RECORD OF DECISION

Former G.L. Thomas & Sons Feed Mill/Laramie Tire
Environmental Restoration Project
Adams, Jefferson County
Site No. E623023
March 2012

Prepared by
Division of Environmental Remediation
New York State Department of Environmental Conservation

DECLARATION STATEMENT - RECORD OF DECISION

Former G.L. Thomas & Sons Feed Mill/Laramie Tire
Environmental Restoration Project
Adams, Jefferson County
Site No. E623023
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Statement of Purpose and Basis

This document presents the remedy for the For. G.L. Thomas & Sons Feed Mill/Laramie Tire site, an environmental restoration site. The remedial program was chosen in accordance with 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 decision is based on the Administrative Record of the New York State Department of Environmental Conservation (the Department) for the For. G.L. Thomas & Sons Feed Mill/Laramie Tire site and the public's input to the proposed remedy presented by the Department. A listing of the documents included as a part of the Administrative Record is included in Appendix B of the ROD.

Description of Selected Remedy

During the course of the investigation certain actions, known as interim remedial measures (IRMs), were undertaken at the above referenced site. An IRM is conducted at a site when a source of contamination or exposure pathway can be effectively addressed before completion of the remedial investigation (RI) or alternatives analysis (AA). The IRM(s) undertaken at this site are discussed in Section 6.2.

Based on the implementation of the IRM(s), the findings of the investigation of this site indicate that the site no longer poses a threat to human health or the environment; therefore No Further Action is the selected remedy. The remedy may include continued operation of a remedial system if one was installed during the IRM and the implementation of any prescribed institutional controls/engineering controls (ICs/ECs) that have been identified as being part of the remedy for the site.

The IRM(s) conducted at the site attained the remediation objectives identified for this site in Section 6.5 for the protection of public health and the environment.

New York State Department of Health Acceptance

The New York State Department of Health (NYSDOH) concurs that the remedy for this site is protective of human health.

Declaration

The selected remedy is protective of human health and the environment, complies with State and Federal requirements that are legally applicable or relevant and appropriate to the remedial action to the extent practicable, and is cost effective. This remedy utilizes permanent solutions and alternative treatment or resource recovery technologies, to the maximum extent practicable, and satisfies the preference for remedies that reduce toxicity, mobility, or volume as a principal element.

March 28,2012

Date

Robert W. Schick, P.E., Acting Director
Division of Environmental Remediation

RECORD OF DECISION

Former G.L. Thomas & Sons Feed Mill/Laramie Tire
Adams, Jefferson County
Site No. E623023
March 2012

SECTION 1: SUMMARY AND PURPOSE

The New York State Department of Environmental Conservation (the Department), in consultation with the New York State Department of Health (NYSDOH), has selected a remedy for the above referenced site. The disposal of contaminants at the site resulted in threats to public health and the environment that were addressed by actions known as interim remedial measures (IRMs), which were undertaken at the site. An IRM is conducted at a site when a source of contamination or exposure pathway can be effectively addressed before completion of the remedial investigation (RI) or feasibility study (FS). The IRMs undertaken at this site are discussed in Section 6.2. Contaminants include hazardous wastes and/or petroleum.

Based on the implementation of the IRM(s), the findings of the investigation of this site indicate that the site no longer poses a threat to human health or the environment. The IRM(s) conducted at the site attained the remediation objectives identified for this site, which are presented in Section 6.5, for the protection of public health and the environment. No Further Action is the remedy selected by this Record of Decision (ROD). A No Further Action remedy may include continued operation of any remedial system installed during the IRM and the implementation of any prescribed controls that have been identified as being part of the remedy for the site. This ROD identifies the IRM(s) conducted and discusses the basis for No Further Action.

The 1996 Clean Water/ Clean Air Bond Act provides funding to municipalities for the investigation and cleanup of brownfields. Brownfields are abandoned, idled, or under-used properties where redevelopment is complicated by real or perceived environmental contamination. They typically are former industrial or commercial properties where operations may have resulted in environmental contamination. Brownfields often pose not only environmental, but legal and financial burdens on communities. Under the Environmental Restoration Program, the state provides grants to municipalities to reimburse up to 90 percent of eligible costs for site investigation and remediation activities. Once remediated, the property can then be reused.

The Department has issued this document in accordance with the requirements of New York State Environmental Conservation Law and 6 NYCRR Part 375. This document is a summary of the information that can be found in the site-related reports and documents.

SECTION 2: CITIZEN PARTICIPATION

The Department seeks input from the community on all remedies. A public comment period was held, during which the public was encouraged to submit comment on the proposed remedy. All comments on the remedy received during the comment period were considered by the Department in selecting a remedy for the site. Site-related reports and documents were made available for review by the public at the following document repository:

Village of Adams, Village Hall
Attn: Patricia Sweetland
3 South Main Street
Adams, NY 13605
Phone: 315-232-2632

A public meeting was also conducted. At the meeting, the findings of the remedial investigation (RI) and the alternatives analyses (AA) were presented along with a summary of the proposed remedy. After the presentation, a question-and-answer period was held, during which verbal or written comments were accepted on the proposed remedy.

Comments on the remedy received during the comment period are summarized and addressed in the responsiveness summary section of the ROD.

Receive Site Citizen Participation Information By Email

Please note that the Department's Division of Environmental Remediation (DER) is "going paperless" relative to citizen participation information. The ultimate goal is to distribute citizen participation information about contaminated sites electronically by way of county email listservs. Information will be distributed for all sites that are being investigated and cleaned up in a particular county under the State Superfund Program, Environmental Restoration Program, Brownfield Cleanup Program, Voluntary Cleanup Program, and Resource Conservation and Recovery Act Program. We encourage the public to sign up for one or more county listservs at http://www.dec.ny.gov/chemical/61092.html

SECTION 3: SITE DESCRIPTION AND HISTORY

Location: The site is located in the middle of the Village of Adams. The site is approximately 0.55 acres and consists of two tax parcels on the west side of US Route 11 (Main Street), north of West Church Street.

Site Features: The site is currently a vacant lot backfilled with a clean crushed stone surface and is used for parking by the Village of Adams Fire Department. The former feed mill and automobile repair shop were demolished in 2008 as part of the interim remedial measures performed under the ERP.

Current Zoning /Uses: The site is zoned for commercial use. The surrounding parcels are currently used for a combination of residential, commercial and public use. The Village of

Adams Fire Department and Library are located to the south of the site; the Fireman's Community Park is located to the west of the site. Residential homes and commercial businesses are located to the north and east of the site.

