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Edward Neuhauser
Project Manager

February 11, 2010

Mr. Scott Deyette
Project Manager
Remedial Action Bureau C, 11th Floor
New York State Department of Environmental Conservation
625 Broadway
Albany, New York 12233-7014

Re: Troy (Liberty Street)
Non-Owned Former MGP Site
Rensselaer County
Troy, New York
NYSDEC Site No.: V00482
Remedial Investigation (RI)
Scope of Work (SOW)

Dear Mr. Deyette,

This letter presents National Grid's (Syracuse, New York) revised Scope of Work (SOW) for a Remedial Investigation (RI) of the Troy (Liberty Street) Non-Owned Former Manufactured Gas Plant (MGP) site in Troy, New York (Site).

This SOW was developed based on:

- The April 2007 Site Characterization Data Summary Report generated by EA Engineering, P.C (EA).
- Recent historical research conducted by GEI Consultants, Inc. (GEI).
- Review of the preliminary field investigation plan prepared by GEI during the October 28, 2009 meeting held at the Site.
- New York State Department of Environmental Conservation (NYSDEC) comments (letter to National Grid dated December 14, 2009) on our draft work plan submitted to NYSDEC and New York State Department of Health (NYSDOH) on November 18, 2009.

Proposed RI activities are intended to confirm and enhance EA's characterization of potential source areas and subsurface soil and groundwater quality. The activities will also generate additional data to fill apparent data gaps. In addition, the RI will include tasks typically required for RI work in New York State, for example, a Phase 1A Cultural Resources Evaluation.

The remainder of this letter provides the Site description, Site history, a summary of previous investigations, and our proposed field investigation. The methodology of each activity is also presented.

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Site Description

The Site location is presented in Figure 1. Figure 2 presents the current Site configuration.

The Site consists of four separate parcels of land, all owned by the City of Troy, as depicted on Figure 2. For the purposes of this work plan, the word "Site" refers to all four parcels.

The relevant information for each parcel is provided in the table below. The information was taken from the City of Troy on-line Assessment Information System (http://24.105.166.198/gb_deploy/mapSearch.aspx).

Parcel ID	Address	Zoning	Acres
101.69-12-1	301 Liberty Street	Vacant Commercial	1.02
101.69-12-2.1	Fifth Avenue	Vacant	0.04
101.69-12-2.2	Washington Street	Vacant	0.08
101.69-12-3	1303 Fifth Avenue	Two story res	0.06

The Site primarily consists of paved and unoccupied land in an urban residential/light commercial setting. It is bordered on all sides by city streets: Liberty Street on the north, 5th Avenue on the east, Washington Street on the south, and Hill Street on the west.

The Site is flat or nearly so. The elevation is approximately 50 feet above mean sea level (MSL). The Site is used for a Farmer's Market during the season. Two bocce courts are present in the southern portion of the Site. The courts are maintained by a local community group.

Site History

Research into the Site history was conducted by GEI. Research included file and document reviews as follow:

- State Archives, Albany New York (former gas works owners)
- Hartgen Associates, Inc. (historic map library)
- City of Troy Engineers office (maps and engineering plans)
- City of Troy Public Library (historic maps, local histories and other documents)
- On-Line Newspaper Archives (http://www.newspaperarchive.com)
- Google map resource website (http://maps.google.com/maps?hl=en&tab=wl)
- Environmental Data Resources, Inc. (EDR)
    - Historic United States Geologic Survey topographic maps dated 1898, 1928, 1950, 1953, and 1980.
    - Sanborn Fire Insurance (Sanborn) maps dated 1885, 1904, 1951, 1955, 1962, 1965, 1971.
    - Aerial photographs taken in 1978, 1986, 1994, 1995, and 2006.

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The gas works on Liberty Street in Troy were constructed in 1848 by the Troy Gas Light Company, south of the city center. Soon after the plant was built, a railroad was constructed that across the southeastern corner of the Site. The former course of the railroad is apparent in recent aerial photographs.

The gas plant consisted of coal storage sheds, a retort house, a purification house, a condenser room, and offices. The plant had two subsurface gas holders approximately 55 feet in diameter, with aboveground iron guide frames. In 1874 a gas holder was built by the Troy Gas Light Company three blocks south, on Jefferson Street. Gas from Liberty Street was likely sent to that holder for storage. The boiler room with attendant exhauster at Liberty Street was likely used to push the gas to Jefferson Street.

The configuration of the Liberty Street plant apparently did not change between 1848 and 1889, when it was shut down. The Liberty Street plant was replaced by a newer gas works on Smith Avenue in Troy in the late 1880s, concurrent with the merger of Troy Gas Light with two other gas companies (Troy Citizen's Gas Co. and Troy Fuel Gas Co.) to form the Troy Gas Company.

After the Liberty Street gas plant operation ceased, within 10 years it was demolished and the City of Troy took possession in July 1899, using the property as an open-air market. This use continues today, as an open-air farmer's market.

The online Google map resource website was also used to evaluate the Site. The specific aerial photograph at the website, dated 2008, was used as the background in Figure 3. A roughly circular ground feature is apparent in the photograph, in the northwest corner of the Site, where the 1885 Sanborn map indicates the location of purifiers. This circular feature may indicate the location of a former holder, even though it is inconsistent with the Sanborn map feature locations. The location will be investigated during the field work described later in this work plan.

