 2000 feet of any site in the NYSDEC Environmental Site Remediation database? Yes No
If yes, provide DEC ID number(s): _____
iv. If yes to (i), (ii) or (iii) above, describe current status of site(s): _____

v. Is the project site subject to an institutional control limiting property uses? Yes No

- If yes, DEC site ID number: _____
- Describe the type of institutional control (e.g., deed restriction or easement): _____
- Describe any use limitations: _____
- Describe any engineering controls: _____
- Will the project affect the institutional or engineering controls in place? Yes No
- Explain: _____

E.2. Natural Resources On or Near Project Site

a. What is the average depth to bedrock on the project site? _____ > 6.5 feet

b. Are there bedrock outcroppings on the project site? Yes No
 If Yes, what proportion of the site is comprised of bedrock outcroppings? _____ %

c. Predominant soil type(s) present on project site:

Howard gravelly silt loam 3-8% slopes (HrB)	82.9 %
Howard gravelly silt loam 0-3% slopes (HrA)	5.3 %
Hamlin silt loam (Ha)	11.8 %

d. What is the average depth to the water table on the project site? Average: 3 to > 6.5 feet

e. Drainage status of project site soils: Well Drained: _____ 100 % of site
 Moderately Well Drained: _____ % of site
 Poorly Drained: _____ % of site

f. Approximate proportion of proposed action site with slopes: 0-10%: _____ 100 % of site
 10-15%: _____ % of site
 15% or greater: _____ % of site

g. Are there any unique geologic features on the project site? Yes No
 If Yes, describe: _____

h. Surface water features.

i. Does any portion of the project site contain wetlands or other waterbodies (including streams, rivers, ponds or lakes)? Yes No

ii. Do any wetlands or other waterbodies adjoin the project site? Yes No

If Yes to either *i* or *ii*, continue. If No, skip to E.2.i.

iii. Are any of the wetlands or waterbodies within or adjoining the project site regulated by any federal, state or local agency? Yes No

iv. For each identified regulated wetland and waterbody on the project site, provide the following information:

- Streams: Name Mohawk River Classification NYSDEC Class A Stream
- Lakes or Ponds: Name _____ Classification _____
- Wetlands: Name _____ Approximate Size _____
- Wetland No. (if regulated by DEC) _____

v. Are any of the above water bodies listed in the most recent compilation of NYS water quality-impaired waterbodies? Yes No
 If yes, name of impaired water body/bodies and basis for listing as impaired: _____

i. Is the project site in a designated Floodway? Yes No

j. Is the project site in the 100 year Floodplain? Yes No

k. Is the project site in the 500 year Floodplain? Yes No

l. Is the project site located over, or immediately adjoining, a primary, principal or sole source aquifer? Yes No
 If Yes:

i. Name of aquifer: Environmental Protection Agency Sole Source Aquifer: Schenectady-Niskayuna SSA, NYSDEC Principal and Primary Aquifer

m. Identify the predominant wildlife species that occupy or use the project site:		
Foxes _____	Cottontail _____	White-tailed deer _____
Squirrels _____	Songbirds _____	_____
n. Does the project site contain a designated significant natural community? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
If Yes:		
i. Describe the habitat/community (composition, function, and basis for designation): _____		
ii. Source(s) of description or evaluation: _____		
iii. Extent of community/habitat:		
• Currently: _____	_____	acres
• Following completion of project as proposed: _____	_____	acres
• Gain or loss (indicate + or -): _____	_____	acres
o. Does project site contain any species of plant or animal that is listed by the federal government or NYS as endangered or threatened, or does it contain any areas identified as habitat for an endangered or threatened species? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		
Potential suitable habitat for Northern Long-eared bats is present on site.		
p. Does the project site contain any species of plant or animal that is listed by NYS as rare, or as a species of special concern? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
q. Is the project site or adjoining area currently used for hunting, trapping, fishing or shell fishing? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		
If yes, give a brief description of how the proposed action may affect that use: _____		
Multiple locations along the Mohawk River are used for public fishing; however, no impacts to this resource will occur due to the proposed project.		
E.3. Designated Public Resources On or Near Project Site		
a. Is the project site, or any portion of it, located in a designated agricultural district certified pursuant to Agriculture and Markets Law, Article 25-AA, Section 303 and 304? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
If Yes, provide county plus district name/number: _____		
b. Are agricultural lands consisting of highly productive soils present? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		
i. If Yes: acreage(s) on project site? <u>The entire project site is classified as Prime Farmland (0.7 acres).</u>		
ii. Source(s) of soil rating(s): <u>United States Department of Agriculture: Natural Resources Conservation Service</u>		
c. Does the project site contain all or part of, or is it substantially contiguous to, a registered National Natural Landmark? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
If Yes:		
i. Nature of the natural landmark: <input type="checkbox"/> Biological Community <input type="checkbox"/> Geological Feature		
ii. Provide brief description of landmark, including values behind designation and approximate size/extent: _____		

d. Is the project site located in or does it adjoin a state listed Critical Environmental Area? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		
If Yes:		
i. CEA name: <u>Aquifer Area Overlay Zone</u>		
ii. Basis for designation: <u>Conserve, improve, protect natural resources</u>		
iii. Designating agency and date: <u>Date: 4-5-85, Agency: Town of Rotterdam</u>		

e. Does the project site contain, or is it substantially contiguous to, a building, archaeological site, or district which is listed on, or has been nominated by the NYS Board of Historic Preservation for inclusion on, the State or National Register of Historic Places? Yes No

If Yes:

i. Nature of historic/archaeological resource: Archaeological Site Historic Building or District

ii. Name: (1) Enlarged Double Lock No. 23 Old Erie Canal; (2) Enlarged Erie Barge Canal Nominated by NPS (2014)

iii. Brief description of attributes on which listing is based:
 (1) Constructed in 1841-1842, it is associated with the transportation history of the Old Erie Canal; (2) A nationally significant work of early 20th century engineering.

f. Is the project site, or any portion of it, located in or adjacent to an area designated as sensitive for archaeological sites on the NY State Historic Preservation Office (SHPO) archaeological site inventory? Yes No

g. Have additional archaeological or historic site(s) or resources been identified on the project site? Yes No

If Yes:

i. Describe possible resource(s): _____

ii. Basis for identification: _____

h. Is the project site within five miles of any officially designated and publicly accessible federal, state, or local scenic or aesthetic resource? Yes No

If Yes:

i. Identify resource: Mohawk-Hudson Bikeway, Revolutionary Trail, Mohawk Towpath

ii. Nature of, or basis for, designation (e.g., established highway overlook, state or local park, state historic trail or scenic byway, etc.): New York State Trails; New York State Scenic Byway; National and NYS Scenic Byway, respectively

iii. Distance between project and resource: _____ 0.05 to 1 miles.

i. Is the project site located within a designated river corridor under the Wild, Scenic and Recreational Rivers Program 6 NYCRR 666? Yes No

If Yes:

i. Identify the name of the river and its designation: _____

ii. Is the activity consistent with development restrictions contained in 6NYCRR Part 666? Yes No

F. Additional Information

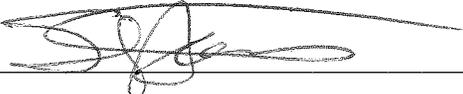
Attach any additional information which may be needed to clarify your project.

If you have identified any adverse impacts which could be associated with your proposal, please describe those impacts plus any measures which you propose to avoid or minimize them.

G. Verification

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

Applicant/Sponsor Name TOWN OF ROTTERDAM Date FEBRUARY 3, 2016

Signature  Title TOWN SUPERVISOR

ATTACHMENT A

NEW YORK STATE ENVIRONMENTAL QUALITY REVIEW LONG ENVIRONMENTAL ASSESSMENT FORM PART 1 – PROJECT INFORMATION

ROTTERDAM DISTRICT #5 WELLHEAD FACILITY

DESCRIPTION AND CLASSIFICATION OF ACTION

This supplemental information has been prepared for the Project listed above as a companion to the Long Environmental Assessment Form (6 NYCRR Part 617.20 - Appendix B) completed by GOSR as part of an independent review as an Involved Agency, with consideration of Criteria for Determining Significance listed in 6 NYCRR 617.7.

Project Description: The Rotterdam Water District #5 Well Head facility is at 49 Rice Road near Schermerhorn Road, Town of Rotterdam, Schenectady County, New York. The facility serves most of the Town of Rotterdam. The Town of Rotterdam is proposing to drill a new well at this existing facility in the Town of Rotterdam, Schenectady County, New York. The casing of the new well would be elevated between two and five feet above the 500-year floodplain and at least three feet above the flood-of-record elevation. The Rotterdam Water District #5 Well Head Project (Project) would involve establishing a well connection to existing pipes; installing a chlorinator, motor, and pump; and constructing a new building to house the pump and equipment and a paved access road. The new well, with connection to an existing backup generator for power, is designed to be a self-sufficient drinking water supply facility for the town in the event that the other wells become inoperative for any reason. Under normal conditions, the pump would be powered electrically, but it would be wired through an automatic transfer switch to the well field's existing emergency backup, a diesel-powered generator with its own storage tank. The new building design would be similar to the design of the existing building that houses Well #4. Diesel fuel for the generator will be stored in an existing above ground storage tank associated with the existing four wells.

The well would be drilled approximately 120 feet southeast of Well #4 (See Appendix A, Figures, Project Area). The well would be installed in accordance with American Water Works Association (AWWA) A100 "Standard for Water Wells" and with the New York State Sanitary Code, Appendix 5-D. The annular space between casing and soil would be grouted with cement/bentonite, according to AWWA standard A100-06, thereby preventing surface runoff from entering the borehole and reaching the aquifer. The finished well would be equipped with a standard lineshaft vertical turbine pump and would be approximately 95.5 feet deep from the top of the casing to the bottom of the 24-inch diameter screen. The well would be located in a 100-year floodplain, and it would be elevated and constructed in accordance with the New York State Department of Health (NYSDOH) requirements. Exposed piping from the well would be ductile iron with grooved-end and rubber gasket joints, and buried piping would be ductile iron having push-on or mechanical joints with rubber gaskets. All piping, fittings and joints would be National Sanitation Foundation (NSF)-approved for potable water use. (See Figure 1.)

