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Geotechnical
Environmental and
Water Resources
Engineering

Quarterly Groundwater Monitoring Report
Fourth Quarter (Q4) 2012

Sag Harbor
Former MGP Site

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

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Table of Contents

Tables

Figures

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1. Sag Harbor Site and Adjacent Offsite Areas

Fourth Quarter (Q4) 2012 Groundwater Monitoring Event Summary

Event Date: December 17, 18, 19, and 20, 2012

Site Phase: Quarterly groundwater monitoring

Location: The location of the Sag Harbor Former MGP site is depicted on **Figure 1**.

Monitoring Well Network

A total of 25 monitoring wells are currently located at or in the vicinity of the site (**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 Q4 2008 sampling event due to the remediation activities being conducted at the site. Seven of the monitoring wells, including SHMW-01SR, SHMW-01IR, SHMW-02IR, SHMW-02DR, SHMW-04SR, SHMW-05SR and SHMW-05IR, were replaced as part of the post-remediation monitoring well replacement/installation program in Q4 2010.

Monitoring wells SHMW-02IR and SHMW-04SR were installed as larger diameter, potential dense non-aqueous phase liquid (DNAPL) recovery wells. In addition to the installation of the replacement monitoring wells listed above, new monitoring wells SHMW-01D and SHMW-02S were also installed as part of this program. Monitoring wells SHMW-07S and SHMW-07I, which were damaged presumably during the remedial activities, were abandoned during the replacement well installation program and reinstalled.

Hydrological Data

Groundwater levels were measured on December 19, 2012 at 24 of the 25 monitoring wells, during low and high tide. Monitoring well SHMW-02I was repaired during Q3 2011, altering the survey point. As a result, a groundwater level measurement was not taken. Depth to groundwater and calculated groundwater elevations are provided in **Table 1**. Shallow and intermediate groundwater contours for high and low tidal conditions are depicted on **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 2012, are provided in the following table:

Depth Zone	High Tide			Low Tide		
	Range		Gradient[3]	Range		Gradient[3]
	DTW[1]	WLE[2]		DTW[1]	WLE[2]	
Shallow	0.18 – 4.61	0.71 – 3.70	0.0035	0.10 – 5.07	0.25 – 3.78	0.004
Intermediate	1.11 – 4.62	1.01 – 2.21	0.0012	0.03 – 5.61	0.02 – 1.96	0.0023

Notes:

[1]: Depth to water - Measured as feet below top of casing
[2]: Water level elevation - Calculated as feet above mean sea level
[3]: feet/foot

NAPL Thickness Data

Table 2 provides a summary of historical non-aqueous phase liquid (NAPL) data. In Q4 2012, all of the 25 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 2012.

Chemical Data

In Q4 2012, a total of 25 wells were sampled for benzene, toluene, ethylbenzene, and total xylenes (BTEX) and methyl tert-butyl ether (MTBE) by Environmental Protection Agency (EPA) Method 8260, and for polycyclic aromatic hydrocarbons (PAHs) by EPA Method 8270. Well sampling was performed on December 17, 18 and 20, 2012 and included all wells on the annual sampling list.

Chemical data for Q4 2012 (**Table 3**) indicate:

- BTEX concentrations ranged from below method detection limits (ND) in 19 of the 25 wells sampled to 449 micrograms per liter (µg/L) in SHMW-04SR.
- Total PAH concentrations ranged from ND in 16 of the 25 wells sampled to 690 µg/L in SHMW-09S.
- MTBE concentrations were ND in each of the 25 wells sampled, excluding an estimated detection of 5 µg/L in SHMW-08S.

Data Trend Analysis

Shallow Zone

In general, BTEX and total PAH concentrations (see historical data in **Tables 4** and **5**) are generally decreasing in shallow groundwater on and adjacent to the site as indicated in the table below. BTEX and total PAH concentrations in shallow wells decreased significantly relative to Q3 2012 levels, and are generally at or near the lowest concentrations recorded since the completion of remedial activities. Overall, the concentrations observed during recent sampling events remain significantly below historical levels (see table below).

Shallow Zone	Historical*		Q2 2012		Q3 2012		Q4 2012	
	Max	Average	Max	Average	Max	Average	Max	Average
BTEX	25,860	1,066	709	168	2,822	307	449	76
Total PAHs	7,211**	714	1,296	224	4,342	591	690	172

Notes:

Concentrations in µg/L

*: Including data from existing wells only.

**: Historical maximum for all depth zones is 580,200 µg/L (total PAH) in SHMW-02I.

Concentrations of BTEX were identified in six shallow monitoring wells in Q4 2012. The concentrations in monitoring wells SHMW-05SR (16 µg/L), SHMW-08S (6 µg/L) and SHMW-12S (19 µg/L) were relatively low (below 50 µg/L). The Q4 2012 detections in these wells were equal to, or below their respective historical mean concentrations.

Elevated BTEX concentrations in the remaining shallow wells in Q3 2012 were limited to SHMW-04SR, SHMW-07SR, and SHMW-09S. The concentration in SHMW-04SR (449 µg/L) decreased compared to Q2 and Q3 2012, and remained significantly below the historical mean concentration. The concentration in SHMW-07SR (251 µg/L) decreased significantly relative to Q3 2012. The concentration in monitoring well SHMW-09S (165 µg/L), was similar to the concentration detected in Q2 2012 (130 µg/L), which was the lowest concentration recorded during the historical monitoring period. Prior to Q2 2012, monitoring well cluster SHMW-09 had not been sampled since Q4 2009, due to access issues.

For total PAH concentrations, eight shallow wells had detections in Q4 2012. The concentrations in monitoring wells SHMW-03S (2 µg/L), SHMW-05SR (20 µg/L), and SHMW-11S (2 µg/L) were relatively low (below 50 µg/L). The Q4 2012 detections in these wells remained below their respective historical mean concentrations.

The total PAH concentrations in Q4 2012 in SHMW-04SR (639 µg/L) and SHMW-07SR (419 µg/L) decreased significantly from Q3 2012 levels and remained well below their respective historical mean concentrations. Total PAH concentrations in monitoring wells SHMW-09S (690 µg/L) and SHMW-12S (104 µg/L) also decreased from Q3 2012 levels and remained below their respective historical mean concentrations. As mentioned above, prior to Q2 2012, monitoring well cluster SHMW-09 had not been sampled since Q4 2009, due to access issues. The Q4 2012 total PAH concentration in monitoring well SHMW-08S (182 µg/L) increased slightly relative to Q3 2012, and was above its historical mean concentration, but within the historical concentration range.

Intermediate and Deep Zones

Concentrations of BTEX and total PAHs in intermediate or deep zone monitoring wells in Q4 2012 were limited to a detection of total PAHs in monitoring well SHMW-02IR (56 µg/L). The total PAH concentration in this well was higher than in recent annual sampling events, but significantly below the historical mean concentration. The number of detections in intermediate or deep zone wells in Q4 2012 decreased relative to the previous annual sampling round (Q4 2011), particularly for BTEX.

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/soil vapor interface.

The historical NAPL data (**Table 2**) indicates that measurable quantities of NAPL have primarily been found in two onsite shallow monitoring wells (MW-02 and MW-05), one onsite intermediate well (SHMW-02I), and one offsite shallow well (SHMW-04S). Non-measurable (trace) amounts of NAPL have historically been found in two onsite shallow wells, MW-03 and MW-04, as well as in offsite shallow well SHMW-06S, and was intermittently found in SHMW-07S. All of the wells identified above in which NAPL has been historically detected were either destroyed or abandoned prior to, or during remedial activities.

Non-measurable (trace) amounts of LNAPL and DNAPL were found in replacement monitoring wells SHMW-04SR and SHMW-07SR during the first three monitoring events following the installation of these wells. However, no evidence of NAPL has been found in these monitoring wells or any of the remaining monitoring wells since Q2 2011.

Future Plans

Continue quarterly groundwater and NAPL monitoring at onsite and offsite monitoring wells.

Tables

Table 1
Water Level Measurements and Calculated Groundwater Elevations
Sag Harbor Former MGP Site
Groundwater Monitoring Program - Q4 2012