Historic Uses: The former G.L. Thomas and Sons Feed Mill and Laramie Tire Shop occupied the 0.30-acre southern parcel (10 North Main Street - Tax Map Number 112.36-2-28). The 8,500 square foot feed mill, occupied the majority of the southern parcel and consisted of two adjoining two-story wooden structures. The single-bay Laramie Tire Shop (approximately 1,250 square feet) was utilized as an automobile repair facility with retail gasoline services. The northern parcel (Tax Map Number 112.36-2-27) was a 0.25-acre vacant property. This portion of the site consisted only of a gravel parking area and was historically utilized as a laundry and possibly as a dry cleaner. No environmental investigations were conducted at the site prior to the Environmental Restoration Program.

Site Geology and Hydrogeology: The site is relatively flat and gradually slopes from northeast to southwest. The site soil is comprised of clean fill and crushed stone across the majority of the site which varies from 1 foot to 10 feet at depth. Native soil and fill are found beneath the clean surface fill. Bedrock is located approximately 8 to 10 feet below grade. Groundwater flows to the southwest and is found approximately 8 to 10 feet below grade. Sandy Creek is approximately 0.1 miles south of the site.

A site location map is attached as Figure 1.

SECTION 4: LAND USE AND PHYSICAL SETTING

The Department may consider the current, intended, and reasonably anticipated future land use of the site and its surroundings when evaluating a remedy for soil remediation. For this site, an alternative which allows for unrestricted use of the site was evaluated.

A comparison of the results of the investigation against unrestricted use standards, criteria and guidance values (SCGs) for the site contaminants is included in the Tables for the media being evaluated in Exhibit A.

SECTION 5: 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.

No PRPs have been documented to date.

Since no viable PRPs have been identified, there are currently no ongoing enforcement actions. However, legal action may be initiated at a future date by the state to recover state response costs should PRPs be identified. The Village of Adams will assist the state in its efforts by providing all information to the state which identifies PRPs. The Village of Adams will also not enter into any agreement regarding response costs without the approval of the Department.

SECTION 6: SITE CONTAMINATION

6.1: Summary of the Remedial Investigation

A Remedial Investigation (RI) has been conducted. The purpose of the RI was to define the nature and extent of any contamination resulting from previous activities at the site. The field activities and findings of the investigation are described in the RI Report.

The following general activities are conducted during an RI:

- Research of historical information,
- Geophysical survey to determine the lateral extent of wastes,
- Test pits, soil borings, and monitoring well installations,
- Sampling of waste, surface and subsurface soils, groundwater, and soil vapor,
- Sampling of surface water and sediment,
- Ecological and Human Health Exposure Assessments.

6.1.1: Standards, Criteria, and Guidance (SCGs)

The remedy must conform to 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.

To determine whether the contaminants identified in various media are present at levels of concern, the data from the RI were compared to media-specific SCGs. The Department has developed SCGs for groundwater, surface water, sediments, and soil. The NYSDOH has developed SCGs for drinking water and soil vapor intrusion. The tables found in Exhibit A list the applicable SCG in the footnotes. For a full listing of all SCGs see: http://www.dec.ny.gov/regulations/61794.html

6.1.2: RI Information

The analytical data collected on this site includes data for:

- groundwater
- soil
- soil vapor
- indoor air

The data have identified contaminants of concern. A "contaminant of concern" is a contaminant that is sufficiently present in frequency and concentration in the environment to require

evaluation for remedial action. Not all contaminants identified on the property are contaminants of concern. The nature and extent of contamination and environmental media requiring action are summarized in Exhibit A. Additionally, the RI Report contains a full discussion of the data. The contaminant(s) of concern identified at this site is/are:

BENZENE	XYLENE (MIXED)
ETHYLBENZENE	NAPHTHALENE
TOLUENE	

Based on the investigation results, comparison to the SCGs, and the potential public health and environmental exposure routes, certain media and areas of the site required remediation. These media were addressed by the IRM(s) described in Section 6.2. More complete information can be found in the RI Report and the IRM Construction Completion Report.

6.2: 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 issuance of the Record of Decision.

The following IRM(s) has/have been completed at this site based on conditions observed during the RI.

Building, Waste, Tank and Soil Removal

In 2007, the on-site building was cleared of automobile wastes and products. An asbestos and lead paint abatement program was completed, and then the on-site building was demolished. In 2008, five underground storage tanks were emptied of their contents, cleaned and removed. 2,400 gallons of petroleum product, waste oil and water were recovered from the tanks during the removal. 2,677 tons of petroleum impacted soil was removed for disposal at a permitted facility.

In 2011, the final IRM phase was implemented and an additional 1,400 tons of petroleum impacted soils were excavated for disposal at a permitted facility. This IRM was part of a sanitary sewer relocation project. The relocation of the sewer line allowed access to petroleum contaminated soils that remained at the southern end of the site, adjacent to the Fire Department Building.

6.3: Summary of Human Exposure Pathways

This human exposure assessment identifies ways in which people may be exposed to site-related contaminants. Chemicals can enter the body through three major pathways (breathing, touching or swallowing). This is referred to as *exposure.*

People are not drinking contaminated groundwater because the area is served by a public water supply that obtains water from a different source. Volatile organic compounds in the groundwater may move into the soil vapor (air spaces within the soil), which in turn may move

into overlying buildings and affect the indoor air quality. This process which is similar to the movement of radon gas from the subsurface into the indoor air of buildings is referred to as soil vapor intrusion. There are no on-site structures and sampling indicates soil vapor intrusion is not a concern for off-site buildings.

6.4: Summary of Environmental Assessment

This section summarizes the assessment of existing and potential future environmental impacts presented by the site. Environmental impacts may include existing and potential future exposure pathways to fish and wildlife receptors, wetlands, groundwater resources, and surface water.

Based upon the resources and pathways identified and the toxicity of the contaminants of ecological concern at this site, a Fish and Wildlife Resources Impact Analysis (FWRIA) was deemed not necessary for OU 01.

Based upon investigations conducted to date, the primary contaminants of concern for the site were semi-volatile organic compounds (SVOCs) and volatile organic compounds (VOCs). All source material and residual soil contamination has been removed to bedrock to meet the residential SCOs and the excavations were backfilled with clean soil meeting the unrestricted SCOs. All sources of groundwater contamination have been removed both on-site and off-site and groundwater beyond the excavation boundaries meets SCGs. Only low levels of groundwater contamination remain on-site. Groundwater use for potable supply is prohibited by a municipal ordinance and this residual contamination is expected to attenuate with time.

6.5: Summary of the Remediation Objectives

The objectives for the remedial program have been established through the remedy selection process stated in 6 NYCRR Part 375. The goal for the remedial program is to restore the site to pre-disposal conditions to the extent feasible. At a minimum, the remedy shall eliminate or mitigate all significant threats to public health and the environment presented by the contamination identified at the site through the proper application of scientific and engineering principles.