SHORT ENVIRONMENTAL ASSESSMENT FORM

PART 1 - PROJECT INFORMATION

ACTION/PROJECT: ROTTERDAM DISTRICT #5 WELLHEAD FACILITY

PAGE 2 OF 3

No changes to the potable water system or the number of people using the system would be made. The Project would not include a storm sewer, allowing all rain and runoff dissipate naturally. There are no dry wells, retention ponds, leach fields or onsite recharge basins.

The Project would disturb approximately 0.7 acres of previously undeveloped land on a 9.38-acre parcel (Parcel number 38 owned by Water District #5). The Project site would provide enough space to assure the appropriate grade of the fill (at a three-to-one slope) that would raise the level of the well between two and five feet above the 500-year floodplain and at least three feet above the flood-of-record elevation. The disturbance would involve the construction of a 900-square foot well house for Well #5 in Water District #5, construction of a paved access road, as well as grading and filling to elevate the well house for Well #5. The access road would be constructed prior to the installation of the drinking water supply well so that it could provide access for the drilling equipment and limit the amount of ground disturbance.

While the proposed well is only 200 feet from the Mohawk River, it is not expected to require testing for Ground Water under Direct Influence of surface water (GWUDI); however, the plans and specifications for the well have been submitted to NYSDOH for review. The Town of Rotterdam well field is permitted to produce 10 million gallons per day (6,944 gallons per minute), a pumping rate that has been determined to not adversely affect the City of Schenectady well field, which is a half-mile away. The purpose of the new well is to provide redundancy, rather than added capacity, so that the well field could still produce up to the permitted 10 million gallons per day if one well was out of service.

The Project is within Wellhead Protection Zone 1, which is the most protective designation. The Project would be consistent with the regulations for this protection zone including the following:

1. All land uses and development activities other than those directly connected with the pumping and treatment of public water supplies is prohibited (with the exception of existing single family residences); and
2. The handling of hazardous, toxic, or other waste substances is prohibited.

This Project would ensure that Rotterdam Water District #5 has a reliable supply of potable water for residents during a flood event, would provide additional capacity for the town during non-flood periods, and would benefit residents of the Town of Rotterdam.

State Environmental Quality Review Act (SEQRA) Classification: Operating under the auspices of New York State Homes and Community Renewal's (HCR) and the New York Rising Community Reconstruction and Infrastructure Program Fund, the Governor's Office of Storm Recovery (GOSR) disburses funding made available by the U.S. Department of Housing & Urban Development's (HUD) CDBG-DR program. In this role, GOSR serves as an Involved Agency and must make a discretionary decision to fund the proposed action. It is independently responsible for ensuring that its own decision is consistent with the requirements of SEQRA.

SHORT ENVIRONMENTAL ASSESSMENT FORM

PART 1 - PROJECT INFORMATION

ACTION/PROJECT: ROTTERDAM DISTRICT #5 WELLHEAD FACILITY

PAGE 3 OF 3

The proposed Rotterdam District #5 Wellhead Project involves the construction of a new well at this existing facility in the Town of Rotterdam, Schenectady County, New York. The completed well housing would encompass a footprint of approximately 900-square feet and would temporarily disturb approximately 0.7 acres of previously undeveloped land on a 9.38-acre parcel (Parcel number 38 owned by Water District #5). This plan results in a total of approximately 900-square foot (0.02 acres, 2.9 percent of the 0.7-acre Project site) footprint for the well house and a 0.25-acre extension of the paved road to the Project site (35 percent of the 0.7-acre Project site).

The proposed action activities involves construction of non-residential facilities disturbing less than one acre; does not occur wholly or partially within an agricultural district; does not wholly or partially within or substantially contiguous to any publicly owned or operated parkland, recreation area or designated open space, including any site on the Register of National Natural Landmarks; and does not occur wholly or partially within, or substantially contiguous to, any historic building, structure, facility, site or district or prehistoric site. The Project area is located within 0.25 miles of two archeological sites to the northwest; the National Register of Historic Places (NRHP)-listed Enlarged Lock No. 23 Old Erie Canal to the west; and the NRHP-listed New York State Barge Canal District to the west. These are more than 500 feet from the proposed well location, are screened by forested growth and there are 4 existing wells between them and the proposed new well. Therefore, the action was originally classified as an Unlisted action since these resources were not considered substantially contiguous. However, to complete its evaluation, GOSR reclassified the action as a Type I and used a full EAF to provide a more comprehensive analysis of potential impacts as the basis for its determination of significance for the proposed action.

ATTACHMENT B

NEW YORK STATE ENVIRONMENTAL QUALITY REVIEW LONG ENVIRONMENTAL ASSESSMENT FORM PART 1 – PROJECT AND SETTING

ROTTERDAM DISTRICT #5 WELLHEAD FACILITY

This supplemental information has been prepared for the Project listed above as a companion to the Long Environmental Assessment Form (6 NYCRR Part 617.20 - Appendix B) completed by GOSR as part of an independent review as an Involved Agency, with consideration of Criteria for Determining Significance listed in 6 NYCRR 617.7.

A. Project and Sponsor Information

- No supplemental information

B. Government Approvals

Approvals (required and/or received) (see Attachment B1_2015 11 02 Rotterdam WD #5 LA Response Letter, Attachment B2_Project Description, Attachment B3_Rotterdam District #5 Well SEQR Short EAF_draft_09-15-2015, and Attachment B4_Rotterdam_Well_Lead Agency Request Package)

- Town of Rotterdam: Site Plan Approval, Town Board Approval, Floodplain Development Permit, and Building Permit
- New York State Department of Environmental Conservation: Water Supply Permit, Joint Application Form with Water Withdrawal Application Supplement WW-1 and engineering report
- New York State Department of Health: Approval of Plans and Specifications

C. Planning and Zoning

The Project site is zoned as an industrial district. The proposed Project is allowable under this zoning as it is consistent with the current land use on the property and the adopted town comprehensive plan (See Attachment B4 and Attachment C1_town of Rotterdam Comprehensive Plan). The Project is not located within a coastal resource area (See Attachment B5_Coastal Barrier Resources and Attachment B6_Coastal Boundary Map).

D. Project Details

D.1. Proposed Potential Development

D.1.a. General nature of proposed action

The proposed Project includes the construction of a new well at the Rotterdam Water District #5 well head facility. The new well will be elevated 2 to 5 feet above the 500-year floodplain and at least 3 feet above the flood-of-record elevation. This will ensure that the Rotterdam Water District #5 will have potable water during a flood event (See Attachment B2).

D.1.b. Total acreage

The Rotterdam Water District #5 Well Field is located on a 9.38-acre parcel of land at 49 Rice Road, Rotterdam, Schenectady County, New York (See Attachment B7_Rotterdam 5th well aerial and site plan 7 9 15). The Project would disturb approximately 0.7 acres of the 9.38-acre site.

D.1.c. Expansion of an existing project

The proposed action is an expansion of the Rotterdam Water District #5 well field, which serves most of the Town of Rotterdam. There are currently four existing wells that pump groundwater from the Great Flats Aquifer and the well head facility. The new well (Well #5) will be located approximately 120 feet southwest of Well #4 and disturb 0.7 acres (7.5 percent) of the 9.38-acre facility (See Attachment B4).

D.1.d. Subdivision

No existing plans for the proposed Project include a subdivision.

D.1.e. Multiple phase construction

The proposed Project will occur within a single phase, anticipated to occur over 11 months (See Attachment B8_Rotterdam Well Proposed Design and Construction Schedule 7 8 15).

D.1.f. New residential uses

No new residential uses will be constructed for the proposed Project.

D.1.g. New non-residential construction

The proposed renovation will include the construction of one water well head, which will measure approximately 30 feet in width and 30 feet in length. The casing of the new well would be elevated between two and five feet above the 500-year floodplain and at least three feet above the flood-of-record elevation. A new access road will also be constructed and occupy approximately 0.25 acres (10,800 square feet).

D.1.h. Impoundment of any liquids

No impoundment of any liquids is proposed for the Project actions (See Attachment B3).

D.2. Project Operations

D.2.a. Excavation, mining or dredging during construction or operations

No excavation, mining or dredging will occur during construction or operations.

D.2.b. Alteration or encroachment into any existing waterbody

After review of available databases, no mapped National Wetlands Inventory or DEC wetlands are located within or immediately adjacent to the subject property (See Attachment B9_Freshwater Wetlands). Therefore, no alteration of an existing wetland, waterbody, shoreline, beach or adjacent area is anticipated. However, the Mohawk River, which is designated as a NYSDEC Class A waterbody, is located adjacent to the Project site. Care should be taken to ensure that no stormwater runoff, pollutants and/or sediment enters the river as a result of Project activities (See Attachment B1).

D.2.c. New demand for water

The permitted pumping capacity from the Rotterdam Water District #5 well field is 10 million gallons per day. The average daily demand is 3.64 million gallons per day. This facility is located within a 500-year-floodplain and was almost compromised by flooding during Hurricane Irene and Tropical Storm Lee in 2011. The new well (Well #5) will be constructed 2 to 5 feet above the 500-year-floodplain and at least 3 feet above the flood-of-record elevation, ensuring that the Rotterdam Water District #5 will have potable water during future flood events (See Attachment B4 and Attachment_B10_Rotterdam 2014 Water Quality Report). A new demand for water will not be created or used due to the proposed Project. The purpose of the new well is to provide redundancy, rather than added capacity, so that the well field could still produce up to the permitted 10 million gallons per day if one was out of service.

D.2.d. Liquid waste

No liquid waste would be generated, and the number of people using the wastewater system would not change.

D.2.e. Stormwater runoff

The proposed Project will not have an adverse impact on erosion, flooding or drainage (See Attachment B3). The only impervious surface that would be created on the site would be the 900-square foot (0.02 acres, 2.9 percent of the 0.7-acre Project site) well house and the 0.25-acre extension of the paved road to the Project site (35 percent of the 0.7-acre Project site). Rain and runoff from most of the Project site would dissipate naturally.

D.2.f. Sources of air emissions

The proposed Project is not located in a designated non-attainment area for air quality (See Attachment B11_Nonattainment Areas). The proposed activities will not affect transportation patterns or levels of service thereby aiding the preservation of local air quality.

D.2.g. Air emission sources requiring permits

Please see D.2.f. above

D.2.h. Emission of methane

The emission of methane is not anticipated based on the proposed actions.

D.2.i. Release of air pollutants

Please see D.2.f. above

D.2.j. Traffic

The proposed Project will not generate a significant increase in traffic above present levels or generate substantial new demand for transportation facilities or services as the new well will be constructed at an existing well head facility (See Attachment B3).