Well ID	Top of Casing Elevation (ft)*	Tide	Time	12/19/2012		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-01SR	3.71	High	1435	1.98	1.73	Well replaced in Q4 2010
		Low	0902	1.88	1.83	
SHMW-01IR	3.81	High	1435	2.11	1.70	Well replaced in Q4 2010
		Low	0902	2.29	1.52	
SHMW-01D	3.67	High	1436	1.51	2.16	Well installed in Q4 2010
		Low	0903	2.12	1.55	
SHMW-02S	3.95	High	1430	1.90	2.05	Well installed in Q4 2010
		Low	0900	1.58	2.37	
SHMW-02IR	3.92	High	NM	NM	NM	Survey point altered
		Low	NM	NM	NM	
SHMW-02DR	3.66	High	1430	1.90	1.76	Well replaced in Q4 2010
		Low	0900	2.47	1.19	
SHMW-03S	3.83	High	1447	2.60	1.23	
		Low	0910	2.62	1.21	
SHMW-03I	3.85	High	1448	1.96	1.89	
		Low	0911	2.62	1.23	
SHMW-04SR	3.90	High	1440	2.42	1.48	Well replaced in Q4 2010
		Low	0905	2.28	1.62	
SHMW-04I	5.71	High	--	--	--	Well abandoned
		Low	--	--	--	
SHMW-05SR	5.03	High	1442	3.2	1.83	Well replaced in Q4 2010
		Low	0907	3.08	1.95	
SHMW-05IR	4.96	High	1444	3.18	1.78	Well replaced in Q4 2010
		Low	0908	3.35	1.61	
SHMW-06S	4.44	High	--	--	--	Well abandoned
		Low	--	--	--	
SHMW-06I	4.43	High	--	--	--	Well abandoned
		Low	--	--	--	
SHMW-07SR	3.48	High	1513	0.18	3.30	
		Low	0928	0.10	3.38	
SHMW-07IR	3.38	High	1514	1.49	1.89	
		Low	0929	1.81	1.57	
SHMW-08S	3.69	High	1522	+0.01	3.70	Artesian
		Low	0933	+0.09	3.78	
SHMW-08I	3.79	High	1523	1.64	2.15	
		Low	0934	2.19	1.60	
SHMW-09S	3.06	High	15.03	0.71	2.35	
		Low	0921	0.66	2.40	
SHMW-09I	2.82	High	1504	1.11	1.71	
		Low	0922	1.30	1.52	
SHMW-10S	4.75	High	1452	3.77	0.98	
		Low	0914	4.08	0.67	
SHMW-10I	4.75	High	1453	3.28	1.47	
		Low	0915	4.36	0.39	
SHMW-11S	5.32	High	1457	4.61	0.71	
		Low	0918	5.07	0.25	
SHMW-11I	5.63	High	1500	4.62	1.01	
		Low	0919	5.61	0.02	
SHMW-12S	1.98	High	1509	+0.25	2.23	Artesian
		Low	0924	+0.25	2.23	
SHMW-12I	1.99	High	1510	+0.19	2.18	Artesian at High Tide
		Low	0926	0.03	1.96	
SHMW-13S	3.36	High	15.19	0.18	3.18	
		Low	0931	0.15	3.21	
SHMW-13I	3.50	High	1520	1.29	2.21	
		Low	0932	1.67	1.83	

Notes:
* Elevations were re-surveyed in November 2010.
-- = Not Available
NM = Not Measured

Table 2
Summary of Historical NAPL Observations
Sag Harbor Former MGP Site
Groundwater Monitoring Program - Q4 2012

Well ID	May 2002 Observations	May 2004 Observations	Aug 2004 Observations	Oct 2004 Observations	Nov 2004 Observations	Dec 2004 Observations	Jan 2005 Observations	Feb 2005 Observations	Mar 2005 Observations	Apr/Q1 2005 Observations	Jun/Q2 2005 Observations	Sep/Q3 2005 Observations	Dec/Q4 2005 Observations	Mar/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 H2O, 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/01SR	None Observed	Slight naphthalene-like odor	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
SHMW-01I/01IR	None Observed	None Observed	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
SHMW-01D	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
SHMW-02S	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
SHMW-02I/02IR	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/02DR	None Observed	None Observed	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
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/04SR	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/05SR	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/05IR	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/07SR	Sheen and naphthalene-like odor	Slight odor	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
SHMW-07I/07IR	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
SHMW-08I	None Observed	None Observed	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR

Table 2
Summary of Historical NAPL Observations
Sag Harbor Former MGP Site
Groundwater Monitoring Program - Q4 2012

Well ID	May 2002 Observations	May 2004 Observations	Aug 2004 Observations	Oct 2004 Observations	Nov 2004 Observations	Dec 2004 Observations	Jan 2005 Observations	Feb 2005 Observations	Mar 2005 Observations	Apr/Q1 2005 Observations	Jun/Q2 2005 Observations	Sep/Q3 2005 Observations	Dec/Q4 2005 Observations	Mar/Q1 2006 Observations
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

Table 2
Summary of Historical NAPL Observations
Sag Harbor Former MGP Site
Groundwater Monitoring Program - Q4 2012

Well ID	Jun/Q2 2006 Observations	Sep/Q3 2006 Observations	Dec/Q4 2006 Observations	Mar/Q1 2007 Observations	Jun/Q2 2007 Observations	Sep/Q3 2007 Observations	Dec/Q4 2007 Observations	Mar/Q1 2008 Observations	Jun/Q2 2008 Observations	Sep/Q3 2008 Obsevations	Dec/Q4 2008 Obsevations	Mar/Q1 2009 Observations	Jun/Q2 2009 Observations	Sep/Q3 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
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
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
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
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
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
SHMW-01S/01SR	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
SHMW-01I/01IR	NR	NR	NR	None Observed	NR	NR	None Observed	NR	NR	NR	Well Inaccessible or Abandoned	Well Abandoned	Well Abandoned	Well Abandoned
SHMW-01D	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
SHMW-02S	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
SHMW-02I/02IR	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
SHMW-02D/02DR	NR	NR	NR	None Observed	NR	NR	None Observed	NR	NR	NR	Well Inaccessible or Abandoned	Well Abandoned	Well Abandoned	Well Abandoned
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
SHMW-03I	NR	NR	NR	None Observed	NR	NR	None Observed	NR	NR	NR	None Observed	NR	None Observed	NR
SHMW-04S/04SR	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
SHMW-04I	NR	NR	NR	None Observed	NR	NR	None Observed	NR	NR	NR	Well Inaccessible or Abandoned	Well Abandoned	Well Abandoned	Well Abandoned
SHMW-05S/05SR	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
SHMW-05I/05IR	NR	NR	NR	None Observed	NR	NR	None Observed	NR	NR	NR	Well Inaccessible or 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
SHMW-06I	NR	NR	NR	None Observed	NR	NR	None Observed	NR	NR	NR	Well Inaccessible or Abandoned	Well Abandoned	Well Abandoned	Well Abandoned
SHMW-07S/07SR	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)
SHMW-07I/07IR	NR	NR	NR	None Observed	NR	NR	None Observed	NR	NR	NR	Well Inaccessible or Abandoned	Well Inaccessible	None Observed	NR
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
SHMW-08I	NR	NR	NR	None Observed	NR	NR	None Observed	NR	NR	NR	Well Inaccessible or Abandoned	Well Inaccessible	None Observed	NR

Table 2
Summary of Historical NAPL Observations
Sag Harbor Former MGP Site
Groundwater Monitoring Program - Q4 2012

Well ID	Jun/Q2 2006 Observations	Sep/Q3 2006 Observations	Dec/Q4 2006 Observations	Mar/Q1 2007 Observations	Jun/Q2 2007 Observations	Sep/Q3 2007 Observations	Dec/Q4 2007 Observations	Mar/Q1 2008 Observations	Jun/Q2 2008 Observations	Sep/Q3 2008 Obsevations	Dec/Q4 2008 Obsevations	Mar/Q1 2009 Observations	Jun/Q2 2009 Observations	Sep/Q3 2009 Observations
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
SHMW-09I	NR	NR	NR	None Observed	NR	NR	None Observed	NR	NR	NR	NR	NR	NR	NR
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
SHMW-10I	NR	NR	NR	None Observed	NR	NR	None Observed	NR	NR	NR	NR	NR	NR	NR
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
SHMW-11I	NR	NR	NR	None Observed	NR	NR	None Observed	NR	NR	NR	NR	NR	NR	NR
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
SHMW-12I	NR	NR	NR	None Observed	NR	NR	None Observed	NR	NR	NR	NR	NR	NR	NR
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
SHMW-13I	NR	NR	NR	None Observed	NR	NR	None Observed	NR	NR	NR	NR	NR	NR	NR

Table 2
Summary of Historical NAPL Observations
Sag Harbor Former MGP Site
Groundwater Monitoring Program - Q4 2012

