

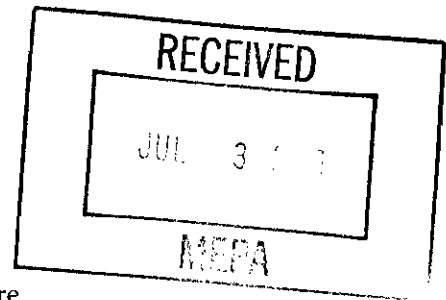


June 29, 2006

*Vanasse Hangen Brustlin, Inc.*

Ref: 71795

Mr. Stephen R. Prichard, Secretary  
Executive Office of Environmental Affairs - MEPA Office  
100 Cambridge Street, Suite 900  
Boston, MA 02114



Re: Request for Advisory Opinion  
National Grid Q169 RESCO Load Break Switch Structure  
Saugus, MA

Dear Mr. Prichard:

On behalf of National Grid, Vanasse Hangen Brustlin, Inc. (VHB) respectfully requests an advisory opinion on MEPA jurisdiction for work associated with removing two existing aged transmission line switch structures and installing a new electric transmission load break switch structure and replacing existing structures and wires along an electric transmission line right-of-way within the Rumney Marshes Area of Critical Environmental Concern (ACEC) in Saugus.

The 115 kilovolt (kV) Q169 electric transmission line is owned by New England Power, a National Grid company. This work is part of a larger structure and wire replacement (i.e. reconductoring) project that extends from the Golden Hills Substation in Saugus east to the Saugus River in Lynn, an approximate distance of 5.7 miles (see **Figure 1**). The line is primarily composed of wood pole H-frame structures, with 6 steel towers at the Saugus River crossing, 2 steel pole H-frame structures at the Route 107 crossing, 3 single pole steel davit arm structures at the Route 1 crossing and 1 single pole davit arm structure at Salem Street.

Following a detailed inspection of the line and structures, National Grid has determined that certain structures and equipment are deteriorated and nearing the ends of their useful service lives. In addition, the power wires (conductors) are proposed for replacement in order to continue to provide reliable electric service. Wood pole structures would be replaced at select locations, and crossarms and hardware would be replaced as needed. All existing steel poles and towers would be reused with no modifications.

A portion of the proposed work occurs within the Rumney Marshes ACEC (see **Figure 2**). The MEPA review threshold (at 301 CMR 11.03[11]b) that pertains to work within a state-defined ACEC stipulates that a Project is subject, at a minimum, to the filing of an Environmental Notification Form

(ENF) with the MEPA Office for "Any Project within a designated ACEC, unless the Project consists solely of one single-family dwelling."

Notwithstanding the above MEPA review threshold, the MEPA implementing regulations also establish more general provisions related to the applicability of the review thresholds that would appear to exempt the Project from the MEPA review thresholds. The language at 301 CMR 11.01(2)b(3) states that "The review thresholds *do not apply* [emphasis added] to: a lawfully existing structure, facility or activity; Routine Maintenance; a Replacement Project..." The proposed Project appears to meet the MEPA definitions (301 CMR 11.02[2]) for "Replacement Project" and the definition for "Routine Maintenance."

The majority of the proposed project appears to qualify under the above language and not be subject to the MEPA review thresholds and not subject to the required filing of an ENF. However, "new" work on the line involves removing two existing aged transmission line switch structures and installing a new electric transmission load break switch structure in the transmission line right-of-way within the limits of the capped Saugus RESCO landfill (see attached **Figure 3**). The landfill is within the Rumney Marshes ACEC. We are, therefore, requesting clarification as to whether the new structure is subject to MEPA.

Installing the load break switch structure and replacing wood pole structures within the limits of the capped landfill will require filing an application for Post-Closure Use with the Department of Environmental Protection Bureau of Waste Prevention – Solid Waste Management.

