



Geotechnical
Environmental and
Water Resources
Engineering

**Quarterly Groundwater Monitoring Report
Fourth Quarter (Q4) 2009**

Sag Harbor Former MGP Site

Village of Sag Harbor
Suffolk County, Long Island, NY
Site ID No. 1-52-159

Submitted to:
National Grid
175 East Old Country Road
Hicksville, NY

Submitted by:
GEI Consultants, Inc.
110 Walt Whitman Road
Huntington Station, NY 11746
631-760-9300

April 2010
093190-2-1203

Table of Contents

1. Sag Harbor Site and Adjacent Off-Site Areas **2**

Tables

- 1 Water Level Measurements and Calculated Elevations – Q4 2009
- 2 Summary of Historical NAPL Observations
- 3 Summary of BTEX, MTBE, and PAH Results – Q4 2009
- 4 Summary of Historical Total BTEX Results
- 5 Summary of Historical Total PAH Results

Figures

- 1 Site Location Map
- 2 Monitoring Well Location Map
- 3 Shallow Groundwater Contours – High Tide – 12/15/09
- 4 Shallow Groundwater Contours – Low Tide – 12/15/09
- 5 Intermediate Groundwater Contours – High Tide – 12/15/09
- 6 Intermediate Groundwater Contours – Low Tide – 12/15/09

H:\WPROC\Project\KEYSPAN\Sag Harbor\Quarterly Monitoring\2009\Q4 2009\Sag Harbor Q4 2009 GW Report Text final.docx

1. Sag Harbor Site and Adjacent Off-Site Areas

Q4 2009 Groundwater Monitoring Event Summary

Event Date:	December 15-21, 2009
Site Phase:	Quarterly groundwater monitoring
Location:	The location of the Sag Harbor Former MGP Site is depicted on Figure 1 .
Monitoring Program:	<p><i>Number of Wells:</i> A total of 16 monitoring wells are currently located in the vicinity of the site (see Figure 2). MW-05 was destroyed sometime between March and June 2007. Monitoring wells MW-01, MW-02, MW-03, MW-04, MW-06, SHMW-01S, SHMW-01I, SHMW-02I, SHMW-02D, SHMW-04S, SHMW-04I, SHMW-05S, SHMW-05I, SHMW-06S, and SHMW-06I were abandoned prior to the Q1 2009 sampling event due to the remediation activities being conducted at the site.</p>
	<p><i>Hydrological Data:</i> Groundwater levels were measured at all 16 remaining monitoring wells. Depth to groundwater and calculated groundwater elevations are provided on Table 1. The measuring points of MW-07S, MW-07I, and MW-09S have been altered and therefore, the calculated groundwater elevations are not accurate. As a result, they were not used in preparation of the groundwater contour maps. Shallow and intermediate groundwater contours for high and low tidal conditions are depicted in Figures 3 through 6. The groundwater flow direction was generally to the west towards Sag Harbor Cove. The ranges in depth to water and water table elevation data, as well as calculated hydraulic gradients for the shallow and intermediate portions of the aquifer in Q4 2009 were as follows:</p> <ul style="list-style-type: none">▪ Depth to the water table in shallow wells at high tide ranged from -0.08 (SHMW-13S) to 4.28 (SHMW-11S) feet below the well measuring point. SHMW-12S was artesian and

- SHMW-08S was slightly artesian at high tide.
- Water table elevations in shallow wells at high tide ranged from **1.46** (SHMW-11S) to **5.26** (SHMW-8S) feet above mean sea level (MSL).
 - Depth to the water table in shallow wells at low tide ranged from **-0.06** (SHMW-13S) to **5.38** (SHMW-11S) feet below the well measuring point. SHMW-12S was artesian and SHMW-08S was slightly artesian at low tide.
 - Water table elevations in shallow wells at low tide ranged from **0.36** (SHMW-11S) to **5.27** (SHMW-8S) feet above MSL.
 - The calculated shallow hydraulic gradient for high tide was **0.0144** feet/foot. The calculated shallow hydraulic gradient for low tide was **0.0180** feet/foot.
 - Depth to groundwater in intermediate wells at high tide ranged from **-0.94** (SHMW-13I) to **4.11** (SHMW-11I) feet below the well measuring point. SHMW-12I was artesian at high tide.
 - Groundwater elevations in intermediate wells at high tide ranged from **1.68** (SHMW-11I) to **3.78** (SHMW-08I) feet above MSL.
 - Depth to groundwater in intermediate wells at low tide ranged from **0.10** (SHMW-12I) to **5.85** (SHMW-11I) feet below the well measuring point.
 - Groundwater elevations in intermediate wells at low tide ranged from **-0.06** (SHMW-11I) to **3.19** (SHMW-12I) feet above MSL.
 - The calculated intermediate hydraulic gradient for high tide was **0.0096** feet/foot. The calculated intermediate hydraulic gradient for low tide was **0.0160** feet/foot.

*NAPL
Thickness
Data:*

Table 2 provides a summary of historical non-aqueous phase liquid (NAPL) data. In Q4 2009, all of the monitoring wells were monitored for NAPL as part of the groundwater monitoring program. There was no evidence of light non-aqueous phase liquid (LNAPL) or dense non-aqueous phase liquid (DNAPL) in any of the monitoring wells during Q4 2009.

Chemical Data: A total of 15 monitoring wells were sampled for BTEX and MTBE (EPA Method 8260), and PAHs (EPA Method 8270). Well SHMW-07I was not sampled because it had approximately 10 feet of sand in the bottom of the well. Well sampling was conducted on December 16, 17, and 21, 2009 and included all accessible wells on the quarterly sampling list.

Chemical data for Q4 2009 (see **Table 3**) indicate:

- Total BTEX concentrations ranged from less than method detection limits in nine of the 15 wells sampled to **2,183** micrograms per liter ($\mu\text{g/L}$) in SHMW-07S.
- Total PAH concentrations ranged from less than method detection limits in 11 of the 15 wells sampled to **5,286** $\mu\text{g/L}$ in SHMW-07S.

Data Trend Analysis:

In general, fairly consistent BTEX and PAH concentrations (see historical data in **Tables 4** and **5**) have been detected in shallow groundwater on and adjacent to the site when compared to previous sampling events. In Q4 2009, BTEX concentrations were below laboratory detection limits in three of the eight shallow wells sampled. In four of the five shallow wells that had detectable BTEX concentrations (SHMW-03S, SHMW-08S, SHMW-09S, and SHMW-12S), the BTEX concentrations detected were lower than the respective mean concentrations. In the remaining well (SHMW-07S), although the BTEX concentration was above the mean for this well, the concentration decreased slightly from the previous sampling event and was within the historical range. Between Q3 and Q4 2009, BTEX concentrations decreased in three of the eight shallow wells sampled in each quarter (SHMW-07S, SHMW-08S, and SHMW-09S). Minor increases in BTEX concentrations were observed in shallow wells SHMW-03S and SHMW-12S.

BTEX concentrations were below laboratory detection limits in six of the seven intermediate wells sampled in Q4 2009. A low concentration ($2 \mu\text{g/L}$) was found in SHMW-12I; however, this concentration was below the mean and within the range for this well.

In Q4 2009, PAH concentrations were below laboratory detection limits in four of the eight shallow wells sampled. In one of the four shallow wells (SHMW-09S) that had detectable PAH concentrations, the PAH concentration was lower than its respective mean. In the remaining three wells that had detectable PAH concentrations (SHMW-07S, SHMW-08S, and SHMW-12S), the concentrations

were above the mean in SHMW-07S and SHMW-12S; however, the concentrations were within the historical range for these wells. In SHMW-08S, the PAH concentration was the highest recorded (112 µg/L) at this well. Between Q3 and Q4 2009, PAH concentrations increased in four of the eight shallow wells sampled in each quarter (SHMW-07S, SHMW-08S, SHMW-09S, and SHMW-12S).

PAH concentrations were below the laboratory detection limits in all of intermediate wells sampled in Q4 2009.

MTBE concentrations remained below laboratory detection limits in all of the 15 wells sampled.

Variable dissolved constituent concentrations detected in shallow groundwater over the past sampling events are likely due, in part, to the rise and fall of the water table resulting in periods of both decreased and increased dissolution of adsorbed BTEX and PAHs trapped beneath the groundwater/air interface.

The historical NAPL data (see **Table 2**) indicate that measurable quantities of NAPL have primarily been found in two on-site shallow monitoring wells (MW-02 and MW-05), one on-site intermediate well (SHMW-02I), and one off-site shallow well (SHMW-04S). Historically, trace amounts of NAPL have been found in two on-site shallow wells (MW-03 and MW-04), and one off-site shallow well (SHMW-06S). All of the wells in which NAPL has been historically detected were either destroyed or abandoned prior to the Q4 2009 groundwater monitoring event.

Current Plans: Continue quarterly groundwater and NAPL monitoring at accessible monitoring wells. A replacement monitoring well installation work plan will be submitted to NYSDEC in mid Q2 2010. It is anticipated that the replacement groundwater and NAPL monitoring wells will be installed and sampled in late Q2 2010. All existing and new wells will be surveyed after the new wells have been installed.