The remedial action objectives for this site are:

Groundwater

RAOs for Public Health Protection

- Prevent ingestion of groundwater with contaminant levels exceeding drinking water standards.
- Prevent contact with, or inhalation of volatiles, from contaminated groundwater.

RAOs for Environmental Protection

- Restore ground water aquifer to pre-disposal/pre-release conditions, to the extent practicable.
- Remove the source of ground or surface water contamination.

Soil

RAOs for Public Health Protection

- Prevent ingestion/direct contact with contaminated soil.
- Prevent inhalation of or exposure from contaminants volatilizing from contaminants in soil.

RAOs for Environmental Protection

- Prevent migration of contaminants that would result in groundwater or surface water contamination.

Soil Vapor

RAOs for Public Health Protection

- Mitigate impacts to public health resulting from existing, or the potential for, soil vapor intrusion into buildings at a site.

SECTION 7: SUMMARY OF SELECTED REMEDY

Based on the results of the investigations at the site, the IRM that has been performed, and the evaluation presented here, the Department is selecting No Further Action as the remedy for the site. Soil levels remaining at the site have achieved residential use levels and, while low levels of groundwater contamination remain on-site, groundwater use for potable supply is prohibited by a municipal ordinance. Since this residual groundwater contamination is expected to attenuate with time and residential levels have been met, no use restrictions are needed. Therefore, the Department believes that this remedy is protective of human health and the environment and satisfies the remediation objectives.

Exhibit A

Nature and Extent of Contamination

This section describes the findings of the Remedial Investigation for all environmental media that were evaluated. As described in Section 6.1, samples were collected from various environmental media to characterize the nature and extent of contamination.

For each medium, a table summarizes the findings of the investigation. The tables present the range of contamination found at the site in the media and compares the data with the applicable SCGs for the site. The contaminants are arranged into three categories; volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs) and inorganics (metals). For comparison purposes, the SCGs are provided for each medium that allows for unrestricted use. For soil, if applicable, the Restricted Use SCGs identified in Section 6.1.1 are also presented.

Waste/Source Areas

As described in the RI report, waste/source materials were identified at the site and are impacting groundwater and soil.

Wastes are defined in 6 NYCRR Part 375-1.2(aw) and include solid, industrial and/or hazardous wastes. Source Areas are defined in 6 NYCRR Part 375(au). Source areas are areas of concern at a site were substantial quantities of contaminants are found which can migrate and release significant levels of contaminants to another environmental medium. Wastes and Source areas identified at the site include, underground storage tanks containing petroleum products and contaminated water; drums and containers of automobile waste such as oil, antifreeze, and transmission fluid; asbestos containing materials (ACM); and lead based paint and debris. The waste/source areas identified at the site were addressed by the IRM(s) described in Section 6.2.

Groundwater

In 2008, seven (7) temporary wells were installed at locations based on visual observations made during soil boring installation. Groundwater samples were analyzed for VOCs, SVOCs and metals. The data from the temporary monitoring wells is presented below.

Table 1 - Groundwater From Temporary Wells (May 2008)

Detected Constituents	Concentration Range Detected (ppb)[a]	SCG[b] (ppb)	Frequency Exceeding SCG
VOCs			
Ethyl benzene	ND - 120	5	1 out of 7
Xylene	ND - 348	5	1 out of 7
SVOCs			
Naphthalene	ND - 540	10	2 out of 7
Metals			
Arsenic	ND - 88	25	5 out of 7
Barium	1,020 - 1,680	1000	8 out of 7

Beryllium	ND - 12	3	6 out of 7
Cadmium	ND - 20	5	6 out of 7
Chromium	56 - 302	50	7 out of 7
Copper	ND - 2,930	200	4 out of 7
Lead	283 - 2,040	25	7 out of 7
Nickel	ND - 56,100	100	6 out of 7
Silver	ND - 56	50	1 out of 7
Zinc	ND - 2,800	2,000	2 out of 7

a - ppb: parts per billion, which is equivalent to micrograms per liter, ug/L, in water.
b- SCG: Standard Criteria or Guidance - Ambient Water Quality Standards and Guidance Values (TOGs 1.1.1), 6 NYCRR Part 703, Surface water and Groundwater Quality Standards, and Part 5 of the New York State Sanitary Code (10 NYCRR Part 5).

Based on the analytical data and groundwater flow direction obtained from the temporary wells, eight permanent monitoring wells were installed to depths ranging from 8 to 15 feet below grade (See Figure 4). Two rounds of groundwater samples were taken from all eight wells in 2008 and the results are presented below.

Table 2 - Groundwater From Permanent Wells (July 2008) Pre-IRM

Detected Constituents	Concentration Range Detected (ppb)[a]	SCG[b] (ppb)	Frequency Exceeding SCG
VOCs			
Benzene	ND - 120	0.7	2 out of 8
Toluene	ND - 3,100	5	2 out of 8
Ethyl benzene	ND - 2,400	5	2 out of 8
Xylene	ND - 1,800	5	2 out of 8
Isopropylbenzene	ND - 180	5	2 out of 8
SVOCs			
2,4,-Dimethylphenol	ND - 6	1	2 out of 8
Naphthalene	ND - 540	10	2 out of 8
Metals			
Lead	27 - 212	25	5 out of 8

a - ppb: parts per billion, which is equivalent to micrograms per liter, ug/L, in water.
b- SCG: Standard Criteria or Guidance - Ambient Water Quality Standards and Guidance Values (TOGs 1.1.1), 6 NYCRR Part 703, Surface water and Groundwater Quality Standards, and Part 5 of the New York State Sanitary Code (10 NYCRR Part 5).

Contamination found in the permanent wells was located between the former feed mill and the Adams Fire Station located off-site and to the south. The contaminated monitoring wells were identified as MW-4 and MW-5. The extent of contaminated groundwater was approximately 100 feet by 25 feet in size.

Table 3 - Groundwater From Permanent Wells (October 2008) Post 2008 Soil Removal IRM

Detected Constituents	Concentration Range Detected (ppb)[a]	SCG[b] (ppb)	Frequency Exceeding SCG
VOCs			

Benzene	ND - 98	0.7	2 out of 8
Toluene	ND - 1,100	5	2 out of 8
Ethyl benzene	ND - 1,700	5	2 out of 8
Xylene	ND - 920	5	2 out of 8
Isopropylbenzene	ND - 130	5	2 out of 8
SVOCs			
Naphthalene	ND - 530	10	2 out of 8
Metals			
Antimony	ND - 10	3	1 out of 8
Lead	ND - 77.7	25	1 out of 8

a - ppb: parts per billion, which is equivalent to micrograms per liter, ug/L, in water.
b- SCG: Standard Criteria or Guidance - Ambient Water Quality Standards and Guidance Values (TOGs 1.1.1), 6 NYCRR Part 703, Surface water and Groundwater Quality Standards, and Part 5 of the New York State Sanitary Code (10 NYCRR Part 5).