In accordance with the Wetlands Protection Act (MGL Ch. 131 s. 40), the project consists of "maintaining, repairing or replacing, but not substantially changing or enlarging, an existing and lawfully located structure or facility used in the service of the public and used to provide electric, gas, water, telephone, telegraph and other telecommunication services" and is, therefore, exempt from filing a Notice of Intent with the respective conservation commissions and Department of Environmental Protection (DEP). Any new structure work within the geographic jurisdiction of the Massachusetts Wetlands Protection Act or local wetlands protection bylaw would require filing a Notice of Intent with the DEP and local conservation commission.

As previously noted, the overall project involves reconductoring the 115kV line in its entirety (i.e. replacing wire), replacing complete wood pole structures at select locations and replacing crossarms and replace hardware as needed.

One new switch structure is proposed to replace two existing switch structures. The new structure will be located outside of any state wetland resources areas subject to MGL Ch. 131 s. 40. Although a portion of the work is within the Rumney Marshes ACEC, most of it is maintenance or replacement of existing structures that will have negligible impact to the



Stephen R. Prichard  
Project No.: 71795  
April 10, 2006  
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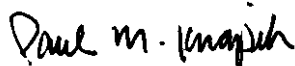
use and enjoyment of the ACEC. The design and location of the proposed new structure at the RESCO tap will be reviewed by the DEP as an application for Post-Closure Use.

We believe the project in its entirety does not require the filing of an ENF. We, therefore, request that you consider the enclosed materials and information and determine that a MEPA filing is not required for the project.

If you have any questions or require additional information please do not hesitate to call me at (401) 272-8100.

Very truly yours,

VANASSE HANGEN BRUSTLIN, INC.



Paul M. Knapik  
Senior Environmental Scientist



PB



imagination | innovation | energy Creating results for our clients and benefits for our communities

September 13, 2006

*Vanasse Hangen Brustlin, Inc.*

Ref: 71795

Mr. Richard Bourre', Assistant Director  
Executive Office of Environmental Affairs - MEPA Office  
100 Cambridge Street, Suite 900  
Boston, MA 02114

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SEP 15 2006

MEPA

Re: Request for Advisory Opinion Letter Response to Comments  
National Grid Q169 Reconductoring project  
Revere and Saugus, Massachusetts

Dear Mr. Bourre':

On behalf of National Grid, Vanasse Hangen Brustlin, Inc. (VHB) hereby provides the following responses to questions and concerns raised by Ms. Elizabeth Sorenson, ACEC Program Director, on the proposed Q169 reconductoring project that crosses a portion of the Rumney Marshes Area of Critical Environmental Concern (ACEC) in Revere and Saugus.

The project, in its entirety, consists of refurbishing and reconductoring the Q169 115 kilovolt (kV) electric transmission line within existing right-of-way (ROW) from the Golden Hills Substation in Saugus to the Lynn Substation #21 in Lynn for a total distance of approximately 6.5 miles (see Figure 1). National Grid has determined that certain structures and equipment on the Q169 line are deteriorated and nearing the ends of their useful service lives. In addition, the power wires (conductors) need to be replaced in order to continue to provide reliable electric service to the City of Lynn and surrounding areas. Wood pole structures, crossarms and hardware would be replaced as needed. All existing steel poles and towers would be reused with no modifications.

The Q169 transmission line was originally constructed in 1970. This work predated MEPA (est. 1972) and, therefore, a MEPA filing was not required for the construction of the line. In April 1984 an Environmental Notification Form (ENF) was filed for the installation of the tap line (Structure Nos. 1 through 7 in the attached Figure 2) to the Refuse Energy System Company's (RESCO) facility (EOEA File No. 5139). No environmental impact report (EIR) was scoped for the project. EOEA File No. 1367 (as referenced in Ms. Sorenson's comments) was an unrelated 23 kV Massachusetts Electric Company cable project in Melrose and Saugus.