Tables

Table 1
Sag Harbor Former MGP Site
Groundwater Monitoring Program
Water Level Measurements and Calculated Water Elevations - Q4 2009

Well ID	Top of Casing Elevation (ft)	Tide	Time	12/15/2009		Notes
				Depth to Water (ft)	Groundwater Elevation (ft)	
MW-01	5.09	High	--	--	--	Well abandoned
		Low	--	--	--	
MW-02	4.48	High	--	--	--	Well abandoned
		Low	--	--	--	
MW-03	4.59	High	--	--	--	Well abandoned
		Low	--	--	--	
MW-04	4.13	High	--	--	--	Well abandoned
		Low	--	--	--	
MW-05	5.07	High	--	--	--	Well destroyed
		Low	--	--	--	
MW-06	5.38	High	--	--	--	Well abandoned
		Low	--	--	--	
SHMW-01S	4.52	High	--	--	--	Well abandoned
		Low	--	--	--	
SHMW-01I	4.47	High	--	--	--	Well abandoned
		Low	--	--	--	
SHMW-02I	5.22	High	--	--	--	Well abandoned
		Low	--	--	--	
SHMW-02D	5.19	High	--	--	--	Well abandoned
		Low	--	--	--	
SHMW-03S	5.43	High	849	2.84	2.59	
		Low	1528	3.11	2.32	
SHMW-03I	5.43	High	849	1.76	3.67	
		Low	1528	2.88	2.55	
SHMW-04S	5.71	High	--	--	--	Well abandoned
		Low	--	--	--	
SHMW-04I	5.71	High	--	--	--	Well abandoned
		Low	--	--	--	
SHMW-05S	6.23	High	--	--	--	Well abandoned
		Low	--	--	--	
SHMW-05I	6.14	High	--	--	--	Well abandoned
		Low	--	--	--	
SHMW-06S	4.44	High	--	--	--	Well abandoned
		Low	--	--	--	
SHMW-06I	4.43	High	--	--	--	Well abandoned
		Low	--	--	--	
SHMW-07S	5.05	High	905	0.46	4.59	Measuring point lowered (well to be resurveyed)
		Low	1548	0.20	4.85	
SHMW-07I	5.00	High	905	1.38	3.62	Measuring point lowered (well to be resurveyed)
		Low	1549	2.11	2.89	
SHMW-08S	5.26	High	909	0.00	5.26	Water level at top of casing (very slight artesian at high tide/ slight artesian at low tide)
		Low	1556	-0.01	5.27	
SHMW-08I	5.08	High	910	1.30	3.78	
		Low	1557	2.29	2.79	
SHMW-09S	4.36	High	855	1.14	3.22	Measuring point lowered (well to be resurveyed)
		Low	1539	0.84	3.52	
SHMW-09I	4.41	High	856	1.05	3.36	
		Low	1540	1.59	2.82	
SHMW-10S	5.91	High	851	3.81	2.10	
		Low	1531	4.67	1.24	
SHMW-10I	5.89	High	851	2.88	3.01	
		Low	1532	5.08	0.81	
SHMW-11S	5.74	High	853	4.28	1.46	
		Low	1536	5.38	0.36	
SHMW-11I	5.79	High	853	4.11	1.68	
		Low	1536	5.85	-0.06	
SHMW-12S	3.42	High	902	-0.02	3.44	Artesian for high and low tides
		Low	1543	-0.28	3.70	
SHMW-12I	3.29	High	903	-0.12	3.41	Artesian for high tide only
		Low	1544	0.10	3.19	
SHMW-13S	4.68	High	907	0.08	4.60	
		Low	1552	0.06	4.62	
SHMW-13I	4.70	High	908	0.94	3.76	
		Low	1553	1.73	2.97	

-- Not Available

Table 2
Sag Harbor Former MGP Site
Groundwater Monitoring Program
Summary of Historical NAPL Observations

Well ID	May 2002 Observations	May 2004 Observations	August 2004 Observations	October 2004 Observations	November 2004 Observations	December 2004 Observations	January 2005 Observations	February 2005 Observations	March 2005 Observations	April/Q1 2005 Observations	June/Q2 2005 Observations	September/Q3 2005 Observations	December/Q4 2005 Observations	March/Q1 2006 Observations
MW-01	None Observed	Odor	None Observed	Not Checked	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
MW-02	Approx. 0.16' of DNAPL, sheen on surface	Approx. 0.15' of DNAPL, sheen on surface	Approx. 0.29' of DNAPL	Approx. 0.2' of DNAPL	Approx. 0.01' of DNAPL, 1.0' intermittent DNAPL	Approx. 0.1' of DNAPL	Approx. 0.11' of DNAPL	Approx. 0.16' of DNAPL	Approx. 0.15' of DNAPL	Approx. 0.15' of DNAPL	Trace DNAPL at bottom of tape	Approx. 0.13' of DNAPL	Approx. 0.09' DNAPL, naphthalene-like odor	Approx. 0.01' DNAPL
MW-03	Intermittent DNAPL for 1.5'	Approx. 0.03' of DNAPL, naphthalene-like odor	NR	Trace DNAPL at bottom of tape	Trace DNAPL at bottom of tape	Trace DNAPL at bottom of tape	Trace DNAPL at bottom of tape	Trace DNAPL at bottom of tape	Trace DNAPL at bottom of tape	Trace DNAPL at bottom of tape	Trace DNAPL at bottom of tape	Trace DNAPL at bottom of tape	None, naphthalene-like odor	No DNAPL observed
MW-04	None Observed	Approx. 0.02' of DNAPL, naphthalene-like odor	NR	Trace DNAPL at bottom of tape	None Observed	None Observed	Trace DNAPL at bottom of tape	Not Checked (under snow pile)	None Observed	None Observed	None Observed	Trace DNAPL at bottom of tape	Trace DNAPL at bottom of tape	Trace DNAPL
MW-05	Blebs of LNAPL	Approx. 1.0' of DNAPL, naphthalene-like odor	Approx. 0.75' of DNAPL	Approx. 4.5' of LNAPL/NAPL	Approx. 0.35' of DNAPL, 3.6' intermittent DNAPL	Trace DNAPL at bottom of tape, bubbles in WC	Trace DNAPL at bottom of tape	Approx. 0.6' of DNAPL, approx. 0.02' of LNAPL	Sporadic DNAPL, approx. 0.1' of LNAPL	Sporadic DNAPL, approx. 0.1' of LNAPL	Approx. 3.0' of DNAPL	Approx. 0.75' of DNAPL, approx. 0.12' of LNAPL	DNAPL blebs in purge H ₂ O, 0.5' DNAPL coating on tubes	Approx. 0.15' of DNAPL, approx. 0.1' of LNAPL
MW-06	None Observed	Slight naphthalene-like odor	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
SHMW-01S	None Observed	Slight naphthalene-like odor	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
SHMW-01I	None Observed	None Observed	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
SHMW-02I	None Observed	Approx. 4.9' of DNAPL, sheen	Approx. 4.7' of DNAPL	Approx. 4.9' of DNAPL	Approx. 1.0' of DNAPL, 3.0' intermittent DNAPL	Approx. 0.6' of DNAPL	Approx. 0.65' of DNAPL	Approx. 0.5' of DNAPL	Approx. 0.45' of DNAPL	Approx. 1.1' of DNAPL	Approx. 0.75' of DNAPL	Approx. 0.4' of DNAPL	Approx. 1.3' of DNAPL, naphthalene-like odor	Approx. 0.35' of DNAPL
SHMW-02D	None Observed	None Observed	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR

Notes:
DNAPL - Dense Non-aqueous Phase Liquid
LNAPL - Light Non-aqueous Phase Liquid
WC - Water Column
NR - Gauging Not Required

Table 2
Sag Harbor Former MGP Site
Groundwater Monitoring Program
Summary of Historical NAPL Observations

Well ID	May 2002 Observations	May 2004 Observations	August 2004 Observations	October 2004 Observations	November 2004 Observations	December 2004 Observations	January 2005 Observations	February 2005 Observations	March 2005 Observations	April/Q1 2005 Observations	June/Q2 2005 Observations	September/Q3 2005 Observations	December/Q4 2005 Observations	March/Q1 2006 Observations
SHMW-03S	None Observed	Odor	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
SHMW-03I	None Observed	None Observed	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
SHMW-04S	None Observed	Approx. 0.6' of DNAPL, naphthalene-like odor	NR	Approx. 0.7' of DNAPL, 2.3' intermittent DNAPL	Approx. 0.55' of DNAPL	Approx. 0.29' of DNAPL	Approx. 0.35' of DNAPL	Approx. 0.22' of DNAPL	Approx. 0.25' of DNAPL	Approx. 0.25' of DNAPL	Approx. 0.90' of DNAPL	Approx. 0.26' of DNAPL	Approx. 0.5' DNAPL, naphthalene-like odor	Approx. 0.25' of DNAPL
SHMW-04I	None Observed	None Observed	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
SHMW-05S	None Observed	Blebs of DNAPL in purge water, odor	NR	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed	No DNAPL observed
SHMW-05I	None Observed	None Observed	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
SHMW-06S	Slight sheen and naphthalene-like odor	Naphthalene-like odor	NR	NR	NR	NR	NR	NR	NR	NR	NR	Trace DNAPL at bottom of tape	Approx. 0.10' DNAPL, naphthalene-like odor	Trace DNAPL
SHMW-06I	None Observed	None Observed	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
SHMW-07S	Sheen and naphthalene-like odor	Slight odor	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
SHMW-07I	None Observed	None Observed	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
SHMW-08S	None Observed	None Observed	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR

Notes:
DNAPL - Dense Non-aqueous Phase Liquid
LNAPL - Light Non-aqueous Phase Liquid
WC - Water Column
NR - Gauging Not Required

Table 2
Sag Harbor Former MGP Site
Groundwater Monitoring Program
Summary of Historical NAPL Observations

Well ID	May 2002 Observations	May 2004 Observations	August 2004 Observations	October 2004 Observations	November 2004 Observations	December 2004 Observations	January 2005 Observations	February 2005 Observations	March 2005 Observations	April/Q1 2005 Observations	June/Q2 2005 Observations	September/Q3 2005 Observations	December/Q4 2005 Observations	March/Q1 2006 Observations
SHMW-08I	None Observed	None Observed	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
SHMW-09S	None Observed	Slight naphthalene-like odor	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
SHMW-09I	None Observed	None Observed	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
SHMW-10S	None Observed	None Observed	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
SHMW-10I	None Observed	None Observed	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
SHMW-11S	None Observed	None Observed	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
SHMW-11I	None Observed	None Observed	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
SHMW-12S	None Observed	Sheen, strong sulfur-like odor	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
SHMW-12I	None Observed	None Observed	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
SHMW-13S	None Observed	None Observed	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
SHMW-13I	None Observed	None Observed	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR

