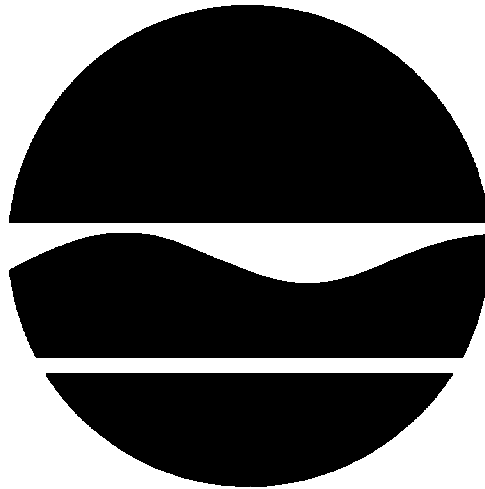


PROPOSED REMEDIAL ACTION PLAN
NYSEG Lockport State Road Site
Lockport, Niagara County, New York
Site No. 9-32-109

February 2007



Prepared by:

Division of Environmental Remediation
New York State Department of Environmental Conservation

PROPOSED REMEDIAL ACTION PLAN

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SECTION 1: SUMMARY AND PURPOSE OF THE PROPOSED PLAN

The New York State Department of Environmental Conservation (the Department), in consultation with the New York State Department of Health (NYSDOH), is proposing a remedy for the NYSEG Lockport State Road Site. As more fully described in Sections 3 and 5 of this document, operations at the former coal tar processing facility and gas holder have resulted in the disposal of hazardous wastes, including coal tar, which contains chemicals including polycyclic aromatic hydrocarbons (PAHs) and benzene, toluene, ethylbenzene, and xylene (BTEX). These wastes have contaminated the soils at the site, and have resulted in:

- a potential threat to human health associated with potential exposure to surface soil.
- a potential threat to the environment associated with potential erosion of contaminated soils into the adjacent canal.

To eliminate or mitigate this threat, the Department proposes to provide additional fencing and one foot of additional soil/gravel cover on the site.

The proposed remedy, discussed in detail in Section 8, is intended to attain the remediation goals identified for this site in Section 6. The remedy must conform with officially promulgated standards and criteria that are directly applicable, or that are relevant and appropriate. The selection of a remedy must also take into consideration guidance, as appropriate. Standards, criteria and guidance are hereafter called SCGs.

This Proposed Remedial Action Plan (PRAP) identifies the preferred remedy, summarizes the other alternatives considered, and discusses the reasons for this preference. The Department will select a final remedy for the site only after careful consideration of all comments received during the public comment period.

The NYSDEC has issued this PRAP as a component of the Citizen Participation Plan developed pursuant to the New York State Environmental Conservation Law and Title 6 of the Official Compilation of Codes, Rules and Regulations of the State of New York (6 NYCRR) Part 375. This document is a summary of the information that can be found in greater detail in the September 2006 "Final Remedial Investigation Report," and other relevant documents. The public is encouraged to review the project documents, which are available at the following repositories:

Lockport Public Library
23 East Avenue
Lockport, NY 14095-0475
(716) 433-5935
Mon. - Thu., 10 AM - 9 PM;
Fri. & Sat., 10 AM - 5 PM

NYSDEC Central Office
Attn: William Ottaway, Project Manager
625 Broadway
Albany, NY 12233-7014
(518) 402-9564
(by appointment only)

NYSDEC Region 9 Office
Attn: Megan Gollwitzer
270 Michigan Avenue
Buffalo, New York
(716) 851-7220
(by appointment only)

The NYSDEC seeks input from the community on all PRAPs. A public comment period has been set from February 9, 2007 through March 9, 2007 to provide an opportunity for public participation in the remedy selection process. A public meeting is scheduled for February 22, 2007 at the Trinity Lutheran Church, 67 Saxton St at 7:30 pm.

At the meeting, the results of the RI/FS and IRM will be presented along with a summary of the proposed remedy. After the presentation, a question-and-answer period will be held, during which verbal or written comments may be submitted on the PRAP. Written comments may also be sent to Mr. Ottaway at the above address through March 9, 2007.

The Department may modify the proposed remedy or select another of the alternatives presented in this PRAP, based on new information or public comments. Therefore, the public is encouraged to review and comment on all of the alternatives identified here.

Comments will be summarized and addressed in the responsiveness summary section of the Record of Decision (ROD). The ROD is the Department's final selection of the remedy for this site.

SECTION 2: SITE LOCATION AND DESCRIPTION

The NYSEG Lockport State Road Site is located in the City of Lockport in Niagara County. The site is located on a 2.1 acre parcel, just north of the newly constructed High Street bridge, between State Road and the New York State Barge Canal. The eastern portion of the site, along State Road, is occupied by a natural gas regulator station and an associated gravel parking area. The remainder of the site is heavily wooded and slopes steeply down to the banks of the Barge Canal.

The site location is shown on Figure 1. The NYSEG Transit Street MGP Site (Site No.9-32-098) is located north and east of this site and is also shown on Figure 1.

The site is covered by 5 to 22 feet of fill material. The fill includes generally consists of silt and sand, but also includes anthropogenic materials including deposits of ash, slag, cinders. These materials are common in historic, urban fill, and are not necessarily site related. The fill material generally extends downward to bedrock, but in some areas a native silty sand was noted underlying the fill. The underlying bedrock consists of dolomite and shale layers.