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In accordance with the Massachusetts Wetlands Protection Act (MGL Ch. 131 s. 40), *"no person shall remove, fill, dredge or alter any bank, riverfront area, fresh water wetland, coastal wetland, beach, dune, flat, marsh, meadow or swamp bordering on the ocean or on any estuary, creek, river, stream, pond, or lake, or any land under said waters or any land subject to tidal action, coastal storm flowage, or flooding, other than in the course of maintaining, repairing or replacing, but not substantially changing or enlarging, an existing and lawfully located structure or facility used in the service of the public and used to provide electric, gas, water, telephone, telegraph and other telecommunication services, without filing written notice of his intention to so remove, fill, dredge or alter"*. As noted, the project involves replacing transmission line structures, crossarms, insulators, and conductors that are nearing the end of their useful service lives with no substantial changes or enlargement. The reconductoring project, therefore, would qualify as exempt from filing a Notice of Intent with the respective conservation commissions and Department of Environmental Protection (DEP). The portion of the project that proposes to remove two structures from the marsh and one at the edge of the marsh and replace them with a new 3-way loadbreak switch structure at the RESCO landfill site may require filing a Notice of Intent with the Saugus Conservation Commission. The new structure will be located away from the Marsh, however, a filing would be required if the work associated with installing the structure is within 200-foot Riverfront Area associated with the Saugus River.

With respect to M.G.L. c 91, all of the waterways crossings along the ROW have been previously licensed: Bride's Brook (License No. 5467), Bear Creek (License No. 5464), Saugus River (License No. 5347 as modified by License No. 6114) and RESCO Tap (License No. 1147). National Grid will request that the Department of Environmental Protection's Waterways Regulation Program ("DEP") authorize the proposed work as Minor Project Modifications to the existing licenses in accordance with 310 CMR 9.22(3). In one instance, with respect to the RESCO Tap (License No. 1147), the proposed project will result in the removal of the licensed structures and National Grid will therefore request the approval from DEP pursuant to 310 CMR 9.22(1)(d) for the removal of unused structures that are no longer suitable for the uses authorized by License No. 1147.

The project requires the extensive use of timber mats (i.e. swamp mats) to support the construction equipment used to replace structures in order to protect the salt marsh substrate in Rummey Marsh and other wetland areas along the ROW during construction. Because greater than 5,000 square feet of temporary fill (i.e. swamp mats) and approximately 800 square feet of permanent fill (i.e. the footprint of new wood-pole structures in wetlands) are proposed, the project will require filing an application to the Army Corps of Engineers (Corps) for Category II eligibility under the Massachusetts Programmatic General Permit (MAPGP). The application is reviewed by state and federal agencies through a joint review process as Category II activities. The general requirements of the PGP state that swamp or timber mats are considered temporary fill when they are removed immediately upon work completion.



Additionally, a portion of the project is within Massachusetts Water Quality Standards (314 CMR 4.00) designated Outstanding Resource Waters (ORW) and salt marsh. The regulations (314 CMR 9.04) require any activity resulting in any discharge of dredged or fill material to any ORW or salt marsh to file an application for Water Quality Certification. There are 18 proposed structure replacements within the designated ORW. Swamp mats will be used to access these structure locations. The work includes installing new wood-pole structures adjacent to the existing structures and cutting the old poles at ground level and abandoning the embedded portion. A comprehensive marsh access plan has been developed to avoid or minimize impacts to salt marsh and tidal creeks by accessing the ROW from upland locations and utilizing previously disturbed portions of the marsh (i.e. the former racetrack footprint) as an access route. A Water Quality Certification application, describing alternatives and mitigation measures, has been filed with the DEP. This application has been public noticed in the *Saugus Advertiser* and will be an opportunity for the public to comment on the project.