Notes:
DNAPL - Dense Non-aqueous Phase Liquid
LNAPL - Light Non-aqueous Phase Liquid
WC - Water Column
NR - Gauging Not Required

Table 2
Sag Harbor Former MGP Site
Groundwater Monitoring Program
Summary of Historical NAPL Observations

Well ID	June/Q2 2006 Observations	September/Q3 2006 Observations	December/Q4 2006 Observations	March/Q1 2007 Observations	June/Q2 2007 Observations	September/Q3 2007 Observations	December/Q4 2007 Observations	March/Q1 2008 Observations	June/Q2 2008 Observations	September/Q3 2008 Observations	December/Q4 2008 Observations	March/Q1 2009 Observations	June/Q2 2009 Observations	September/Q3 2009 Observations	December/Q4 2009 Observations
MW-01	NR	NR	NR	NR	NR	NR	None Observed	None Observed	Trace DNAPL	Trace DNAPL (at bottom of tubing)	Well Inaccessible or Abandoned	Well Abandoned	Well Abandoned	Well Abandoned	Well Abandoned
MW-02	Approx. 0.12' of DNAPL	Approx. 0.15' DNAPL	Approx. 0.10' DNAPL	Approx. 0.20' DNAPL	Approx. 0.07' DNAPL	Approx. 0.11' DNAPL	Approx. ~0.08'	Trace DNAPL	Moderate DNAPL; not measureable	Trace DNAPL	Well Inaccessible or Abandoned	Well Abandoned	Well Abandoned	Well Abandoned	Well Abandoned
MW-03	Trace DNAPL (coating on tubes)	Trace DNAPL (coating on tubes)	No DNAPL observed	Trace DNAPL (coating on tubes)	None Observed	Trace DNAPL (coating on tubes)	Trace	Trace DNAPL (On bottom 1.5' of tubes)	Trace DNAPL	Trace DNAPL (0.05' at bottom of tubing)	Well Inaccessible or Abandoned	Well Abandoned	Well Abandoned	Well Abandoned	Well Abandoned
MW-04	Trace DNAPL	Trace DNAPL (coating on tubes)	Trace DNAPL (coating on tubes)	Trace DNAPL (coating on tubes)	Trace DNAPL (coating on tubes)	Trace DNAPL (coating on tubes)	Approx. ~0.02'	NR	Trace DNAPL	Trace DNAPL (at bottom of tubing)	Well Inaccessible or Abandoned	Well Abandoned	Well Abandoned	Well Abandoned	Well Abandoned
MW-05	Approx. 0.22' DNAPL; 0.05' of LNAPL	Approx. 0.55' DNAPL; 0.06' of LNAPL	Trace LNAPL; DNAPL in purge water (not measurable)	Trace LNAPL; DNAPL in purge water (not measurable)	Well Destroyed	Well Destroyed	Well Destroyed	Well Destroyed	Well Destroyed	Well Destroyed	Well Destroyed	Well Destroyed	Well Destroyed	Well Destroyed	Well Destroyed
MW-06	NR	NR	NR	None Observed	NR	NR	None Observed	None Observed	None Observed	None Observed	Well Inaccessible or Abandoned	Well Abandoned	Well Abandoned	Well Abandoned	Well Abandoned
SHMW-01S	NR	NR	NR	None Observed	NR	NR	None Observed	None Observed	None Observed	None Observed	Well Inaccessible or Abandoned	Well Abandoned	Well Abandoned	Well Abandoned	Well Abandoned
SHMW-01I	NR	NR	NR	None Observed	NR	NR	None Observed	NR	NR	NR	Well Inaccessible or Abandoned	Well Abandoned	Well Abandoned	Well Abandoned	Well Abandoned
SHMW-02I	Approx. 0.43' of DNAPL	Approx. 0.5' of DNAPL	Trace DNAPL (coating on tubes)	Trace DNAPL (coating on tubes)	Trace DNAPL (coating on tubes)	Trace DNAPL (coating on tubes)	Approx. ~0.60'	Approx. 3' DNAPL	Approx. 1.5' DNAPL	Approx. 4' DNAPL	Well Inaccessible or Abandoned	Well Abandoned	Well Abandoned	Well Abandoned	Well Abandoned
SHMW-02D	NR	NR	NR	None Observed	NR	NR	None Observed	NR	NR	NR	Well Inaccessible or Abandoned	Well Abandoned	Well Abandoned	Well Abandoned	Well Abandoned

Notes:
DNAPL - Dense Non-aqueous Phase Liquid
LNAPL - Light Non-aqueous Phase Liquid
WC - Water Column
NR - Gauging Not Required

Table 2
Sag Harbor Former MGP Site
Groundwater Monitoring Program
Summary of Historical NAPL Observations

Well ID	June/Q2 2006 Observations	September/Q3 2006 Observations	December/Q4 2006 Observations	March/Q1 2007 Observations	June/Q2 2007 Observations	September/Q3 2007 Observations	December/Q4 2007 Observations	March/Q1 2008 Observations	June/Q2 2008 Observations	September/Q3 2008 Observations	December/Q4 2008 Observations	March/Q1 2009 Observations	June/Q2 2009 Observations	September/Q3 2009 Observations	December/Q4 2009 Observations
SHMW-03S	NR	NR	NR	None Observed	NR	NR	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed
SHMW-03I	NR	NR	NR	None Observed	NR	NR	None Observed	NR	NR	NR	None Observed	NR	None Observed	NR	None Observed
SHMW-04S	Approx. 0.5' of DNAPL	Approx. 0.25' of DNAPL	Approx. 0.30' of DNAPL	Approx. 0.40' DNAPL	Approx. 0.50' DNAPL	Approx. 0.5' DNAPL	Approx. ~0.61'	Approx. 1.05' DNAPL	Approx. 0.6' DNAPL	Approx. 0.75' DNAPL	Well Inaccessible or Abandoned	Well Abandoned	Well Abandoned	Well Abandoned	Well Abandoned
SHMW-04I	NR	NR	NR	None Observed	NR	NR	None Observed	NR	NR	NR	Well Inaccessible or Abandoned	Well Abandoned	Well Abandoned	Well Abandoned	Well Abandoned
SHMW-05S	None Observed	None Observed	None Observed	None Observed	None Observed	NR	None Observed	None Observed	None Observed	None Observed	Well Inaccessible or Abandoned	Well Abandoned	Well Abandoned	Well Abandoned	Well Abandoned
SHMW-05I	NR	NR	NR	None Observed	NR	NR	None Observed	NR	NR	NR	Well Inaccessible or Abandoned	Well Abandoned	Well Abandoned	Well Abandoned	Well Abandoned
SHMW-06S	Approx. 0.2' of DNAPL	Approx. 0.2' of DNAPL	Trace DNAPL (coating on tubes)	Trace DNAPL (coating on tubes)	Trace DNAPL (coating on tubes)	Trace DNAPL (coating on tubes)	Trace	Trace DNAPL (on tubing)	Trace DNAPL	Trace DNAPL (on tubing)	Well Inaccessible or Abandoned	Well Abandoned	Well Abandoned	Well Abandoned	Well Abandoned
SHMW-06I	NR	NR	NR	None Observed	NR	NR	None Observed	NR	NR	NR	Well Inaccessible or Abandoned	Well Abandoned	Well Abandoned	Well Abandoned	Well Abandoned
SHMW-07S	NR	NR	NR	None Observed	NR	NR	Trace	NR	NR	Trace DNAPL (on side of tubing approx 1' off bottom)	Well Inaccessible or Abandoned	Well Inaccessible	None Observed	Trace DNAPL (on side of tubing)	None Observed
SHMW-07I	NR	NR	NR	None Observed	NR	NR	None Observed	NR	NR	NR	Well Inaccessible or Abandoned	Well Inaccessible	None Observed	NR	None Observed (approximately 10 feet of sand present in well)
SHMW-08S	NR	NR	NR	None Observed	NR	NR	None Observed	None Observed	None Observed	None Observed	Well Inaccessible or Abandoned	Well Inaccessible	None Observed	None Observed	None Observed

Notes:
DNAPL - Dense Non-aqueous Phase Liquid
LNAPL - Light Non-aqueous Phase Liquid
WC - Water Column
NR - Gauging Not Required

Table 2
Sag Harbor Former MGP Site
Groundwater Monitoring Program
Summary of Historical NAPL Observations

Well ID	June/Q2 2006 Observations	September/Q3 2006 Observations	December/Q4 2006 Observations	March/Q1 2007 Observations	June/Q2 2007 Observations	September/Q3 2007 Observations	December/Q4 2007 Observations	March/Q1 2008 Observations	June/Q2 2008 Observations	September/Q3 2008 Observations	December/Q4 2008 Observations	March/Q1 2009 Observations	June/Q2 2009 Observations	September/Q3 2009 Observations	December/Q4 2009 Observations
SHMW-08I	NR	NR	NR	None Observed	NR	NR	None Observed	NR	NR	NR	Well Inaccessible or Abandoned	Well Inaccessible	None Observed	NR	None Observed
SHMW-09S	NR	NR	NR	None Observed	NR	NR	None Observed	None Observed	None Observed	None Observed	None Observed	Well Inaccessible	None Observed	None Observed	None Observed
SHMW-09I	NR	NR	NR	None Observed	NR	NR	None Observed	NR	NR	NR	NR	NR	NR	NR	None Observed
SHMW-10S	NR	NR	NR	None Observed	NR	NR	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed
SHMW-10I	NR	NR	NR	None Observed	NR	NR	None Observed	NR	NR	NR	NR	NR	NR	NR	None Observed
SHMW-11S	NR	NR	NR	None Observed	NR	NR	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed
SHMW-11I	NR	NR	NR	None Observed	NR	NR	None Observed	NR	NR	NR	NR	NR	NR	NR	None Observed
SHMW-12S	NR	NR	NR	None Observed	NR	NR	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed
SHMW-12I	NR	NR	NR	None Observed	NR	NR	None Observed	NR	NR	NR	NR	NR	NR	NR	None Observed
SHMW-13S	NR	NR	NR	None Observed	NR	NR	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed
SHMW-13I	NR	NR	NR	None Observed	NR	NR	None Observed	NR	NR	NR	NR	NR	NR	NR	None Observed