D.2.k. Demand for energy

The Project would not result in additional energy consumption because the new well would provide redundancy, rather than added capacity. The pump and generator would operate if another well is out of service or experienced a reduction in productivity, so the well field would not require additional energy. No impacts would occur to existing suppliers in the vicinity.

D.2.l. Hours of operation

This new well will be available for operation 24 hours a day, 7 days a week including holidays after construction is complete. Construction will occur during normal business hours.

D.2.m. Noise

Some noise may be generated during construction; however, this will be temporary and will not adversely impact the surrounding areas. The proposed activities will not significantly increase the level of noise or vibration compared to current conditions. In addition, no blasting will be required.

D.2.n. Outdoor lighting

The proposed action will not have outdoor lighting.

D.2.o. Odor

The proposed activities will not significantly increase the level of odor.

D.2.p. Storage of petroleum

No additional storage is needed for back up diesel fuel. Back fuel will be stored in an existing 2,000 gallon aboveground storage tank associated with the existing four wells.

D.2.q. Use of pesticides

The use of pesticides is not anticipated with the Project activities.

D.2.r. Solid waste

There would be no increase in solid waste disposal or recycling from operation of the Project. Construction may generate a small amount of solid waste.

D.2.s. Solid waste management facility

The proposed action does not include construction or modification of a solid waste management facility.

D.2.t. Hazardous waste

No hazardous waste will be generated by the project.

E. Site and Setting of Proposed Action

E.1. Land uses on and surrounding the project site

E.1.a. Existing land uses

The new well will be located approximately 120 feet southeast of the existing Well #4. The proposed location is surrounded by stands of forest with the Mohawk River to the northeast. The surrounding landscape is largely undeveloped (See Attachment B4).

E.1.b. Land uses and covertypes

Recent aerial imagery shows the current land cover of the 0.7-acre portion to be disturbed is primarily grassland. This will be converted to the new well including a motor and pump, and a new building to house the pump and equipment.

E.1.c. Public recreation

The Project site is not presently used by members of the community for public recreation.

E.1.d. Facilities serving children, the elderly or people with disabilities

There are no facilities serving children, the elderly, or people with disabilities within 1,500 feet of the Project site.

E.1.e. Existing dam

The Project site does not contain an existing dam.

E.1.f. Solid waste management facility

The Project site has not been used as a municipal, commercial, or industrial solid waste management facility, nor have any adjoining properties to the Project site (See Attachment B3).

E.1.g. Previous hazardous waste disposal

Hazardous wastes have not been generated, treated and/or disposed of at the site, nor does the Project site adjoin any properties which now or was used to commercially treat, store and/or dispose of hazardous waste (See Attachment B3 and Attachment B12_Remediation Sites).

E.1.h. Potential contamination history

No reported spills have occurred at the Project site and no remedial actions have been conducted at or adjacent to the Project site based on review of available databases.

E.2. Natural Resources On or Near Project Site

E.2.a. Depth to bedrock

The site is comprised of Howard gravelly silt loam, 3 to 8 percent slopes (HrB) (82.9 percent), Howard gravelly silt loam, 0 to 3 percent slopes (HrA) (5.3 percent), and Hamlin silt loam (Ha) (11.8 percent). These soil types have a depth to restrictive feature of more than 6.5 feet (See Attachment B13_Rotterdam_Well_Soil_Report and Attachment B14_Protected Soils).

E.2.b. Bedrock outcroppings

No bedrock outcroppings are associated with this soil type (See Attachment B13).

E.2.c. Predominant soil types

The site is comprised of Howard gravelly silt loam (HrA and HrB) and Hamlin silt loam (Ha) (See Attachment B13 and B14).

E.2.d. Depth to water table

Howard gravelly silt loam (HrA and HrB) has a depth to water table of more than 6.5 feet. Hamlin silt loam (Ha) has a depth to water table of 3 to 6 feet (See Attachment B13).

E.2.e. Drainage status of project site soils

The natural drainage class of Howard gravelly silt loam (HrA and HrB), and Hamlin silt loam (Ha) is well drained (See Attachment B13).

E.2.f. Proposed action site with slopes

The slopes of Howard gravelly silt loam, HrA is 0 to 3 percent, and HrB is 3 to 8 percent. Hamlin silt loam (Ha) has 0 to 3 percent slopes (See Attachment B13).

E.2.g. Unique geological features

No unique geological features are present on the Project site.

E.2.h. Surface water features

The Mohawk River is located approximately 200 feet northeast of the Project site. It is identified as a DEC protected Class A Stream. Class A streams are sources of drinking water.

E.2.i. Designated Floodway

The Project site is not located within a designated floodway.

E.2.j. 100 year Floodplain

The Project site is located within the 100 year floodplain (Zone AE) (See Attachment B15). The direct and indirect impacts associated with the development within the floodplain would be minimal because the area that would be permanently affected would be the area of the structure, which would be approximately 900 square feet and the area associated with the new access road, which is approximately 10,800 square feet (0.25 acres). An early public notice of activity in a 100-year floodplain was published on December 10, 2015. The comment period was held open until December 31, 2015. A final notice and public explanation of a proposed activity in a 100-year floodplain was published on January 22, 2016 and all comments received by January 29, 2016 will be considered (See Attachment B27_Rotterdam_District5_Final_Notice).

According to the FEMA Guidelines the volume of floodplain capacity displaced does not have to be mitigated if the modification to the floodway fringe storage capacity results in an increase in flood elevation in the floodway fringe of less than 12 inches. To determine the effect of the new fill volume on the storage capacity of the floodway fringe the following steps were taken: using the proposed cross sectional area the corresponding running volume of the proposed fill was calculated; the floodway fringe width was determined from the FEMA maps; the allowable

increase in volume to produce less than 12" increase in flood elevation was determined; using this evaluation, the increase in flood elevation in the floodway fringe was determined to be less than the maximum of 12" and with the range of 5" to 7". This is an instantaneous worst case "snapshot" at the new well field location and in reality the impacts should be less. The new fill is relatively short in length, narrower than the existing well field, and will be constructed in the hydraulic "shadow" of the existing well field. Once the water passes by the end of the new well fill, the water will return to preexisting levels. For these reasons, the volume of floodplain capacity displaced does not have to be mitigated.

E.2.k. 500 year Floodplain

The Project site is located within the 500-year floodplain (See Attachment B15).

E.2.l. Primary, Principal or Sole Source Aquifer

The Project site is located within a DEC-regulated principal and primary aquifer. Principal aquifers are known to be highly productive or whose geology suggests abundant water supply, but which are not intensively used as sources of water supply by major municipal systems at the present time. Primary aquifers are highly productive aquifers presently utilized as sources of water supply by major municipal water systems. It is also located within an Environmental Protection Agency sole source aquifer, the Schenectady-Niskayuna Sole Source Aquifer (See Attachment B16_Sole Source Aquifers). Sole source aquifers supply at least 50 percent of the drinking water consumed in the area overlying that aquifer. Consultation with the EPA on December 1, 2015, determined that the Project satisfies the requirements of Section 1424(e) of the Safe Drinking Water Act (SDWA). The Project is within Wellhead Protection Zone I, and would be consistent with the regulations for the Project zone (See Attachment C2). The new well be installed in accordance with American Water Works Association (AWWA) AI 00 "Standard for Water Wells" and with the New York State Sanitary Code. The annular space between casing and soil would be grouted with cement/bentonite, according to AWWA standard AI 00-06, thereby preventing surface runoff from entering the borehole and reaching the aquifer. In addition, safety precautions on the imported fill material will be implemented, which will require offsite testing of the soil materials prior to being transported to the site.

E.2.m. Predominant wildlife species

White-tailed deer, song birds, squirrels, cottontail, and foxes are the common wildlife species for this region.

E.2.n. Designated significant natural community

According to available databases, there are no records of significant natural communities at the Project site or in its immediate vicinity. A response is pending from the New York Natural Heritage Program to confirm this finding.

E.2.o. Federal or NYS listed threatened or endangered species

The Information, Planning and Consultation (IPaC) system on the US Fish and Wildlife Service (USFWS) website identified one (1) federal threatened species, the northern long-eared bat (*Myotis septentrionalis*), and 13 migratory bird species that the Project could potentially impact (See Attachment B17_ipac report 102115). To confirm this finding, consultation with the USFWS occurred. An official species list for the Project site was provided, which included the northern long-eared bat as the only listed species that may occur within the boundary of the Project site. No critical habitats were identified on the Project site (See Attachment B18_Official Species List NY ESFO 21 Oct 2015). However, the New York State Homes & Community Renewal (NYSHCR) reviewed the Project activities and determined that the proposed Project “may affect, but is not likely to adversely impact” the northern long-eared bat. The USFWS confirmed this determination given the Project location. No additional coordination or consultation under the Endangered Species Act with the USFWS is required at this time (See Attachment B19_USFWS_response).

E.2.p. NYS rare species or species of special concern

No State of New York rare species or species of special concern were identified during the database research. A response is pending from the New York Natural Heritage Program to confirm this finding.

E.2.q. Hunting, trapping, fishing or shell fishing

The Project site is not currently used for hunting, trapping, fishing, or shell fishing. However, the Mohawk River, located approximately 200 feet northeast of the Project site, has multiple public fishing areas. The proposed Project will not impact access to public fishing as no actions will occur within or adjacent to the Mohawk River.

E.3. Designated Public Resources On or Near Project Site

E.3.a Designated agricultural district

No portion of the Project site is located in a designated agricultural district (See Attachment B20_Agricultural Districts).

E.3.b. Highly productive soils

Howard gravelly silt loam (HrA and HrB), and Hamlin silt loam (Ha), meet the criteria for Prime Farmland (See Attachment B13 and Attachment B14). On January 15, 2016, the National Resources Conservation Service (NRCS) determined that the proposed conversion of this Prime Farmland is exempt under the Farmland Protection Policy Act (FPPA) (See Attachment C4).

E.3.c. Registered National Natural Landmark

The Project site does not contain nor is substantially contiguous to a registered National Natural Landmark.

E.3.d. Critical Environmental Area

The Project site is located within a state-listed Critical Environmental Area (CEA), the Aquifer Area Overlay Zone associated with the Mohawk River (See Attachment B21_Critical Environmental Area). This area was designated as a CEA on April 5, 1985, by the Town of Rotterdam in order to conserve, improve, and protect natural resources.

