Spill Prevention Control and Countermeasure Plan

For

University of Rhode Island

- **Kingston Campus**
- **Narragansett Bay Campus**
- **W. Alton Jones Campus - West Greenwich**

Prepared by:
Triumvirate Environmental, Inc.
200 Inner Belt Road
Somerville, MA 02143

Revised – June 2022

Reviewed and approved by:

Triumvirate Environmental
200 Innerbelt Road
Somerville, MA 02134

UNIVERSITY OF RHODE ISLAND
SPILL PREVENTION CONTROL AND COUNTERMEASURE PLAN
(40 CFR Part 112)

TABLE OF CONTENTS

SECTION **PAGE**

1.0 INTRODUCTION AND PLAN CERTIFICATION

1.1 Introduction

As required by the Clean Water Act, the United States Environmental Protection Agency (USEPA) established Oil Pollution Prevention Regulations, which are codified in 40 Code of Federal Regulations (CFR) Part 112. These regulations establish procedures, methods, equipment, and other requirements to prevent the discharge of oil from non-transportation-related onshore and offshore facilities into or upon the navigable waters of the United States (U.S.) or adjoining shorelines.

These regulations apply to owners/operators of facilities engaged in storing, processing, transferring, distributing, using, or consuming oil and oil products, including gasoline, and other activities, which due to its location, could reasonably be expected to discharge oil in quantities that may be harmful into or upon navigable waters of the U.S.

Facilities are subject to the federal Oil Pollution Prevention regulations if:

1. The underground storage capacity of the facility is 42,000 gallons of oil or greater, or

2. The aggregate aboveground storage capacity of the facility is 1,320 gallons or greater of oil.

The University of Rhode Island (URI) at all three locations below is subject to these regulations because the total aboveground storage quantity of oil exceeds 1,320 gallons.

The facilities discussed in this plan are located at the following addresses:

University of Rhode Island
Kingston Campus
Route 138
South Kingstown, RI 02881

University of Rhode Island
Narragansett Bay Campus
South Ferry Road
Narragansett, RI 02882

University of Rhode Island
W. Alton Jones Campus
401 Victory Highway
West Greenwich, RI 02816

URI stores approximately:

- Kingston – 199,406 gallons
- Narragansett Bay – 3,226 gallons
- W. Alton Jones – 10,092 gallons

Of oil in containers and/or aboveground and underground storage tanks (ASTs and UST) in various buildings throughout the above campuses. Since each of the above facility's aboveground volume exceeds the regulatory threshold volume and since there is potential, although limited, for an oil spill to reach a "water of the United States", this SPCC Plan has been prepared and implemented. The plan is maintained in the Department of Public Safety/Environmental, Health and Safety office.

1.2 Professional Engineer's Certification (§112.3(d))

Original Plan Date: **May 2014**

Date of PE Certification: **September 9, 2022**

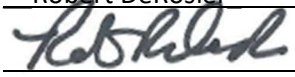
Date of Plan Review: **May – September 2022**

Certification

I, Robert DeRosier, attest that I have reviewed the University of Rhode Island Oil SPCC Plan and certify that:

- I am familiar with the requirements of the federal Oil Pollution Prevention regulations in 40 CFR Part 112;
- I have visited and examined the facilities included in this plan;
- The plan has been prepared in accordance with good engineering practices, including consideration of applicable industry standards, and with the requirements of the SPCC rule;
- Procedures for inspections and testing have been established; and,
- The plan is adequate for the facility.

Professional Engineer: Robert DeRosier

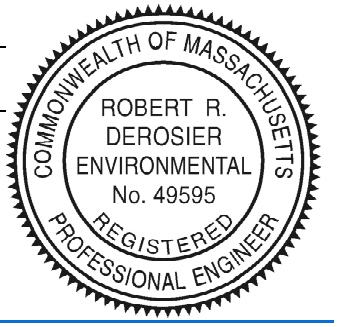
Signature: 

Registration Number: 45959

State: Massachusetts

Date: 9/9/2022

Stamp:



1.3 Plan Review and Amendments (§112.4, 112.5(a)(b)(c))

1.3.1 Oil SPCC Plan Amendments Required by the U.S. EPA

In accordance with 40 CFR Part 112.4, the Regional Administrator (RA) of the USEPA may require the amendment of this Oil SPCC Plan if:

1) The facility has a discharge exceeding 1,000 gallons of oil in a single discharge, or

2) If more than 42 gallons of oil are discharged in each of two discharges occurring within any 12-month period.

If either of these two events occurs, URI must submit information specified in the regulation to the RA within 60 days.