Well ID	Dec/Q4 2009 Observations	Mar/Q1 2010 Observations	Jun/Q2 2010 Observations	Sep/Q3 2010 Observations	Dec/Q4 2010 Observations	Mar/Q1 2011 Observations	Jun/Q2 2011 Observations	Sep/Q3 2011 Observations	Dec/Q4 2011 Observations	Mar/Q1 2012 Observations	June/Q2 2012 Observations	Sep/Q3 2012 Observations	Dec/Q4 2012 Observations
MW-01	Well Abandoned	Well Abandoned	Well Abandoned	Well Abandoned	Well Abandoned	Well Abandoned	Well Abandoned	Well Abandoned	Well Abandoned	Well Abandoned	Well Abandoned	Well Abandoned	Well Abandoned
MW-02	Well Abandoned	Well Abandoned	Well Abandoned	Well Abandoned	Well Abandoned	Well Abandoned	Well Abandoned	Well Abandoned	Well Abandoned	Well Abandoned	Well Abandoned	Well Abandoned	Well Abandoned
MW-03	Well Abandoned	Well Abandoned	Well Abandoned	Well Abandoned	Well Abandoned	Well Abandoned	Well Abandoned	Well Abandoned	Well Abandoned	Well Abandoned	Well Abandoned	Well Abandoned	Well Abandoned
MW-04	Well Abandoned	Well Abandoned	Well Abandoned	Well Abandoned	Well Abandoned	Well Abandoned	Well Abandoned	Well Abandoned	Well Abandoned	Well Abandoned	Well Abandoned	Well Abandoned	Well Abandoned
MW-05	Well Destroyed	Well Destroyed	Well Destroyed	Well Destroyed	Well Destroyed	Well Destroyed	Well Destroyed	Well Destroyed	Well Destroyed	Well Destroyed	Well Destroyed	Well Destroyed	Well Destroyed
MW-06	Well Abandoned	Well Abandoned	Well Abandoned	Well Abandoned	Well Abandoned	Well Abandoned	Well Abandoned	Well Abandoned	Well Abandoned	Well Abandoned	Well Abandoned	Well Abandoned	Well Abandoned
SHMW-01S/01SR	Well Abandoned	Well Abandoned	Well Abandoned	Well Abandoned	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed
SHMW-01I/01IR	Well Abandoned	Well Abandoned	Well Abandoned	Well Abandoned	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed
SHMW-01D	NI	NI	NI	NI	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed
SHMW-02S	NI	NI	NI	NI	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed
SHMW-02I/02IR	Well Abandoned	Well Abandoned	Well Abandoned	Well Abandoned	None Observed	Well Damaged	Well Damaged	Well Damaged	None Observed	None Observed	None Observed	None Observed	None Observed
SHMW-02D/02DR	Well Abandoned	Well Abandoned	Well Abandoned	Well Abandoned	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed
SHMW-03S	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed
SHMW-03I	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed
SHMW-04S/04SR	Well Abandoned	Well Abandoned	Well Abandoned	Well Abandoned	Trace LNAPL - DNAPL observed on tubing	Trace LNAPL - DNAPL observed on tubing	Trace LNAPL - DNAPL observed on tubing	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed
SHMW-04I	Well Abandoned	Well Abandoned	Well Abandoned	Well Abandoned	Well Abandoned	Well Abandoned	Well Abandoned	Well Abandoned	Well Abandoned	Well Abandoned	Well Abandoned	Well Abandoned	Well Abandoned
SHMW-05S/05SR	Well Abandoned	Well Abandoned	Well Abandoned	Well Abandoned	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed
SHMW-05I/05IR	Well Abandoned	Well Abandoned	Well Abandoned	Well Abandoned	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed
SHMW-06S	Well Abandoned	Well Abandoned	Well Abandoned	Well Abandoned	Well Abandoned	Well Abandoned	Well Abandoned	Well Abandoned	Well Abandoned	Well Abandoned	Well Abandoned	Well Abandoned	Well Abandoned
SHMW-06I	Well Abandoned	Well Abandoned	Well Abandoned	Well Abandoned	Well Abandoned	Well Abandoned	Well Abandoned	Well Abandoned	Well Abandoned	Well Abandoned	Well Abandoned	Well Abandoned	Well Abandoned
SHMW-07S/07SR	None Observed	None Observed	Well Inaccessible	Well Inaccessible	Trace LNAPL - DNAPL observed on tubing	Trace LNAPL - DNAPL observed on tubing	Trace LNAPL - DNAPL observed on tubing	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed
SHMW-07I/07IR	None Observed (approximately 10 feet of sand present in well)	None Observed (approximately 10 feet of sand present in well)	Well Inaccessible	Well Inaccessible	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed
SHMW-08S	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed
SHMW-08I	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed

Table 2
Summary of Historical NAPL Observations
Sag Harbor Former MGP Site
Groundwater Monitoring Program - Q4 2012

Well ID	Dec/Q4 2009 Observations	Mar/Q1 2010 Observations	Jun/Q2 2010 Observations	Sep/Q3 2010 Observations	Dec/Q4 2010 Observations	Mar/Q1 2011 Observations	Jun/Q2 2011 Observations	Sep/Q3 2011 Observations	Dec/Q4 2011 Observations	Mar/Q1 2012 Observations	June/Q2 2012 Observations	Sep/Q3 2012 Observations	Dec/Q4 2012 Observations
SHMW-09S	None Observed	Well Inaccessible	None Observed	None Observed	No access	No access	No access	No access	No access	No access	No access	No access	No access
SHMW-09I	None Observed	None Observed	None Observed	None Observed	No access	No access	No access	No access	No access	No access	No access	No access	No access
SHMW-10S	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed
SHMW-10I	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed
SHMW-11S	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed
SHMW-11I	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed
SHMW-12S	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed
SHMW-12I	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed
SHMW-13S	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed
SHMW-13I	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed	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
NI = Not Installed

Table 3
Summary of BTEX, MTBE and PAH Results
Sag Harbor Former MGP Site
Groundwater Monitoring Program - Q4 2012

Location Name	NYS AWQS	SHMW-01SR	SHMW-01IR	SHMW-01D	SHMW-02S	SHMW-02IR	SHMW-02DR	SHMW-03S	SHMW-03I	SHMW-04SR	SHMW-05SR	SHMW-05IR	SHMW-07SR	SHMW-07IR
Sample Date		12/17/2012	12/17/2012	12/17/2012	12/17/2012	12/17/2012	12/17/2012	12/18/2012	12/18/2012	12/18/2012	12/18/2012	12/18/2012	12/17/2012	12/17/2012
Analyte														
BTEX (ug/L)														
Benzene	1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	**210**	**10**	1 U	**90 J**	1 U
Toluene	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	**9**	1 U	1 U	**3 J**	1 U
Ethylbenzene	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	**130**	**3**	1 U	**97**	1 U
Total Xylene	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	**100**	**3**	1 U	**61**	1 U
Total BTEX	NE	ND	ND	ND	ND	ND	ND	ND	ND	**449**	**16**	ND	**251**	ND
Other VOCs (ug/L)														
Methyl tert-butyl ether (MTBE)	10*	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Non-carcinogenic PAHs (ug/L)														
Acenaphthene	20*	10 U	10 U	10 U	10 U	**1 J**	10 U	**2 J**	10 U	**100**	**13**	10 U	**25**	10 U
Acenaphthylene	NE	10 U	10 U	10 U	10 U	**5 J**	10 U	10 U	10 U	**2 J**	10 U	10 U	**2 J**	10 U
Anthracene	50*	10 U	10 U	10 U	10 U	**3 J**	10 U	10 U	10 U	**8 J**	10 U	10 U	**3 J**	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	10 U	10 U	10 U
Fluoranthene	50*	10 U	10 U	10 U	10 U	**4 J**	10 U	10 U	10 U	**4 J**	10 U	10 U	**2 J**	10 U
Fluorene	50*	10 U	10 U	10 U	10 U	**3 J**	10 U	10 U	10 U	**24**	**6 J**	10 U	**10**	10 U
2-Methylnaphthalene	NE	10 U	10 U	10 U	10 U	**5 J**	10 U	10 U	10 U	**68**	10 U	10 U	**28**	10 U
Naphthalene	10*	10 U	10 U	10 U	10 U	**14**	10 U	10 U	10 U	**390**	10 U	10 U	**330**	10 U
Phenanthrene	50*	10 U	10 U	10 U	10 U	**10**	10 U	10 U	10 U	**37**	**1 J**	10 U	**16**	10 U
Pyrene	50*	10 U	10 U	10 U	10 U	**6 J**	10 U	10 U	10 U	**6 J**	10 U	10 U	**3 J**	10 U
Carcinogenic PAHs (ug/L)														
Benz[a]anthracene	0.002*	10 U	10 U	10 U	10 U	**2 J**	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo[a]pyrene	ND	10 U	10 U	10 U	10 U	**1 J**	10 U	10 U	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 UJ	10 UJ	10 U	10 U	10 U	10 U
Benzo[k]fluoranthene	0.002*	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Chrysene	0.002*	10 U	10 U	10 U	10 U	**2 J**	10 U	10 U	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	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	10 U	10 U	10 U
Total PAH	NE	ND	ND	ND	ND	**56**	ND	**2**	ND	**639**	**20**	ND	**419**	ND

Table 3
Summary of BTEX, MTBE and PAH Results
Sag Harbor Former MGP Site
Groundwater Monitoring Program - Q4 2012

		Duplicate of:														Duplicate of:
Location Name	NYS AWQS	SHMW-07IR	SHMW-08S	SHMW-08I	SHMW-09S	SHMW-09I	SHMW-10S	SHMW-10I	SHMW-11S	SHMW-11I	SHMW-12S	SHMW-12I	SHMW-13S	SHMW-13I	SHMW-13I
Sample Date		12/17/2012	12/17/2012	12/17/2012	12/18/2012	12/18/2012	12/20/2012	12/20/2012	12/17/2012	12/17/2012	12/20/2012	12/20/2012	12/18/2012	12/18/2012	12/18/2012
Analyte															
BTEX (ug/L)															
Benzene	1	1 U	**4**	1 U	**110**	1 U	1 U	1 U	1 U	1 U	**14**	1 U	1 U	1 U	1 U
Toluene	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Ethylbenzene	5	1 U	1 U	1 U	**26**	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Total Xylene	5	1 U	**2**	1 U	**29**	1 U	1 U	1 U	1 U	1 U	**5**	1 U	1 U	1 U	1 U
Total BTEX	NE	ND	**6**	ND	**165**	ND	ND	ND	ND	ND	**19**	ND	ND	ND	ND
Other VOCs (ug/L)															
Methyl tert-butyl ether (MTBE)	10*	10 U	**5 J**	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Non-carcinogenic PAHs (ug/L)															
Acenaphthene	20*	10 U	**30**	10 U	**60**	10 U	10 U	10 U	10 U	10 U	**4 J**	10 U	10 U	10 U	10 U
Acenaphthylene	NE	10 U	**1 J**	10 U	10 U	10 U	10 U	10 U	**2 J**	10 U	10 U	10 U	10 U	10 U	10 U
Anthracene	50*	10 U	**4 J**	10 U	**2 J**	10 U	10 U	10 U	10 U	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	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Fluoranthene	50*	10 U	**3 J**	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Fluorene	50*	10 U	**16**	10 U	**13**	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2-Methylnaphthalene	NE	10 U	**5 J**	10 U	**23**	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Naphthalene	10*	10 U	**93 D**	10 U	**580 D**	10 U	10 U	10 U	10 U	10 U	**100 D**	10 U	10 U	10 U	10 U
Phenanthrene	50*	10 U	**27**	10 U	**12**	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Pyrene	50*	10 U	**3 J**	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Carcinogenic PAHs (ug/L)															
Benz[a]anthracene	0.002*	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	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	10 U	10 U	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	10 U	10 U	10 U	10 U
Benzo[k]fluoranthene	0.002*	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Chrysene	0.002*	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	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	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	10 U	10 U	10 U	10 U
Total PAH	NE	ND	**182**	ND	**690**	ND	ND	ND	**2**	ND	**104**	ND	ND	ND	ND