E.3.e. Listed or nominated building, archeological site or district by the NYS Board of Historic

Preservation for inclusion on the State or National Register of Historic Places

According to the New York Cultural Resources Information System (NY CRIS), the Project site is located within 0.25 miles of two historic sites to the northwest; the National Register of Historic Places (NRHP)-listed Enlarged Lock No. 23 Old Erie Canal to the west; and the NRHP-listed New York State Barge Canal District to the east. In addition, the Project site is within 0.25 miles of an inventoried property, a group of three houses dating to ca. 1900, which was demolished about a decade ago.

Consultation with the State Historic Preservation Office (SHPO) was initiated to review the proposed Project and determine if the proposed location encompasses historic properties of religious or cultural significance (See Attachment B22_Rotterdam Well No 5 SHPO Letter 090915). A response from SHPO was received on December 21, 2015, which confirmed that no historic properties would be affected by the proposed Project (See Attachment B23_NYSHPO Response).

In addition, a consultation request for the proposed Project was sent to the Tribal Historic Preservation Office for the Delaware Tribe of Indians, Mohawk Nation, Saint Regis Mohawk Tribe, and the Stockbridge-Munsee Community Band of Mohicans. The Saint Regis Mohawk Tribe and the Stockbridge-Munsee Mohican Tribe determined that their Tribes do not have cultural properties of concern within proposed Project area (See Attachment B25_FEMA Rotterdam Wellheads 2015 and Attachment B26_RE_New York State CDBG Disaster Recovery Program). A response from the Delaware Tribe of Indians and Mohawk Nation is pending.

E.3.f. Sensitive for archeological sites

NY CRIS shows that the Project site is situated within a zone of archeological sensitivity due to the area's proximity of the archeological sites mentioned in E.3.e. above (See Attachment B22). A Phase IA/IB Archeological Investigation was completed for the Project in October 2015. The Phase IA literature review indicated that the Project area is considered to have a low sensitivity for the presence of historic cultural remains. The investigation determined that extensive disturbance from the former gravel mining and adjacent pump station facilities' construction and operation had likely erased any traces of prior occupations. The Phase IB fieldwork confirmed the presence of stripped soils across the Project area and found no cultural resources on the Project site, such as prehistoric sites, historic sites, sites recommended for a Phase II/Avoidance, historic buildings/structures/cemeteries within or adjacent to the Project area, or NRHP listed or eligible buildings/structures/cemeteries/districts. Therefore, no further investigation is recommended (See Attachment B24_PHASE I Arch Report Rotterdam District #5 Well Heads Final).

During the Phase IA/IB Archeological Investigation, the Project area was determined to have a low sensitivity for the presence of prehistoric and historic cultural remains. Although the location within the narrow Mohawk River valley suggests high sensitivity, the extensive disturbance across the site including gravel mining activities and other suspected impacts associated with the construction and operation of the Rotterdam Water District #5 well field facility have likely erased any traces of prior occupations (See Attachment B24).

E.3.g. Additional historic or archeological sites or resources

The Phase I Archeological Survey field investigation found no cultural resources on the Project area (See Attachment B24).

E.3.h. Five miles radius of scenic or aesthetic resources

The Project site is within five miles of the following officially designated and publicly accessible federal, state, or local scenic or aesthetic resource:

- Mohawk-Hudson Bikeway (New York State Trails)
- Revolutionary Trail (New York State Scenic Byway)
- Mohawk Towpath (National and New York State Scenic Byway)

E.3.i. Wild, Scenic and Recreational Rivers Program 6 NYCRR 666

The Project site is not located within a designated river corridor under the Wild, Scenic and Recreational Rivers Program, 6 NYCRR 666.

List of Sources, Agencies and Persons Consulted

Federal Emergency Management Agency (FEMA)

<https://msc.fema.gov/portal/search?AddressQuery=owego>

New York State Department of Agriculture & Markets

<http://www.agriculture.ny.gov/AP/agservices/agricultural-districts.html>

<http://www.agriculture.ny.gov/AP/agservices/SOILCOUNTY.htm>

New York State Department of Environmental Conservation (NYSDEC)

<http://gis.ny.gov/gisdata/inventories/member.cfm?organizationid=529&nysgis=>

<http://www.dec.ny.gov/animals/7494.html>

<http://www.dec.ny.gov/animals/29392.html>

<http://www.dec.ny.gov/cfmx/extapps/derexternal/index.cfm?pageid=3>

<http://www.dec.ny.gov/chemical/32501.html>

http://www.dec.ny.gov/docs/fish_marine_pdf/shoreprotect.pdf

http://www.dec.ny.gov/docs/permits_ej_operations_pdf/visual2000.pdf

http://www.dec.ny.gov/docs/wildlife_pdf/wetart24a.pdf

<http://www.dec.ny.gov/imsmaps/ERM/viewer.htm>

<http://www.dec.ny.gov/imsmaps/facilities/viewer.htm>

<http://www.dec.ny.gov/natureexplorer/app/>

<http://www.dec.ny.gov/outdoor/8297.html>

<http://www.dec.ny.gov/permits/6184.html>

<http://www.dec.ny.gov/permits/53826.html>

<http://www.dec.ny.gov/regs/3932.html>

<http://www.dec.ny.gov/regs/4613.html>

<http://www.dec.ny.gov/regs/4614.html>

<http://www.dec.ny.gov/regs/13337.html>

<http://www.dec.ny.gov/regs/13338.html>

New York State Department of Transportation (NYSDOT)

<http://gis.dot.ny.gov/tdv/>

New York State Natural Heritage Program

<http://www.acris.nynhp.org/>

U.S. Census Bureau, 2011 American Community Survey

<http://factfinder2.census.gov/faces/nav/jsf/pages/index.xhtml>

United States Department of Agriculture

http://soils.usda.gov/survey/online_surveys/new_york/

<http://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm>

U.S. Department of Agriculture - Natural Resources Conservation Service (NRCS)

<http://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx>

U.S. Environmental Protection Agency

<http://nepassisttool.epa.gov/nepassist/entry.aspx>

<http://www.epa.gov/region02/water/aquifer>

<http://www.epa.gov/oaqps001/greenbk/ancl.html>

U.S. Department of Fish and Wildlife

<http://ecos.fws.gov/ecos/home.action>

<http://ecos.fws.gov/ipac/>

<http://refuges.fws.gov>

<http://www.fws.gov/CBRA/Maps/Boundaries.html>

<http://www.fws.gov/CBRA/Maps/Mapper.html>

<http://www.fws.gov/wetlands/Wetlands-Mapper.html>

<http://www.rivers.gov/new-york.php>

LONG ENVIRONMENTAL ASSESSMENT FORM

PART 1 - PROJECT SETTING

ACTION/PROJECT: ROTTERDAM DISTRICT #5 WELLHEAD FACILITY

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U.S. Geological Society

<http://viewer.nationalmap.gov/viewer/>

U.S. Department of Interior – National Park Service

<http://science.nature.nps.gov/im/gis/index.cfm>

<http://www.nature.nps.gov/nnl/docs/NNLRegistry.pdf>

<http://www.nps.gov/history/nr/research/>

U.S. Department of Interior – National Wild and Scenic Rivers System

<http://www.rivers.gov/new-york.php>

Full Environmental Assessment Form
Part 2 - Identification of Potential Project Impacts

Agency Use Only [If applicable]

Project :
 Date :

Part 2 is to be completed by the lead agency. Part 2 is designed to help the lead agency inventory all potential resources that could be affected by a proposed project or action. We recognize that the lead agency's reviewer(s) will not necessarily be environmental professionals. So, the questions are designed to walk a reviewer through the assessment process by providing a series of questions that can be answered using the information found in Part 1. To further assist the lead agency in completing Part 2, the form identifies the most relevant questions in Part 1 that will provide the information needed to answer the Part 2 question. When Part 2 is completed, the lead agency will have identified the relevant environmental areas that may be impacted by the proposed activity.

If the lead agency is a state agency **and** the action is in any Coastal Area, complete the Coastal Assessment Form before proceeding with this assessment.

Tips for completing Part 2:

- Review all of the information provided in Part 1.
- Review any application, maps, supporting materials and the Full EAF Workbook.
- Answer each of the 18 questions in Part 2.
- If you answer “**Yes**” to a numbered question, please complete all the questions that follow in that section.
- If you answer “**No**” to a numbered question, move on to the next numbered question.
- Check appropriate column to indicate the anticipated size of the impact.
- Proposed projects that would exceed a numeric threshold contained in a question should result in the reviewing agency checking the box “Moderate to large impact may occur.”
- The reviewer is not expected to be an expert in environmental analysis.
- If you are not sure or undecided about the size of an impact, it may help to review the sub-questions for the general question and consult the workbook.
- When answering a question consider all components of the proposed activity, that is, the “whole action”.
- Consider the possibility for long-term and cumulative impacts as well as direct impacts.
- Answer the question in a reasonable manner considering the scale and context of the project.

1. Impact on Land Proposed action may involve construction on, or physical alteration of, the land surface of the proposed site. (See Part 1. D.1) <i>If “Yes”, answer questions a - j. If “No”, move on to Section 2.</i>			
		<input type="checkbox"/> NO	<input checked="" type="checkbox"/> YES
	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action may involve construction on land where depth to water table is less than 3 feet.	E2d	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. The proposed action may involve construction on slopes of 15% or greater.	E2f	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. The proposed action may involve construction on land where bedrock is exposed, or generally within 5 feet of existing ground surface.	E2a	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. The proposed action may involve the excavation and removal of more than 1,000 tons of natural material.	D2a	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e. The proposed action may involve construction that continues for more than one year or in multiple phases.	D1e	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f. The proposed action may result in increased erosion, whether from physical disturbance or vegetation removal (including from treatment by herbicides).	D2e, D2q	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g. The proposed action is, or may be, located within a Coastal Erosion hazard area.	B1i	<input checked="" type="checkbox"/>	<input type="checkbox"/>
h. Other impacts: _____ _____		<input type="checkbox"/>	<input type="checkbox"/>

2. Impact on Geological Features

The proposed action may result in the modification or destruction of, or inhibit access to, any unique or unusual land forms on the site (e.g., cliffs, dunes, minerals, fossils, caves). (See Part 1. E.2.g)

NO

YES

If "Yes", answer questions a - c. If "No", move on to Section 3.