The site is immediately adjacent to the New York State Barge Canal, which, at this location, is cut into bedrock to a depth approximately 45 feet below the ground surface at State Road.

Groundwater (both shallow and deep) flows generally north and west across the site toward the canal. The water level in the canal is raised and lowered seasonally. While the flow direction remains toward the canal throughout the year, the gradient changes significantly with these variations in canal elevation.

SECTION 3: SITE HISTORY

3.1: Operational/Disposal History

The State Road Tar Works operated from approximately 1900 to 1911 as a processing plant for tar generated at the Transit Street former MGP Site. The Transit Street MGP (currently occupied by a NYSEG electrical substation) is located approximately 700 feet northeast of the State Road Site and is being investigated separately as Site No. 9-32-109.

The State Road site included a 500,000 cubic foot gas holder, tar tanks, a tar still, a warehouse and office. These buildings were demolished between 1948 and 1969. Historic structures are shown on Figure 2.

3.2: Remedial History

Previous investigations of this site include a 1990 Site Screening and additional sampling conducted in 2000 associated with an interim remedial measure (IRM) to support the construction of the High Street Bridge. Construction of this bridge required excavation of contaminated soils in areas on and near the site.

The site screening investigation included the collection of three surface water samples, three sediment samples, and five surface soil samples. No MGP-related contamination was noted in the sediment or surface water. One of the surface soil samples (SS-05) did contain MGP related contamination at levels above guidance levels, with total carcinogenic PAHs of 109.5 parts per million (ppm). This sample was collected from a location where visible purifier waste was observed (iron impregnated wood chips which were used to remove impurities from the gas after production). This material was not present during subsequent site visits.

Four surface soil samples and 45 subsurface soil samples were collected and submitted for analysis in 2000 in association with the High Street Bridge IRM. Total PAH levels in the surface soil samples ranged from 6 to 8 ppm. Subsurface soil PAHs ranged from 0.2 to 1,103 ppm.

The IRM involved the removal of contaminated material in the vicinity of the High Street Bridge construction project. From July 21 to August 12, 2003, approximately 4,500 tons of soil was removed and transported to Modern Landfill in Lewiston, NY for disposal. Coal tar was observed in one location during the IRM as shown in Figure 3. Petroleum contamination unrelated to this site was also identified during this work, and is being addressed separately as NYSDEC Spill #0375238. Other than the one area of coal tar, locations where screening samples showed elevated levels of PAHs were generally observed to contain fill material including ash and cinders. This material exhibited some moderate odors but did not exhibit elevated levels of VOCs.

SECTION 4: ENFORCEMENT STATUS

Potentially Responsible Parties (PRPs) are those who may be legally liable for contamination at a site. This may include past or present owners and operators, waste generators, and haulers.

The Department and the New York State Electric and Gas Corporation (NYSEG) entered into a Consent Order on March 30, 1994. The Order obligates NYSEG to investigate and, where necessary, remediate 33 former MGP sites in their service area. The Lockport State Road Site is one of the sites included in the multi-site order.

SECTION 5: SITE CONTAMINATION

A remedial investigation/feasibility study (RI/FS) has been conducted to evaluate potential threats to human health and the environment.

5.1: Summary of the Remedial Investigation

The purpose of the RI was to define the nature and extent of any contamination resulting from previous activities at the site. RI fieldwork was conducted between January 2005 and June 2005. The field activities and findings of the investigation are described in the RI report.

During the RI, soil borings and wells were used to delineate and characterize the soils, bedrock and groundwater in the subsurface at the site. Sediment cores were collected from the adjacent canal. Environmental samples were collected from the surface and subsurface soil, sediment, groundwater and surface water. These samples were analyzed for the contaminants typically found in coal tar and other MGP wastes.

5.1.1: Standards, Criteria, and Guidance (SCGs)

To determine whether the soil and groundwater contain contamination at levels of concern, data from the investigation were compared to the following SCGs:

- Groundwater and surface water SCGs are based on the Department's "Ambient Water Quality Standards and Guidance Values" and Part 5 of the New York State Sanitary Code.
- Soil SCGs are based on the Department's Cleanup Objectives ("Technical and Administrative Guidance Memorandum [TAGM] 4046; Determination of Soil Cleanup Objectives and Cleanup Levels." and 6 NYCRR Subpart 375-6 - Remedial Program Soil Cleanup Objectives).
- Sediment SCGs are based on the Department's "Technical Guidance for Screening Contaminated Sediments."

Based on the RI results, in comparison to the SCGs and potential public health and environmental exposure routes, certain media and areas of the site require remediation. These are summarized in Section 5.1.2. More complete information can be found in the RI report.

5.1.2: Nature and Extent of Contamination

This section describes the findings of the investigation for all environmental media that were investigated.