Notes:
DNAPL - Dense Non-aqueous Phase Liquid
LNAPL - Light Non-aqueous Phase Liquid
WC - Water Column
NR - Gauging Not Required

Table 3
Sag Harbor Former MGP Site
Groundwater Monitoring Program
Summary of BTEX, MTBE, PAH Results - Q4 2009

Sample Name: Sample Date:	NYS AWQS	SHMW-03I 12/16/2009	SHMW-03S 12/16/2009	Duplicate of: SHMW-03S 12/16/2009	SHMW-07S 12/21/2009	SHMW-08S 12/17/2009	SHMW-08I 12/17/2009	SHMW-09S 12/17/2009	SHMW-09I 12/17/2009	SHMW-10S 12/16/2009	SHMW-10I 12/16/2009
BTEX (ug/L)											
Benzene	1	10 U	2 J	10 U	590	4 J	10 U	99 J	10 U	10 U	10 U
Toluene	5	10 U	10 U	10 U	43	10 U	10 U	10 U	10 U	10 U	10 U
Ethylbenzene	5	10 U	4 J	10 U	970 J	10 UJ	10 UJ	97 J	10 UJ	10 U	10 U
Xylene, total	5	10 U	3 J	10 U	580	10 U	10 U	28	10 U	10 U	10 U
Total BTEX	NE	ND	9	ND	2183	4	ND	224	ND	ND	ND
Other VOCs (ug/L)											
Methyl tert-butyl ether	10*	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Total VOCs	NE	ND	9	ND	2183	4	ND	224	ND	ND	ND
Non-carcinogenic PAH (ug/L)											
Acenaphthene	20*	10 U	10 U	10 U	200 J	24	10 U	110	10 U	10 U	10 U
Acenaphthylene	NE	10 U	10 U	10 U	4 J	10 U	10 U	10 U	10 U	10 U	10 U
Anthracene	50*	10 U	10 U	10 U	11	3 J	10 U	3 J	10 U	10 U	10 U
Benzo[g,h,i]perylene	NE	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Fluoranthene	50*	10 U	10 U	10 U	6	3 J	10 U	10 U	10 U	10 U	10 U
Fluorene	50*	10 U	10 U	10 U	45	12	10 U	19	10 U	10 U	10 U
Methylnaphthalene,2-	NE	10 U	10 U	10 U	250 J	3 J	10 U	12	10 U	10 U	10 U
Naphthalene	10*	10 U	10 U	10 U	4700	38	10 U	230	10 U	10 U	10 U
Phenanthrene	50*	10 U	10 U	10 U	60	25	10 U	15	10 U	10 U	10 U
Pyrene	50*	10 U	10 U	10 U	6	4 J	10 U	10 U	10 U	10 U	10 U
Total Noncarcinogenic PAHs	NE	ND	ND	ND	5282	112	ND	389	ND	ND	ND
Carcinogenic PAH (ug/L)											
Benz[a]anthracene	0.002*	10 U	10 U	10 U	2 J	10 U	10 U	10 U	10 U	10 U	10 U
Benzo[a]pyrene	ND	10 U	10 U	10 U	1 J	10 U	10 U	10 U	10 U	10 U	10 U
Benzo[b]fluoranthene	0.002*	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo[k]fluoranthene	0.002*	10 UJ	10 UJ	10 UJ	10 U	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ
Chrysene	0.002*	10 U	10 U	10 U	1 J	10 U	10 U	10 U	10 U	10 U	10 U
Dibenz[a,h]anthracene	NE	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Indeno[1,2,3-cd]pyrene	0.002*	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Total Carcinogenic PAHs	NE	ND	ND	ND	4	ND	ND	ND	ND	ND	ND
Total PAH (ug/L)											
Total PAH	NE	ND	ND	ND	5286	112	ND	389	ND	ND	ND

Table 3
Sag Harbor Former MGP Site
Groundwater Monitoring Program
Summary of BTEX, MTBE, PAH Results - Q4 2009

	Sample Name: Sample Date:	NYS AWQS	SHMW-11S 12/16/2009	SHMW-11I 12/16/2009	SHMW-12S 12/17/2009	SHMW-12I 12/17/2009	SHMW-13S 12/21/2009	SHMW-13I 12/21/2009
BTEX (ug/L)								
Benzene		1	10 U	10 U	47	2 J	10 U	10 U
Toluene		5	10 U	10 U	10 U	10 U	10 U	10 U
Ethylbenzene		5	10 UJ	10 U	1 J	10 UJ	10 UJ	10 UJ
Xylene, total		5	10 U	10 U	10	10 U	10 U	10 U
Total BTEX		NE	ND	ND	58	2	ND	ND
Other VOCs (ug/L)								
Methyl tert-butyl ether		10*	10 U	10 U	10 U	10 U	10 U	10 U
Total VOCs		NE	ND	ND	58	2	ND	ND
Non-carcinogenic PAH (ug/L)								
Acenaphthene		20*	10 U	10 U	4 J	10 U	10 U	10 U
Acenaphthylene		NE	10 U	10 U	10 U	10 U	10 U	10 U
Anthracene		50*	10 U	10 U	10 U	10 U	10 U	10 U
Benzo[g,h,i]perylene		NE	10 U	10 U	10 U	10 U	10 U	10 U
Fluoranthene		50*	10 U	10 U	10 U	10 U	10 U	10 U
Fluorene		50*	10 U	10 U	10 U	10 U	10 U	10 U
Methylnaphthalene,2-		NE	10 U	10 U	2 J	10 U	10 U	10 U
Naphthalene		10*	10 U	10 U	210	10 U	10 U	10 U
Phenanthrene		50*	10 U	10 U	10 U	10 U	10 U	10 U
Pyrene		50*	10 U	10 U	10 U	10 U	10 U	10 U
Total Noncarcinogenic PAHs		NE	ND	ND	216	ND	ND	ND
Carcinogenic PAH (ug/L)								
Benz[a]anthracene		0.002*	10 U	10 U	10 U	10 U	10 U	10 U
Benzo[a]pyrene		ND	10 U	10 U	10 U	10 U	10 U	10 U
Benzo[b]fluoranthene		0.002*	10 U	10 U	10 U	10 U	10 U	10 U
Benzo[k]fluoranthene		0.002*	10 UJ	10 UJ	10 UJ	10 UJ	10 U	10 U
Chrysene		0.002*	10 U	10 U	10 U	10 U	10 U	10 U
Dibenz[a,h]anthracene		NE	10 U	10 U	10 U	10 U	10 U	10 U
Indeno[1,2,3-cd]pyrene		0.002*	10 U	10 U	10 U	10 U	10 U	10 U
Total Carcinogenic PAHs		NE	ND	ND	ND	ND	ND	ND
Total PAH (ug/L)								
Total PAH		NE	ND	ND	216	ND	ND	ND

Table 3
Sag Harbor Former MGP Site
Groundwater Monitoring Program
Summary of BTEX, MTBE, PAH Results - Q4 2009

Notes:

ug/L - micrograms per liter or parts per billion (ppb)

BTEX - benzene, toluene, ethylbenzene, and xylenes

VOCs - volatile organic compounds

PAH - polycyclic aromatic hydrocarbons

Total BTEX, Total VOCs, and Total PAHs are calculated using detects only.

NYS AWQS - New York State Ambient Water Quality Standards and Guidance Values for GA groundwater

* indicates the value is a guidance value and not a standard

NE - not established

ND - not detected; total concentration is listed as ND because no compounds were detected in the group

Bolding indicates a detected concentration

Shading and bolding indicates that the detected concentration is above the NYS AWQS objective it was compared to

Validation Qualifiers:

J - estimated value

U - indicates not detected to the reporting limit for organic analysis and the method detection limit for inorganic analysis

UJ - not detected at or above the reporting limit shown and the reporting limit is estimated

Table 4
Sag Harbor Former MGP Site
Groundwater Monitoring Program
Summary of Historical Total BTEX Results