	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. Identify the specific land form(s) attached: _____ _____	E2g	<input type="checkbox"/>	<input type="checkbox"/>
b. The proposed action may affect or is adjacent to a geological feature listed as a registered National Natural Landmark. Specific feature: _____	E3c	<input type="checkbox"/>	<input type="checkbox"/>
c. Other impacts: _____ _____		<input type="checkbox"/>	<input type="checkbox"/>

3. Impacts on Surface Water

The proposed action may affect one or more wetlands or other surface water bodies (e.g., streams, rivers, ponds or lakes). (See Part 1. D.2, E.2.h)

NO

YES

If "Yes", answer questions a - l. If "No", move on to Section 4.

	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action may create a new water body.	D2b, D1h	<input type="checkbox"/>	<input type="checkbox"/>
b. The proposed action may result in an increase or decrease of over 10% or more than a 10 acre increase or decrease in the surface area of any body of water.	D2b	<input type="checkbox"/>	<input type="checkbox"/>
c. The proposed action may involve dredging more than 100 cubic yards of material from a wetland or water body.	D2a	<input type="checkbox"/>	<input type="checkbox"/>
d. The proposed action may involve construction within or adjoining a freshwater or tidal wetland, or in the bed or banks of any other water body.	E2h	<input type="checkbox"/>	<input type="checkbox"/>
e. The proposed action may create turbidity in a waterbody, either from upland erosion, runoff or by disturbing bottom sediments.	D2a, D2h	<input type="checkbox"/>	<input type="checkbox"/>
f. The proposed action may include construction of one or more intake(s) for withdrawal of water from surface water.	D2c	<input type="checkbox"/>	<input type="checkbox"/>
g. The proposed action may include construction of one or more outfall(s) for discharge of wastewater to surface water(s).	D2d	<input type="checkbox"/>	<input type="checkbox"/>
h. The proposed action may cause soil erosion, or otherwise create a source of stormwater discharge that may lead to siltation or other degradation of receiving water bodies.	D2e	<input type="checkbox"/>	<input type="checkbox"/>
i. The proposed action may affect the water quality of any water bodies within or downstream of the site of the proposed action.	E2h	<input type="checkbox"/>	<input type="checkbox"/>
j. The proposed action may involve the application of pesticides or herbicides in or around any water body.	D2q, E2h	<input type="checkbox"/>	<input type="checkbox"/>
k. The proposed action may require the construction of new, or expansion of existing, wastewater treatment facilities.	D1a, D2d	<input type="checkbox"/>	<input type="checkbox"/>

I. Other impacts: _____ _____		<input type="checkbox"/>	<input type="checkbox"/>
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4. Impact on groundwater NO YES
 The proposed action may result in new or additional use of ground water, or may have the potential to introduce contaminants to ground water or an aquifer.
 (See Part 1. D.2.a, D.2.c, D.2.d, D.2.p, D.2.q, D.2.t)
If "Yes", answer questions a - h. If "No", move on to Section 5.

	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action may require new water supply wells, or create additional demand on supplies from existing water supply wells.	D2c	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Water supply demand from the proposed action may exceed safe and sustainable withdrawal capacity rate of the local supply or aquifer. Cite Source: _____	D2c	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. The proposed action may allow or result in residential uses in areas without water and sewer services.	D1a, D2c	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. The proposed action may include or require wastewater discharged to groundwater.	D2d, E2l	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e. The proposed action may result in the construction of water supply wells in locations where groundwater is, or is suspected to be, contaminated.	D2c, E1f, E1g, E1h	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f. The proposed action may require the bulk storage of petroleum or chemical products over ground water or an aquifer.	D2p, E2l	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g. The proposed action may involve the commercial application of pesticides within 100 feet of potable drinking water or irrigation sources.	E2h, D2q, E2l, D2c	<input checked="" type="checkbox"/>	<input type="checkbox"/>
h. Other impacts: _____ _____		<input type="checkbox"/>	<input type="checkbox"/>

5. Impact on Flooding NO YES
 The proposed action may result in development on lands subject to flooding.
 (See Part 1. E.2)
If "Yes", answer questions a - g. If "No", move on to Section 6.

	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action may result in development in a designated floodway.	E2i	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. The proposed action may result in development within a 100 year floodplain.	E2j	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. The proposed action may result in development within a 500 year floodplain.	E2k	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. The proposed action may result in, or require, modification of existing drainage patterns.	D2b, D2e	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e. The proposed action may change flood water flows that contribute to flooding.	D2b, E2i, E2j, E2k	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f. If there is a dam located on the site of the proposed action, is the dam in need of repair, or upgrade?	E1e	<input checked="" type="checkbox"/>	<input type="checkbox"/>

g. Other impacts: _____ _____		<input type="checkbox"/>	<input type="checkbox"/>
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6. Impacts on Air			
The proposed action may include a state regulated air emission source. (See Part 1. D.2.f., D.2.h, D.2.g) <i>If "Yes", answer questions a - f. If "No", move on to Section 7.</i>		<input checked="" type="checkbox"/> NO	<input type="checkbox"/> YES
	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. If the proposed action requires federal or state air emission permits, the action may also emit one or more greenhouse gases at or above the following levels:			
i. More than 1000 tons/year of carbon dioxide (CO ₂)	D2g	<input type="checkbox"/>	<input type="checkbox"/>
ii. More than 3.5 tons/year of nitrous oxide (N ₂ O)	D2g	<input type="checkbox"/>	<input type="checkbox"/>
iii. More than 1000 tons/year of carbon equivalent of perfluorocarbons (PFCs)	D2g	<input type="checkbox"/>	<input type="checkbox"/>
iv. More than .045 tons/year of sulfur hexafluoride (SF ₆)	D2g	<input type="checkbox"/>	<input type="checkbox"/>
v. More than 1000 tons/year of carbon dioxide equivalent of hydrochloroflourocarbons (HFCs) emissions	D2g	<input type="checkbox"/>	<input type="checkbox"/>
vi. 43 tons/year or more of methane	D2h	<input type="checkbox"/>	<input type="checkbox"/>
b. The proposed action may generate 10 tons/year or more of any one designated hazardous air pollutant, or 25 tons/year or more of any combination of such hazardous air pollutants.	D2g	<input type="checkbox"/>	<input type="checkbox"/>
c. The proposed action may require a state air registration, or may produce an emissions rate of total contaminants that may exceed 5 lbs. per hour, or may include a heat source capable of producing more than 10 million BTU's per hour.	D2f, D2g	<input type="checkbox"/>	<input type="checkbox"/>
d. The proposed action may reach 50% of any of the thresholds in "a" through "c", above.	D2g	<input type="checkbox"/>	<input type="checkbox"/>
e. The proposed action may result in the combustion or thermal treatment of more than 1 ton of refuse per hour.	D2s	<input type="checkbox"/>	<input type="checkbox"/>
f. Other impacts: _____ _____		<input type="checkbox"/>	<input type="checkbox"/>

7. Impact on Plants and Animals			
The proposed action may result in a loss of flora or fauna. (See Part 1. E.2. m.-q.) <i>If "Yes", answer questions a - j. If "No", move on to Section 8.</i>		<input checked="" type="checkbox"/> NO	<input type="checkbox"/> YES
	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action may cause reduction in population or loss of individuals of any threatened or endangered species, as listed by New York State or the Federal government, that use the site, or are found on, over, or near the site.	E2o	<input type="checkbox"/>	<input type="checkbox"/>
b. The proposed action may result in a reduction or degradation of any habitat used by any rare, threatened or endangered species, as listed by New York State or the federal government.	E2o	<input type="checkbox"/>	<input type="checkbox"/>
c. The proposed action may cause reduction in population, or loss of individuals, of any species of special concern or conservation need, as listed by New York State or the Federal government, that use the site, or are found on, over, or near the site.	E2p	<input type="checkbox"/>	<input type="checkbox"/>
d. The proposed action may result in a reduction or degradation of any habitat used by any species of special concern and conservation need, as listed by New York State or the Federal government.	E2p	<input type="checkbox"/>	<input type="checkbox"/>

e. The proposed action may diminish the capacity of a registered National Natural Landmark to support the biological community it was established to protect.	E3c	<input type="checkbox"/>	<input type="checkbox"/>
f. The proposed action may result in the removal of, or ground disturbance in, any portion of a designated significant natural community. Source: _____	E2n	<input type="checkbox"/>	<input type="checkbox"/>
g. The proposed action may substantially interfere with nesting/breeding, foraging, or over-wintering habitat for the predominant species that occupy or use the project site.	E2m	<input type="checkbox"/>	<input type="checkbox"/>
h. The proposed action requires the conversion of more than 10 acres of forest, grassland or any other regionally or locally important habitat. Habitat type & information source: _____	E1b	<input type="checkbox"/>	<input type="checkbox"/>
i. Proposed action (commercial, industrial or recreational projects, only) involves use of herbicides or pesticides.	D2q	<input type="checkbox"/>	<input type="checkbox"/>
j. Other impacts: _____		<input type="checkbox"/>	<input type="checkbox"/>

8. Impact on Agricultural Resources			
The proposed action may impact agricultural resources. (See Part 1. E.3.a. and b.)		<input checked="" type="checkbox"/> NO	<input type="checkbox"/> YES
<i>If "Yes", answer questions a - h. If "No", move on to Section 9.</i>			
	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action may impact soil classified within soil group 1 through 4 of the NYS Land Classification System.	E2c, E3b	<input type="checkbox"/>	<input type="checkbox"/>
b. The proposed action may sever, cross or otherwise limit access to agricultural land (includes cropland, hayfields, pasture, vineyard, orchard, etc).	E1a, E1b	<input type="checkbox"/>	<input type="checkbox"/>
c. The proposed action may result in the excavation or compaction of the soil profile of active agricultural land.	E3b	<input type="checkbox"/>	<input type="checkbox"/>
d. The proposed action may irreversibly convert agricultural land to non-agricultural uses, either more than 2.5 acres if located in an Agricultural District, or more than 10 acres if not within an Agricultural District.	E1b, E3a	<input type="checkbox"/>	<input type="checkbox"/>
e. The proposed action may disrupt or prevent installation of an agricultural land management system.	E1 a, E1b	<input type="checkbox"/>	<input type="checkbox"/>
f. The proposed action may result, directly or indirectly, in increased development potential or pressure on farmland.	C2c, C3, D2c, D2d	<input type="checkbox"/>	<input type="checkbox"/>
g. The proposed project is not consistent with the adopted municipal Farmland Protection Plan.	C2c	<input type="checkbox"/>	<input type="checkbox"/>
h. Other impacts: _____		<input type="checkbox"/>	<input type="checkbox"/>