As described in the RI report, many soil and groundwater samples were collected to characterize the nature and extent of contamination. As summarized in Table 1, the main category of contaminants which exceed their SCGs are semivolatile organic compounds (SVOCs). The specific semivolatile organic compounds of concern in soil and groundwater are the following polycyclic aromatic hydrocarbons (PAHs):

acenaphthene	pyrene	<i>benzo(a)pyrene</i>
acenaphthylene	<i>indeno(1,2,3-cd) pyrene</i>	<i>benzo(a)anthracene</i>
anthracene	<i>chrysene</i>	<i>benzo(b)fluoranthene</i>
<i>dibenzo(a,h)anthracene</i>	fluorene	<i>benzo(k)fluoranthene</i>
phenanthrene	naphthalene	<i>benzo(g,h,i)perylene</i>
fluoranthene	2-methylnaphthalene	

PAH concentrations referred to in this document are the summation of the individual PAHs listed above (i.e., total PAHs or tPAHs). The italicized PAHs are probable human carcinogens.

Figure 4-6 and Table 1 summarize the degree of contamination for the contaminants of concern in soil, groundwater, sediment and surface water and compare the data with the SCGs for the site. The following are the media which were investigated and a summary of the findings of the investigation.

Waste Materials

Coal tar was observed visually at two locations: at BMW-04-04 and during the IRM in an excavation near the canal.

At monitoring well BMW-04-04, coal tar was observed in bedrock fractures at 19.4 and 19.7 feet below ground surface. The location of this well is shown on Figure 4. Coal tar odors were noted from that point to the bottom of the boring at 30 feet. Despite the presence of this visible contamination, no volatile or semi-volatile organic chemicals were detected in groundwater samples from this well.

The final engineering report for the IRM notes coal tar was observed during the excavation activities in the overburden closest to the canal. Aerial photos taken during the bridge construction show that this area was extensively excavated well beyond the area of concern. No additional coal tar observations were reported.

During past site visits, small amounts of purifier waste were observed on the ground surface. However, during the subsequent RI field work, no purifier waste was observed in either the surface or subsurface.

Waste identified prior to the RI/FS was addressed during the IRM described in Section 3.2. Waste identified during the RI/FS will be addressed in the remedy selection process.

Surface Soil (0-2 inches)

Surface soil PAH levels ranged from 4 to 151 ppm. No VOCs were detected at levels above applicable SCGs.

Surface soil contamination identified during the RI/FS will be addressed in the remedy selection process.

Subsurface Soil

Subsurface soil PAH levels ranged from non-detect to 1,103 ppm. No VOCs were detected at levels above applicable SCGs. Subsurface soil contamination identified during the RI/FS will be addressed in the remedy selection process.

Groundwater

No site-related groundwater contamination of concern was identified during the RI/FS. Therefore, no remedial alternatives need to be evaluated for groundwater.

Surface Water and Sediment

PAH levels in sediments adjacent to this site were below the screening level of 4 ppm. No site related VOCs or SVOCs were detected in surface water samples.

No remediation of sediments or surface water is necessary relative to this site. However, sediment downstream of this site appears to be impacted by contamination from the NYSEG Lockport Transit Street Site (9-32-098), and will be addressed as part of the remedy for that site.

5.2: Interim Remedial Measures

An interim remedial measure (IRM) is conducted at a site when a source of contamination or exposure pathway can be effectively addressed before completion of the RI/FS.

A soil removal IRM was conducted during construction of the High Street Bridge, prior to the RI/FS. There were no additional IRMs performed at this site during the RI/FS.

5.3: Summary of Human Exposure Pathways:

This section describes the types of human exposures that may present added health risks to persons at or around the site. A more detailed discussion of the human exposure pathways can be found in Section 6 of the RI report. An exposure pathway describes the means by which an individual may be exposed to contaminants originating from a site. An exposure pathway has five elements: [1] a contaminant source, [2] contaminant release and transport mechanisms, [3] a point of exposure, [4] a route of exposure, and [5] a receptor population.

The source of contamination is the location where contaminants were released to the environment (any waste disposal area or point of discharge). Contaminant release and transport mechanisms carry contaminants from the source to a point where people may be exposed. The exposure point is a location where actual or potential human contact with a contaminated medium may occur. The route of exposure is the manner in which a contaminant actually enters or contacts the body (e.g., ingestion, inhalation, or direct contact). The receptor population is the people who are, or may be, exposed to contaminants at a point of exposure.

An exposure pathway is complete when all five elements of an exposure pathway exist. An exposure pathway is considered a potential pathway when one or more of the elements currently does not exist, but could in the future.

At this site, limited contamination exists in surface and subsurface soils. For a complete exposure pathway to occur, persons would have to come into contact with the contaminated soil. Exposure to this media could occur through excavation activities at the site. Because most of the site is fenced, the only current potential pathway of exposure is for utility workers who may enter on-site utility trenches during repair or replacement activities. The potential pathway is:

- Dermal (skin) contact with contaminated soils.

The site is located in a mixed residential and commercial area and is not readily accessible to the general public or employees of adjacent businesses. No groundwater contamination was identified during the RI/FS. In addition, public water serves the area; therefore, ingestion of contaminated groundwater is unlikely. Completed pathways may occur in the future for utility workers or site workers during subsurface construction activities. Existing potential exposure pathways require remediation and/or controls.

5.4: Summary of Environmental Assessment

This section summarizes the assessment of existing and potential future environmental impacts presented by the site. Environmental impacts include existing and potential future exposure pathways to fish and wildlife receptors, as well as damage to natural resources such as aquifers and wetlands.

The Fish and Wildlife Impact Analysis, which is included in the RI report, presents a detailed discussion of the existing and potential impacts from the site to fish and wildlife receptors.