Notes:

ug/L - micrograms per liter or parts per billion (ppb)
BTEX - benzene, toluene, ethylbenzene, and xylenes
VOCs - volatile organic compounds
PAHs - polycyclic aromatic hydrocarbons

Total BTEX, Total VOCs, and Total PAHs are calculated using detects only.
Total PAH16 is calculated using the EPA16 list of analytes: Acenaphthene, Acenaphthylene, Anthracene, Benz[a]anthracene, Benzo[a]pyrene, Benzo[b]fluoranthene, Benzo[g,h,i]perylene, Benzo[k]fluoranthene, Chrysene, Dibenz[a,h]anthracene, Fluoranthene, Fluorene, Indeno[1,2,3-cd]pyrene, Naphthalene, Phenanthrene, and Pyrene
Total PAH17 is calculated using the EPA16 list of analytes plus 2-Methylnaphthalene

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
Gray shading indicates that the detected result value exceeds NYS AWQS

Data Qualifiers:

D - Results for dilution
J - estimated value
U - indicates not detected to the reporting limit
UJ - not detected at or above the reporting limit shown and the reporting limit is estimated

Table 4
Summary of Historical BTEX Results
Sag Harbor Former MGP Site
Groundwater Monitoring Program - Q4 2012

Well No.	Screen Interval (feet)	BTEX Concentrations (µg/L)													
		Sampling Date													
		1995	2000		2002	2004		2005				2006			
		Nov	Mar	Apr	May	May	Aug	Mar/Apr	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
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
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
MW-04	1.25 - 6.81	864	35	--	10	208	--	0	0	225	299	268	193	181	101
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
SHMW-01S/01SR	1.0 - 6.0	--	--	1,413	874	2,102	--	1,367	1,810	406	1,313	2,562	2,085	5,183	2,915
SHMW-01I/01IR	35.0 - 45.0	--	--	5	0	0	--	--	--	--	0	--	--	--	0
SHMW-01D	65.0 - 75.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SHMW-02S	1.0 - 6.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SHMW-02I/02IR	35.0 - 45.0	--	--	26	0	1,179	16	20	20	19	25	0	0	0	0
SHMW-02D/02DR	65.0 - 75.0	--	--	5	4	0	--	--	--	--	0	--	--	--	0
SHMW-03S	2.0 - 12.0	--	--	63	0	110	--	48	53	46	75	131	67	97	13
SHMW-03I	35.0 - 45.0	--	--	0	52	0	--	--	--	--	0	--	--	--	0
SHMW-04S/04SR	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
SHMW-04I	35.0 - 45.0	--	--	5	0	0	--	--	--	--	0	--	--	--	0
SHMW-05S/05SR	2.0 - 12.0	--	--	37	69	83	--	107	282	2,960	115	202	45	43	26
SHMW-05I/05IR	35.0 - 45.0	--	--	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
SHMW-06I	35.0 - 45.0	--	--	0	0	0	--	--	--	--	0	--	--	--	0
SHMW-07S/07SR	1.0 - 11.0	--	--	2,011	1,562	414	--	1,482	3,340	2,458	1,722	1,400	1,060	--	1,137
SHMW-07I/07IR	35.0 - 45.0	--	--	0	0	0	--	--	--	--	0	--	--	--	0
SHMW-08S	1.0 - 7.0	--	--	5	2	9	--	0	14	0	15	11	0	19	0
SHMW-08I	35.0 - 45.0	--	--	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
SHMW-09I	35.0 -45.0	--	--	0	0	0	--	--	--	--	0	--	--	--	0
SHMW-10S	5.0 -15.0	--	--	--	0	0	--	0	0	0	0	0	0	0	0
SHMW-10I	35.5 - 45.5	--	--	--	0	0	--	--	--	--	0	--	--	--	0
SHMW-11S	3.5 - 13.5	--	--	--	0	0	--	0	0	0	0	0	0	0	0
SHMW-11I	35.0 - 45.0	--	--	--	0	0	--	--	--	--	0	--	--	--	0
SHMW-12S	1.5 - 6.5	--	--	--	0	344	--	142	930	69	290	140	463	581	182
SHMW-12I	35.0 - 45.0	--	--	--	0	0	--	--	--	--	0	--	--	--	0
SHMW-13S	1.5 - 6.5	--	--	--	0	0	--	0	0	0	0	0	0	0	0
SHMW-13I	35.0- 45.0	--	--	--	0	0	--	--	--	--	0	--	--	--	0

Table 4
Summary of Historical BTEX Results
Sag Harbor Former MGP Site
Groundwater Monitoring Program - Q4 2012

Well No.	Screen Interval (feet)	BTEX Concentrations (µg/L)											
		Sampling Date											
		2007				2008				2009			
		March	June	Sept	Dec	March	June	Sep	Dec	March	June	Sept	Dec
MW-01	1.50 - 7.32	160	240	150	270	337	141	208	--	--	--	--	--
MW-02	0.50 - 7.25	8,678	12,810	15,181	98	8,865	7,415	2,240	--	--	--	--	--
MW-03	2.17 - 10.17	1,680	2,930	3,225	2,831	2,842	2,241	2,875	--	--	--	--	--
MW-04	1.25 - 6.81	0	51	89	66	--	15	79	--	--	--	--	--
MW-05	2.46 - 7.46	--	--	--	--	--	--	--	--	--	--	--	--
MW-06	2.47 - 7.47	0	37	31	0	1	33	7	--	--	--	--	--
SHMW-01S/01SR	1.0 - 6.0	691	2,460	2,600	1,684	1,595	306	243	--	--	--	--	--
SHMW-01I/01IR	35.0 - 45.0	0	--	--	--	--	--	--	--	--	--	--	--
SHMW-01D	65.0 - 75.0	--	--	--	--	--	--	--	--	--	--	--	--
SHMW-02S	1.0 - 6.0	--	--	--	--	--	--	--	--	--	--	--	--
SHMW-02I/02IR	35.0 - 45.0	--	11	12	15	18	41	29	--	--	--	--	--
SHMW-02D/02DR	65.0 - 75.0	--	--	--	0	--	--	--	--	--	--	--	--
SHMW-03S	2.0 - 12.0	122	80	12	50	3	0	5	13	111	24	4	9
SHMW-03I	35.0 - 45.0	--	--	--	0	--	--	--	0	--	0	--	0
SHMW-04S/04SR	2.0 - 12.0	6,883	20,488	16,120	10,378	7,567	8,059	7,561	--	--	--	--	--
SHMW-04I	35.0 - 45.0	--	--	--	0	--	--	--	--	--	--	--	--
SHMW-05S/05SR	2.0 - 12.0	35	458	676	98	77	83	64	--	--	--	--	--
SHMW-05I/05IR	35.0 - 45.0	--	--	--	0	--	--	--	--	--	--	--	--
SHMW-06S	2.0 - 6.0	1,475	2,285	2,162	1,565	1,296	1,343	1,298	--	--	--	--	--
SHMW-06I	35.0 - 45.0	--	--	--	0	--	--	--	--	--	--	--	--
SHMW-07S/07SR	1.0 - 11.0	185	--	2,139	726	--	1,075	1,374	--	--	1,500	3,472	2,183
SHMW-07I/07IR	35.0 - 45.0	--	--	--	0	--	--	--	--	--	--	--	--
SHMW-08S	1.0 - 7.0	0	0	0	12	8	9	10	--	--	5	5	4
SHMW-08I	35.0 - 45.0	--	--	--	0	--	--	--	--	--	0	--	0
SHMW-09S	2.0 - 12.0	418	1,240	178	600	1,039	1,298	671	483	--	584	455	224
SHMW-09I	35.0 -45.0	--	--	--	0	--	--	--	0	--	0	--	0
SHMW-10S	5.0 -15.0	0	0	0	0	0	1	0	0	0	0	0	0
SHMW-10I	35.5 - 45.5	--	--	--	0	--	--	--	0	--	0	--	0
SHMW-11S	3.5 - 13.5	0	0	0	0	0	0	0	0	0	0	0	0
SHMW-11I	35.0 - 45.0	--	--	--	0	--	--	--	0	--	0	--	0
SHMW-12S	1.5 - 6.5	85	623	81	0	166	482	111	279	28	315	45	58
SHMW-12I	35.0 - 45.0	--	--	--	23	--	--	--	0	--	--	--	2
SHMW-13S	1.5 - 6.5	0	0	0	0	0	0	0	0	0	0	0	0
SHMW-13I	35.0- 45.0	--	--	--	0	--	--	--	0	--	0	--	0

Table 4
Summary of Historical BTEX Results
Sag Harbor Former MGP Site
Groundwater Monitoring Program - Q4 2012