Previous Investigations

EA conducted site characterization studies on behalf of National Grid. Field work was conducted in December 2005 and December 2006. EA generated a Data Summary Report in April 2007. The data summary report included (the location IDs for 2005 and 2006 work have been amended with "05" and "06" suffixes, to indicate the year work was performed):

- Test pit logs for the six test pits [TP-101(05) through TP-106 (05)] excavated at the Site in December 2005.
- Soil boring/monitoring well construction logs [B-101/MW-101 (05) through B-104/MW-104 (05), and B-105 (05), B-106 (05), and B-107 (05)] for work conducted in December 2005.
- Soil boring/monitoring well construction logs [B-201/MW-201 (06) through B-203/MW-203 (06)] for work conducted in December 2006.

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- Subsurface soil analytical data (seven primary samples and one duplicate sample in 2005; three primary samples and one duplicate sample in 2006) for samples collected from borings and test pits).
- Two rounds of groundwater analytical data collected from wells MW-101 (05) through MW-104 (05) in 2005 and 2006, and one round of groundwater data from wells MW-201 (06) through MW-203 (06) in 2006.
- Sample location and groundwater contour figures and one geologic cross-section.
- Data validation reports.

The table below provides a summary of observations in the 2005/2006 test pit, soil boring, and monitoring well logs. The EA logs are based on 1 foot increments. As such, some of the intervals in the table are based on GEI's approximation.

Location ID	Fill	Depth to Saturation	Soils	Odor Intervals	Sheen Intervals	"Oily Liquid" Intervals	Analytical Sample Intervals	Total Depth
B/MW-101 (05)	1 - ?	10.0	Silt/sand	None	None	None	22-24	30
B/MW-102 (05)	0-6.5	14	Silt/sand	12-12.5	None	none	14-16	17
B/MW-103 (05) (tar well)	0-6.5	20	Silt/sand/ clay	10-14 16.4-17.4 18-18.2 19.2-21 22.5-23.3 25-26 26.3-26.5 28.4-30	None	10-12 14.8-15.2	16-18	30
B/MW-104 (05)	none	14	Silt/sand/ clay	4.5-9 18.5-21	None	None	14-16	23.5
B-105 (05) (holder)	0-16	4.0	Fill	14-14.5		14.2.-14.5	14-16	16
B-106 (05) (holder)	0-17.5	?	Fill	None	None	None	None	17.5
B-107 (05) (tar well)	0-10.5	6.0	Fill	None	None	None	None	10.5
TP-101 (05) (holder)	0-4.5	?	Fill	None	None	None	None	4.5
TP-102 (05) (holder)	1-10.5	6.0	Fill	None	None	None	None	10.5
TP-103 (05)	0-2	?	Sand/silt	None	None	None	None	10
TP-104 (05) (tar well)	0-7.5	?	Fill	None	None	None	Composite	7.5
TP-105 (05)	0-2	?	Sand/silt	None	None	None	None	10.5
TP-106 (05)	0-6	?	Sand/silt	None	None	None	None	11.5
B/MW-201 (06) (off-site)	0-15.5	5.0	Sand/silt	None	None	None	15-16	25
B/MW-202 (06) (off-site)	0-4.0	9.5 (perched)	Sand/silt/ clay	17-17.25	None	None	8-9	20
B/MW-203 (06) (off-site)	0-1.0	9.0	Fill	13-14	15-18	None	7-8	20

Based on the test pit and soil boring logs, figures, and the data and information summarized in the table above, a number of relevant observations can be made, as follow.

- Sample recoveries were generally poor during 2005 and 2006 field work.

- Fill depths apparently outside of holder foundations and the tar well varied from 0.0 to approximately 15.5 feet below ground surface.
- Native soils were alluvial in nature, consisting of gravel, sand, silt, and some clay. In general, the subsurface soils appear to be quite permeable.
- Groundwater flow direction is from east to west, with a nearly flat gradient. The gradient is approximately 0.005 feet per foot.
- Gas holder foundation walls were not described in the logs.
- Petroleum odors were described at borings B/MW-202 and B/MW-203 (both are off-site locations). Odor observations on site were not qualified as petroleum or other type.
- The deepest boring was advanced to 30 feet below ground surface, at B/MW-103 (near the former tar well). Odors were present as deep as 30 feet. The boring did not advance beyond 30 feet into "clean" soil.
- The highest concentrations of volatile organic compounds and semi-volatile organic compounds (VOCs and SVOCs, respectively) in soils were present in borings B-103 (near the former tar well) and test pit TP-104 (also near the tar well).
- The physical impacts at these locations were described as "black liquid" and "odor". The analytical sample collected at B-103 was collected below the interval with the oily liquid. At TP-104, the analytical sample was a composite.
- At B-105 a "black, oily liquid" and "strong odor" were present from approximately 14.2 to 14.5 feet below ground surface. The analytical sample was collected from 14 to 16 feet below ground.
- Off-site well B/MW-201 is cross-gradient, not downgradient, of the tar well location, where black oily liquid was observed. The elevations of screened intervals at wells B/MW-103 and B/MW-201 are not optimal.
- Soil and groundwater analytical results generated during 2005 and 2006 demonstrated a general lack of metals, cyanide, and pesticides, and polychlorinated biphenyls.