The following environmental exposure pathways and ecological risks have been identified:

- The potential for contaminated surface and subsurface soil to be eroded and deposited as sediment in the adjacent canal. Samples from the area of the canal receiving drainage from the site do not currently contain elevated levels of contaminants; therefore this exposure pathway is not currently completed.

SECTION 6: SUMMARY OF THE REMEDIATION GOALS

Goals for the remedial program have been established through the remedy selection process stated in 6 NYCRR Part 375. At a minimum, the remedy selected must eliminate or mitigate all significant threats to public health and/or the environment presented by the hazardous waste disposed at the site through the proper application of scientific and engineering principles.

The remediation goals for this site are to eliminate or reduce to the extent practicable:

- exposures of persons at or around the site to PAHs in surface and subsurface soil;
- environmental exposures of flora or fauna to PAHs in surface and subsurface soil;
- the potential erosion of contaminated surface and subsurface soil into the surface water and sediment of the NYS barge Canal.

SECTION 7: SUMMARY OF THE EVALUATION OF ALTERNATIVES

The selected remedy must be protective of human health and the environment, be cost-effective, comply with other statutory requirements, and utilize permanent solutions, alternative technologies or resource recovery technologies to the maximum extent practicable. The Final Remedial Investigation Report, which is available at the document repositories established for this site, concluded that no active remediation is needed at this site, but that institutional and engineering controls should be evaluated to address residual contamination.

A summary of the institutional and engineering controls that were considered for this site is provided below. The present worth represents the amount of money invested in the current year that would be sufficient to cover all present and future costs associated with the alternative. This enables the costs of remedial alternatives to be compared on a common basis. As a convention, a time frame of 30 years is used to evaluate present worth costs for alternatives with an indefinite duration. This does not imply that operation, maintenance, or monitoring would cease after 30 years if remediation goals are not achieved.

7.1: Description of Remedial Alternatives

The following potential remedies were considered to address the contaminated surface and subsurface soils at the site.

Alternative 1: No Action

The No Action Alternative is evaluated as a procedural requirement and as a basis for comparison. It requires continued monitoring only, allowing the site to remain in an unremediated state. This

alternative would leave the site in its present condition and would not provide any additional protection to human health or the environment.

Alternative #2: Fencing, Soil Cover, and Institutional Controls

<i>Present Worth:</i>	<i>\$80,000</i>
<i>Capital Cost:</i>	<i>\$50,000</i>
<i>Annual Costs:</i>	
<i>Years 1-30:</i>	<i>\$2,000</i>

A 1 foot soil/gravel cover (approximately 1,100 cubic yards of fill) would be provided to isolate elevated PAHs in the surface soil along the level, upper area of the site. This area would also be fenced (approximately 1,000 linear feet of chain link fencing), primarily to restrict access to the lower, steeply sloped portion of the site. The site would be inspected periodically by a qualified environmental professional who would certify that the fence and cover material is in place.

7.2 Evaluation of Remedial Alternatives

The criteria to which potential remedial alternatives are compared are defined in 6 NYCRR Part 375, which governs the remediation of inactive hazardous waste disposal sites in New York A detailed discussion of the evaluation criteria and comparative analysis is included in the FS report.

The first two evaluation criteria are termed “threshold criteria” and must be satisfied in order for an alternative to be considered for selection.

1. Protection of Human Health and the Environment. This criterion is an overall evaluation of each alternative’s ability to protect public health and the environment.
2. Compliance with New York State Standards, Criteria, and Guidance (SCGs). Compliance with SCGs addresses whether a remedy will meet environmental laws, regulations, and other standards and criteria. In addition, this criterion includes the consideration of guidance which the Department has determined to be applicable on a case-specific basis.

The next five “primary balancing criteria” are used to compare the positive and negative aspects of each of the remedial strategies.

3. Short-term Effectiveness. The potential short-term adverse impacts of the remedial action upon the community, the workers, and the environment during the construction and/or implementation are evaluated. The length of time needed to achieve the remedial objectives is also estimated and compared against the other alternatives.
4. Long-term Effectiveness and Permanence. This criterion evaluates the long-term effectiveness of the remedial alternatives after implementation. If wastes or treated residuals remain on-site after the selected remedy has been implemented, the following items are evaluated: 1) the magnitude of the remaining risks, 2) the adequacy of the engineering and/or institutional controls intended to limit the risk, and 3) the reliability of these controls.
5. Reduction of Toxicity, Mobility or Volume. Preference is given to alternatives that permanently and significantly reduce the toxicity, mobility or volume of the wastes at the site.
6. Implementability. The technical and administrative feasibility of implementing each alternative are evaluated. Technical feasibility includes the difficulties associated with the construction of the remedy and the ability to monitor its effectiveness. For administrative feasibility, the availability of the necessary

personnel and materials is evaluated along with potential difficulties in obtaining specific operating approvals, access for construction, institutional controls, and so forth.

7. Cost-Effectiveness. Capital costs and annual operation, maintenance, and monitoring costs are estimated for each alternative and compared on a present worth basis. Although cost-effectiveness is the last balancing criterion evaluated, where two or more alternatives have met the requirements of the other criteria, it can be used as the basis for the final decision. The costs for each alternative are presented in Table 2.

This final criterion is considered a “modifying criterion” and is taken into account after evaluating those above. It is evaluated after public comments on the Proposed Remedial Action Plan have been received.