During the 2008 soil removal IRM three permanent wells (MW-1, 2 & 3) were removed and not replaced. Additional rounds of groundwater sampling were conducted to evaluate the effectiveness of the 2008 IRM.

Table 4 - Groundwater From Permanent Wells (June 2009) Post 2008 Soil Removal IRM Samples from MW-4, 5, 6, 7 & 8

Detected Constituents	Concentration Range Detected (ppb)[a]	SCG[b] (ppb)	Frequency Exceeding SCG
VOCs			
Benzene	ND - 440	0.7	2 out of 5
Toluene	ND - 9,500	5	2 out of 5
Ethyl benzene	ND - 9,900	5	2 out of 5
Xylene	ND - 4,900	5	2 out of 5
Isopropylbenzene	ND - 180	5	2 out of 5
Metals			
Lead	ND - 70.9	25	1 out of 5

a - ppb: parts per billion, which is equivalent to micrograms per liter, ug/L, in water.
b- SCG: Standard Criteria or Guidance - Ambient Water Quality Standards and Guidance Values (TOGs 1.1.1), 6 NYCRR Part 703, Surface water and Groundwater Quality Standards, and Part 5 of the New York State Sanitary Code (10 NYCRR Part 5).

Table 5 - Groundwater From Permanent Wells (September 2009) Post 2008 Soil Removal IRM Samples from MW-4, 5, 7 & 8

Detected Constituents	Concentration Range Detected (ppb)[a]	SCG[b] (ppb)	Frequency Exceeding SCG
VOCs			
Benzene	ND - 98 D	0.7	2 out of 4
Toluene	ND - 1200E	5	2 out of 4
Ethyl benzene	ND - 2300 DE	5	2 out of 4
Xylene	ND - 100 D	5	2 out of 4
Isopropylbenzene	ND - 180 D	5	2 out of 4

a - ppb: parts per billion, which is equivalent to micrograms per liter, ug/L, in water.

b- SCG: Standard Criteria or Guidance - Ambient Water Quality Standards and Guidance Values (TOGs 1.1.1), 6 NYCRR Part 703, Surface water and Groundwater Quality Standards, and Part 5 of the New York State Sanitary Code (10 NYCRR Part 5).
E = Estimated Quantity
D = the reported value is from a secondary analysis with a dilution factor. The original analysis exceeded the calibration range.

Based on previous two sampling events, MW-4 and MW-5 were the only wells identified which exhibited VOCs exceeding SCGs. Subsequently, three additional rounds of groundwater samples were obtained to evaluate trends in groundwater contamination in MW-4 and MW-5. The results of groundwater sampling are presented below:

Table 6 - Groundwater From Permanent Wells (December 2009) Post 2008 Soil Removal IRM MW-4 & 5

Detected Constituents	Concentration Range Detected (ppb)[a]	SCG[b] (ppb)	Frequency Exceeding SCG
VOCs			
Benzene	ND - 660	0.7	2 out of 2
Toluene	ND - 13,000	5	2 out of 2
Ethyl benzene	ND - 4,700	5	2 out of 2
Isopropylbenzene	ND - 160	5	2 out of 2

a - ppb: parts per billion, which is equivalent to micrograms per liter, ug/L, in water.
b- SCG: Standard Criteria or Guidance - Ambient Water Quality Standards and Guidance Values (TOGs 1.1.1), 6 NYCRR Part 703, Surface water and Groundwater Quality Standards, and Part 5 of the New York State Sanitary Code (10 NYCRR Part 5).

Table 7 - Groundwater From Permanent Wells (March 2010) Post 2008 Soil Removal IRM MW-4 & 5

Detected Constituents	Concentration Range Detected (ppb)[a]	SCG[b] (ppb)	Frequency Exceeding SCG
VOCs			
Benzene	ND - 440	0.7	2 out of 2
Toluene	ND - 1,700	5	2 out of 2
Ethyl benzene	ND - 1,200	5	2 out of 2
Isopropylbenzene	ND - 140	5	2 out of 2
Xylene	ND – 2,600	5	1 out of 2

a - ppb: parts per billion, which is equivalent to micrograms per liter, ug/L, in water.
b- SCG: Standard Criteria or Guidance - Ambient Water Quality Standards and Guidance Values (TOGs 1.1.1), 6 NYCRR Part 703, Surface water and Groundwater Quality Standards, and Part 5 of the New York State Sanitary Code (10 NYCRR Part 5).

Table 8 - Groundwater From Permanent Wells (May 2011) Post 2008 Soil Removal IRM MW-4 & 5

Detected Constituents	Concentration Range Detected (ppb)[a]	SCG[b] (ppb)	Frequency Exceeding SCG
VOCs			
Benzene	ND - 300	0.7	2 out of 2
Toluene	ND - 2,100	5	1 out of 2

Ethyl benzene	ND - 1,900	5	2 out of 2
Isopropylbenzene	ND - 97	5	2 out of 2
2,4,-Dimthylphenol	ND - 54	1	2 out of 2
Naphthalene	ND - 180	10	1 out of 2
Phenol	ND - 3.8	1	1 out of 2

a - ppb: parts per billion, which is equivalent to micrograms per liter, ug/L, in water.
b- SCG: Standard Criteria or Guidance - Ambient Water Quality Standards and Guidance Values (TOGs 1.1.1), 6 NYCRR Part 703, Surface water and Groundwater Quality Standards, and Part 5 of the New York State Sanitary Code (10 NYCRR Part 5).

Following the 2008 soil removal IRM, only two wells (MW-4 and MW-5) exhibited contamination above groundwater standards. These overburden wells were located adjacent to the former sewer line and were removed during the 2011 soil removal IRM. Although post 2011 IRM groundwater monitoring was not performed in the immediate vicinity of MW-4 and MW-5, all soil contamination in this area was removed down to bedrock and the excavation was dewatered during the removal. Since the source of the contamination in the area of groundwater contamination has been removed, any residual groundwater contamination is expected to attenuate rapidly. Groundwater results from samples taken downgradient of the site (MW-6, 7 & 8) during the sampling rounds identified in Tables 2 through 8 have all remained below SCGs. Groundwater contamination identified during the RI was addressed during the IRM described in Section 6.2.

Surface Soil

In 2008, five surface soil samples were obtained and analyzed for VOCs, SVOCs, metals, PCBs and pesticides. No samples exceeded the unrestricted use SCOs. In 2011, five samples were obtained below the imported gravel backfill to further characterize shallow soils. The samples were analyzed for VOCs, SVOCs and metals. No site-related soil contamination above the unrestricted SCOs was identified during the RI. Therefore, no remedial alternatives need to be evaluated for surface soil.