Preliminary Conceptual Site Model

Based on site investigation to date, the subsurface at the Site consists of fill that ranges from 0.0 feet to 15 feet in thickness. The fill lies above native soils that consist primarily of sands and gravel, with some silt, and a relatively shallow and thin clay unit. The clay may have confining properties, but its depth is shallower than some observed impacts. As such, the clay unit may not play any meaningful role in limiting vertical migration at depth.

Analytical samples were not generally collected from intervals where the heaviest impacts were observed, and the full extent of impacts has not been confirmed vertically. Odors were noted to 30 feet below ground at B/MW-103(05), but the depth to "clean" was not determined.

Groundwater apparently flows generally from east to west. The gradient is rather flat. Based on the groundwater flow contours, the off-site well closest to on-site impacts (near the former tar well) isn't actually downgradient of the tar well. As such, it is currently uncertain whether dissolved impacts are migrating off site.

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In general, the impacts previously observed were minor, but these observations are inconsistent with respect to impacts typically observed at an MGP that operated for roughly 30 years. The lack of recognizable plant structures, such as the gas holder foundations, is also unusual.

Data Gaps

This section provides a brief summary of data gaps or uncertainties that should be filled or clarified during the RI.

- Existing site characterization does not indicate whether impacts are apparently MGP-related. On the broadest scale this may be addressed and clarified during investigative activities conducted by an experienced field scientist.

- At least one analytical sample should be collected from a heavily impacted interval, and analyzed for the full suite of chemical parameters known to be associated with MGP sites.

- Former holders should be confirmed by locating and exposing evidence of the structures (holder foundation walls). The apparent circular feature in the ground surface in the northwest corner of the site is a newly observed feature and needs to be investigated.

- The full extent of impacts has not been confirmed either vertically or laterally. Drilling and sampling in the tar well area should proceed to a confining unit deeper than at least 35 feet below ground, or to a confining unit or until "clean" conditions are observed and sampled.

- At least one monitoring well should be installed downgradient of confirmed source areas to establish whether there are dissolved phase MGP constituents in groundwater. Screened intervals can be carefully selected to capture the most likely depth of dissolved impacts.

Proposed Scope of Work (SOW)

Health and Safety Plan

A site-specific Health and Safety Plan (HASP) will be developed for field activities. The HASP will be consistent with National Grid requirements and guidance. The HASP will be approved by National Grid and NYSDEC.

Community Air Monitoring Plan

In accordance with NYSDOH requirements for a Community Air Monitoring Plan (CAMP), a perimeter air-monitoring plan will be developed and implemented at the Site during intrusive

field activities. Air quality monitoring will be performed for total VOCs, benzene, and dust as outlined below.

Two perimeter locations will be established each day at one upwind site perimeter location and one downwind perimeter location. An air monitoring technician will check the instrumentation at each of these locations during work. Upwind concentrations will be measured at the start of each workday and periodically thereafter to establish background conditions. Field personnel will be prepared to monitor multiple locations in the event that there is little wind or if the wind direction changes frequently.

The monitoring instruments will be calibrated at the start of each work day, and again during the day if the performance of an instrument is in question.

VOC monitoring will be performed using three field photoionization detectors (PIDs) (RAE Systems MiniRAE or equivalent). The monitoring instruments will be checked periodically by a technician, and the real-time measurements recorded.

If real-time measurements of total VOCs indicate that the action level is exceeded, then the benzene concentration will also be determined at that location using benzene-specific colorimetric tubes.

Particulate (dust) monitoring will be performed during drilling activity at the Site. Two particulate monitors (TSI DustTrak or equivalent) will be used for continuous real-time dust monitoring. The monitoring instruments will be checked by a technician periodically, and the real-time measurements recorded. In addition, fugitive dust migration will be visually assessed during all work activities, and the observations recorded.

The following levels should not be exceeded for more than 15 consecutive minutes at the downwind perimeter of the site:

- Benzene — 1 part per million (ppm)
- Total VOCs — 5 ppm
- Dust — 150 micrograms per cubic meter ($\mu g/m^3$)

The action levels cited here are above (in addition to) the background ambient (upwind) concentration.

Monitoring equipment will have an audible alarm that activates if air quality exceeds "alert" levels. The alert level for VOCs is 3.7 ppm (75% of the action level). The alert level for dust is 100 $\mu g/m^3$.

Potential dust migration will be visually assessed during all work activities. If the downwind dust level is 150 $\mu g/m^3$ greater than the background level for a 15-minute period, or if airborne dust is observed leaving the work area, then dust suppression techniques will be employed. Work may continue with dust suppression techniques provided that downwind dust levels do

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not exceed 150 $\mu g/m^3$ above the background level and provided that no visible dust is migrating from the work area.

Typical emission control measures may include:

- Apply water for dust suppression.
- Relocate operations, if applicable.
- Reassess the existing control measures.

Proposed Test Pits

Seven test pits will be excavated in the locations shown on Figure 3. The test pit location rationale is provided in the table below.