8. Community Acceptance - Concerns of the community regarding the RI/FS reports and the PRAP are evaluated. A responsiveness summary will be prepared that describes public comments received and the manner in which the Department will address the concerns raised. If the selected remedy differs significantly from the proposed remedy, notices to the public will be issued describing the differences and reasons for the changes.

SECTION 8: SUMMARY OF THE PROPOSED REMEDY

The Department is proposing Alternative 2: Fencing, Soil Cover and Institutional Controls as the remedy for this site. The elements of this remedy are described at the end of this section.

The proposed remedy is based on the results of the RI and the evaluation of alternatives presented herein.

Alternative 2 is being proposed because, as described below, it satisfies the threshold criteria and provides the best balance of the primary balancing criteria described in Section 7.2. It would achieve the remediation goals for the site by limiting exposure to impacted surface and subsurface soil and limiting erosion from the site into the canal.

The estimated present worth cost to implement the remedy is \$80,000. The cost to construct the remedy is estimated to be \$50,000 and the estimated average annual costs for 30 years is \$2,000.

The elements of the proposed remedy are as follows:

1. The existing fence on the property would be extended to the property’s northern boundary. NYSEG would maintain this fence and verify by periodic inspection that there continues to be no evidence of significant foot or vehicle traffic.
2. Appropriate cover would be provided on the level, upper portion of the site. The one foot thick cover would consist of crushed stone or similar material, underlain by a demarcation layer to identify the original surface soil.
3. Development of a site management plan to:(a) address residual contaminated soils that may be excavated from the site during future redevelopment. The plan would require soil characterization and, where applicable, disposal/reuse in accordance with NYSDEC regulations; (b) evaluate the potential for vapor intrusion for any buildings developed on the site, including provision for mitigation of any impacts identified; (c) identify any use restrictions; and (d) provide for the operation and maintenance of the components of the remedy.
4. Imposition of an institutional control in the form of an environmental easement that would (a) require compliance with the approved site management plan; (b) limit the use and development of the property to commercial or industrial uses only; (c) require the property owner to complete and submit to the NYSDEC periodic certification.

The property owner would provide a periodic certification, prepared and submitted by a professional engineer or such other expert acceptable to the NYSDEC, until the NYSDEC notifies the property owner in writing that this certification is no longer needed. This submittal would contain certification that the institutional controls, are still in place, allow the NYSDEC access to the site, and that nothing has occurred that would impair the ability of the control to protect public health or the environment, or constitute a violation or failure to comply with the site management plan. Any evidence of foot or vehicle traffic would be reported, as would any indication of erosion.

TABLE 1
Nature and Extent of Contamination
November 1991-May 2005

SURFACE SOIL	Contaminants of Concern	Concentration Range Detected (ppm)^a	SCG^b (ppm)^a	Frequency of Exceeding SCG
Semivolatile Organic Compounds (SVOCs)	PAHs (BAP Toxicity Equivalence)	ND-21	1.0	10 of 14
	Total Carcinogenic PAHs	ND- 74.9	10	9 of 14

SUBSURFACE SOIL	Contaminants of Concern	Concentration Range Detected (ppm)^a	SCG^b (ppm)^a	Frequency of Exceeding SCG
Volatile Organic Compounds (VOCs)	Benzene	ND-.004	.06	0 of 47
	Toluene	ND-.02	1.5	0 of 47
	Ethylbenzene	ND-.028	5.5	0 of 47
	Xylene	ND-.042	1.2	0 of 47
Semivolatile Organic Compounds (SVOCs)	Total PAHs	ND - 1,103	500	2 of 47

SEDIMENTS	Contaminants of Concern	Concentration Range Detected (ppm)^a	SCG^b (ppm)^a	Frequency of Exceeding SCG
Semivolatile Organic Compounds (SVOCs)	Total PAHs	0.2 - 3.8	4 ppm	0 of 4

GROUNDWATER	Contaminants of Concern	Concentration Range Detected (ppb)^a	SCG^b (ppb)^a	Frequency of Exceeding SCG
Volatile Organic Compounds (VOCs)	Benzene	ND	1	0 of 5
	Toluene	ND	5	0 of 5
	Ethylbenzene	ND	5	0 of 5
	Xylene	ND	5	0 of 5
Semivolatile Organic Compounds (SVOCs)	Total PAHs	ND	N/A	0 of 5

SURFACE WATER	Contaminants of Concern	Concentration Range Detected (ppb)^a	SCG^b (ppb)^a	Frequency of Exceeding SCG
Volatile Organic Compounds (VOCs)	Benzene	ND		0 of 5
	Toluene	ND		0 of 5

SURFACE WATER	Contaminants of Concern	Concentration Range Detected (ppb)^a	SCG^b (ppb)^a	Frequency of Exceeding SCG
	Ethylbenzene	ND		0 of 5
	Xylene	ND		0 of 5
Semivolatile Organic Compounds (SVOCs)	Total PAHs	ND	---	NA

^a ppb = parts per billion, which is equivalent to micrograms per liter, ug/L, in water;
ppm = parts per million, which is equivalent to milligrams per kilogram, mg/kg, in soil;
ug/m³ = micrograms per cubic meter

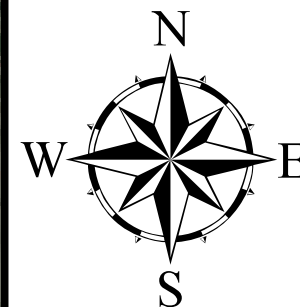
^b SCG = standards, criteria, and guidance values;

^c LEL = Lowest Effects Level and SEL = Severe Effects Level. A sediment is considered to be contaminated if either of these criteria is exceeded. If both criteria are exceeded, the sediment is severely impacted. If only the LEL is exceeded, the impact is considered to be moderate.