A Post-Closure Use Permit Application has been submitted to the Department of Environmental Protection Bureau of Waste Prevention – Solid Waste Management for the portion of the project within limits of the RESCO landfill. This involves removing an existing tap structure (Structure #1) and two airbreak switch structures (Structure # 24-A and 25-1) from salt marsh and installing a new 3-way loadbreak switch structure (Structure #71) and a new side guy anchors at an existing structure (Structure #2). Figure 2 illustrates this work. The new loadbreak switch structure will be located outside of any wetland resource area and these minor modifications to the line configuration will greatly increase the access to the loadbreak switch while avoiding impacts to salt marsh in the event of a line outage.

All wetland resource areas within the ROW from the Golden Hills Substation to the project terminus at the Lynn Substation #21 have been field identified and flagged, and the boundaries are illustrated on the construction plans. Impacts to wetlands have been avoided or minimized to the greatest extent practicable by rerouting access around wetlands or accessing structures from a direction that avoids having to cross a wetland. Access to structures within Rumney Marsh ACEC avoids any tidal creek crossing and all equipment will be supported by swamp mats to minimize disturbance to the marsh substrate. There are 32 structures within the limits of the ACEC, 26 of which are within wetlands. Of the 26 structures in wetlands, 18 will be replaced and one will be removed entirely. A minor loss (i.e. 800 square feet) of salt marsh from the footprint of the structures will be mitigated through the removal of the old wood pole structures and restoration of the previously altered footprint. This would provide approximately a 1:1 ratio (loss:mitigation).

The refurbishment and reconductoring of the Q169 transmission line is needed to maintain the line to current design standards to continue to provide reliable electric supply to the City of Lynn and surrounding areas. The project would not result in an expansion in use of



Mr. Richard Bourre'  
Project No.: 71795  
September 13, 2006  
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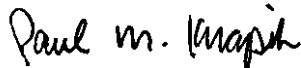
the line as structures will be replaced with those of similar design and dimension. The electric voltage of the line will also remain unchanged at 115kV. Extensive measures will be employed during construction, including avoiding crossing wetlands where practicable, using swamp mats to support construction equipment in sensitive areas, relocating structures from salt marsh to upland locations and accessing the Rumney Marsh at strategic locations that minimize impacts to the marsh and avoid crossing sensitive tidal creeks. Irregardless of MEPA review, the project will meet all other applicable state and federal agency requirements including DEP Waterways, Water Quality Certification, and Post-Closure Use permit, and ACOE PGP.

The MEPA regulations (301 CMR 11.01(2)b(3)) state that "The review thresholds *do not apply* [emphasis added] to: a lawfully existing structure, facility or activity; Routine Maintenance; a Replacement Project..." National Grid believes the proposed Project meets the MEPA definitions (301 CMR 11.02[2]) for "Replacement Project" and the definition for "Routine Maintenance." As such, we believe an ENF is not required.

If you wish to discuss this project further or require additional information, please call me at (401) 272-8100.