Sub-Surface Soil

During the RI, soil samples were obtained from 16 soil borings and 14 test pit locations that exhibited visual, olfactory or photo-ionization detector results. Samples were analyzed for VOCs, SVOCs and metals. The data from the RI sub-surface sampling program is presented below.

Table 9 - Sub-Surface Soil (Pre-IRM)

Detected Constituents	Concentration Range Detected (ppm)[a]	Unrestricted SCO[b] (ppm)	Frequency Exceeding Unrestricted SCO	Lower of the Protection of Groundwater (GW) or Residential SCO[c] (ppm)	Frequency Exceeding Protection of GW or Residential SCOs
VOCs					
Acetone	ND - 410	0.05	2 out of 30	0.5	2 out of 30
Ethylbenzene	ND - 19	1	1 out of 30	1	1 out of 30
Methylene Chloride	ND - 0.94	0.05	1 out of 30	.05	1 out of 30
Xylene	ND -42	0.26	2 out of 30	1.6	2 out of 30

SVOCs					
Benzo(a)anthracene	ND - 6.5	1	1 out of 30	1	1 out of 30
Chrysene	ND - 6.2	1	2 out of 30	1	2 out of 30
Benzo(b)fluoranthene	ND - 6.7	1	2 out of 30	1	2 out of 30
Benzo(k)fluoranthene	ND - 3	0.8	2 out of 30	1	2 out of 30
Naphthalene	ND - 12	12	1 out of 30	12	1 out of 30
Metals					
Arsenic	ND - 19.4	13	1 out of 30	16	1 out of 30
Lead	ND – 432	63	1 out of 30	400	1 out of 30

a - ppm: parts per million, which is equivalent to milligrams per kilogram, mg/kg, in soil;
b - SCG: Part 375-6.8(a), Unrestricted Soil Cleanup Objectives.
c - SCG: Part 375-6.8(b), Protection of Groundwater and Residential Soil Cleanup Objectives.

The subsurface soil sample exhibiting the methylene chloride is located off-site along West Church Street at location MW-7. This sample was obtained from a depth of 4.5 to 5.0 feet below grade. This area was not identified for remediation because no visual or olfactory evidence of contamination was identified, no evidence was found to relate methylene chloride to the site, and the results were below residential SCOs. The VOC, SVOC and metal contamination was addressed by the 2008 and 2011 soil removal IRMs as documented in Table 10 below.

Confirmation Soil Samples

Following the 2008 removal IRM, twenty-one (21) soil samples were obtained from the sidewalls of the excavation to evaluate the compliance with SCOs. No exceedances of the residential SCOs were found following the 2008 IRM. Following the 2011 soil removal IRM, eight (8) soil samples were obtained from the sidewalls and the bottom of the excavation. The samples were analyzed for VOCs and SVOCs and the results are presented below.

Table 10 - Soil (Post IRMs)

Detected Constituents	Concentration Range Detected (ppm)[a]	Unrestricted SCO[b] (ppm)	Frequency Exceeding Unrestricted SCOs	Lower of Protection of Groundwater and Residential SCG[c] (ppm)	Frequency Exceeding Protection of Groundwater and Residential SCOs
VOCs					
Ethylbenzene	ND – 28	0.26	2 out of 8	30	2 out of 8

a - ppm: parts per million, which is equivalent to milligrams per kilogram, mg/kg, in soil;
b - SCG: Part 375-6.8(a), Unrestricted Soil Cleanup Objectives.
c - SCG: Part 375-6.8(b), Protection of Groundwater and Residential Soil Cleanup Objectives.

The two samples exceeding the unrestricted SCOs and the Protection of Groundwater SCO were located off-site and on the eastern wall of the excavation below a natural gas line, at the base of the foundation of the Fire Station Building. However, no exceedances of the residential SCOs were documented as part of either 2008 or 2011 post IRM sampling program. Soil contamination identified during the RI was addressed during the IRM described in Section 6.2.

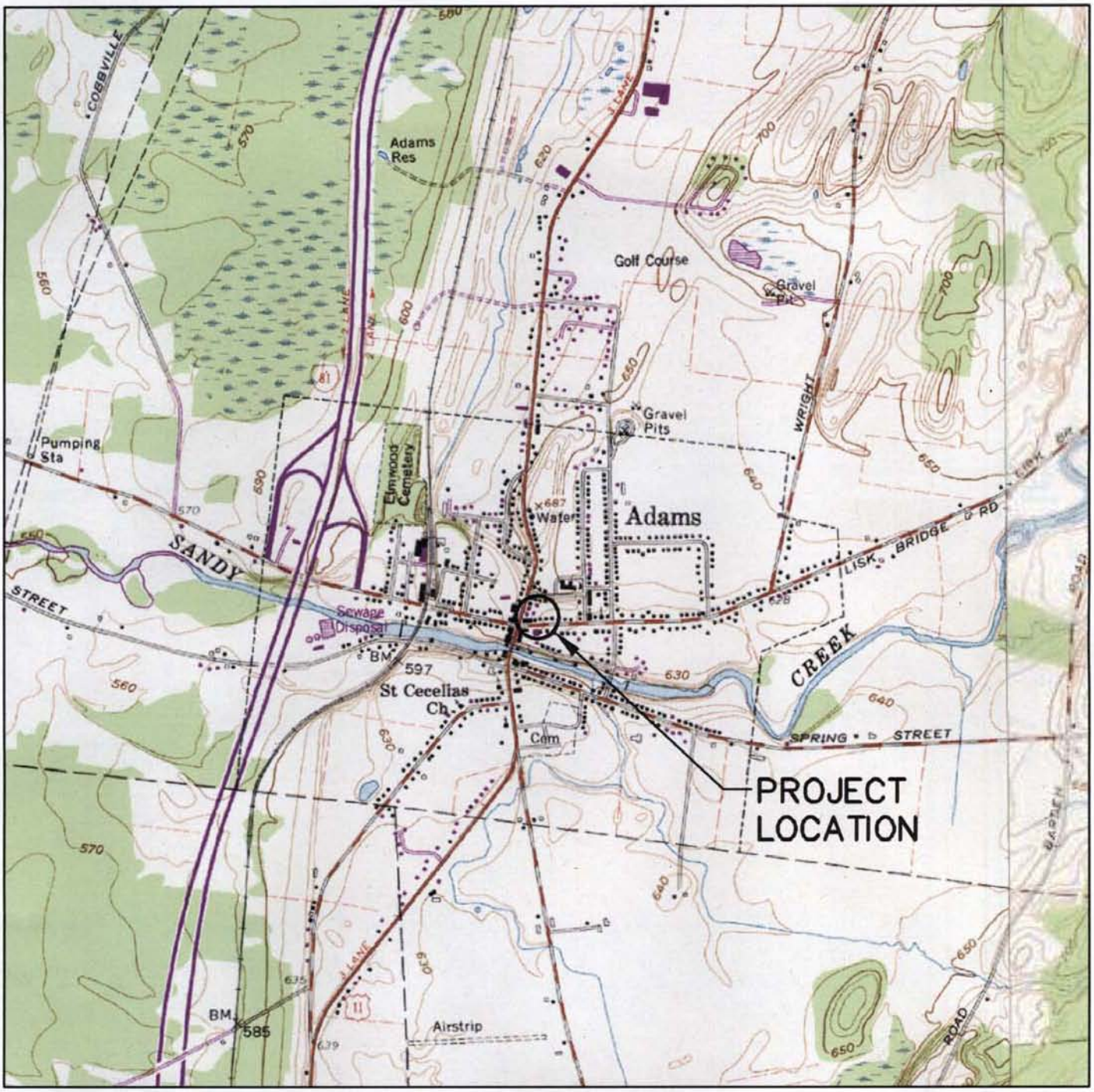
In 2011, five (5) subsurface soils samples were also obtained to characterize on-site sub-surface fill that was not characterized previously. Samples were obtained from 4.5 to 5.5 below grade and were analyzed for VOCs, SVOCs and metals. No exceedances of the unrestricted SCOs were observed. Soil contamination identified during the RI was addressed during the IRM described in Section 6.2.