9. Impact on Aesthetic Resources The land use of the proposed action are obviously different from, or are in sharp contrast to, current land use patterns between the proposed project and a scenic or aesthetic resource. (Part 1. E.1.a, E.1.b, E.3.h.) <i>If "Yes", answer questions a - g. If "No", go to Section 10.</i>			
		<input checked="" type="checkbox"/> NO	<input type="checkbox"/> YES
	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. Proposed action may be visible from any officially designated federal, state, or local scenic or aesthetic resource.	E3h	<input type="checkbox"/>	<input type="checkbox"/>
b. The proposed action may result in the obstruction, elimination or significant screening of one or more officially designated scenic views.	E3h, C2b	<input type="checkbox"/>	<input type="checkbox"/>
c. The proposed action may be visible from publicly accessible vantage points: i. Seasonally (e.g., screened by summer foliage, but visible during other seasons) ii. Year round	E3h	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
d. The situation or activity in which viewers are engaged while viewing the proposed action is: i. Routine travel by residents, including travel to and from work ii. Recreational or tourism based activities	E3h E2q, E1c	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
e. The proposed action may cause a diminishment of the public enjoyment and appreciation of the designated aesthetic resource.	E3h	<input type="checkbox"/>	<input type="checkbox"/>
f. There are similar projects visible within the following distance of the proposed project: 0-1/2 mile 1/2 -3 mile 3-5 mile 5+ mile	D1a, E1a, D1f, D1g	<input type="checkbox"/>	<input type="checkbox"/>
g. Other impacts: _____ _____		<input type="checkbox"/>	<input type="checkbox"/>

10. Impact on Historic and Archeological Resources The proposed action may occur in or adjacent to a historic or archaeological resource. (Part 1. E.3.e, f. and g.) <i>If "Yes", answer questions a - e. If "No", go to Section 11.</i>			
		<input type="checkbox"/> NO	<input checked="" type="checkbox"/> YES
	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action may occur wholly or partially within, or substantially contiguous to, any buildings, archaeological site or district which is listed on or has been nominated by the NYS Board of Historic Preservation for inclusion on the State or National Register of Historic Places.	E3e	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. The proposed action may occur wholly or partially within, or substantially contiguous to, an area designated as sensitive for archaeological sites on the NY State Historic Preservation Office (SHPO) archaeological site inventory.	E3f	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. The proposed action may occur wholly or partially within, or substantially contiguous to, an archaeological site not included on the NY SHPO inventory. Source: _____	E3g	<input checked="" type="checkbox"/>	<input type="checkbox"/>

d. Other impacts: _____ _____		<input type="checkbox"/>	<input type="checkbox"/>
e. If any of the above (a-d) are answered “Yes”, continue with the following questions to help support conclusions in Part 3:			
i. The proposed action may result in the destruction or alteration of all or part of the site or property.	E3e, E3g, E3f	<input type="checkbox"/>	<input type="checkbox"/>
ii. The proposed action may result in the alteration of the property’s setting or integrity.	E3e, E3f, E3g, E1a, E1b	<input type="checkbox"/>	<input type="checkbox"/>
iii. The proposed action may result in the introduction of visual elements which are out of character with the site or property, or may alter its setting.	E3e, E3f, E3g, E3h, C2, C3	<input type="checkbox"/>	<input type="checkbox"/>

11. Impact on Open Space and Recreation			
The proposed action may result in a loss of recreational opportunities or a reduction of an open space resource as designated in any adopted municipal open space plan. (See Part 1. C.2.c, E.1.c., E.2.q.) <i>If “Yes”, answer questions a - e. If “No”, go to Section 12.</i>		<input checked="" type="checkbox"/> NO	<input type="checkbox"/> YES
	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action may result in an impairment of natural functions, or “ecosystem services”, provided by an undeveloped area, including but not limited to stormwater storage, nutrient cycling, wildlife habitat.	D2e, E1b E2h, E2m, E2o, E2n, E2p	<input type="checkbox"/>	<input type="checkbox"/>
b. The proposed action may result in the loss of a current or future recreational resource.	C2a, E1c, C2c, E2q	<input type="checkbox"/>	<input type="checkbox"/>
c. The proposed action may eliminate open space or recreational resource in an area with few such resources.	C2a, C2c E1c, E2q	<input type="checkbox"/>	<input type="checkbox"/>
d. The proposed action may result in loss of an area now used informally by the community as an open space resource.	C2c, E1c	<input type="checkbox"/>	<input type="checkbox"/>
e. Other impacts: _____ _____		<input type="checkbox"/>	<input type="checkbox"/>

12. Impact on Critical Environmental Areas			
The proposed action may be located within or adjacent to a critical environmental area (CEA). (See Part 1. E.3.d) <i>If “Yes”, answer questions a - c. If “No”, go to Section 13.</i>		<input type="checkbox"/> NO	<input checked="" type="checkbox"/> YES
	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action may result in a reduction in the quantity of the resource or characteristic which was the basis for designation of the CEA.	E3d	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. The proposed action may result in a reduction in the quality of the resource or characteristic which was the basis for designation of the CEA.	E3d	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Other impacts: _____ _____		<input type="checkbox"/>	<input type="checkbox"/>

13. Impact on Transportation

The proposed action may result in a change to existing transportation systems.

 NO

 YES

(See Part 1. D.2.j)

If "Yes", answer questions a - g. If "No", go to Section 14.

	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. Projected traffic increase may exceed capacity of existing road network.	D2j	<input type="checkbox"/>	<input type="checkbox"/>
b. The proposed action may result in the construction of paved parking area for 500 or more vehicles.	D2j	<input type="checkbox"/>	<input type="checkbox"/>
c. The proposed action will degrade existing transit access.	D2j	<input type="checkbox"/>	<input type="checkbox"/>
d. The proposed action will degrade existing pedestrian or bicycle accommodations.	D2j	<input type="checkbox"/>	<input type="checkbox"/>
e. The proposed action may alter the present pattern of movement of people or goods.	D2j	<input type="checkbox"/>	<input type="checkbox"/>
f. Other impacts: _____ _____		<input type="checkbox"/>	<input type="checkbox"/>

14. Impact on Energy

The proposed action may cause an increase in the use of any form of energy.

 NO

 YES

(See Part 1. D.2.k)

If "Yes", answer questions a - e. If "No", go to Section 15.

	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action will require a new, or an upgrade to an existing, substation.	D2k	<input type="checkbox"/>	<input type="checkbox"/>
b. The proposed action will require the creation or extension of an energy transmission or supply system to serve more than 50 single or two-family residences or to serve a commercial or industrial use.	D1f, D1q, D2k	<input type="checkbox"/>	<input type="checkbox"/>
c. The proposed action may utilize more than 2,500 MWhrs per year of electricity.	D2k	<input type="checkbox"/>	<input type="checkbox"/>
d. The proposed action may involve heating and/or cooling of more than 100,000 square feet of building area when completed.	D1g	<input type="checkbox"/>	<input type="checkbox"/>
e. Other Impacts: _____ _____			

15. Impact on Noise, Odor, and Light

The proposed action may result in an increase in noise, odors, or outdoor lighting.

 NO

 YES

(See Part 1. D.2.m., n., and o.)

If "Yes", answer questions a - f. If "No", go to Section 16.

	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action may produce sound above noise levels established by local regulation.	D2m	<input type="checkbox"/>	<input type="checkbox"/>
b. The proposed action may result in blasting within 1,500 feet of any residence, hospital, school, licensed day care center, or nursing home.	D2m, E1d	<input type="checkbox"/>	<input type="checkbox"/>
c. The proposed action may result in routine odors for more than one hour per day.	D2o	<input type="checkbox"/>	<input type="checkbox"/>

d. The proposed action may result in light shining onto adjoining properties.	D2n	<input type="checkbox"/>	<input type="checkbox"/>
e. The proposed action may result in lighting creating sky-glow brighter than existing area conditions.	D2n, E1a	<input type="checkbox"/>	<input type="checkbox"/>
f. Other impacts: _____ _____		<input type="checkbox"/>	<input type="checkbox"/>

16. Impact on Human Health

The proposed action may have an impact on human health from exposure to new or existing sources of contaminants. (See Part 1.D.2.q., E.1. d. f. g. and h.)
If "Yes", answer questions a - m. If "No", go to Section 17.

NO

YES

	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action is located within 1500 feet of a school, hospital, licensed day care center, group home, nursing home or retirement community.	E1d	<input type="checkbox"/>	<input type="checkbox"/>
b. The site of the proposed action is currently undergoing remediation.	E1g, E1h	<input type="checkbox"/>	<input type="checkbox"/>
c. There is a completed emergency spill remediation, or a completed environmental site remediation on, or adjacent to, the site of the proposed action.	E1g, E1h	<input type="checkbox"/>	<input type="checkbox"/>
d. The site of the action is subject to an institutional control limiting the use of the property (e.g., easement or deed restriction).	E1g, E1h	<input type="checkbox"/>	<input type="checkbox"/>
e. The proposed action may affect institutional control measures that were put in place to ensure that the site remains protective of the environment and human health.	E1g, E1h	<input type="checkbox"/>	<input type="checkbox"/>
f. The proposed action has adequate control measures in place to ensure that future generation, treatment and/or disposal of hazardous wastes will be protective of the environment and human health.	D2t	<input type="checkbox"/>	<input type="checkbox"/>
g. The proposed action involves construction or modification of a solid waste management facility.	D2q, E1f	<input type="checkbox"/>	<input type="checkbox"/>
h. The proposed action may result in the unearthing of solid or hazardous waste.	D2q, E1f	<input type="checkbox"/>	<input type="checkbox"/>
i. The proposed action may result in an increase in the rate of disposal, or processing, of solid waste.	D2r, D2s	<input type="checkbox"/>	<input type="checkbox"/>
j. The proposed action may result in excavation or other disturbance within 2000 feet of a site used for the disposal of solid or hazardous waste.	E1f, E1g E1h	<input type="checkbox"/>	<input type="checkbox"/>
k. The proposed action may result in the migration of explosive gases from a landfill site to adjacent off site structures.	E1f, E1g	<input type="checkbox"/>	<input type="checkbox"/>
l. The proposed action may result in the release of contaminated leachate from the project site.	D2s, E1f, D2r	<input type="checkbox"/>	<input type="checkbox"/>
m. Other impacts: _____ _____			

17. Consistency with Community Plans

The proposed action is not consistent with adopted land use plans.
 (See Part 1. C.1, C.2. and C.3.)
 If “Yes”, answer questions a - h. If “No”, go to Section 18.