Test Pit Location	Location Rationale
TP-201 (09)	Evaluate surficial feature in aerial photograph.
TP-202 (09)	Evaluate surficial feature in aerial photograph.
TP-203 (09)	Confirm holder locations and attempt to expose foundation walls.
TP-204 (09)	Confirm holder location and attempt to expose foundation wall.
TP-205 (09)	Confirm holder location and attempt to expose foundation wall.
TP-206 (09)	Evaluate subsurface at former condenser room location.
TP-207 (09)	Evaluate subsurface at former alleyway behind retort.

Test pits will be excavated using a rubber-tired backhoe to better assess and document the location, depth, and condition of the former gas holder foundations and tar well structures. The test pits will be excavated as deeply as possible. A GEI scientist will supervise, observe, and document the test pit activities with field notes and digital photographs.

At least one analytical sample will be collected in each holder. The purpose will be to establish and document the magnitude of potential impacts. These samples will be analyzed for the most prevalent MGP compounds of benzene, ethylbenzene, toluene, and xylene (BTEX) and the polycyclic aromatic hydrocarbons (PAHs). BTEX will be analyzed using United States Environmental Protection Agency (EPA) Method 8260C. PAHs will be analyzed using EPA Method 8270C. If test pits cannot advance deep enough to encounter impacts (due to shallow water or caving of the test pit), the analytical samples will be collected during soil boring operations (described below).

Samples will be analyzed by Test America (TA), in Shelton, Connecticut. TA Connecticut is accredited by the NYSDOH Environmental Laboratory Approval Program (ELAP) for analysis of non potable water, potable water, and solid and hazardous waste.

During test pitting operations, excavated soils will be placed on a waterproof tarp. The shallower soils, expected to contain the least potential impacts, will be used as a "bed" for

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deeper soils. When the test pits are back-filled, the deeper soils will be placed back in the pit first, and compacted, to ensure that all remaining soils can be returned to the pit.

Pavement will be saw-cut before excavations begin. When the test pits are completed, the locations will be restored as requested by City of Troy officials and as allowed by seasonal constraints (i.e., a crushed stone cap may be used if hot asphalt is not commercially available). Pavement removed to provide access to the subsurface will be recycled if possible. Otherwise the pavement will be disposed of as construction debris at an appropriate landfill. If necessary, National Grid/GEI will return to the site at a later date when hot asphalt is available to restore the paved area.

Subsurface Soil Borings

Eight borings will be installed at the locations shown on Figure 3. A Geoprobe® sampling grid will be applied in the tar well area. The soil boring location rationale is provided in the table below.

Soil Boring Location	Location Rationale
B-301 (09)	Evaluate surficial feature in aerial photograph. Determine depth and potential impacts.
B-302 (09)	Evaluate surficial feature in aerial photograph. Determine depth and potential impacts.
B-303 (09)	Confirm holder location, depth, and potential impacts.
B-304 (09)	Confirm holder location, depth, and potential impacts.
B-305 (09)	Confirm holder location, depth, and potential impacts.
B-306 (09)	Confirm holder location, depth, and potential impacts.
B/MW-301 (09)	Determine groundwater conditions upgradient of holders.
B/MW-302 (09)	Determine groundwater conditions upgradient of tar well.
B/MW-303 (09)	Determine groundwater conditions directly downgradient of former tar well.
Geoprobe® Grid	12 borings to 35 feet below ground to enhance impact delineation in tar well area.

Soil borings will be sampled using a truck-mounted Geoprobe® sampler. All borings outside of holders will be advanced to a confining unit or a maximum of 30 feet below ground, to ensure that adequate depth is attained to investigate impacts. In the tar well area all grid borings will be advanced to 35 feet below ground, or a deeper "clean" depth, to ensure that olfactory impacts are bracketed.

Each soil boring sample will be continuously logged, screened with an organic vapor meter, and photographed. If visual or olfactory impacts are apparent in any of the proposed boring locations, additional borings will be installed at "step-out" locations to refine delineation of subsurface impacts.

At least one (but as many as three) subsurface soil analytical samples will be collected from each boring to document subsurface soil quality, evaluate whether shallow impacts may have an effect on deeper soils, and/or demonstrate the maximum depth of impacts.

At least one sample will be collected from a heavily impacted interval and analyzed for a "full" suite of compounds: Target Compound List (TCL) VOCs (EPA Method 8260B), TCL SVOCs (EPA Method 9270C), Target Analyte List (TAL) metals (Method 6000/7000 series), and cyanide (Method 9012).

Most samples will be analyzed only for BTEX (EPA Method 8260B) and PAHs (EPA Method 8270C). Appropriate quality assurance/quality control (QA/QC) samples will be collected and analyzed.

Samples will be analyzed by TA, in Shelton, Connecticut.

Monitoring wells will be installed with a truck-mounted hollow-stem auger rig to provide access to groundwater samples and assist in completing delineation of groundwater impacts. The wells will be constructed with 2-inch diameter, 10 feet long, 10 slot screens (0.01-inch slot size), and manufactured of polyvinyl chloride (PVC). The sand pack will consist of #1 Morie sand extending to at least 1 foot above the screen (2 feet maximum). A 1- to 2-foot bentonite seal will be placed above the sand pack, and it will be hydrated before the remaining annulus is tremie-grouted to ground surface. The wells will be installed so that the well screen straddles the water table. Well construction will be finished with flush-mount locking well covers. If sampling observations reveal the presence of non-aqueous phase liquid (NAPL) at the well location, a 2-foot "sump" will be attached to the base of the well to capture potentially flowable NAPL.