Well No.	Screen Interval (feet)	Total BTEX Concentrations (µg/L)																	
		Sampling Date																	
		1995	2000		2002	2004		2005				2006				2007			
		Nov	Mar	Apr	May	May	Aug	Mar/Apr	June	Sept	Dec	March	June	Sept	Dec	March	June	Sept	Dec
MW-01	1.50 - 7.32	2,720	10	68	9	4	0	0	12	67	0	21	47	310	190	160	240	150	270
MW-02	0.50 - 7.25	5,429	8,840	7,940	5,840	13,287	8,740	7,333	13,010	--	13,720	7,591	--	14,174	12,267	8,678	12,810	15,181	98
MW-03	2.17 - 10.17	1,222	668	1,553	1,363	2,573	--	2,050	2,867	560	2,622	4,880	1,971	4,965	2,398	1,680	2,930	3,225	2,831
MW-04	1.25 - 6.81	864	35	--	10	208	--	0	0	225	299	268	193	181	101	0	51	89	66
MW-05	2.46 - 7.46	9,100	170	5	102	11,600	2,938	2,697	18,900	--	--	--	--	--	--	--	--	--	--
MW-06	2.47 - 7.47	334	47	30	91	49	--	33	55	39	36	74	37	11	54	0	37	31	0
SHMW-01S	1.0 - 6.0	--	--	1,413	874	2,102	--	1,367	1,810	406	1,313	2,562	2,085	5,183	2,915	691	2,460	2,600	1,684
SHMW-01I	35.0 - 45.0	--	--	5	0	0	--	--	--	--	0	--	--	--	0	0	--	--	--
SHMW-02I	35.0 - 45.0	--	--	26	0	1,179	16	20	20	19	25	0	0	0	0	--	11	12	15
SHMW-02D	65.0 - 75.0	--	--	5	4	0	--	--	--	--	0	--	--	--	0	--	--	--	0
SHMW-03S	2.0 - 12.0	--	--	63	0	110	--	48	53	46	75	131	67	97	13	122	80	12	50
SHMW-03I	35.0 - 45.0	--	--	0	52	0	--	--	--	--	0	--	--	--	0	--	--	--	0
SHMW-04S	2.0 - 12.0	--	--	7,940	3,154	12,180	--	9,369	17,730	8,960	21,920	25,860	9,361	18,398	10,489	6,883	20,488	16,120	10,378
SHMW-04I	35.0 - 45.0	--	--	5	0	0	--	--	--	--	0	--	--	--	0	--	--	--	0
SHMW-05S	2.0 - 12.0	--	--	37	69	83	--	107	282	2,960	115	202	45	43	26	35	458	676	98
SHMW-05I	35.0 - 45.0	--	--	0	0	0	--	--	--	--	0	--	--	--	0	--	--	--	0
SHMW-06S	2.0 - 6.0	--	--	2,392	2,463	3,057	--	2,630	1,950	--	2,910	2,622	1,702	4,289	2,196	1,475	2,285	2,162	1,565
SHMW-06I	35.0 - 45.0	--	--	0	0	0	--	--	--	--	0	--	--	--	0	--	--	--	0
SHMW-07S	1.0 - 11.0	--	--	2,011	1,562	414	--	1,482	3,340	2,458	1,722	1,400	1,060	--	1,137	185	--	2,139	726
SHMW-07I	35.0 - 45.0	--	--	0	0	0	--	--	--	--	0	--	--	--	0	--	--	--	0
SHMW-08S	1.0 - 7.0	--	--	5	2	9	--	0	14	0	15	11	0	19	0	0	0	0	12
SHMW-08I	35.0 - 45.0	--	--	0	0	0	--	--	--	--	0	--	--	--	0	--	--	--	0
SHMW-09S	2.0 - 12.0	--	--	1,024	506	1,100	--	500	1,000	--	920	1,130	770	768	500	418	1,240	178	600
SHMW-09I	35.0 - 45.0	--	--	0	0	0	--	--	--	--	0	--	--	--	0	--	--	--	0
SHMW-10S	5.0 - 15.0	--	--	--	0	0	--	0	0	0	0	0	0	0	0	0	0	0	0
SHMW-10I	35.5 - 45.5	--	--	--	0	0	--	--	--	--	0	--	--	--	0	--	--	--	0
SHMW-11S	3.5 - 13.5	--	--	--	0	0	--	0	0	0	0	0	0	0	0	0	0	0	0
SHMW-11I	35.0 - 45.0	--	--	--	0	0	--	--	--	--	0	--	--	--	0	--	--	--	0
SHMW-12S	1.5 - 6.5	--	--	--	0	344	--	142	930	69	290	140	463	581	182	85	623	81	0
SHMW-12I	35.0 - 45.0	--	--	--	0	0	--	--	--	--	0	--	--	--	0	--	--	--	23
SHMW-13S	1.5 - 6.5	--	--	--	0	0	--	0	0	0	0	0	0	0	0	0	0	0	0
SHMW-13I	35.0 - 45.0	--	--	--	0	0	--	--	--	--	0	--	--	--	0	--	--	--	0

Table 4
Sag Harbor Former MGP Site
Groundwater Monitoring Program
Summary of Historical Total BTEX Results

Well No.	Screen Interval (feet)	Total BTEX Concentrations (µg/L)										Min	Max	Mean	
		Sampling Date								Min	Max				Mean
		2008				2009									
		March	June	Sep	Dec	March	June	Sept	Dec						
MW-01	1.50 - 7.32	337	141	208	--	--	--	--	--	0	2,720	236			
MW-02	0.50 - 7.25	8,865	7,415	2,240	--	--	--	--	--	98	15,181	9,129			
MW-03	2.17 - 10.17	2,842	2,241	2,875	--	--	--	--	--	560	4,965	2,416			
MW-04	1.25 - 6.81	--	15	79	--	--	--	--	--	0	864	149			
MW-05	2.46 - 7.46	--	--	--	--	--	--	--	--	5	18,900	5,689			
MW-06	2.47 - 7.47	1	33	7	--	--	--	--	--	0	334	50			
SHMW-01S	1.0 - 6.0	1,595	306	243	--	--	--	--	--	243	5,183	1,756			
SHMW-01I	35.0 - 45.0	--	--	--	--	--	--	--	--	0	5	1			
SHMW-02I	35.0 - 45.0	18	41	29	--	--	--	--	--	0	1,179	80			
SHMW-02D	65.0 - 75.0	--	--	--	--	--	--	--	--	0	5	2			
SHMW-03S	2.0 - 12.0	3	0	5	13	111	24	4	9	0	131	48			
SHMW-03I	35.0 - 45.0	--	--	--	0	--	0	--	0	0	52	6			
SHMW-04S	2.0 - 12.0	7,567	8,059	7,561	--	--	--	--	--	3,154	25,860	12,357			
SHMW-04I	35.0 - 45.0	--	--	--	--	--	--	--	--	0	5	1			
SHMW-05S	2.0 - 12.0	77	83	64	--	--	--	--	--	26	2,960	303			
SHMW-05I	35.0 - 45.0	--	--	--	--	--	--	--	--	0	0	0			
SHMW-06S	2.0 - 6.0	1,296	1,343	1,298	--	--	--	--	--	1,296	4,289	2,214			
SHMW-06I	35.0 - 45.0	--	--	--	--	--	--	--	--	0	0	0			
SHMW-07S	1.0 - 11.0	--	1,075	1,374	--	--	1,500	3,472	2,183	185	3,472	1,624			
SHMW-07I	35.0 - 45.0	--	--	--	--	--	--	--	--	0	0	0			
SHMW-08S	1.0 - 7.0	8	9	10	--	--	5	5	4	0	19	6			
SHMW-08I	35.0 - 45.0	--	--	--	--	--	0	--	0	0	0	0			
SHMW-09S	2.0 - 12.0	1,039	1,298	671	483	--	584	455	224	178	1,298	741			
SHMW-09I	35.0 - 45.0	--	--	--	0	--	0	--	0	0	0	0			
SHMW-10S	5.0 - 15.0	0	1	0	0	0	0	0	0	0	1	0			
SHMW-10I	35.5 - 45.5	--	--	--	0	--	0	--	0	0	0	0			
SHMW-11S	3.5 - 13.5	0	0	0	0	0	0	0	0	0	0	0			
SHMW-11I	35.0 - 45.0	--	--	--	0	--	0	--	0	0	0	0			
SHMW-12S	1.5 - 6.5	166	482	111	279	28	315	45	58	0	930	254			
SHMW-12I	35.0 - 45.0	--	--	--	0	--	--	--	2	0	23	4			
SHMW-13S	1.5 - 6.5	0	0	0	0	0	0	0	0	0	0	0			
SHMW-13I	35.0 - 45.0	--	--	--	0	--	0	--	0	0	0	0			

NOTES:

-- not analyzed or not applicable
µg/L - micrograms per liter
BTEX - benzene, toluene, ethylbenzene, and xylene

Table 5
Sag Harbor Former MGP Site
Groundwater Monitoring Program
Summary of Historical Total PAH Results

Well No.	Screen Interval (feet)	Total PAH Concentrations (µg/L)																	
		Sampling Date																	
		1995	2000		2002	2004			2005				2006				2007		
Nov	Mar	Apr	May	May	Aug	Mar/Apr	June	Sept	Dec	March	June	Sept	Dec	March	June	Sept	Dec		
MW-01	1.50 - 7.32	4,906	1,548	257	402	30	24	0	61	200	0	0	0	97	95	0	54	87	39
MW-02	0.50 - 7.25	6,991	5,511	5,114	10,729	25,167	4,414	5,809	10,504	--	6,919	5,209	--	0	8,617	3,150	7,421	5,398	165
MW-03	2.17 - 10.17	7,034	3,065	3,433	3,774	3,522	--	2,272	4,557	516	92	1,256	565	4,831	6,212	349	489	463	2,904
MW-04	1.25 - 6.81	3,612	75	--	0	90	--	0	22	1,098	103	11	37	66	31	0	66	238	6
MW-05	2.46 - 7.46	16,386	779	101	1,160	431,600	2,049	918	188,200	--	--	--	--	--	--	--	--	--	--
MW-06	2.47 - 7.47	5,416	894	653	258	33	--	90	79	204	0	22	0	0	645	35	46	17	0
SHMW-01S	1.0 - 6.0	--	--	4,147	2,663	2,424	--	1,989	2,185	840	0	42	115	3,989	3,874	0	1,058	1,691	42
SHMW-01I	35.0 - 45.0	--	--	32	0	0	--	--	--	--	0	--	--	--	0	--	--	--	--
SHMW-02I	35.0 - 45.0	--	--	266	0	580,200	41	185	124	271	30	74	32	91	89	0	10	175	32
SHMW-02D	65.0 - 75.0	--	--	308	76	89	--	--	--	--	0	--	--	--	0	--	--	--	15
SHMW-03S	2.0 - 12.0	--	--	422	0	295	--	79	130	117	339	0	0	147	118	430	191	12	154
SHMW-03I	35.0 - 45.0	--	--	2	320	0	--	--	--	--	0	--	--	--	0	--	--	--	0
SHMW-04S	2.0 - 12.0	--	--	4,275	5,107	5,965	--	3,959	6,669	4,684	5,879	2,364	3,572	4,196	6,250	2,632	3,999	4,693	4,305
SHMW-04I	35.0 - 45.0	--	--	18	0	0	--	--	--	--	0	--	--	--	0	--	--	--	0
SHMW-05S	2.0 - 12.0	--	--	13	170	94	--	82	91	26	53	17	11	11	110	0	0	14	8
SHMW-05I	35.0 - 45.0	--	--	0	17	0	--	--	--	--	0	--	--	--	0	--	--	--	0
SHMW-06S	2.0 - 6.0	--	--	4,130	4,694	3,024	--	3,162	2,366	--	4,157	120	201	3,900	4,062	1,703	3,574	4,368	380
SHMW-06I	35.0 - 45.0	--	--	2	0	0	--	--	--	--	0	--	--	--	0	--	--	--	0
SHMW-07S	1.0 - 11.0	--	--	7,211	6,585	2,708	--	3,224	4,604	6,187	3,507	2,004	3,119	--	3,721	0	--	3,902	4
SHMW-07I	35.0 - 45.0	--	--	0	0	0	--	--	--	--	0	--	--	--	2,212	--	--	--	0
SHMW-08S	1.0 - 7.0	--	--	110	71	94	--	25	70	33	83	112	57	77	99	13	90	10	13
SHMW-08I	35.0 - 45.0	--	--	13	0	0	--	--	--	--	0	--	--	--	0	--	--	--	0
SHMW-09S	2.0 - 12.0	--	--	1,787	2,472	1,697	--	1,463	1,600	--	2,609	94	1,935	1,138	2,737	48	206	2,246	130
SHMW-09I	35.0 - 45.0	--	--	3	0	0	--	--	--	--	0	--	--	--	0	--	--	--	0
SHMW-10S	5.0 - 15.0	--	--	--	22	6	--	0	0	0	0	0	0	0	0	0	0	0	1
SHMW-10I	35.5 - 45.5	--	--	--	0	0	--	--	--	--	0	--	--	--	0	--	--	--	0
SHMW-11S	3.5 - 13.5	--	--	--	0	3	--	173	0	0	0	0	0	0	0	0	0	0	0
SHMW-11I	35.0 - 45.0	--	--	--	0	0	--	--	--	--	0	--	--	--	0	--	--	--	4
SHMW-12S	1.5 - 6.5	--	--	--	60	218	--	71	600	230	260	110	470	310	280	15	560	0	155
SHMW-12I	35.0 - 45.0	--	--	--	0	0	--	--	--	--	0	--	--	--	0	--	--	--	20
SHMW-13S	1.5 - 6.5	--	--	--	0	0	--	0	0	0	0	0	0	0	0	0	0	0	0
SHMW-13I	35.0 - 45.0	--	--	--	0	0	--	--	--	--	0	--	--	--	0	--	--	--	0