1.3.2 Oil SPCC Plan Amendments Required in the Event of a Material Change

In accordance with 40 CFR Part 112.5(a) this Oil SPCC Plan will be amended "when there is a change in the facility design, construction, operation, or maintenance that materially affects its potential for a discharge into or upon navigable waters of the U.S." Changes that may require amendment of the plan include, but are not limited to:

- Commissioning or decommissioning containers;
- Replacement, reconstruction, or movement of containers;
- Reconstruction, replacement, or installation of piping systems;
- Construction or demolition that might alter secondary containment structures;
- Changes of product or service; or
- Revision of standard operation or maintenance procedures.

The amendment(s) to the plan will be prepared within six months and implemented as soon as possible, but not later than six months following the plan's amendment(s).

1.3.3 Oil SPCC Plan Review & Evaluation

In accordance with 40 CFR 112.5(b), a review and evaluation of this Oil SPCC Plan will be conducted at least once every five years from the date of the last review. URI will amend the Oil SPCC Plan within six months of the review to include more effective prevention and control technology if: (1) if such technology has been field-proven at the time of the review, and (2) if such technology will significantly reduce the likelihood of a spill event from the University.

The amendment(s) will be implemented as soon as possible, but no later than six months following the amendment(s) of the plan.

The review and evaluation of the Oil SPCC Plan originally prepared in May 2004 will be documented and a statement signed as to whether the Plan will or will not be amended, as follows:

"I have completed a review and evaluation of the Oil SPCC Plan for URI on the date(s) below and will (will not) amend the Plan as a result".

Review Dates	Amendment	Signature or Comment
April, 2004	Plan Developed	Developed with PE
June, 2010	Update contact information, updated appendices, and tank inventory	Revision with PE
April 2018	Update tank inventory, updated contact information	Revision with PE
June 2022	Update inventory, field verification	See page 6 of this plan

All technical amendments will be certified by a registered Professional Engineer.

1.4 Conformance with Regulatory Requirements (§112.7(a)(2))

URI has developed this Oil SPCC Plan in accordance with the requirements of 40 CFR Part 112 and the state of Rhode Island and Providence Plantations Department of Environmental Management (RIDEM) Division of Groundwater and Freshwater Wetlands Oil Pollution Control Regulations. As allowed by this regulation (112.7(a)(2)), alternative equivalent environmental protection provisions have been implemented where deviation from technical elements of the regulation have been necessary. The reason for each deviation and a description of the environmentally equivalent methods implemented are included within this plan.

1.5 Management Approval (§112.7)

URI is committed to the prevention of discharges of oil to navigable waters and the environment and maintains the industry standards for spill prevention control and countermeasures through regular review, updating, and implementation of this Spill Prevention Control and Countermeasure Plan.

Authorized Facility Representative:

Pamela McCarthy

Name

Pamela McCarthy

Digitally signed by Pamela McCarthy
Date: 2022.09.13 12:30:36 -04'00'

Signature

Coordinator, EH&S

Title Date

2.0 GENERAL SITE INFORMATION (§112.7(a)(3))

2.1 Facility Description

The *University of Rhode Island* is an academic and research facility. The *University of Rhode Island* campuses are comprised of buildings with various purposes including dormitories, research laboratories, facility and maintenance buildings, dining halls, farm buildings, classrooms, Memorial Union, and Convocation Center. Site plans of the Kingston, Narragansett Bay and W. Alton Jones campuses are provided in Appendix A. Figures 1 through 15 refer to the Kinston campus, 16 refers to the Narragansett Bay Campus, and Figure 17 refers to the W. Alton Jones campus.

Kingston Campus

The Kingston Campus is situated at an approximate latitude of 41.48° and a longitude of -71.53°. The topography at the Kingston Campus slopes in a westerly direction. The eastern end of the campus has a ground elevation of approximately 240 feet above sea level and the western end has an elevation of about 100 feet above sea level. Any significant surface petroleum release at the campus would generally follow the ground contours and flow westerly.

Two of the more significant environmental features of the Kingston Campus include the White Horn Brook and 30-Acre Pond. White Horn Brook, a perennial stream per the United States Geological Society (USGS), flows in a southerly direction through the middle of the campus. The 2.6-mile-long brook is a tributary of the Chipuxet River and discharges to the Great Swamp Wildlife Reservation. The annual flow of White Horn Brook is approximately 5.2 cubic feet per second.