NO

YES

	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action’s land use components may be different from, or in sharp contrast to, current surrounding land use pattern(s).	C2, C3, D1a E1a, E1b	<input type="checkbox"/>	<input type="checkbox"/>
b. The proposed action will cause the permanent population of the city, town or village in which the project is located to grow by more than 5%.	C2	<input type="checkbox"/>	<input type="checkbox"/>
c. The proposed action is inconsistent with local land use plans or zoning regulations.	C2, C2, C3	<input type="checkbox"/>	<input type="checkbox"/>
d. The proposed action is inconsistent with any County plans, or other regional land use plans.	C2, C2	<input type="checkbox"/>	<input type="checkbox"/>
e. The proposed action may cause a change in the density of development that is not supported by existing infrastructure or is distant from existing infrastructure.	C3, D1c, D1d, D1f, D1d, E1b	<input type="checkbox"/>	<input type="checkbox"/>
f. The proposed action is located in an area characterized by low density development that will require new or expanded public infrastructure.	C4, D2c, D2d D2j	<input type="checkbox"/>	<input type="checkbox"/>
g. The proposed action may induce secondary development impacts (e.g., residential or commercial development not included in the proposed action)	C2a	<input type="checkbox"/>	<input type="checkbox"/>
h. Other: _____ _____		<input type="checkbox"/>	<input type="checkbox"/>

18. Consistency with Community Character

The proposed project is inconsistent with the existing community character.
 (See Part 1. C.2, C.3, D.2, E.3)
 If “Yes”, answer questions a - g. If “No”, proceed to Part 3.

NO

YES

	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action may replace or eliminate existing facilities, structures, or areas of historic importance to the community.	E3e, E3f, E3g	<input type="checkbox"/>	<input type="checkbox"/>
b. The proposed action may create a demand for additional community services (e.g. schools, police and fire)	C4	<input type="checkbox"/>	<input type="checkbox"/>
c. The proposed action may displace affordable or low-income housing in an area where there is a shortage of such housing.	C2, C3, D1f D1g, E1a	<input type="checkbox"/>	<input type="checkbox"/>
d. The proposed action may interfere with the use or enjoyment of officially recognized or designated public resources.	C2, E3	<input type="checkbox"/>	<input type="checkbox"/>
e. The proposed action is inconsistent with the predominant architectural scale and character.	C2, C3	<input type="checkbox"/>	<input type="checkbox"/>
f. Proposed action is inconsistent with the character of the existing natural landscape.	C2, C3 E1a, E1b E2g, E2h	<input type="checkbox"/>	<input type="checkbox"/>
g. Other impacts: _____ _____		<input type="checkbox"/>	<input type="checkbox"/>

ATTACHMENT C
NEW YORK STATE ENVIRONMENTAL QUALITY REVIEW
LONG ENVIRONMENTAL ASSESSMENT FORM
PART 2 – IDENTIFICATION OF POTENTIAL PROJECT IMPACTS

ROTTERDAM DISTRICT #5 WELLHEAD FACILITY

This supplemental information has been prepared for the project listed above as a companion to the Long Environmental Assessment Form (6 NYCRR Part 617.20 - Appendix B) completed by GOSR as part of an independent review as an Involved Agency, with consideration of Criteria for Determining Significance listed in 6 NYCRR 617.7.

1. Impact on Land

The Rotterdam Water District #5 Wellhead Project (the Project) involves the construction of a new well (Well #5) at the Rotterdam Water District #5 well head facility in the Town of Rotterdam. The well head facility is located at 49 Rice Road in the Town of Rotterdam, and is 9.38 acres. It is currently owned by the Town of Rotterdam. The Project is consistent with the goals and vision of the Town of Rotterdam comprehensive plan (See Attachment C1_town of Rotterdam Comprehensive Plan). The proposed action will involve clearing and grubbing, drilling a new groundwater well, installation of a pump, construction of a new well house, grading and site restoration.

Construction is anticipated to last less than one year (approximately 11 months), and the proposed acreage to be physically disturbed is less than 1 acre. In addition, the proposed location of the well has been previously stripped of its topsoil overburden, likely in association with the historic gravel mining to the east and/or to use as fill for the construction of the adjacent water head facility (See Attachment B24). There is sufficient onsite parking to accommodate construction vehicles and material deliver which would avoid ongoing traffic disruptions. The use of heavy equipment with high noise levels will be minimized, stockpiles of soils and materials and other visual signs of construction that result in longer-term visual changes to the character of the area, or other ongoing noise or odor nuisances. Therefore, impacts on land associated with construction activities of longer than one year were determined to be minor.

2. Impact on Geological Features

No unique or unusual landforms are located on the Project site. Therefore, impacts on geological features will not occur.

3. Impacts on Surface Water

No regulated wetlands are located on or adjacent to the Project site. The nearest surface water feature is the Mohawk River located approximately 200 feet northeast.

4. Impacts on Groundwater

The Project site is located within DEC principal and primary aquifers. In addition, it is located within an Environmental Protection Agency-regulated sole source aquifer. However, the proposed Project will not adversely impact the groundwater or existing wells at the Rotterdam Water District #5 wellhead facility. The purpose of the construction of Well #5 is to ensure that the Rotterdam Water District #5 will have potable water during flood events, and it will be constructed 2 to 5 feet above the 500-year-floodplain and at least 3 feet above the flood-of-record elevation to avoid such occurrences. It will be installed in accordance with American Water Works Association (AWWA) AI 00 "Standard for Water Wells" and with the New York State Sanitary Code. The annular space between casing and soil would be grouted with cement/bentonite, according to AWWA standard AI 00-06, thereby preventing surface runoff from entering the borehole and reaching the aquifer. In addition, consultation with the EPA on December 1, 2015, determined that the Project satisfies the requirements of Section 1424(e) of the Safe Drinking Water Act (SDWA). The Project is within Wellhead Protection Zone I, and would be consistent with the regulations for the Project zone (See Attachment C2_USEPA_SSA response letter). In addition, safety precautions on the imported fill material will be implemented, which will require offsite testing of the soil materials prior to being transported to the site.

The well head facility permitted pumping capacity is 10 million gallons per day and the average daily demand is 3.64 gallons per day (See Attachment B10). Therefore, the addition of the new well will not create additional demand on supplies from the existing water head facility. The purpose of the new well is to provide redundancy, rather than added capacity, so that the well field could still produce up to the permitted 10 million gallons per day if one well was out of service.

5. Impact on Flooding

The Project is located within a 100-year floodplain (Zone AE), and a 500-year floodplain. However, the well will be constructed 2 to 5 feet over the 500-year-floodplain and at least 3 feet above the flood-of-record elevation and will not result in an increase in the potential for erosion, flooding or drainage problem. According to FEMA Guidelines the volume of floodplain capacity displaced, does not have to be mitigated if the modification to the floodplain fringe storage capacity results in an increase of flood elevation in the floodway fringe of less than 12 inches. To determine the effect of the new fill volume on the storage capacity of the floodway fringe, the proposed cross sectional area and corresponding running volume of the proposed fill was calculated. The floodway fringe width was derived from the FEMA maps and the allowable increase in volume to produce less than 12" increase in flood elevation was then determined. Based on this evaluation, the increase in flood elevation in the floodway fringe will be less than the maximum of 12" and would be in the range of 5" to 7". This is an instantaneous worst case "snapshot" at the new well field location and in reality the impacts should be less. The new fill is relatively short in length, narrower than the existing well field, and will be constructed in the hydraulic "shadow" of the existing well field. Once the water passes by the end of the new well fill, the water will return to preexisting levels. For these reasons, the volume of floodplain capacity displaced

does not have to be mitigated. The direct and indirect impacts associated with the development within the floodplain would be minimal because the area that would be permanently affected would be the area of the structure, which would be approximately 900 square feet.

An early public notice of activity in a 100- year floodplain was published on December 10, 2015. The comment period was held open until December 31, 2015. A final notice and public explanation of a proposed activity in a 100- year floodplain was published on January 22, 2016 and all comments received by January 29, 2016 will be considered (See Attachment B27 Rotterdam District5 Final Notice Draft010616).

6. Impact on Air

The proposed Project will not adversely affect air quality. The proposed Project is not located in a designated non-attainment area for air quality (See Attachment B11). The proposed activities will not affect transportation patterns or levels of service thereby aiding the preservation of local air quality. Standard best management practices (BMPs) will be implemented during construction to control dust and other emissions. No significant impacts on air quality will result, and further assessment is not required.

7. Impacts on Plants and Animals

No impact to endangered or threatened species is anticipated.

The US Fish and Wildlife Service (USFWS) online review process, completed in October 2015, indicated the threatened northern long-eared bat (*Myotis septentrionalis*) may occur within the boundary of and/or may be affected by the Project. The USFWS confirmed that the Project activities “may effect, but is not likely to adversely impact” the northern long-eared bat given that less than 1 acre of tree removal will occur and tree clearing will take place in the winter (November 1-March 31) (See Attachment B19). Consultation has also been initiated with the New York Natural Heritage Program.

8. Impact on Agricultural Resources

The Project is not located within an agricultural district and the current land use of the site is not used for farming purposes. Although the soils on the site are designated as Prime Farmland (See Attachment B13), the Project will not impact agricultural resources as less than 1 acre of physical disturbance is proposed. The only impervious surface that would be created on the site is the 900-square foot (0.02 acres of the 0.7-acre Project site) well house and the 0.25-acre extension of the paved road to the Project site (35 percent of the 0.7-acre Project site). In addition, On January 15, 2015, the National Resources Conservation Service (NRCS) determined that the proposed conversion of this Prime Farmland is exempt under the Farmland Protection Policy Act (FPPA) (See Attachment C4).

9. Impact on Aesthetic Resources

The Project will not result in an adverse change to the current land use patterns that would affect the scenic or aesthetic resources of the surrounding area.