The wells will be developed using the surge and pump method, unless excessive NAPL is known to be present. Pumping will continue until the groundwater turbidity is 50 Nephelometric Turbidity Units (NTUs) or a minimum of 10 well volumes have been removed. If excessive NAPL is present, the well will not be developed to avoid generation of liquid NAPL and contamination of all media that development liquids would contact. Groundwater samples are not typically collected at NAPL containing wells in any case, because elevated impacts to groundwater are assumed.

All drill cuttings will be containerized in a "roll-off" container on-site or in steel drums until proper disposal is arranged. Wastewater will be stored on-site in a bermed poly tank until it can be properly disposed of.

Groundwater and Groundwater Sampling

Prior to groundwater sample collection, a complete round of groundwater level measurements will be recorded. Wells will also be screened for the presence of NAPL. If NAPL is present, an oil/water interface probe will be used to determine the NAPL column thickness.

Groundwater samples will be collected at existing and new wells a minimum of two weeks after well development of newly installed wells. A second round of samples will be collected approximately six months later.

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The samples will be collected using low-flow sampling methods and purge water will be continuously monitored for pH, dissolved oxygen (DO), temperature, conductivity, and turbidity. When the purge parameters have stabilized to +/- 10%, samples will be collected by directly filling clean sample containers provided by the laboratory. Samples will be stored with ice until they are packed with fresh ice for overnight shipping to the laboratory.

The samples will be analyzed for a "full" suite of compounds: TCL VOCs (EPA Method 8260B), TCL SVOCs (EPA Method 9270C), TAL metals (Method 6000/7000 series), and cyanide (Method 9012).

Soil Vapor Sampling

There is no current plan to collect soil vapor samples at the site. However, when field work is complete and all data are reduced and interpreted, it is possible that soil vapor sampling may be required by NYSDEC. If so, it will be addressed during supplemental field investigation.

Surveying

All new sample points will be surveyed by Delta Engineers, Inc. (formerly Snyder Engineering Associates) to document the locations and elevations.

Cultural Resources Evaluation

As required for RI work in New York State, a Phase 1A Cultural Resources Evaluation will be completed for the Site. Hartgen Archeological Associates will perform the survey.

Human Health Exposure Assessment

A qualitative human health exposure assessment will be conducted at the site to evaluate potential exposures.

Ecological Exposure Assessment

Based on current knowledge and NYSDEC's Division of Environmental Remediation, *Draft DER-10 Technical Guidance for Site Investigation and Remediation* (November 2009, Section 3.10), no ecological investigation is necessary or required. The rationale for such a conclusion will be provided in the Remedial Investigation report.

Access

Access will be negotiated with the City of Troy and off-site landowners.

Reporting

When field work is completed (including the first round groundwater sampling), the resulting analytical data will be validated and the site physical information will be reduced. A data summary report will be generated and provided to NYSDEC for review. If NYSDEC determines that additional investigation work is necessary (for example, soil vapor sampling)

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and National Grid agrees, the supplemental work will be conducted before developing a Remedial Investigation report.

Once NYSDEC has determined that remedial investigation is complete, a Remedial Investigation report will be generated. The report will provide:

- Executive Summary.
- Methods and equipment used to generate new information.
- Updated and expanded physical and chemical site characterization.
- Cultural Resources Evaluation.
- Qualitative human health and exposure assessment (and rationale for lack of ecological assessment).
- Conclusions and recommendations.

The data and information with a discussion of their significance will be compiled with figures and tables, as appropriate, and presented to NYSDEC for comment. The revised report will include appendices that contain copies of relevant documents such as Sanborn maps, groundwater measurements and elevations, and Data Usability Summary reports.

Well Abandonment, Troy Jefferson Street

Monitoring wells at the Troy Jefferson Street former holder site will be abandoned during the same field mobilization as Liberty Street. The Jefferson Street wells will be abandoned by tremie-grouting them to ground surface and removing the wellhead/manhole covers.

Please call me (315-428-3355) or Jerry Zak (860-368-5404) if you have any questions or require additional information.

Sincerely,

FOR

Edward Neuhauser
National Grid Project Manager

Enclosures
c: B. Donovan, Capital District Office, NYSDOH
J. Zak, GEI
J. Ripp, GEI
D. Blicharz, GEI