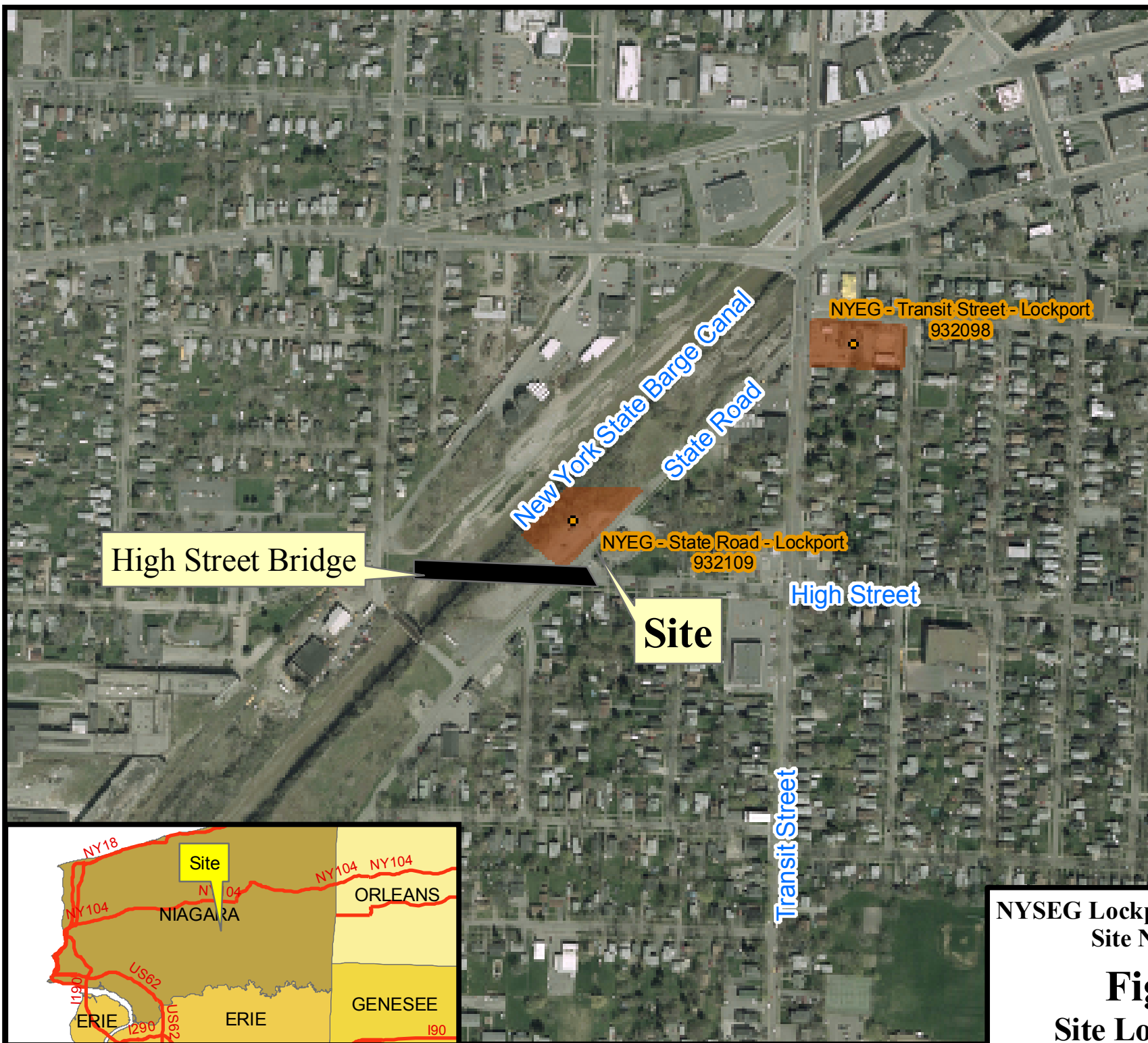
ND = Not Detected
NA = Not Applicable

Table 2
Remedial Alternative Costs

Remedial Alternative	Capital Cost (\$)	Annual Costs (\$)	Total Present Worth (\$)
No Action	0	0	0
Fencing and Cover	\$40,000	\$2,000	\$80,000

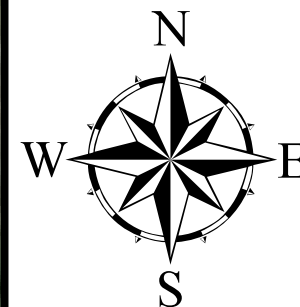


0 262.5 525 Feet



NYSEG Lockport State Road Site
Site No. 9-32-109

Figure 1
Site Location Map



0 30 60 Feet



NYSEG Lockport State Road Site
Site No. 9-32-109

Figure 2
Historic Structures



Areas excavated during the IRM was limited to those locations identified as contaminated during the investigation which preceeded the IRM. The full extent of excavation during subsequent DOT work is shown in Figure 4.