Soil Vapor Intrusion

The evaluation of the potential for soil vapor intrusion into off-site, adjacent structures resulting from the presence of site related soil or groundwater contamination was evaluated by the sampling of soil vapor, sub-slab soil vapor under structures, and indoor air inside structures. At this site, due to the presence of off-site buildings in the impacted area, a full suite of samples were collected to evaluate whether soil vapor intrusion was occurring.

Soil vapor, sub-slab vapor and indoor air samples were collected on May 6, 7 and 8, 2008 from the monitoring points installed on and adjacent to the site. Seven (7) soil vapor monitoring points were installed along the north, south, and west boundaries of the site and inside the Village Fire Hall. The vapor points were installed to a depth of approximately 6 to 12 inches above the water table. Sub-slab monitoring points, V-4, V-5 and V-10 were located in the Village Fire Hall. One (1) indoor air quality sample (I-1) was also collected from within the Village Fire Hall. The soil vapor, sub-slab vapor and air quality sample locations are depicted in Figure 3.

The soil vapor intrusion investigation revealed detectable levels of VOCs at all locations, with the highest levels occurring at V-2. This vapor sampling point is located off-site; to the south of the former feed mill and the auto repair shop, in the alley between the site and the Fire Station. The remaining sub-slab vapor point (also located off-site) had low levels of various contaminants, but all below the NYSDOH Guidance Values. Similarly, the indoor air sample point, I-1, indicated detectable levels of contaminants, but they are lower than the NYSDOH Guidance Values. Based on the concentration detected, and in comparison with the NYSDOH Soil Vapor Intrusion Guidance, no site-related soil vapor contamination of concern was identified during the RI. Therefore, no remedial alternatives need to be evaluated for soil vapor.



SOURCE:
NEW YORK U.S.G.S. QUADRANGLE MAPS; RESTON, VIRGINIA, 1983.

QUADRANGLE LOCATION

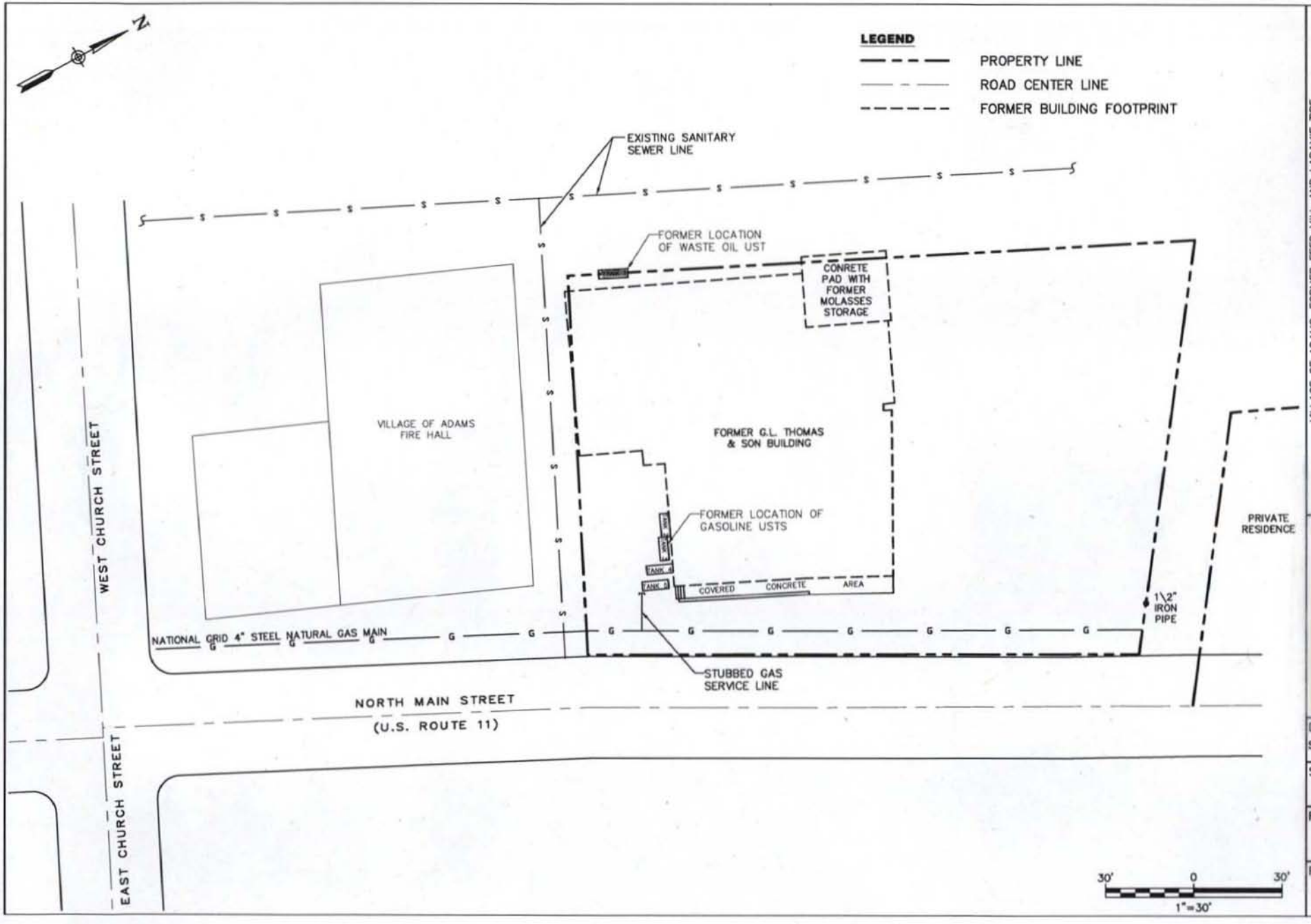
2000' 0 2000'