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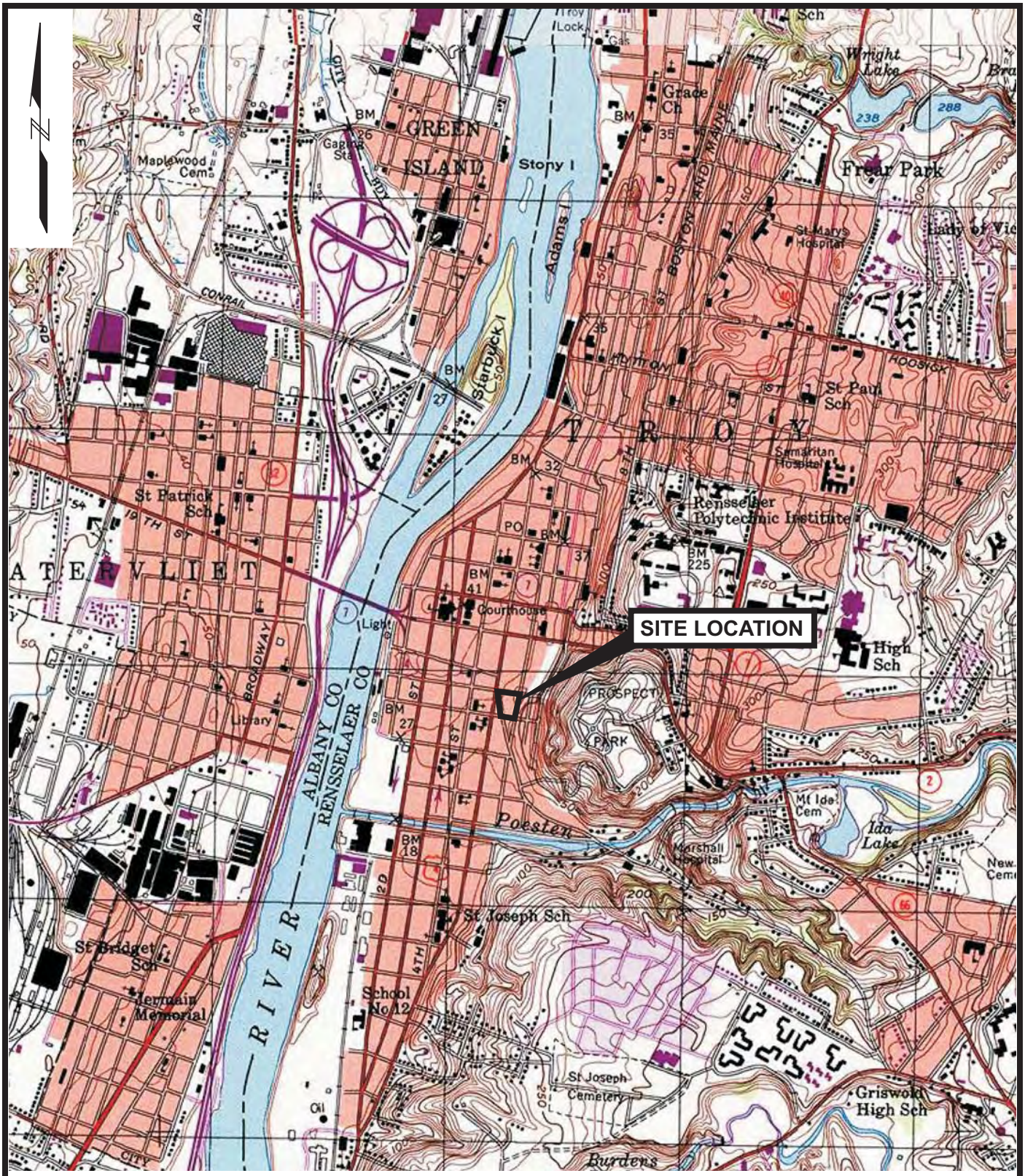


SOURCE: Map created with TOPO! ® ©2001 National Geographic (www.nationalgeographic.com/topo)"