Very truly yours,

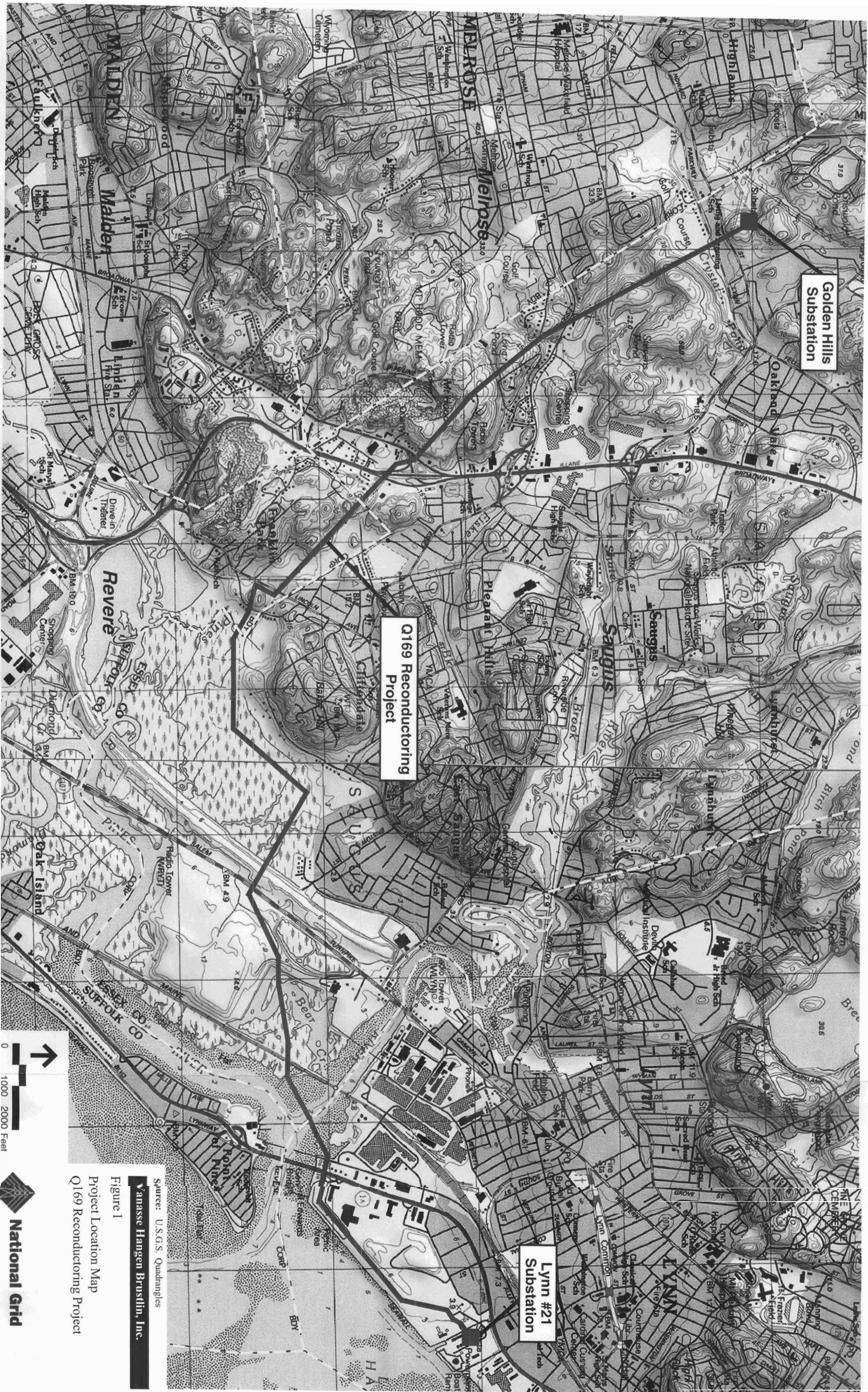
VANASSE HANGEN BRUSTLIN, INC.



Paul M. Knapik  
Senior Environmental Scientist

cc: Dawn Travalini – National Grid  
Brian Reynolds – National Grid  
Brooke Skulley – National Grid  
Elizabeth Sorensen – ACEC Program Director





Source: U.S.G.S. Quadrangles  
**Vanasse Hangen Brustlin, Inc.**  
 Figure 1  
 Project Location Map  
 Q169 Reconductoring Project