1"=2000'

N

TRUE OR CALLED NORTH

		VILLAGE OF ADAMS FORMER FEED MILL AND LARAMIE TIRE ENVIRONMENTAL RESTORATION PROJECT SITE LOCATION MAP	Figure Number 1
Date FEBRUARY, 2009	Scale 1" = 2000'	VILLAGE OF ADAMS JEFFERSON COUNTY, NEW YORK	Project Number 593.028-S



VILLAGE OF ADAMS, FORMER FEED MILL AND LARAMIE TIRE
ENVIRONMENTAL RESTORATION PROJECT

SITE PLAN

JEFFERSON COUNTY, NEW YORK

VILLAGE OF ADAMS

Date	SEPTEMBER, 2009
Scale	1" = 30'
Figure Number	2
Project Number	593.028-S

Plotted: Sep 25, 2009 - 2:43PM SYR By: jpa
I:\Shared\500\593.028-S\SRAR\REVISED SET 08-09\593.028_FIG-02.dwg

NOTE: GROUNDWATER CONTOURS ARE FROM FIGURE "JULY 24, 2008 GROUNDWATER LEVELS".

N

FB-12 FB-11 FB-10 FB-8 FB-9 FB-2 FB-7 FB-4 FB-1 FB-6 FB-5 FB-13 FB-14

WEST CHURCH STREET

EAST CHURCH STREET

NORTH MAIN STREET (U.S. ROUTE 11)

NATIONAL GRID 4" STEEL NATURAL GAS MAIN

EXISTING SANITARY SEWER LINE

FORMER LOCATION OF WASTE OIL UST

WASTE OIL EXCAVATION AREA

WASTE OIL NORTH 2

WASTE OIL NORTH 1

WASTE OIL EAST 2

WASTE OIL EAST 1

ON-SITE 1 COMP

IMPACT AREA 1

EXCAVATION AREA 4

EXCAVATION AREA 1

EXCAVATION AREA 1 WEST 3

EXCAVATION AREA 1 WEST 2

EXCAVATION AREA 1 WEST 1

EXCAVATION AREA 1 NORTH 1

EXCAVATION AREA 1 EAST 4

EXCAVATION AREA 1 EAST 3

EXCAVATION AREA 1 EAST 2

EXCAVATION AREA 3

EXCAVATION AREA 5

FORMER LOCATION OF GASOLINE USTS

FORMER G.L. THOMAS & SON BUILDING

CONRETE PAD WITH FORMER MOLASSES STORAGE

VILLAGE OF ADAMS FIRE HALL

COVERED CONCRETE AREA

WEST COMP

NW COMP

NORTH COMP

SE COMP

SOUTH COMP

EAST COMP

ON-SITE 2 FLOOR

ON-SITE 2 NORTH

ON-SITE 2 SOUTH

SERIES

PRIVATE RESIDENCE

1\2" IRON PIPE

SS-1 SS-2 SS-3 SS-4 SS-5

B-1 B-2 B-3 B-4 B-5 B-6 B-7 B-8 B-9 B-10 B-11 B-12 B-13 B-14 B-15 B-16 B-17 B-18 B-19 B-20 B-21 B-22

SUB-B1 SUB-B2

V-1 V-2 V-3 V-4 V-5 V-6 V-7 V-8 V-9 V-10

I-1

TP-1 TP-3 TP-4 TP-5 TP-6 TP-7 TP-8 TP-9 TP-10 TP-11 TP-12 TP-13 TP-14 TP-15 TP-16

96 97 98 99 100

LEGEND

— — — —	PROPERTY LINE				
— · — · —	ROAD CENTER LINE	V-#	SOIL VAPOR SAMPLE LOCATIONS		EXCAVATION AREA
— — — —	FORMER BUILDING FOOTPRINT	I-#	INDOOR AIR QUALITY SAMPLE LOCATION	•	CLEARANCE SAMPLE LOCATIONS
SS-#	SURFACE SOIL SAMPLE LOCATIONS	V-#	SUB-SLAB VAPOR SAMPLE LOCATION		
SB B-#/FB-#	SOIL BORING LOCATIONS	97	GROUNDWATER LEVEL CONTOUR		
TP-#	TEST PIT LOCATIONS		GROUNDWATER FLOW DIRECTION		

30' 0 30'
1"=30'

VILLAGE OF ADAMS, FORMER FEED MILL AND LARAMIE TIRE ENVIRONMENTAL RESTORATION PROJECT

SOIL BORING AND SUBSURFACE SOIL BORING LOCATIONS

VILLAGE OF ADAMS

JEFFERSON COUNTY, NEW YORK

Date: SEPTEMBER, 2009

Scale: 1" = 30'