Table 5
Sag Harbor Former MGP Site
Groundwater Monitoring Program
Summary of Historical Total PAH Results

Well No.	Screen Interval (feet)	Total PAH Concentrations (µg/L)										
		Sampling Date								Min	Max	Mean
		2008				2009						
		March	June	Sept	Dec	March	June	Sept	Dec			
MW-01	1.50 - 7.32	145	2	35	--	--	--	--	--	0	4,906	380
MW-02	0.50 - 7.25	400	3,455	3,488	--	--	--	--	--	0	25,167	6,235
MW-03	2.17 - 10.17	508	96	1,109	--	--	--	--	--	92	7,034	2,352
MW-04	1.25 - 6.81	--	0	22	--	--	--	--	--	0	3,612	304
MW-05	2.46 - 7.46	--	--	--	--	--	--	--	--	101	431,600	80,149
MW-06	2.47 - 7.47	0	0	10	--	--	--	--	--	0	5,416	420
SHMW-01S	1.0 - 6.0	0	0	0	--	--	--	--	--	0	4,147	1,392
SHMW-01I	35.0 - 45.0	--	--	--	--	--	--	--	--	0	32	6
SHMW-02I	35.0 - 45.0	8	42	209	--	--	--	--	--	0	580,200	30,625
SHMW-02D	65.0 - 75.0	--	--	--	--	--	--	--	--	0	308	81
SHMW-03S	2.0 - 12.0	0	0	17	29	0	20	0	0	0	430	113
SHMW-03I	35.0 - 45.0	--	--	--	0	--	0	--	0	0	320	36
SHMW-04S	2.0 - 12.0	0	1,328	1,868	--	--	--	--	--	0	6,669	3,986
SHMW-04I	35.0 - 45.0	--	--	--	--	--	--	--	--	0	18	3
SHMW-05S	2.0 - 12.0	2	0	31	--	--	--	--	--	0	170	41
SHMW-05I	35.0 - 45.0	--	--	--	--	--	--	--	--	0	17	3
SHMW-06S	2.0 - 6.0	0	44	5,848	--	--	--	--	--	0	5,848	2,690
SHMW-06I	35.0 - 45.0	--	--	--	--	--	--	--	--	0	2	0
SHMW-07S	1.0 - 11.0	--	54	3,252	--	--	2,919	4,722	5,286	0	7,211	3,501
SHMW-07I	35.0 - 45.0	--	--	--	--	--	--	--	--	0	2,212	369
SHMW-08S	1.0 - 7.0	14	21	55	--	--	59	60	112	10	112	61
SHMW-08I	35.0 - 45.0	--	--	--	--	--	1	--	0	0	13	2
SHMW-09S	2.0 - 12.0	0	92	485	503	--	68	39	389	0	2,737	1,084
SHMW-09I	35.0 - 45.0	--	--	--	0	--	0	--	0	0	3	0
SHMW-10S	5.0 - 15.0	0	0	0	0	0	0	0	0	0	22	1
SHMW-10I	35.5 - 45.5	--	--	--	0	--	0	--	0	0	0	0
SHMW-11S	3.5 - 13.5	0	0	0	0	0	0	2	0	0	173	8
SHMW-11I	35.0 - 45.0	--	--	--	0	--	0	--	0	0	4	1
SHMW-12S	1.5 - 6.5	9	137	259	280	0	332	4	216	0	600	202
SHMW-12I	35.0 - 45.0	--	--	--	0	--	--	--	0	0	20	3
SHMW-13S	1.5 - 6.5	0	0	0	0	0	0	0	0	0	0	0
SHMW-13I	35.0 - 45.0	--	--	--	0	--	0	--	0	0	0	0

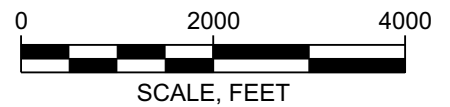
NOTES:

-- not analyzed or not applicable
µg/L - micrograms per liter
PAH - polycyclic aromatic hydrocarbons