0 2000 4000

SCALE, FEET

REMEDIAL INVESTIGATION
TROY (LIBERTY ST.) NON-OWNED FORMER MGP SITE
TROY, NEW YORK

nationalgrid

GEI Consultants

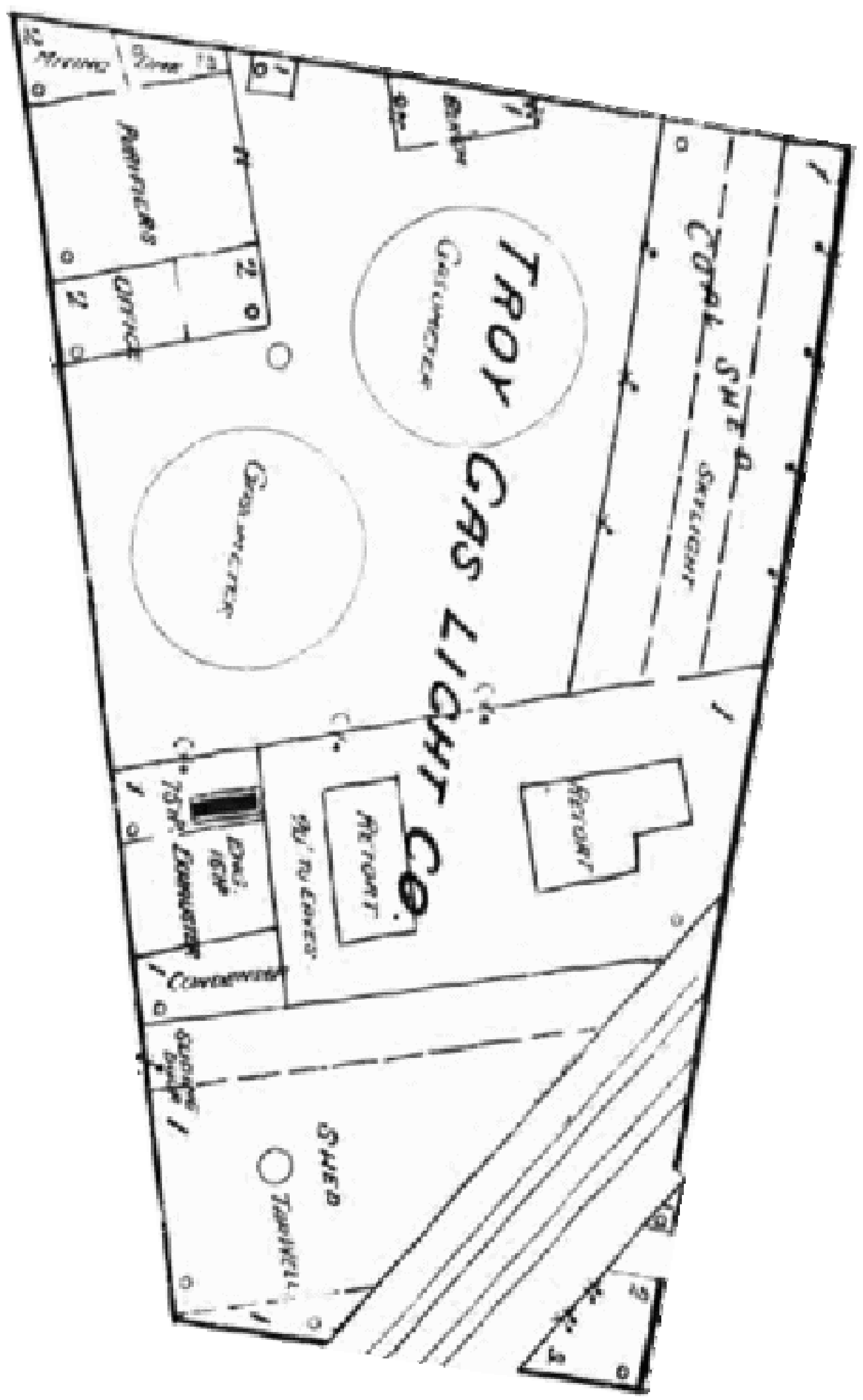
SITE LOCATION MAP

Project 093300

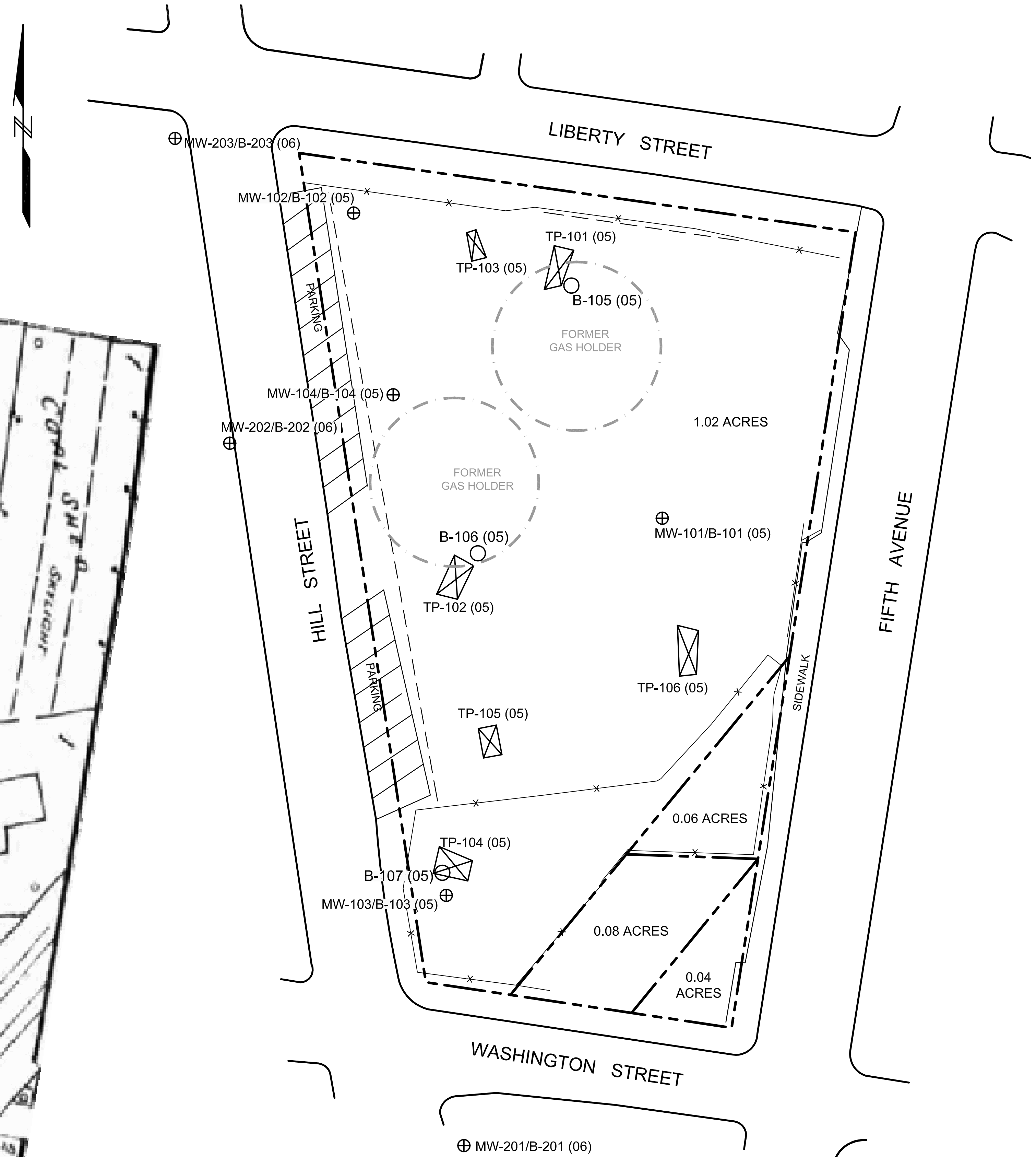
February 2010

Figure 1

I:\GEI\National Grid\TROY\LIBERTY_ST\RI\1-2010\LIBERTY ST-SITE LOCATION.CDR



1885 SANBORN FIRE INSURANCE MAP



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SCALE, FEET

LEGEND:

	APPROXIMATE PROPERTY LINE
	FORMER STRUCTURE
	CHAIN-LINK FENCE
	GUARD RAIL
	EDGE OF PAVEMENT
⊕ MW-101/B-101 (05)	MONITORING WELL LOCATION (2005)
⊕ MW-202/B-202 (06)	MONITORING WELL LOCATION (2006)
○ B-105 (05)	SOIL BORING LOCATION (2005)
TP-101 (05)	TEST PIT LOCATION (2005)

NOTES:

1. HORIZONTAL COORDINATES ARE REPORTED IN FEET ON THE NEW YORK STATE PLANE COORDINATE SYSTEM, EASTERN ZONE (NAD 83).
2. ELEVATIONS ARE IN FEET ABOVE MEAN SEA LEVEL AND ARE BASED UPON NGVD 29 TRANSFERRED TO THE SITE FROM NGS DISK "P33" WITH A REPORTED ELEVATION OF 41.09 FT.
3. SITE SURVEYED IN DECEMBER 2005 BY "M.J. ENGINEERING AND LAND SURVEYING, P.C."
4. ALL PARCELS OWNED BY CITY OF TROY. PARCEL BOUNDARIES AND AREA BASED ON CITY OF TROY ASSESSMENT INFORMATION SYSTEM.

SOURCE:

BASE MAP TAKEN FROM *DATA SUMMARY REPORT* PROVIDED BY EA ENGINEERING FOR NATIONAL GRID, 4/11/2007.

REMEDIAL INVESTIGATION
TROY (LIBERTY STREET) NON-OWNED FORMER MGP SITE
TROY, NEW YORK

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HISTORIC FEATURES AND PREVIOUS SAMPLING LOCATIONS