Well No.	Screen Interval (feet)	BTEX Concentrations (µg/L)														
		Sampling Date												Min	Max	Mean
		2010				2011				2012						
		March	June	Sept	Dec	March	June	Sept	Dec	March	June	Sept	Dec			
MW-01	1.50 - 7.32	--	--	--	--	--	--	--	--	--	--	--	--	0	2,720	112
MW-02	0.50 - 7.25	--	--	--	--	--	--	--	--	--	--	--	--	98	15,181	9,335
MW-03	2.17 - 10.17	--	--	--	--	--	--	--	--	--	--	--	--	560	4,965	2,479
MW-04	1.25 - 6.81	--	--	--	--	--	--	--	--	--	--	--	--	0	864	107
MW-05	2.46 - 7.46	--	--	--	--	--	--	--	--	--	--	--	--	5	18,900	5,202
MW-06	2.47 - 7.47	--	--	--	--	--	--	--	--	--	--	--	--	0	334	35
SHMW-01S/01SR	1.0 - 6.0	--	--	--	0	1	0	0	3	0	0	0	0	0	5,183	1,171
SHMW-01I/01IR	35.0 - 45.0	--	--	--	0	--	--	--	3	--	--	--	0	0	5	1
SHMW-01D	65.0 - 75.0	--	--	--	0	--	--	--	3	--	--	--	0	0	3	1
SHMW-02S	1.0 - 6.0	--	--	--	3	0	3	0	5	1	0	0	0	0	5	1
SHMW-02I/02IR	35.0 - 45.0	--	--	--	4	0	--	--	14	--	--	--	0	0	1,179	66
SHMW-02D/02DR	65.0 - 75.0	--	--	--	0	--	--	--	0	--	--	--	0	0	5	1
SHMW-03S	2.0 - 12.0	40	5	0	9	24	2	3	18	0	1	1	0	0	131	35
SHMW-03I	35.0 - 45.0	--	--	--	0	--	--	--	0	--	--	--	0	0	52	4
SHMW-04S/04SR	2.0 - 12.0	--	--	--	2,717	702	469	292	572	391	709	654	449	292	25,860	8,495
SHMW-04I	35.0 - 45.0	--	--	--	--	--	--	--	--	--	--	--	--	0	5	1
SHMW-05S/05SR	2.0 - 12.0	--	--	--	20	22	25	27	45	25	29	28	16	16	2,960	211
SHMW-05I/05IR	35.0 - 45.0	--	--	--	0	--	--	--	0	--	--	--	0	0	0	0
SHMW-06S	2.0 - 6.0	--	--	--	--	--	--	--	--	--	--	--	--	1,296	4,289	2,214
SHMW-06I	35.0 - 45.0	--	--	--	--	--	--	--	--	--	--	--	--	0	0	0
SHMW-07S/07SR	1.0 - 11.0	1,825	3,946	--	858	455	1,172	607	700	1,418	670	2,822	251	185	3,946	1,516
SHMW-07I/07IR	35.0 - 45.0	--	--	--	0	--	--	--	11	--	--	--	0	0	11	1
SHMW-08S	1.0 - 7.0	6	13	4	9	7	10	5	9	5	7	2	6	0	19	6
SHMW-08I	35.0 - 45.0	--	--	--	0	--	--	--	5	--	--	--	0	0	5	0
SHMW-09S	2.0 - 12.0	--	--	--	--	--	--	--	--	--	--	130	165	130	1,298	683
SHMW-09I	35.0 -45.0	--	--	--	--	--	--	--	--	--	--	0	0	0	0	0
SHMW-10S	5.0 -15.0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
SHMW-10I	35.5 - 45.5	--	--	--	0	--	--	--	5	--	--	--	0	0	5	0
SHMW-11S	3.5 - 13.5	0	0	0	0	0	0	0	8	0	0	0	0	0	8	0
SHMW-11I	35.0 - 45.0	--	--	--	0	--	--	--	0	--	--		0	0	0	0
SHMW-12S	1.5 - 6.5	222	217	8	70	82	672	473	337	127	434	41	19	0	930	239
SHMW-12I	35.0 - 45.0	--	--	--	0	--	--	--	6	--	--	--	0	0	23	3
SHMW-13S	1.5 - 6.5	0	0	0	0	0	0	3	3	12	0	0	0	0	12	1
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
Summary of Historical Total PAH Results
Sag Harbor Former MGP Site
Groundwater Monitoring Program - Q4 2012

Well No.	Screen Interval (feet)	Total PAH Concentrations (µg/L)													
		Sampling Date													
		1995	2000		2002	2004		2005				2006			
		Nov	Mar	Apr	May	May	Aug	Mar/Apr	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
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
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
MW-04	1.25 - 6.81	3,612	75	--	0	90	--	0	22	1,098	103	11	37	66	31
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
SHMW-01S/01SR	1.0 - 6.0	--	--	4,147	2,663	2,424	--	1,989	2,185	840	0	42	115	3,989	3,874
SHMW-01I/01IR	35.0 - 45.0	--	--	32	0	0	--	--	--	--	0	--	--	--	0
SHMW-01D	65.0 - 75.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SHMW-02S	1.0 - 6.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SHMW-02I/02IR	35.0 - 45.0	--	--	266	0	580,200	41	185	124	271	30	74	32	91	89
SHMW-02D/02DR	65.0 - 75.0	--	--	308	76	89	--	--	--	--	0	--	--	--	0
SHMW-03S	2.0 - 12.0	--	--	422	0	295	--	79	130	117	339	0	0	147	118
SHMW-03I	35.0 - 45.0	--	--	2	320	0	--	--	--	--	0	--	--	--	0
SHMW-04S/04SR	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
SHMW-04I	35.0 - 45.0	--	--	18	0	0	--	--	--	--	0	--	--	--	0
SHMW-05S/05SR	2.0 - 12.0	--	--	13	170	94	--	82	91	26	53	17	11	11	110
SHMW-05I/05IR	35.0 - 45.0	--	--	0	17	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
SHMW-06I	35.0 - 45.0	--	--	2	0	0	--	--	--	--	0	--	--	--	0
SHMW-07S/07SR	1.0 - 11.0	--	--	7,211	6,585	2,708	--	3,224	4,604	6,187	3,507	2,004	3,119	--	3,721
SHMW-07I/07IR	35.0 - 45.0	--	--	0	0	0	--	--	--	--	0	--	--	--	2,212
SHMW-08S	1.0 - 7.0	--	--	110	71	94	--	25	70	33	83	112	57	77	99
SHMW-08I	35.0 - 45.0	--	--	13	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
SHMW-09I	35.0 -45.0	--	--	3	0	0	--	--	--	--	0	--	--	--	0
SHMW-10S	5.0 -15.0	--	--	--	22	6	--	0	0	0	0	0	0	0	0
SHMW-10I	35.5 - 45.5	--	--	--	0	0	--	--	--	--	0	--	--	--	0
SHMW-11S	3.5 - 13.5	--	--	--	0	3	--	173	0	0	0	0	0	0	0
SHMW-11I	35.0 - 45.0	--	--	--	0	0	--	--	--	--	0	--	--	--	0
SHMW-12S	1.5 - 6.5	--	--	--	60	218	--	71	600	230	260	110	470	310	280
SHMW-12I	35.0 - 45.0	--	--	--	0	0	--	--	--	--	0	--	--	--	0
SHMW-13S	1.5 - 6.5	--	--	--	0	0	--	0	0	0	0	0	0	0	0
SHMW-13I	35.0- 45.0	--	--	--	0	0	--	--	--	--	0	--	--	--	0

Table 5
Summary of Historical Total PAH Results
Sag Harbor Former MGP Site
Groundwater Monitoring Program - Q4 2012

Well No.	Screen Interval (feet)	Total PAH Concentrations (µg/L)											
		Sampling Date											
		2007				2008				2009			
		March	June	Sept	Dec	March	June	Sep	Dec	March	June	Sept	Dec
MW-01	1.50 - 7.32	0	54	87	39	145	2	35	--	--	--	--	--
MW-02	0.50 - 7.25	3,150	7,421	5,398	165	400	3,455	3,488	--	--	--	--	--
MW-03	2.17 - 10.17	349	489	463	2,904	508	96	1,109	--	--	--	--	--
MW-04	1.25 - 6.81	0	66	238	6	--	0	22	--	--	--	--	--
MW-05	2.46 - 7.46	--	--	--	--	--	--	--	--	--	--	--	--
MW-06	2.47 - 7.47	35	46	17	0	0	0	10	--	--	--	--	--
SHMW-01S/01SR	1.0 - 6.0	0	1,058	1,691	42	0	0	0	--	--	--	--	--
SHMW-01I/01IR	35.0 - 45.0	--	--	--	--	--	--	--	--	--	--	--	--
SHMW-01D	65.0 - 75.0	--	--	--	--	--	--	--	--	--	--	--	--
SHMW-02S	1.0 - 6.0	--	--	--	--	--	--	--	--	--	--	--	--
SHMW-02I/02IR	35.0 - 45.0	0	10	175	32	8	42	209	--	--	--	--	--
SHMW-02D/02DR	65.0 - 75.0	--	--	--	15	--	--	--	--	--	--	--	--
SHMW-03S	2.0 - 12.0	430	191	12	154	0	0	17	29	0	20	0	0
SHMW-03I	35.0 - 45.0	--	--	--	0	--	--	--	0	--	0	--	0
SHMW-04S/04SR	2.0 - 12.0	2,632	3,999	4,693	4,305	0	1,328	1,868	--	--	--	--	--
SHMW-04I	35.0 - 45.0	--	--	--	0	--	--	--	--	--	--	--	--
SHMW-05S/05SR	2.0 - 12.0	0	0	14	8	2	0	31	--	--	--	--	--
SHMW-05I/05IR	35.0 - 45.0	--	--	--	0	--	--	--	--	--	--	--	--
SHMW-06S	2.0 - 6.0	1,703	3,574	4,368	380	0	44	5,848	--	--	--	--	--
SHMW-06I	35.0 - 45.0	--	--	--	0	--	--	--	--	--	--	--	--
SHMW-07S/07SR	1.0 - 11.0	0	--	3,902	4	--	54	3,252	--	--	2,919	4,722	5,286
SHMW-07I/07IR	35.0 - 45.0	--	--	--	0	--	--	--	--	--	--	--	--
SHMW-08S	1.0 - 7.0	13	90	10	13	14	21	55	--	--	59	60	112
SHMW-08I	35.0 - 45.0	--	--	--	0	--	--	--	--	--	1	--	0
SHMW-09S	2.0 - 12.0	48	206	2,246	130	0	92	485	503	--	68	39	389
SHMW-09I	35.0 -45.0	--	--	--	0	--	--	--	0	--	0	--	0
SHMW-10S	5.0 -15.0	0	0	0	1	0	0	0	0	0	0	0	0
SHMW-10I	35.5 - 45.5	--	--	--	0	--	--	--	0	--	0	--	0
SHMW-11S	3.5 - 13.5	0	0	0	0	0	0	0	0	0	0	2	0
SHMW-11I	35.0 - 45.0	--	--	--	4	--	--	--	0	--	0	--	0
SHMW-12S	1.5 - 6.5	15	560	0	155	9	137	259	280	0	332	4	216
SHMW-12I	35.0 - 45.0	--	--	--	20	--	--	--	0	--	--	--	0
SHMW-13S	1.5 - 6.5	0	0	0	0	0	0	0	0	0	0	0	0
SHMW-13I	35.0- 45.0	--	--	--	0	--	--	--	0	--	0	--	0