The Rhode Island Department of Environmental Management (RIDEM) classifies White Horn Brook as Class A in reaches north of Route 138 and Class B in reaches south of Route 138. Thirty-Acre Pond is located along the western boundary of the Kingston Campus and is also part of the Chipuxet River system. RIDEM classifies water quality in 30-Acre Pond as Class B. Thirty-Acre Pond has a surface area of 16 acres and a maximum depth of 30 feet. Much of the Kingston Campus lies within the Community Wellhead Protection Area.

Narragansett Bay Campus

The Narragansett Bay Campus is located on the shore of Narragansett Bay at the eastern end of South Ferry Road at approximate latitude of 41.49 ° and a longitude of -71.42 °. This campus has a high point approximately 120 feet above sea level and the land slopes easterly to sea level.

W. Alton Jones Campus

The W. Alton Jones Campus is found at latitude of 41.62° and a longitude of -71.71°. Loutitt Pond is located within the W. Alton Jones Campus and flows into Eisenhower Lake.

2.2 Evaluation of Potential Discharge

See facility description in Section 2.1

2.3 Spill History (§112.4(a)

There have been no reportable releases of oil to the environment during the past 5 years.

3.0 SPCC PLAN OVERVIEW (§112.7(a)(3))

3.1 Facility Information

Name of Facility: ***University of Rhode Island***
Type of Facility: **Academic/ Research Facility**
Location of Facility: **South Kingstown, RI 02881**

Name of Facility: ***University of Rhode Island***
Type of Facility: **Academic/ Research Facility**
Location of Facility: **Narragansett, RI 02882**

Name of Facility: ***University of Rhode Island***
Type of Facility: **Conference & Environmental Education Center**
Location of Facility: **West Greenwich, RI 02816**

Name and address of owner or operator(s):

Owner/Operator
Rhode Island Council on Postsecondary Education
Office of the Commissioner
560 Jefferson Boulevard, Suite 100
Warwick, RI 02886

Owner/Operator
University of Rhode Island
Kingston Campus
Narragansett Bay Campus
W. Alton Jones Campus- West Greenwich

Contacts

University of Rhode Island
Karl H. Calvo
Assistant Vice President, Facilities Services
Surge Building
210 Flagg Road, Suite 208
Kingston, RI 02881

University of Rhode Island
David Lamb
Director, Facilities Services
Sherman Building
523 Plains Rd.
Kingston, RI 02881

University of Rhode Island
Bob Bozikowski
Assistant Director, Utilities
Sherman Building
523 Plains Road
Kingston, RI 02881

University of Rhode Island
Michael Jagoda
Director of Public Safety
44 Lower College Rd.
Kingston, RI 02881

University of Rhode Island
Samuel Adams
Assistant Director Public Safety/Emergency Management
44 Lower College Rd.
Kingston, RI 02881

Designated persons accountable for oil spill prevention at the facility:

Name	Title	Office Phone Number	Cell Phone / 24 Hour Number
Pamela McCarthy	Coordinator, EHS	401-874-7993	401 639-3048
David Lamb	Director, Facilities Operations	401-874-5488	401-639-7362
Bob Bozikowski	Asst. Director Facilities Utilities	401-874-7896	401-208-8169

3.2 Oil Storage

Oil storage facilities are in or adjacent to the University buildings. The site plans presented in Appendix A identify the locations of these facilities on URI's property. The stored oil and oil products include the following:

- Oil for heating;
- Hydraulic fluid for elevator;
- Transformer oils;
- Used oil from facility equipment;
- Waste kitchen grease; and
- Diesel for emergency generators;
- Gasoline to fuel vehicles and equipment.

Types of Oils Stored and Storage Volumes

The table below identifies the types of oils and oil products located at URI and their total volumes. Aboveground storage totals include the following oil types and sizes of tanks and containers with a capacity of 55 gallons or greater.

Row Labels	Sum of Capacity (gals)
KING	**199,771**
Cooking Oil	**1,200**
AST	1,200
FR3 Envirotemp	**14,709**
Transformer	14,709
Gasoline	**12,000**

UST	12,000
Grease	**13,708**
UST	13,708
Hydraulic oil	**11,338**
Elevator	11,338
Lube Oil	**1,210**
AST	1,210
Mineral oil	**4,933**
Transformer	4,933
Transformer oil	**13,915**
Transformer	13,915
Waste Oil	**605**
AST	605
#2 Fuel Oil/Diesel	**126,153**
AST	94,890
Generator	19,263
UST	12,000
NBC	**4,336**
Hydraulic oil	**815**
AST	165
Elevator	650
Lube Oil	**110**
AST	110
Waste Oil	**447**
AST	447
#2 Fuel Oil/Diesel	**2,964**
AST	1,000
Generator	1,964
WAJ	**10,692**
Cooking Oil	**150**
AST	150
Gasoline	**1,000**
AST	1,000
Grease	**5,000**
UST	5,000
Hydraulic oil	**110**
AST	55
Elevator	55
Mineral oil	**120**
Transformer	120