Figures



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



SAG HARBOR FORMER MGP SITE
 SAG HARBOR, NEW YORK

nationalgrid

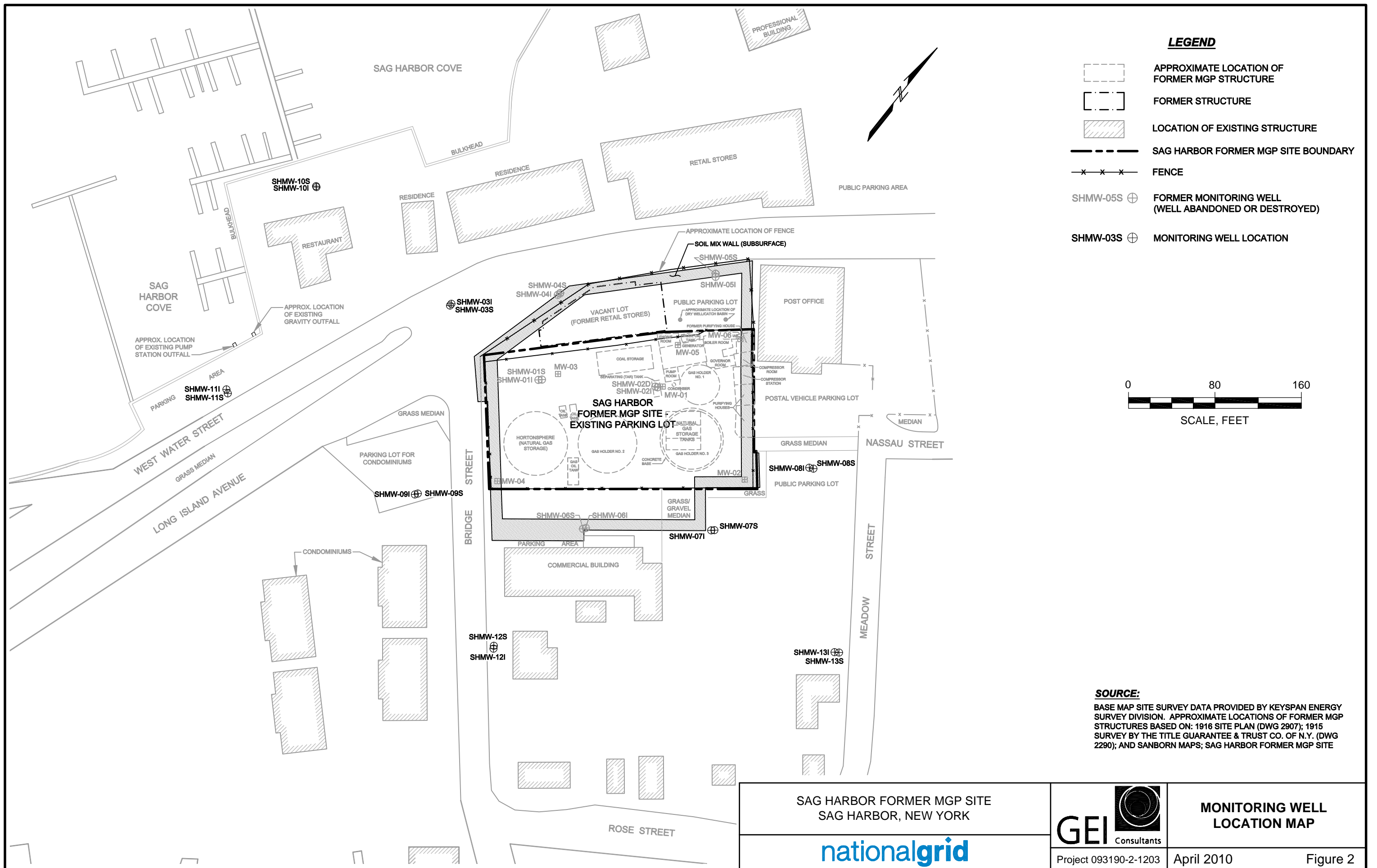


Project 093190-2-1203

SITE LOCATION MAP

April 2010

Figure 1



SAG HARBOR FORMER MGP SITE
 SAG HARBOR, NEW YORK

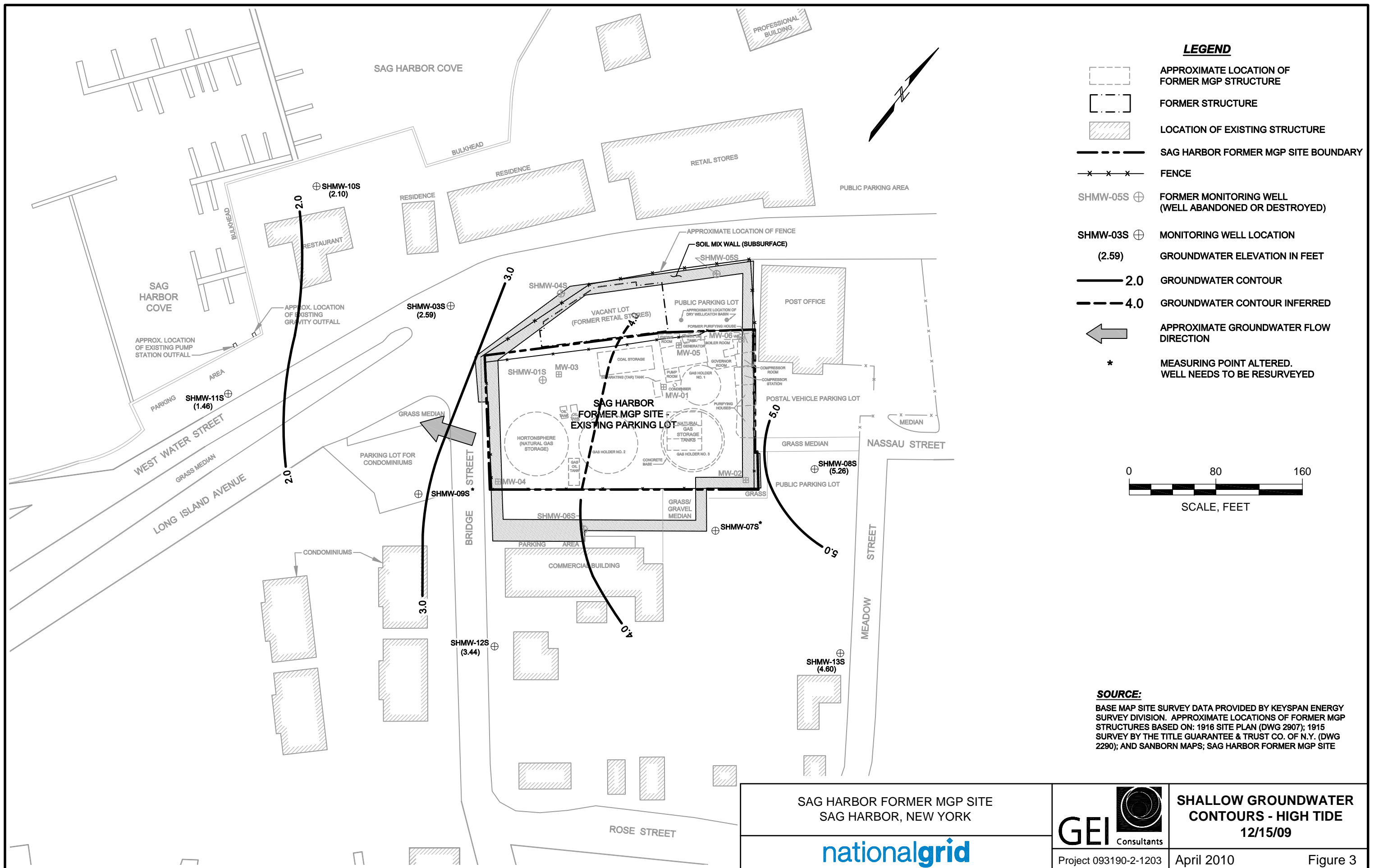
nationalgrid



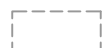
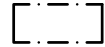


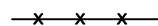


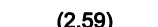




MONITORING WELL LOCATION MAP

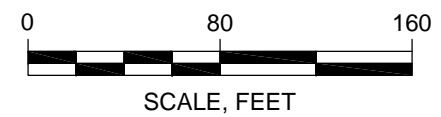
April 2010

Figure 2



LEGEND

-  APPROXIMATE LOCATION OF FORMER MGP STRUCTURE
-  FORMER STRUCTURE
-  LOCATION OF EXISTING STRUCTURE
-  SAG HARBOR FORMER MGP SITE BOUNDARY
-  FENCE
-  SHMW-05S ⊕ FORMER MONITORING WELL (WELL ABANDONED OR DESTROYED)
-  SHMW-03S ⊕ MONITORING WELL LOCATION
-  (2.59) GROUNDWATER ELEVATION IN FEET
-  2.0 GROUNDWATER CONTOUR
-  4.0 GROUNDWATER CONTOUR INFERRED
-  APPROXIMATE GROUNDWATER FLOW DIRECTION
-  * MEASURING POINT ALTERED. WELL NEEDS TO BE RESURVEYED



SOURCE:
 BASE MAP SITE SURVEY DATA PROVIDED BY KEYSpan ENERGY SURVEY DIVISION. APPROXIMATE LOCATIONS OF FORMER MGP STRUCTURES BASED ON: 1916 SITE PLAN (DWG 2907); 1915 SURVEY BY THE TITLE GUARANTEE & TRUST CO. OF N.Y. (DWG 2290); AND SANBORN MAPS; SAG HARBOR FORMER MGP SITE