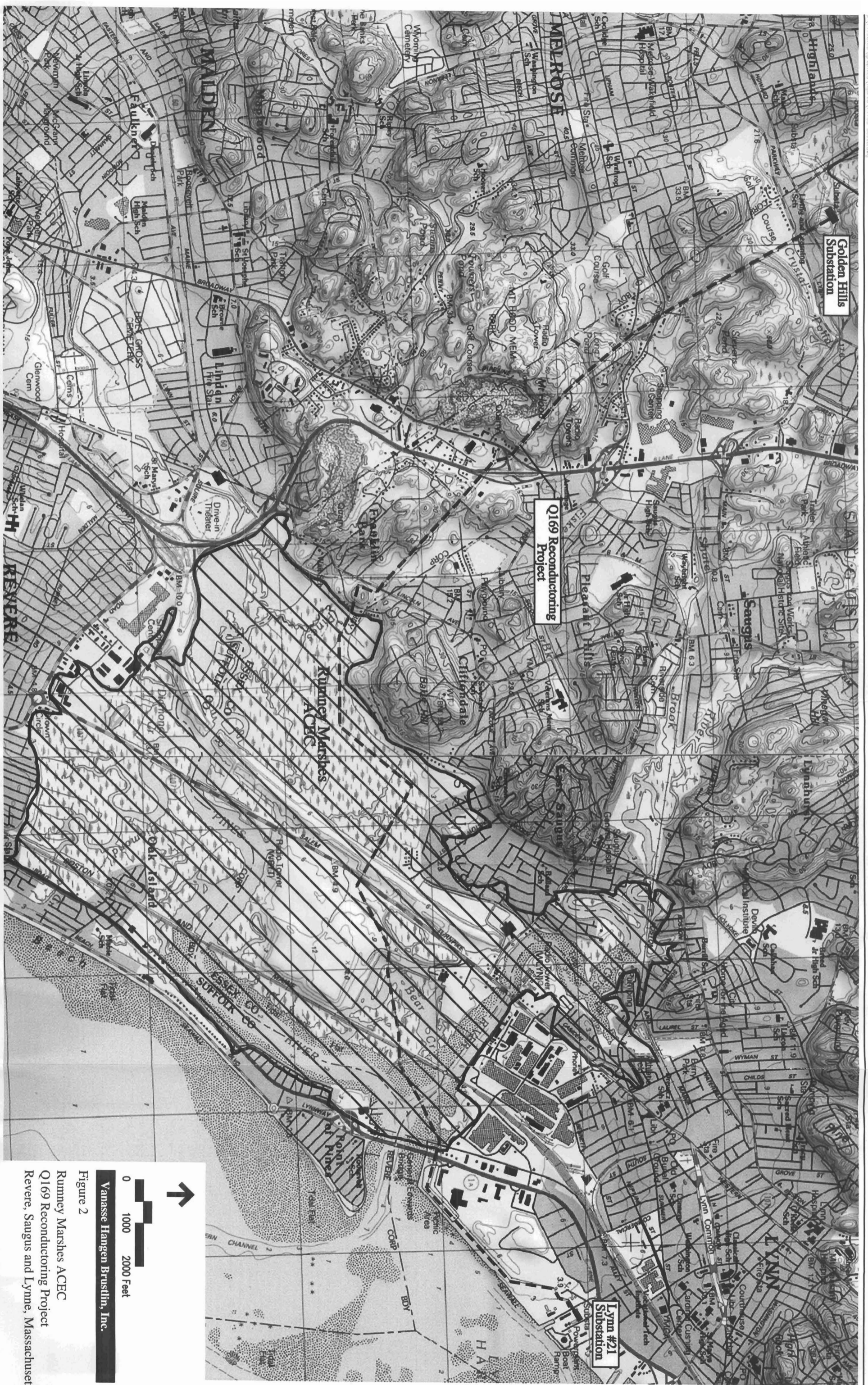
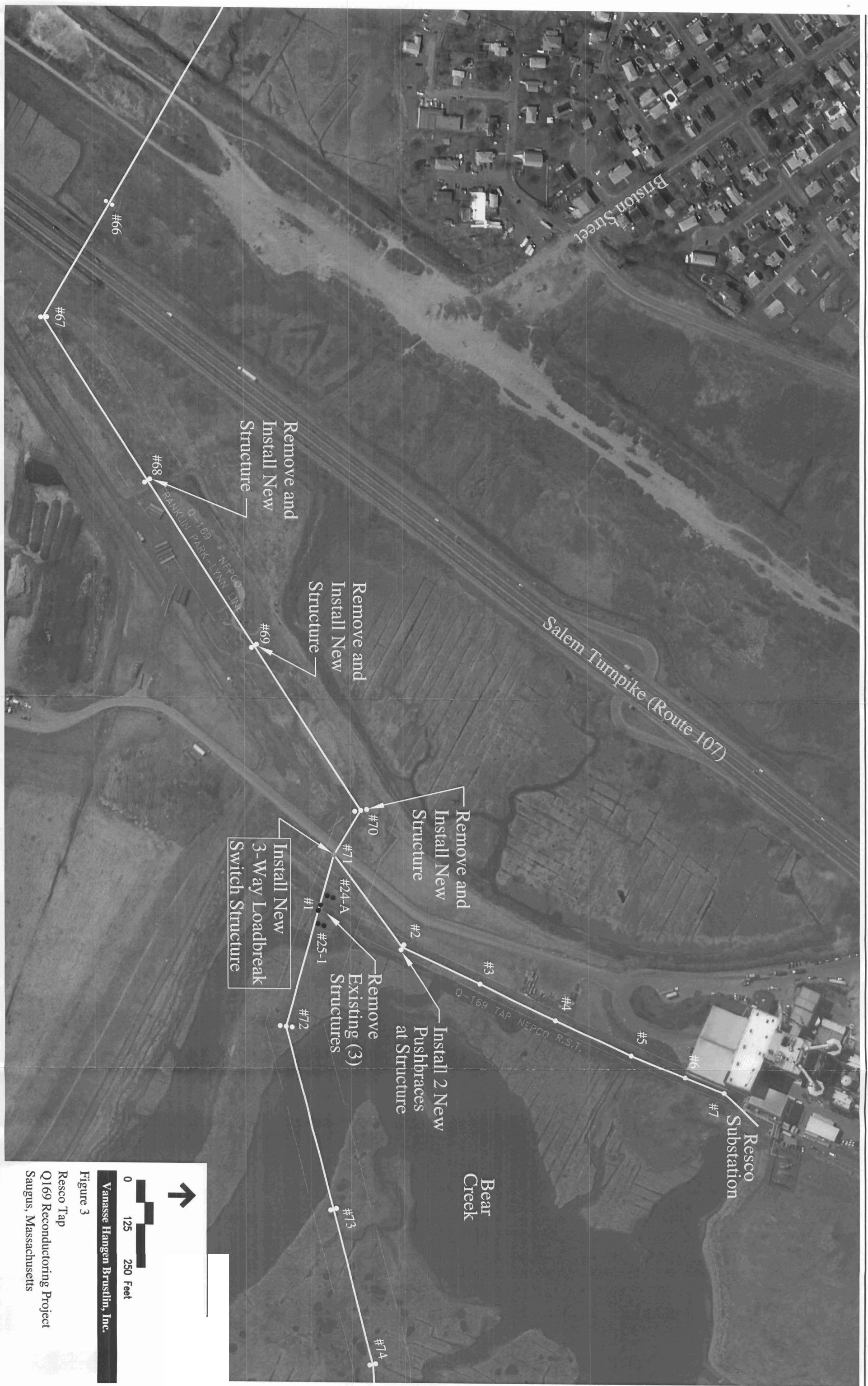


Figure 2  
 Rummy Marshes ACEC  
 Q169 Reconductoring Project  
 Revere, Saugus and Lynn, Massachusetts



Briston Street

Salem Turnpike (Route 107)

Q-169 TAP NEPCO R.S.T.

Remove and Install New Structure

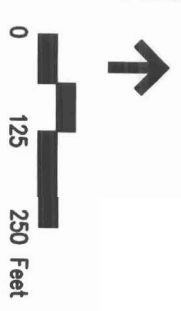
Remove and Install New Structure

Remove and Install New Structure

Install New 3-Way Loadbreak Switch Structure

Remove Existing (3) Structures

Install 2 New Pushbraces at Structure



Vanasse Hangen Brustlin, Inc.

Figure 3  
Resco Tap  
Q169 Reconductoring Project  
Saugus, Massachusetts