Dates shown indicate when that area was excavated during the IRM.



Legend

■ Samples

IRM Excavation

■ Ash and tar

■ Ash

■ Petroleum contamination

■ Visually Clean

irm_data

PAHs

● 1 - 5

● 6 - 50

● 51 - 100

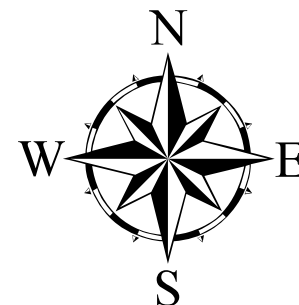
● 101 - 500

● 501 - 1103

0 40 80 Feet

NYSEG Lockport State Road Site
Site No. 9-32-109

Figure 3
Interim Remedial Measure



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Area Excavated by DOT

MGP Structures

Wells

Borings - Total PAHs

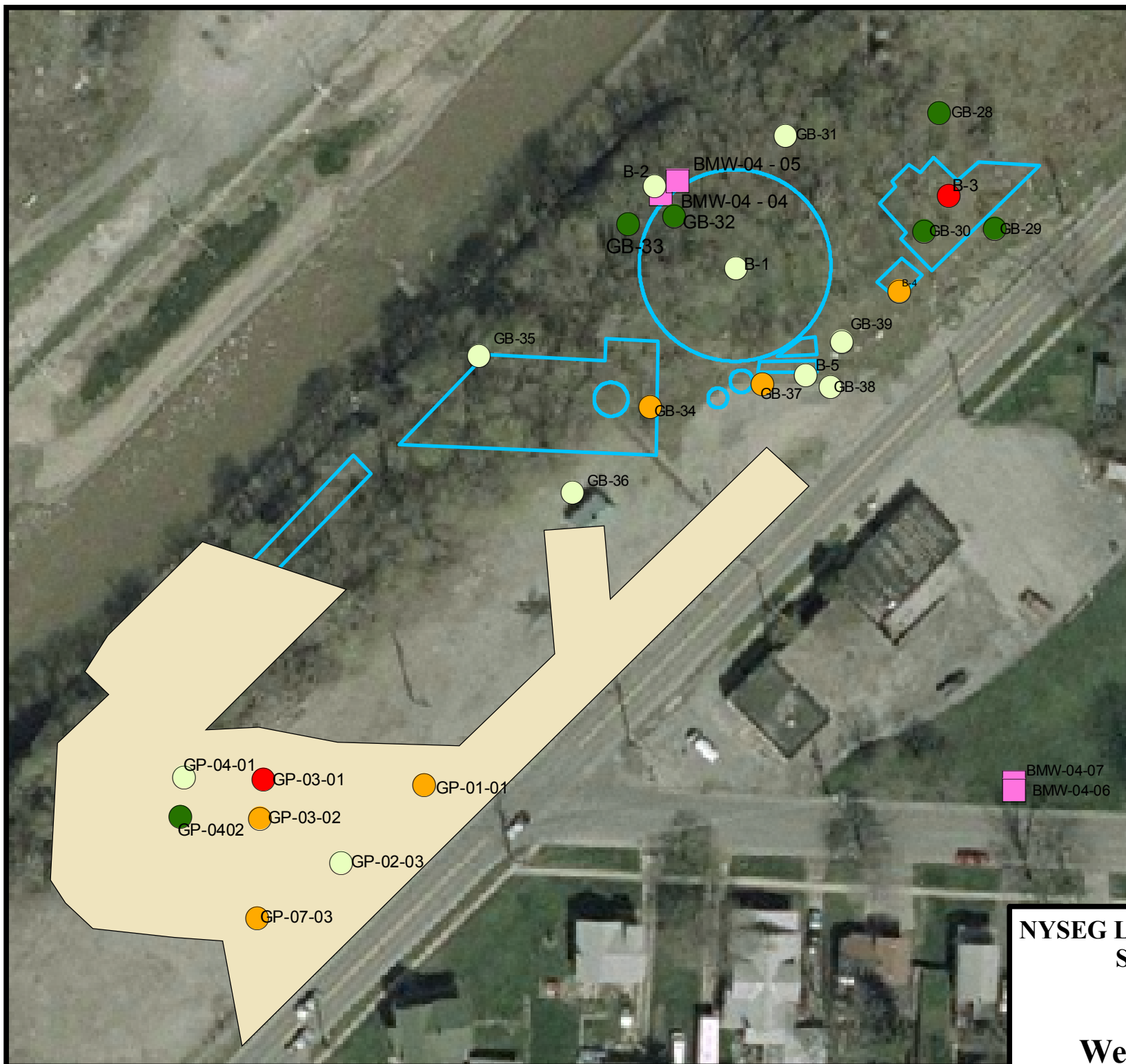
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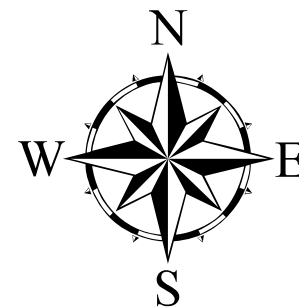
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Feet
0 45 90