Table 5
Summary of Historical Total PAH Results
Sag Harbor Former MGP Site
Groundwater Monitoring Program - Q4 2012

Well No.	Screen Interval (feet)	Total PAH Concentrations (µg/L)														
		Sampling Date												Min	Max	Mean
		2010				2011				2012						
		March	June	Sept	Dec	March	June	Sept	Dec	March	June	Sept	Dec			
MW-01	1.50 - 7.32	--	--	--	--	--	--	--	--	--	--	--	--	0	4,906	380
MW-02	0.50 - 7.25	--	--	--	--	--	--	--	--	--	--	--	--	0	25,167	6,235
MW-03	2.17 - 10.17	--	--	--	--	--	--	--	--	--	--	--	--	92	7,034	2,352
MW-04	1.25 - 6.81	--	--	--	--	--	--	--	--	--	--	--	--	0	3,612	304
MW-05	2.46 - 7.46	--	--	--	--	--	--	--	--	--	--	--	--	101	431,600	80,149
MW-06	2.47 - 7.47	--	--	--	--	--	--	--	--	--	--	--	--	0	5,416	420
SHMW-01S/01SR	1.0 - 6.0	--	--	--	0	0	0	0	4	7	21	0	0	0	4,147	929
SHMW-01I/01IR	35.0 - 45.0	--	--	--	0	--	--	--	0	--	--	--	0	0	32	4
SHMW-01D	65.0 - 75.0	--	--	--	0	--	--	--	0	--	--	--	0	0	0	0
SHMW-02S	1.0 - 6.0	--	--	--	0	0	0	0	0	5	0	0	0	0	5	1
SHMW-02I/02IR	35.0 - 45.0	--	--	--	9	3	--	--	0	--	--	--	56	0	580,200	25,302
SHMW-02D/02DR	65.0 - 75.0	--	--	--	0	--	--	--	0	--	--	--	0	0	308	54
SHMW-03S	2.0 - 12.0	0	22	0	0	2	7	25	22	6	10	22	2	0	430	75
SHMW-03I	35.0 - 45.0	--	--	--	0	--	--	--	0	--	--	--	0	0	320	27
SHMW-04S/04SR	2.0 - 12.0	--	--	--	3,598	1,440	978	811	942	581	1,296	1,195	639	0	6,669	3,082
SHMW-04I	35.0 - 45.0	--	--	--	--	--	--	--	--	--	--	--	--	0	18	3
SHMW-05S/05SR	2.0 - 12.0	--	--	--	0	4	167	273	131	309	219	420	20	0	420	84
SHMW-05I/05IR	35.0 - 45.0	--	--	--	0	--	--	--	0	--	--	--	0	0	17	2
SHMW-06S	2.0 - 6.0	--	--	--	--	--	--	--	--	--	--	--	--	0	5,848	2,690
SHMW-06I	35.0 - 45.0	--	--	--	--	--	--	--	--	--	--	--	--	0	2	0
SHMW-07S/07SR	1.0 - 11.0	3,410	4,547	--	1,456	0	1,736	885	955	927	444	4,342	419	0	7,211	2,832
SHMW-07I/07IR	35.0 - 45.0	--	--	--	0	--	--	--	4	--	--	--	0	0	2,212	246
SHMW-08S	1.0 - 7.0	129	201	34	3	11	185	195	35	152	111	113	182	3	201	80
SHMW-08I	35.0 - 45.0	--	--	--	0	--	--	--	0	--	--	--	0	0	13	1
SHMW-09S	2.0 - 12.0	--	--	--	--	--	--	--	--	--	--	787	690	0	2,737	1,009
SHMW-09I	35.0 -45.0	--	--	--	--	--	--	--	--	--	--	0	0	0	3	0
SHMW-10S	5.0 -15.0	0	0	0	0	0	0	0	1	0	3	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	4	6	0	0	2	0	173	6
SHMW-11I	35.0 - 45.0	--	--	--	0	--	--	--	0	--	--	--	0	0	4	0
SHMW-12S	1.5 - 6.5	177	585	3	0	0	584	739	513	154	361	217	104	0	739	236
SHMW-12I	35.0 - 45.0	--	--	--	0	--	--	--	2	--	--	--	0	0	20	2
SHMW-13S	1.5 - 6.5	0	0	0	0	0	0	3	2	2	0	0	0	0	3	0
SHMW-13I	35.0- 45.0	--	--	--	0	--	--	--	1	--	--	--	0	0	1	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).

0 2000 4000
SCALE, FEET

SAG HARBOR FORMER MGP SITE
SAG HARBOR, NEW YORK

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SITE LOCATION MAP

Project 093190-2-1203 | February 2013 | Figure 1

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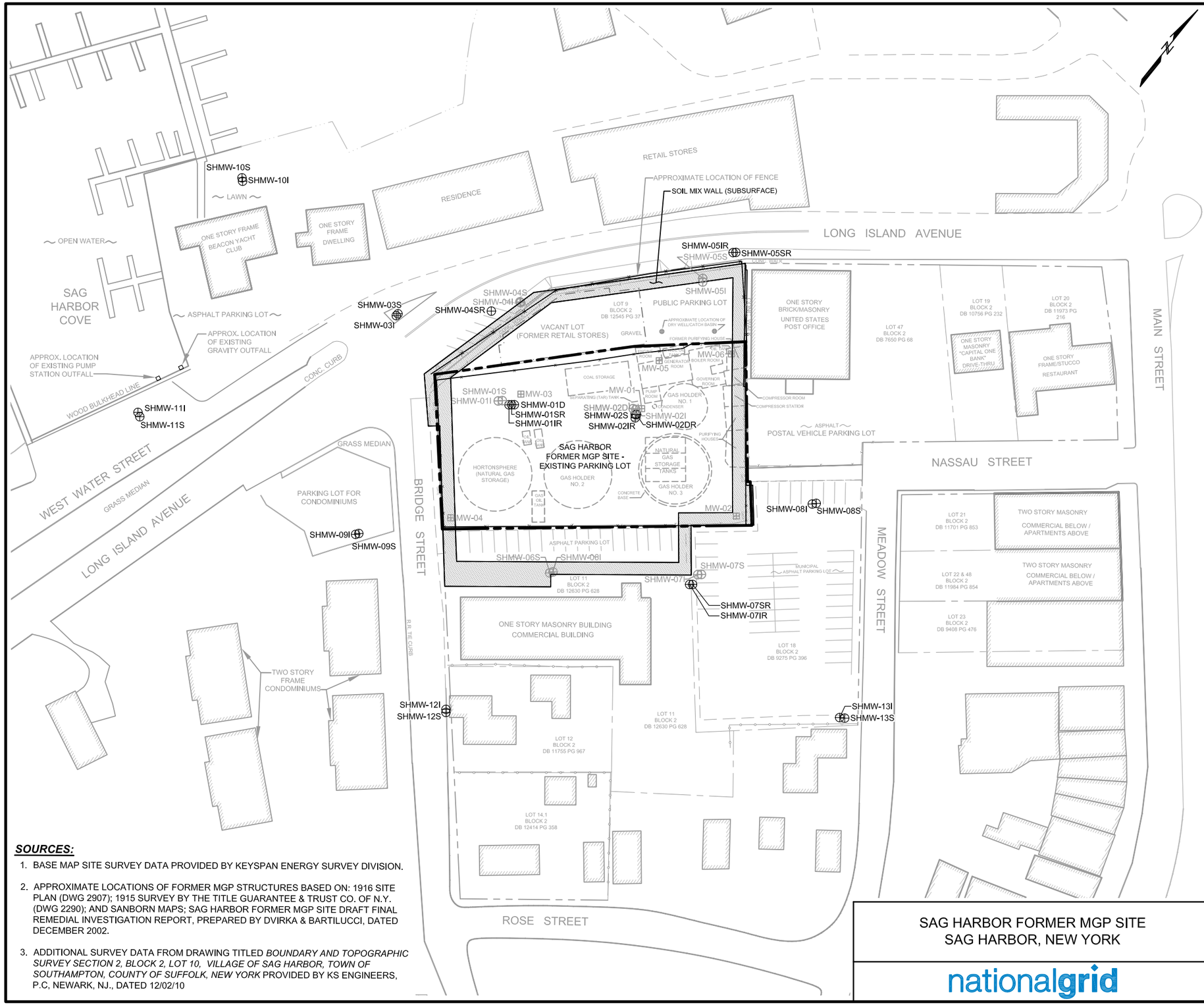