10. Impact on Historic and Archeological Resources

The Project area is located within 0.25 miles of two archeological sites to the northwest; the National Register of Historic Places (NRHP)-listed Enlarged Lock No. 23 Old Erie Canal to the west; and the NRHP-listed New York State Barge Canal District to the west. These are more than 500 feet from the proposed well location, are screened by forested growth and there are 4 existing wells between them and the proposed new well. In addition, the Project site is within 0.25 miles of an inventoried property, a group of three houses dating to ca. 1900, which was demolished about a decade ago (See Attachment B22). A response from SHPO was received on December 21, 2015, which confirmed that no historic properties will be affected by the proposed Project (See Attachment B23). A Phase IA/IB Archeological Investigation was completed for the Project in October 2015. The Phase IA literature review indicated that the Project area is considered to have a low sensitivity for the presence of historic cultural remains. The investigation determined that extensive disturbance from the former gravel mining and adjacent Pump Station facilities' construction and operation had likely erased any traces of prior occupations. The Phase IB fieldwork confirmed the presence of stripped soils across the Project area and found no cultural resources on the Project site. In addition, the Project area was determined to have a low sensitivity for the presence of prehistoric and historic cultural remains (See Attachment B24).

Consultation requests for the proposed Project was sent to the Tribal Historic Preservation Office for the Delaware Tribe of Indians, Mohawk Nation, Saint Regis Mohawk Tribe, and the Stockbridge-Munsee Mohican Tribe. The Saint Regis Mohawk Tribe and the Stockbridge-Munsee Mohican Tribe determined that their Tribes do not have cultural properties of concern within proposed Project area (See Attachment B25 and Attachment B26). A response from the Delaware Tribe of Indians and Mohawk Nation is pending.

11. Impact on Open Space and Recreation

The Project will not impact open space or recreation as it will be located within a currently vacant building.

12. Impact on Critical Environmental Areas

The Project site is located within a state listed Critical Environmental Area (CEA), the Aquifer Area Overlay Zone associated with the Mohawk River (See Attachment B21). This area was designated as a CEA on April 5, 1985, by the Town of Rotterdam in order to conserve, improve, and protect natural resources. However, less than 1 acre of land within this CEA is proposed to be physically disturbed. Therefore, impacts to the CEA are expected to be minor.

13. Impact on Transportation

The proposed Project will not generate a significant increase in traffic above present levels or generate substantial new demand for transportation facilities or services as the new well will be constructed at an existing wellhead facility (See Attachment B3).

14. Impact on Energy

The Project would not result in additional energy consumption because the new well would provide redundancy, rather than added capacity. The pump and generator would operate if another well is out of service or experienced a reduction in productivity, so the well field would not require additional energy. No impacts would occur to existing suppliers in the vicinity.

15. Impact on Noise, Odor, and Light

Some noise may be generated during construction; however, this will be temporary and will not adversely impact the surrounding areas. The proposed activities will not significantly increase the level of noise or vibration compared to current conditions. In addition, no blasting will be required. The proposed activities will also not significantly increase the level of odor compared to current conditions. Outdoor lighting is not proposed for the construction or operations of the new well.

16. Impact on Human Health

All Project-related solid waste materials generated during construction would be managed and transported in accordance with New York State's solid and hazardous waste rules. In addition, an application to the New York State Department of Health will be submitted for the Approval of Public Water Supply permit. Chemicals for the chlorinator would not be stored on the Project site. Because the Project site would not be inhabited, there would be no other changes in human exposure to hazards or nuisances.

17. Consistency with Community Plans

The proposed Project falls within the land use plans under the Town of Rotterdam Comprehensive Plan whose vision includes providing for the health safety and well-being of its citizens. In addition, it calls for the protection of aquifers and wellhead protection zones by continuing to implement Watershed Rules and Regulations and improving wellhead protection zone mapping (See Attachment C1).

The proposed Project is also part of the City of Schenectady and Town of Rotterdam New York Rising Community Reconstruction Plan is consistent with the plan goals to protect wellheads and other drinking water infrastructure from flooding to ensure an uninterrupted supply of clean, safe drinking water (See Attachment C3 NY Rising Community Reconstruction Plan City of Schenectady Town of Rotterdam).

18. Consistency with Community Character

The Project would remain consistent with the existing community character.

Project :

Date :

Full Environmental Assessment Form
Part 3 - Evaluation of the Magnitude and Importance of Project Impacts
and
Determination of Significance

Part 3 provides the reasons in support of the determination of significance. The lead agency must complete Part 3 for every question in Part 2 where the impact has been identified as potentially moderate to large or where there is a need to explain why a particular element of the proposed action will not, or may, result in a significant adverse environmental impact.

Based on the analysis in Part 3, the lead agency must decide whether to require an environmental impact statement to further assess the proposed action or whether available information is sufficient for the lead agency to conclude that the proposed action will not have a significant adverse environmental impact. By completing the certification on the next page, the lead agency can complete its determination of significance.

Reasons Supporting This Determination:

To complete this section:

- Identify the impact based on the Part 2 responses and describe its magnitude. Magnitude considers factors such as severity, size or extent of an impact.
- Assess the importance of the impact. Importance relates to the geographic scope, duration, probability of the impact occurring, number of people affected by the impact and any additional environmental consequences if the impact were to occur.
- The assessment should take into consideration any design element or project changes.
- Repeat this process for each Part 2 question where the impact has been identified as potentially moderate to large or where there is a need to explain why a particular element of the proposed action will not, or may, result in a significant adverse environmental impact.
- Provide the reason(s) why the impact may, or will not, result in a significant adverse environmental impact
- For Conditional Negative Declarations identify the specific condition(s) imposed that will modify the proposed action so that no significant adverse environmental impacts will result.
- Attach additional sheets, as needed.

1. Impact on Land: The construction is anticipated to last less than one year (approximately 11 months), and the proposed Project is only to physically disturb less than 1 acre of land. In addition, the proposed location of the well has been previously stripped of its topsoil, likely in association with the historic gravel mining to the east and/or to use as fill for the construction of the adjacent well head facility. Therefore, impacts on land associated with construction activities were determined to be minor.

2. Impact on Groundwater: While the proposed location of the new well is located within DEC principal and primary aquifers, and an EPA-regulated sole source aquifer, adverse impacts to the groundwater or existing wells at the adjacent well head facility is not anticipated. The purpose of the new well is to ensure that the Rotterdam Water District will have potable water during flood events. The construction of the new well will not increase or create a new demand for water. In addition, the Project will be installed in accordance with American Water Works Association (AWWA) AI "Standard for Water Wells" and with the New York State Sanitary Code. Consultation with the EPA on December 1, 2015, determined that the Project satisfies the requirements of Section 1424(e) of the Safe Drinking Water Act (SDWA).

3. Impact on Flooding: The Project is located within a designated floodway associated with the Mohawk River, a 100-year floodplain, and a 500-year floodplain. However, the well will be constructed 2 to 5 feet over the 500-year-floodplain and at least 3 feet above the flood-of-record elevation, and will not result in an increase in the potential for erosion, flooding or drainage problem. The casing of the new well would be elevated between two and five feet above the 500-year floodplain and at least three feet above the flood of record elevation. The direct and indirect impacts associated with the development within the floodplain would be minimal because the area that would be permanently affected would be the area of the structure, which would be approximately 900 square feet.

4. Impact on Historic and Archaeological Resources: While the Project is located within 0.25 miles of two NRHP-listed historic sites, the Enlarged Lock No. 23 Old Erie Canal, and the New York State Barge Canal District, no cultural resources were identified on the Project site during a Phase IB Archaeological Survey field investigation. In addition, the Project area was determined to have a low sensitivity for the presence of prehistoric and historic cultural remains. Consultation with the New York State Historic Preservation Office (SHPO) was initiated in order to review the proposed Project and determine if the proposed location encompasses historic properties of religious or cultural significance. A response was received on December 21, 2015, which confirmed that no historic properties will be affected by the proposed Project. Consultation requests for the proposed Project was sent to the Tribal Historic Preservation Office for the Delaware Tribe of Indians, Mohawk Nation, Saint Regis Mohawk Tribe, and the Stockbridge-Munsee Mohican Tribe. The Saint Regis Mohawk Tribe and the Stockbridge-Munsee Mohican Tribe determined that their Tribes do not have cultural properties of concern within proposed Project area. No response was received from the other two Tribes.

5. Impact on Critical Environmental Areas: While the Project is located within a Critical Environmental Area, an Aquifer Area Overlay Zone, the proposed activities are not anticipated to result in a reduction in the quantity or quality of the resource characteristic which was the basis for its designation as less than 1 acre of land is proposed to be physically disturbed.

Determination of Significance - Type 1 and Unlisted Actions

SEQR Status: Type 1 Unlisted

Identify portions of EAF completed for this Project: Part 1 Part 2 Part 3

Upon review of the information recorded on this EAF, as noted, plus this additional support information

and considering both the magnitude and importance of each identified potential impact, it is the conclusion of the _____ as lead agency that:

A. This project will result in no significant adverse impacts on the environment, and, therefore, an environmental impact statement need not be prepared. Accordingly, this negative declaration is issued.

B. Although this project could have a significant adverse impact on the environment, that impact will be avoided or substantially mitigated because of the following conditions which will be required by the lead agency:

There will, therefore, be no significant adverse impacts from the project as conditioned, and, therefore, this conditioned negative declaration is issued. A conditioned negative declaration may be used only for UNLISTED actions (see 6 NYCRR 617.d).

C. This Project may result in one or more significant adverse impacts on the environment, and an environmental impact statement must be prepared to further assess the impact(s) and possible mitigation and to explore alternatives to avoid or reduce those impacts. Accordingly, this positive declaration is issued.

Name of Action: Negative Declaration

Name of Lead Agency: New York State Governor's Office of Storm Recovery (GOSR)

Name of Responsible Officer in Lead Agency: Thomas J. King, Esq.

Title of Responsible Officer: Director, Bureau of Environmental Review and Assessment; Assistant General Counsel and Certifying Officer

Signature of Responsible Officer in Lead Agency:

Date:

Signature of Preparer (if different from Responsible Officer)

Date:

For Further Information:

Contact Person: Thomas J. King

Address: Governor's Office of Storm Recovery, 99 Washington Avenue, Suite 1224, Albany, New York 12260

Telephone Number: (518) 473-0015

E-mail: Thomas.King@StormRecovery.NY.Gov

For Type 1 Actions and Conditioned Negative Declarations, a copy of this Notice is sent to:

Chief Executive Officer of the political subdivision in which the action will be principally located (e.g., Town / City / Village of)

Other involved agencies (if any)

Applicant (if any)

Environmental Notice Bulletin: <http://www.dec.ny.gov/enb/enb.html>