**NYSEG Lockport State Road Site
Site No. 9-32-109**


**Figure 4
Wells and Borings**





Legend


 MGP Structures


Surface Soil PAHs

 0 - 10

 11 - 30

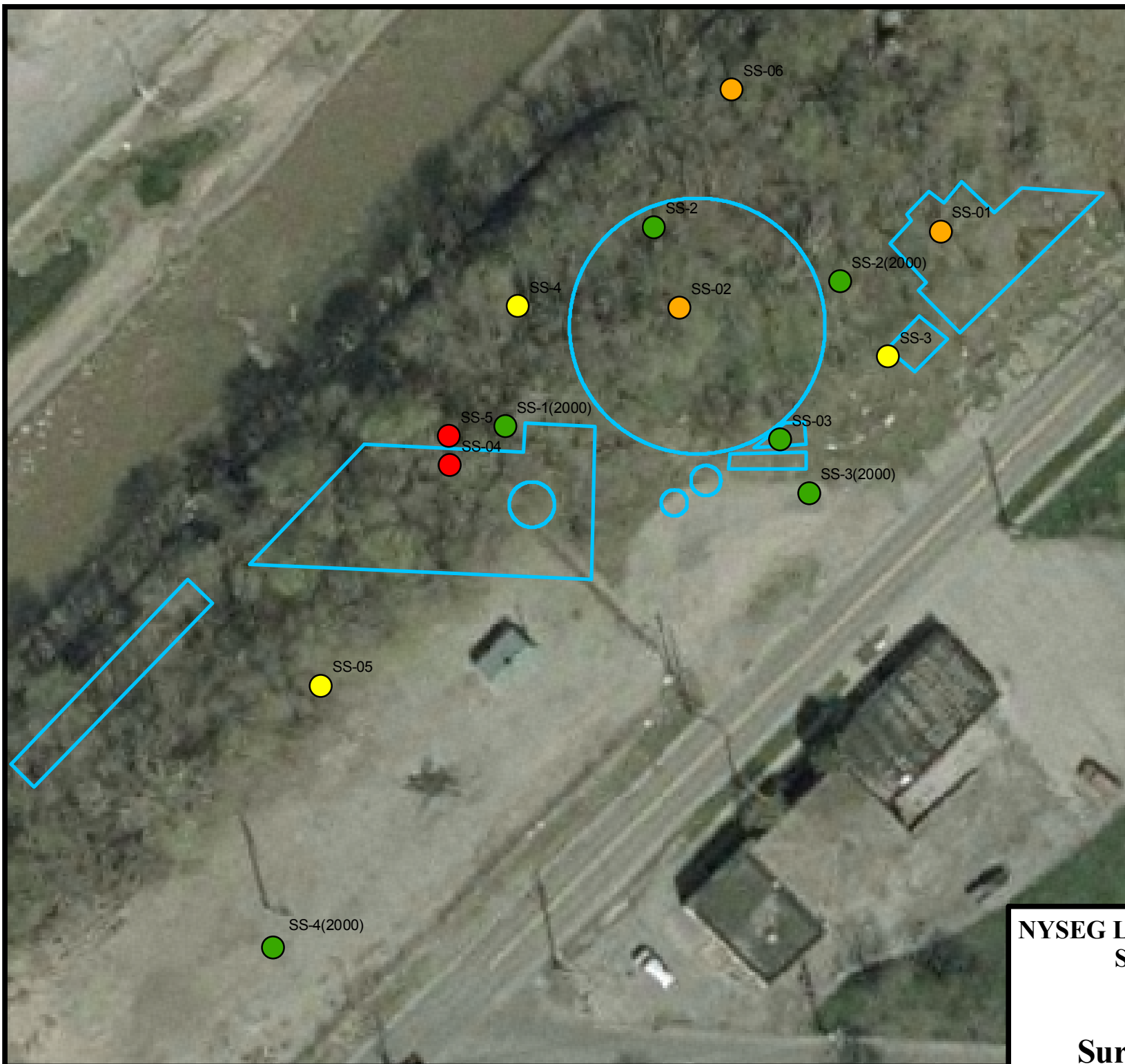
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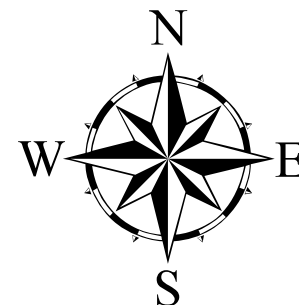
 91 - 169

 Feet
0 37.5 75

NYSEG Lockport State Road Site
Site No. 9-32-109

Figure 5
Surface Soil PAHs





Legend

MGP Structures

Sediment

PAHS

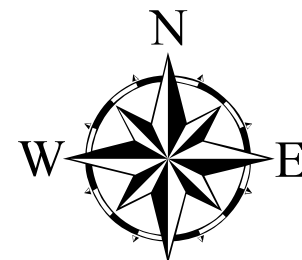
- < 4 ppm
- 4 - 20 ppm
- >20 ppm
- Surface_Water

Feet
0 135 270



NYSEG Lockport State Road Site
Site No. 9-32-109

Figure 6
Surface Water and Sediment Sampling



Legend

- Fence_Line
- Soil Cover
- MGP Structures
- Surface Soil PAHs**
 - 0 - 10
 - 11 - 20
 - 21 - 90
 - 91 - 169
- Extended Road

0 55 110 Feet



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Figure 7
Fencing and Soil Cover