LEGEND

- APPROXIMATE LOCATION OF FORMER MGP STRUCTURE
- LOCATION OF EXISTING STRUCTURE
- CURRENT SITE BOUNDARY
- ADJACENT SITE BOUNDARY
- CHAIN-LINK FENCE
- STOCKADE FENCE
- SHMW-05S ⊕ FORMER MONITORING WELL (WELL ABANDONED OR DESTROYED)
- SHMW-03S ⊕ MONITORING WELL LOCATION

SOURCES:

1. BASE MAP SITE SURVEY DATA PROVIDED BY KEYSPAN ENERGY SURVEY DIVISION.
2. 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 DRAFT FINAL REMEDIAL INVESTIGATION REPORT, PREPARED BY DVIRKA & BARTILUCCI, DATED DECEMBER 2002.
3. ADDITIONAL SURVEY DATA FROM DRAWING TITLED *BOUNDARY AND TOPOGRAPHIC SURVEY SECTION 2, BLOCK 2, LOT 10, VILLAGE OF SAG HARBOR, TOWN OF SOUTHAMPTON, COUNTY OF SUFFOLK, NEW YORK* PROVIDED BY KS ENGINEERS, P.C, NEWARK, NJ., DATED 12/02/10

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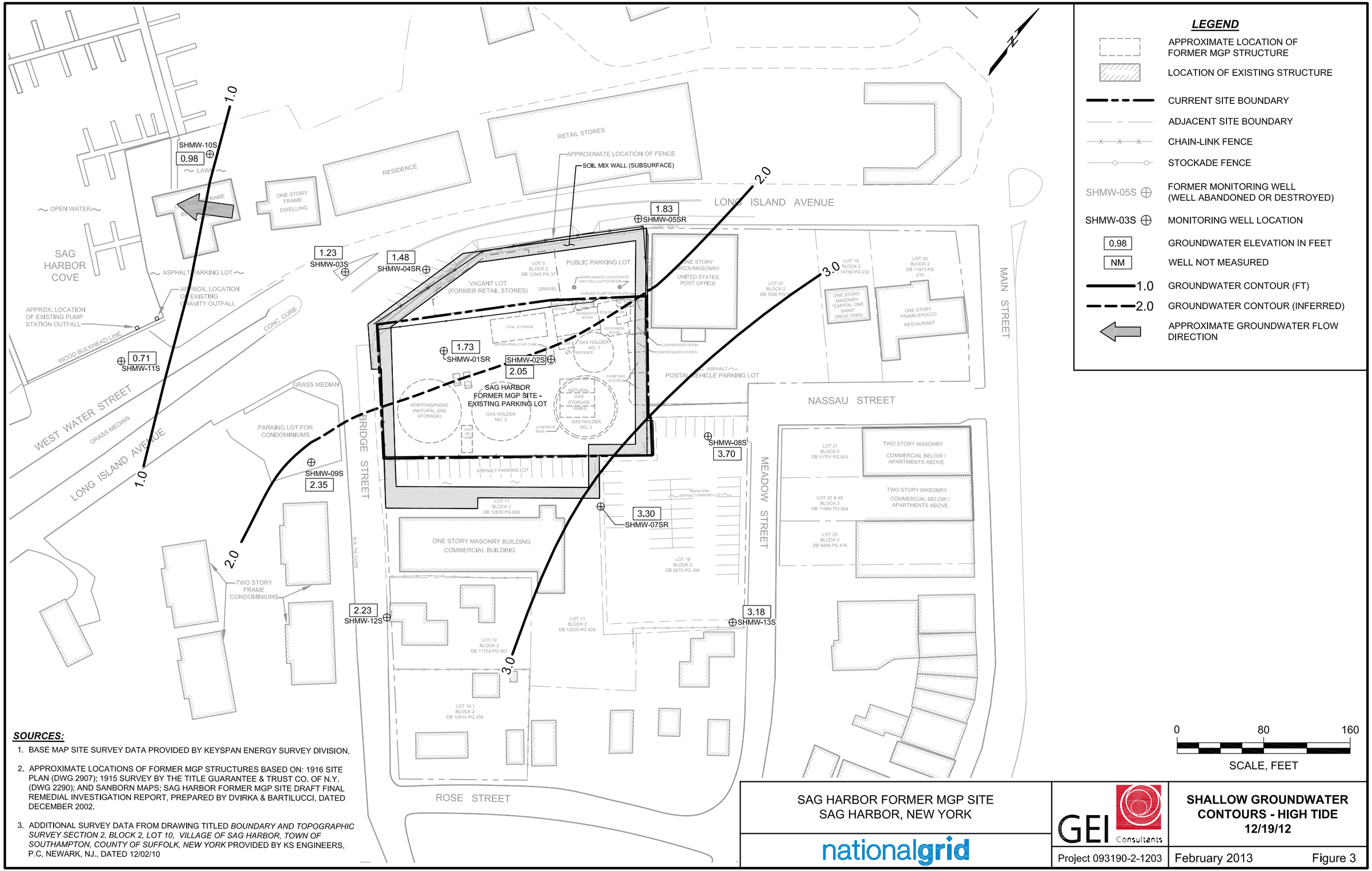
MONITORING WELL LOCATION MAP

Project 093190-2-1203 | February 2013 | Figure 2

I:\PROJECT\NATIONAL GRID\SAG HARBOR\GROUNDWATER-QUARTERLY MONITORING\2012\FIGURES\SAG HARBOR-GW CONTOURS Q4-2012.DWG



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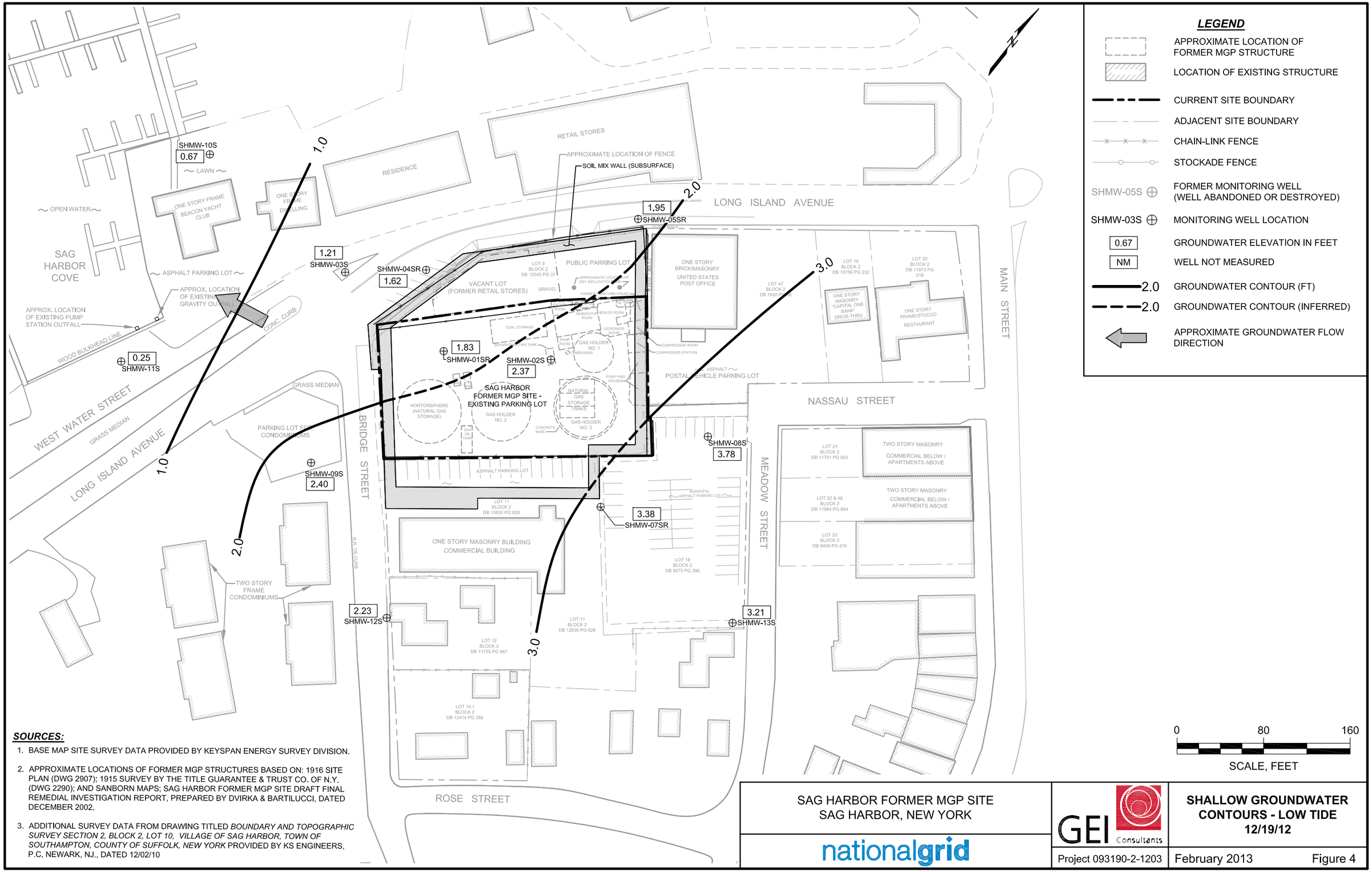
SHALLOW GROUNDWATER CONTOURS - HIGH TIDE 12/19/12