Figure Number: 3

Project Number: 593.028-S

Plotted: Sep 23, 2009 - 2:54PM STR By: jpa
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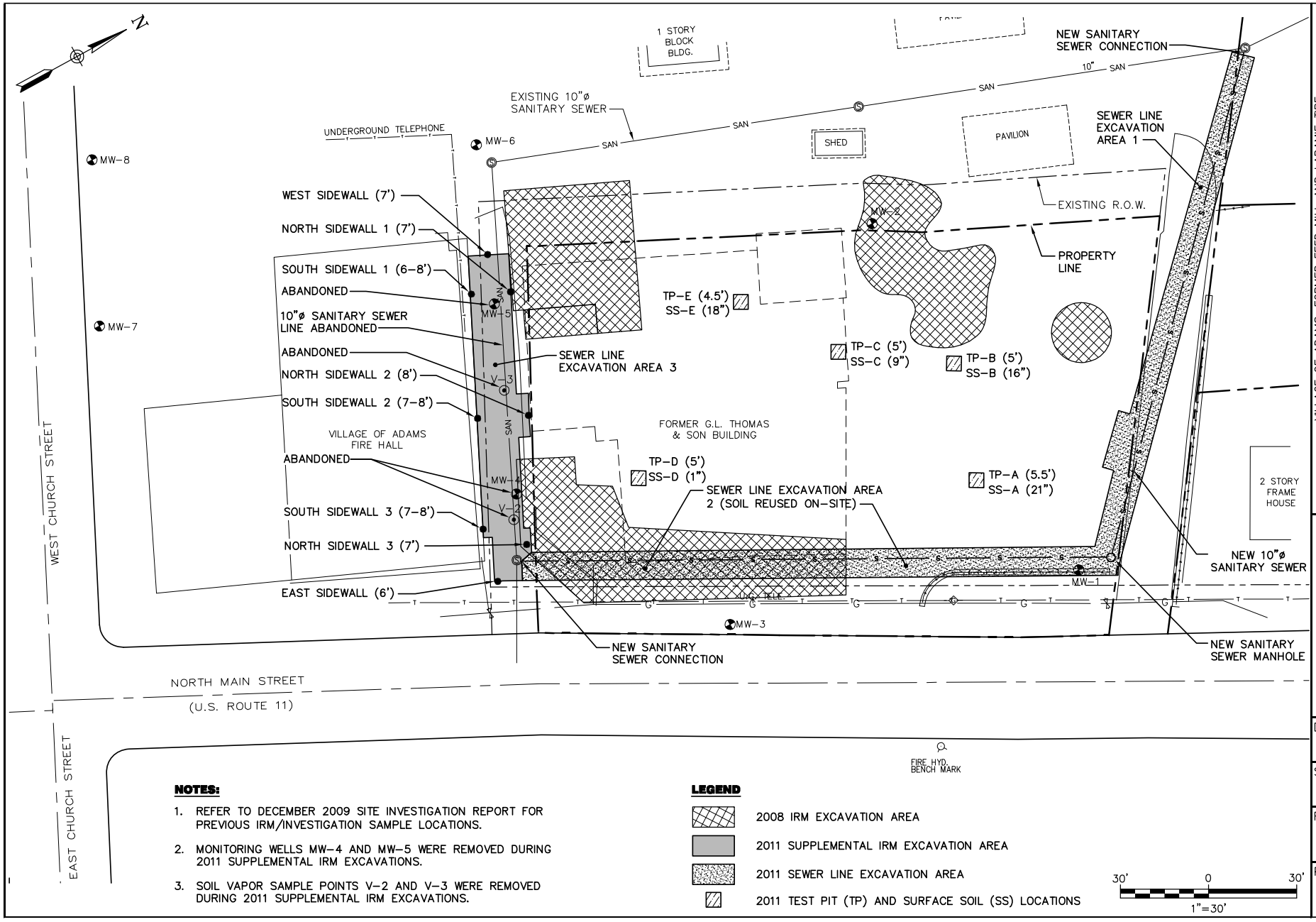

NOTES:

1. REFER TO DECEMBER 2009 SITE INVESTIGATION REPORT FOR PREVIOUS IRM/INVESTIGATION SAMPLE LOCATIONS.
2. MONITORING WELLS MW-4 AND MW-5 WERE REMOVED DURING 2011 SUPPLEMENTAL IRM EXCAVATIONS.
3. SOIL VAPOR SAMPLE POINTS V-2 AND V-3 WERE REMOVED DURING 2011 SUPPLEMENTAL IRM EXCAVATIONS.

LEGEND

- 2008 IRM EXCAVATION AREA
- 2011 SUPPLEMENTAL IRM EXCAVATION AREA
- 2011 SEWER LINE EXCAVATION AREA
- 2011 TEST PIT (TP) AND SURFACE SOIL (SS) LOCATIONS

30' 0 30'
1"=30'

VILLAGE OF ADAMS, FORMER FEED MILL AND LARAMIE TIRE ENVIRONMENTAL RESTORATION PROJECT

SUPPLEMENTAL IRM EXCAVATION AND SAMPLE LOCATIONS

JEFFERSON COUNTY, NEW YORK

VILLAGE OF ADAMS

Barton & Loguidice, P.C.

Date	DECEMBER, 2011
Scale	1" = 30'
Figure Number	4
Project Number	593.028

Plotted: Dec 29, 2011 - 1:04PM SYR By: jgs
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APPENDIX A

Responsiveness Summary

RESPONSIVENESS SUMMARY

Former G.L. Thomas & Sons Feed Mill/Laramie Tire
Environmental Restoration Project
Village of Adams, Jefferson County, New York
Site No. E623023

The Proposed Remedial Action Plan (PRAP) for the Former G.L. Thomas & Sons Feed Mill/Laramie Tire site was prepared by the New York State Department of Environmental Conservation (the Department) in consultation with the New York State Department of Health (NYSDOH) and was issued to the document repositories on February 8, 2012. The PRAP outlined the remedial measure proposed for the contaminated soil and groundwater at the Former G.L. Thomas & Sons Feed Mill/Laramie Tire site.

The release of the PRAP was announced by sending a notice to the public contact list, informing the public of the opportunity to comment on the proposed remedy.

A public meeting was held on March 8, 2012, which included a presentation of the site investigation (SI) and interim remedial measure (IRM) report for the Former G.L. Thomas & Sons Feed Mill/Laramie Tire site, as well as a discussion of the proposed remedy. The meeting provided an opportunity for citizens to discuss their concerns, ask questions and comment on the proposed remedy. These comments have become part of the Administrative Record for this site. The public comment period for the PRAP ended on March 23, 2012.

This responsiveness summary responds to all questions and comments raised during the public comment period. The following are the comments received, with the Department's responses:

COMMENT 1: Will the wells be removed from on-site and off-site?

RESPONSE 1: Yes, the wells will be decommissioned in the near future.

COMMENT 2: Are there any restrictions that will apply to the site?

RESPONSE 2: No, the site has achieved the residential cleanup objectives and no institutional or engineering controls are required.

COMMENT 3: When will the Record of Decision (ROD) be issued?

RESPONSE 3: The ROD should be issued by March 31, 2012.

COMMENT 4: When will the Certificate of Completion (COC) be issued?

RESPONSE 4: The COC should be issued shortly after the ROD is signed.

APPENDIX B

Administrative Record

Administrative Record

Former G.L. Thomas & Sons Feed Mill/Laramie Tire
Environmental Restoration Project
Village of Adams, Jefferson County, New York
Site No. E623023

Proposed Remedial Action Plan for the Former G.L. Thomas & Sons Feed Mill/Laramie Tire site, dated February 2012, prepared by the Department.

Addendum No. 1 to the December 2009 Site Investigation Report – Sewer Relocation and Off-Site Remedial Soil Excavation Results, dated December 2012, prepared by Barton and Loguidice, P.C..

Site Investigation Report, dated December 2009, prepared by Barton and Loguidice, P.C.

Site Investigation Work Plan, dated September 2007, prepared by Barton and Loguidice, P.C.