February 2010 Figure 2

1885 SANBORN FIRE INSURANCE MAP

0 50 100

SCALE, FEET

LEGEND:

- APPROXIMATE PROPERTY LINE
- FORMER STRUCTURE
- CHAIN-LINK FENCE
- GUARD RAIL
- EDGE OF PAVEMENT
- MW-101/B-101 (05) — MONITORING WELL LOCATION (2005)
- MW-202/B-202 (06) — MONITORING WELL LOCATION (2006)
- B-105 (05) — SOIL BORING LOCATION (2005)
- TP-101 (05) — TEST PIT LOCATION (2005)

RI SAMPLE LEGEND

- B/MW-301 (09) — PROPOSED MONITORING WELL/ TEST BORING LOCATION (2009)
- B-301 (09) — PROPOSED TEST BORING LOCATION (2009)
- PROPOSED GEOPROBE LOCATION (2009)
- TP-201 (09) — PROPOSED TEST PIT LOCATION (2009)
- WT — WATER TABLE (IN FEET)

NOTES:

1. HORIZONTAL COORDINATES ARE REPORTED IN FEET ON THE NEW YORK STATE PLANE COORDINATE SYSTEM, EASTERN ZONE (NAD 83).
2. ELEVATIONS ARE IN FEET ABOVE MEAN SEA LEVEL AND ARE BASED UPON NGVD 29 TRANSFERRED TO THE SITE FROM NGS DISK "P33" WITH A REPORTED ELEVATION OF 41.09 FT.
3. SITE SURVEYED IN DECEMBER 2005 BY "M.J. ENGINEERING AND LAND SURVEYING, P.C."
4. ALL PARCELS OWNED BY CITY OF TROY. PARCEL BOUNDARIES AND AREA BASED ON CITY OF TROY ASSESSMENT INFORMATION SYSTEM.

SOURCE:

BASE MAP TAKEN FROM *DATA SUMMARY REPORT* PROVIDED BY EA ENGINEERING FOR NATIONAL GRID, 4/11/2007.

REMEDIAL INVESTIGATION
TROY (LIBERTY STREET) NON-OWNED FORMER MGP SITE
TROY, NEW YORK

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AERIAL VIEW AND PROPOSED SAMPLING LOCATIONS

February 2010 Figure 3

I:\GEI\National Grid\TROY\LIBERTY_ST\RI\1-2010\ TROY-Liberty St Historic.dwg \Feb 10, 2010