Project 093190-2-1203 | February 2013 | Figure 3

I:\PROJECT\NATIONAL GRID\SAG HARBOR\GROUNDWATER-QUARTERLY MONITORING\2012\FIGURES\SAG HARBOR-GW CONTOURS Q4-2012.DWG



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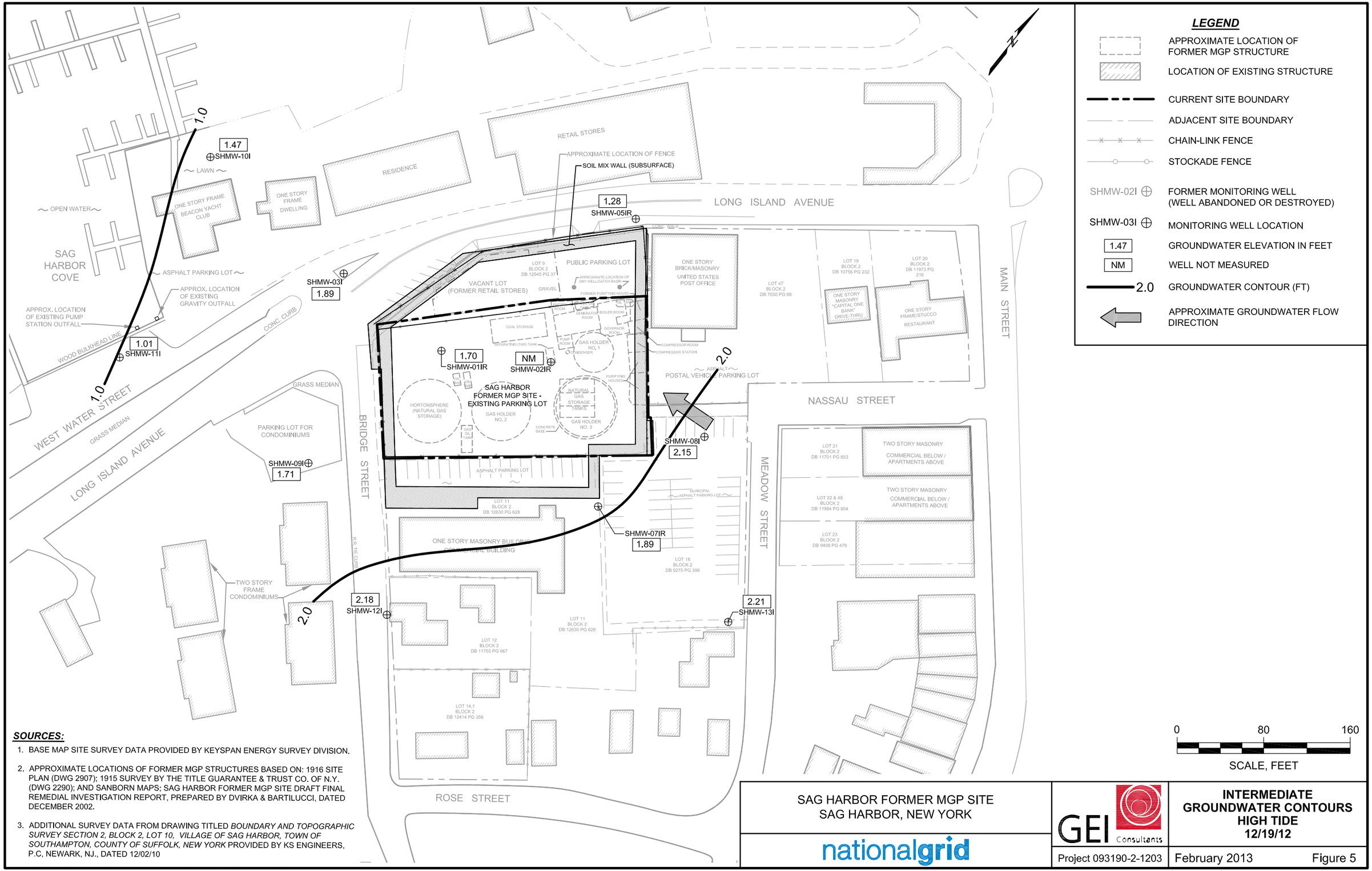
SHALLOW GROUNDWATER CONTOURS - LOW TIDE 12/19/12

Project 093190-2-1203 | February 2013 | Figure 4

I:\PROJECT\NATIONAL GRID\SAG HARBOR\GROUNDWATER-QUARTERLY MONITORING\2012\FIGURES\SAG HARBOR-GW CONTOURS Q4-2012.DWG



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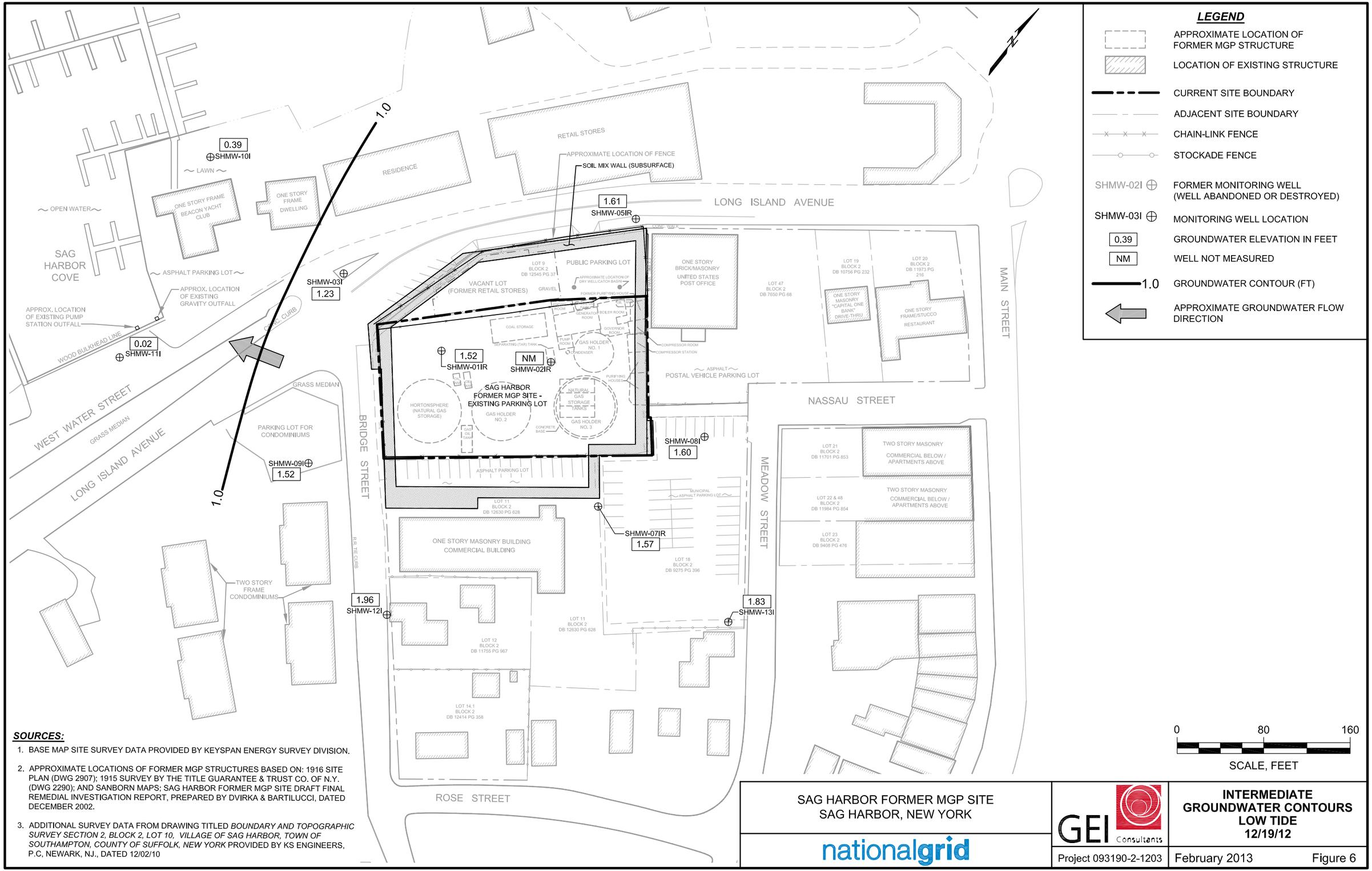
INTERMEDIATE GROUNDWATER CONTOURS HIGH TIDE 12/19/12

Project 093190-2-1203 | February 2013 | Figure 5

I:\PROJECT\NATIONAL GRID\SAG HARBOR\GROUNDWATER-QUARTERLY MONITORING\2012\FIGURES\SAG HARBOR-GW CONTOURS Q4-2012.DWG



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INTERMEDIATE GROUNDWATER CONTOURS LOW TIDE 12/19/12

Project 093190-2-1203 | February 2013 | Figure 6

I:\PROJECT\NATIONAL GRID\SAG HARBOR\GROUNDWATER-QUARTERLY MONITORING\2012\FIGURES\SAG HARBOR-GW CONTOURS Q4-2012.DWG