SAG HARBOR FORMER MGP SITE
 SAG HARBOR, NEW YORK

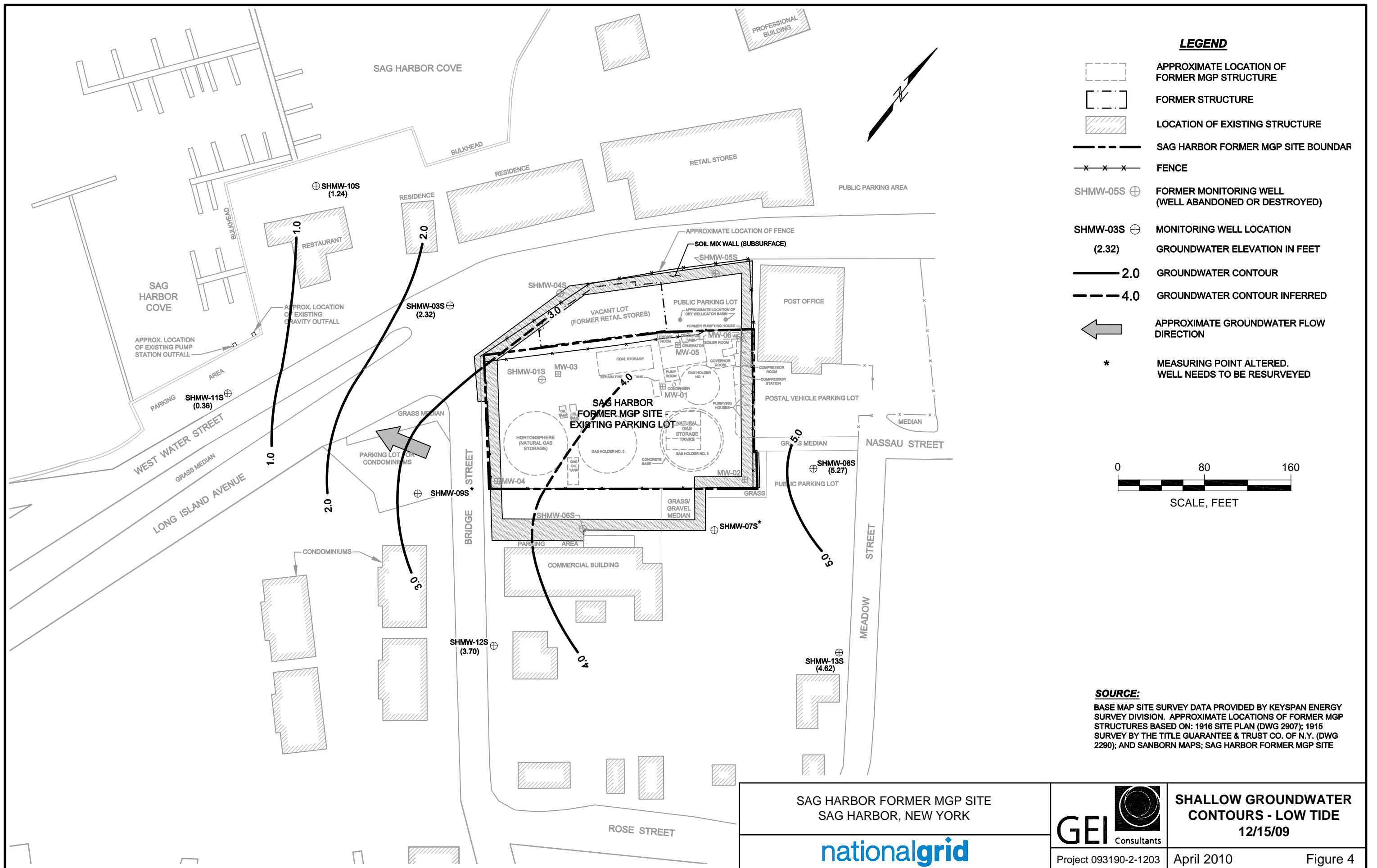


SHALLOW GROUNDWATER
 CONTOURS - HIGH TIDE
 12/15/09

Project 093190-2-1203

April 2010

Figure 3



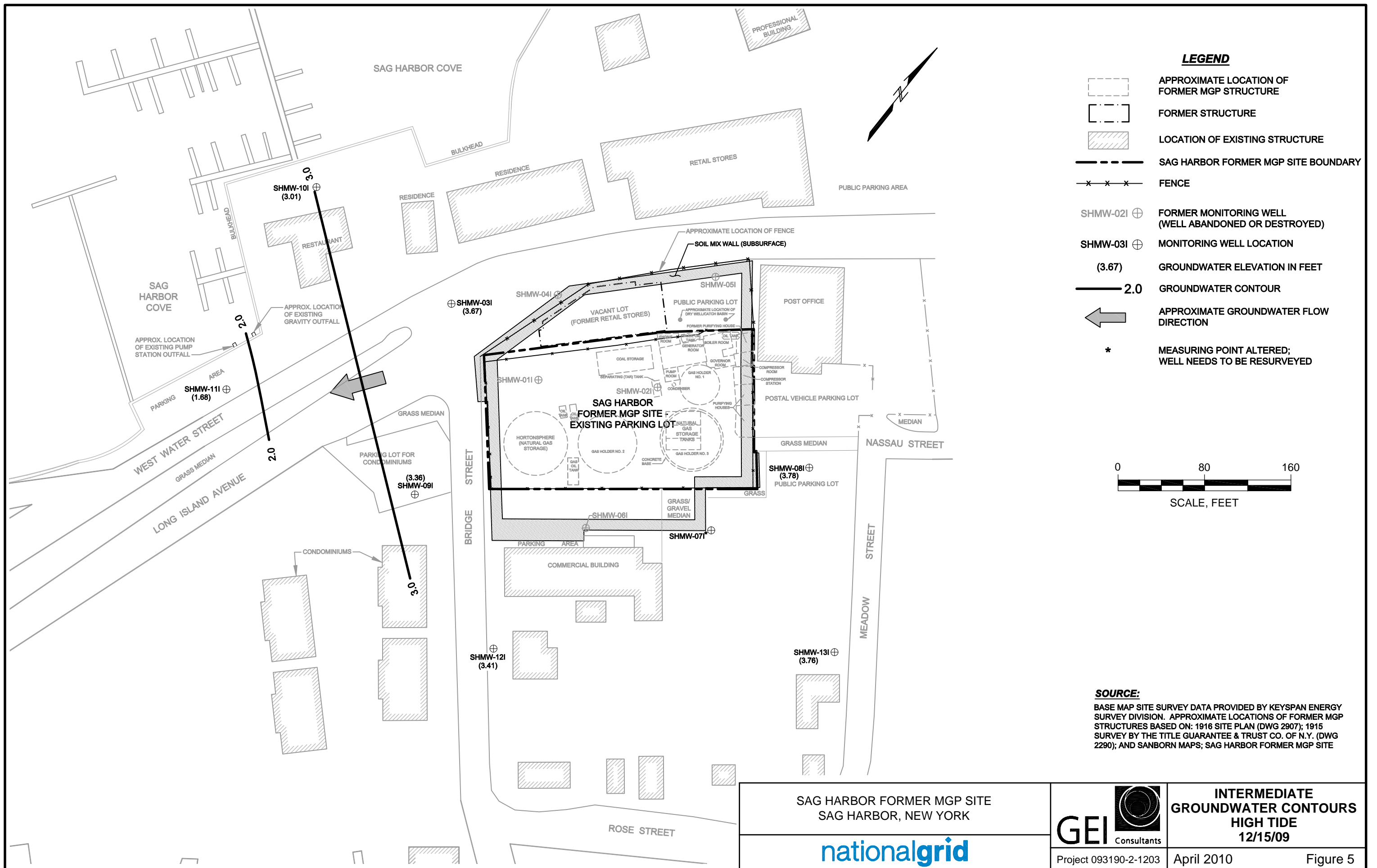
SAG HARBOR FORMER MGP SITE
 SAG HARBOR, NEW YORK

nationalgrid



**SHALLOW GROUNDWATER
 CONTOURS - LOW TIDE**
 12/15/09

April 2010 Figure 4



SAG HARBOR FORMER MGP SITE
 SAG HARBOR, NEW YORK

nationalgrid

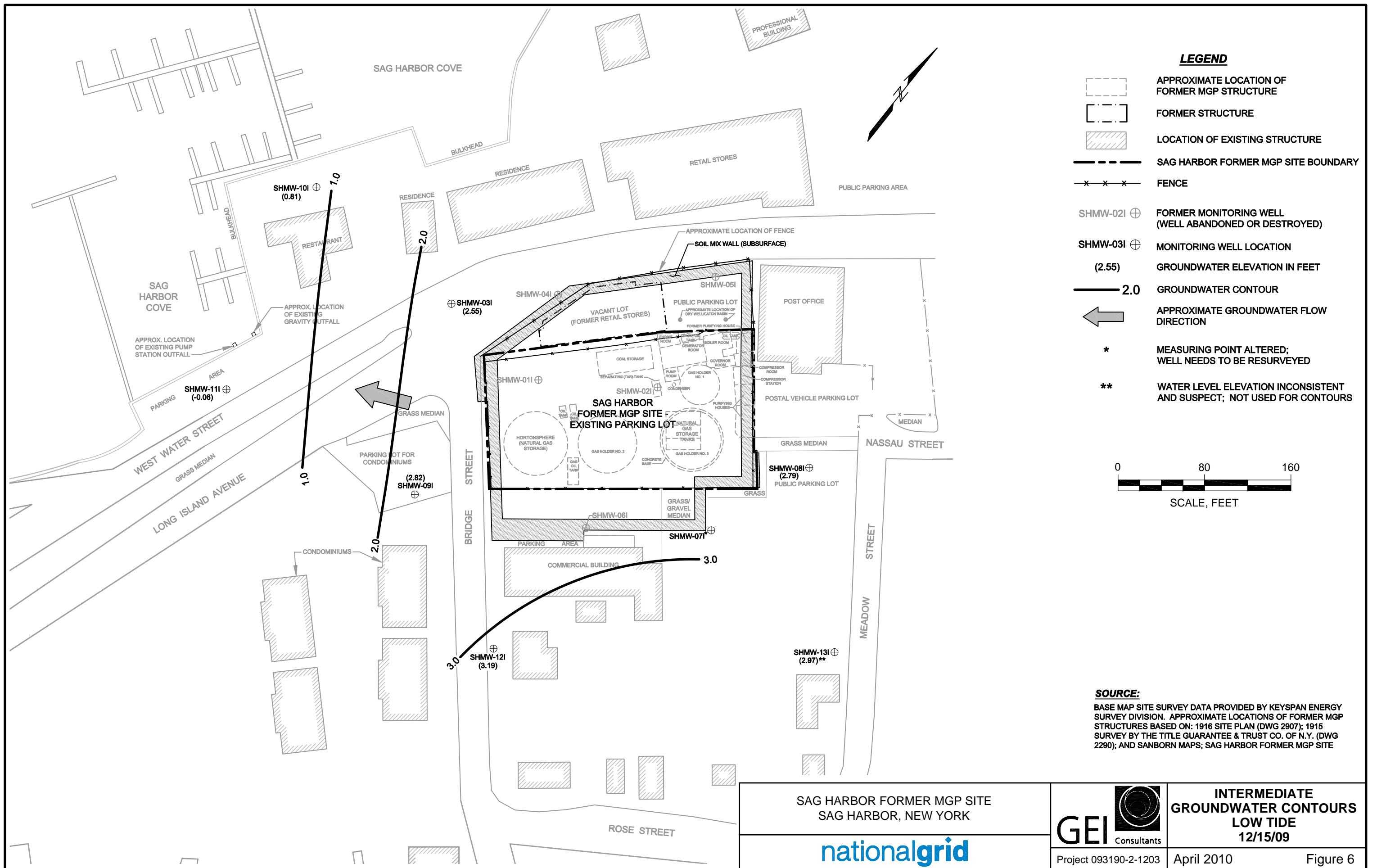


Project 093190-2-1203





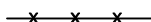







**INTERMEDIATE
 GROUNDWATER CONTOURS
 HIGH TIDE
 12/15/09**

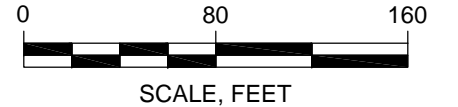
April 2010

Figure 5



LEGEND

-  APPROXIMATE LOCATION OF FORMER MGP STRUCTURE
-  FORMER STRUCTURE
-  LOCATION OF EXISTING STRUCTURE
-  SAG HARBOR FORMER MGP SITE BOUNDARY
-  FENCE
-  SHMW-021 ⊕ FORMER MONITORING WELL (WELL ABANDONED OR DESTROYED)
-  SHMW-031 ⊕ MONITORING WELL LOCATION
-  (2.55) GROUNDWATER ELEVATION IN FEET
-  2.0 GROUNDWATER CONTOUR
-  ← APPROXIMATE GROUNDWATER FLOW DIRECTION
-  * MEASURING POINT ALTERED; WELL NEEDS TO BE RESURVEYED
-  ** WATER LEVEL ELEVATION INCONSISTENT AND SUSPECT; NOT USED FOR CONTOURS



SOURCE:
 BASE MAP SITE SURVEY DATA PROVIDED BY KEYSPAN ENERGY SURVEY DIVISION. APPROXIMATE LOCATIONS OF FORMER MGP STRUCTURES BASED ON: 1916 SITE PLAN (DWG 2907); 1915 SURVEY BY THE TITLE GUARANTEE & TRUST CO. OF N.Y. (DWG 2290); AND SANBORN MAPS; SAG HARBOR FORMER MGP SITE

SAG HARBOR FORMER MGP SITE
 SAG HARBOR, NEW YORK



**INTERMEDIATE
 GROUNDWATER CONTOURS
 LOW TIDE
 12/15/09**

Project 093190-2-1203

April 2010

Figure 6