#2 Fuel Oil/Diesel	**4,312**
AST	4,175
Generator	137
Grand Total	**214,799**

Oil is stored at a variety of locations onsite. Oil storage locations, tank/container sizes, and the predicted flow rate and direction of any releases are presented in Appendix B. Procedures and equipment are fully operational; there is no out-of-service regulated equipment at URI.

The total volume stored at all campuses is below the threshold for a Facility Response Plan as documented in the Applicability of Substantial Harm Criteria, Appendix C.

3.3 URI's Policies on Oil Storage, Spill Prevention, and Spill Containment (§112.7(a)(3)(i-v))

URI has instituted policies for proper oil storage, mitigation of the impact of any spills, and spill response for the University. To achieve URI's primary goal to prevent the occurrence of spills at the facility, specific procedures have been developed and implemented by the Facilities Department and/or their designees. URI supplements this spill prevention initiative with a philosophy that should a spill event occur, the primary means to stop a release is to contain the material within the immediate area of the occurrence. For this reason, URI's oil management system has also established several spill containment procedures for implementation in the event a spill should occur. The specific policies and procedures described in this plan are designed to provide spill prevention and containment at URI.

3.3.1 Container and Drum Storage

The strategy for preventing releases from any of the URI campuses is to handle containers and drums properly, and, where needed, to contain a spill in the general area where the oil is being stored at the university. The following policies have been instituted:

- Drums of oil are properly labeled and stored upright on a spill pallet.
- Containers of oil are to be properly handled and transported by trained personnel.
- Spill equipment (absorbent material and spill containment equipment) is maintained at or near oil loading/unloading storage areas throughout both campuses. Similar materials are available at or near the elevator room and within the boiler room.

Spill prevention measures taken by URI are selected based on site-specific conditions, taking into consideration the practical application of a physical means of containment or engineered structure (e.g., berms, dikes, etc.) and the relative potential for spills or releases. Secondary containment is provided for bulk storage containers. Details of secondary containment inspection and spill prevention equipment and materials are included in Appendix B.

3.3.2 Aboveground Storage Tanks and Containers

There are currently 63 aboveground storage tanks/containers throughout the Kingston campus, 9 aboveground storage tanks/containers at the Narragansett campus, and 11 tanks/containers at the W. Alton Jones campus. Transformers owned by utility companies are excluded. A list of these tanks/containers, their contents and locations are included in Appendix B Figures 1-3 of this plan. Appendix B Figure 4 contains a list of tanks that have been retired since the last SPCC revision in 2017.

Of the aboveground storage tanks at the Kingston Campus, the largest are the three aboveground 29,600-gallon fuel tanks located at the Lippitt Hall Steam Plant, that were installed in 1998. Please refer to Figure 18 in Appendix A for a schematic depiction of the tanks. Each steel tank has a diameter of 12 feet and a height of 35 feet. The tanks were installed within a concrete containment dike that was poured over an 80-mil high-density polyethylene membrane. The floor of the dike is lined with a continuous, elastomer grade thermoplastic. The dike has an approximate storage capacity of 45,000 gallons (150% of a single tank in the containment system). The bottom sides of the tanks have been coated to prevent corrosion from standing rainwater. A sump is provided within the containment area to allow any rainwater that does accumulate to be removed.

The individual fill pipes for each tank are enclosed within a steel weather shield. The fill station has a lockable access door and a drip pan under oil fill connections. The drip pan has a piped overflow into the secondary containment enclosure. The tanks are equipped with a high-level warning alarm (95% capacity) and a check valve is incorporated into the fill piping to prevent backflow from the tanks. Both the delivery truck operator and facility personnel must be present during filling operations as required by the State Fire Marshall.

The general strategy for preventing releases is to contain a spill of oil in the general area until such time as the material can be removed by an outside contractor. The following procedures have been established:

- In outdoor areas with existing storage tanks near storm drains, or sensitive receptors, the drains are temporarily covered during refilling operations. There is no regulated distance that tanks must be from storm drains. In best

practice, the tanks would be downslope of a storm drain and as separated as possible.

- Containment measures, such as the placement of curbs, berms, or spill pillows at doors or other exits, are used to contain spills within the rooms in which they occur.

- The Facilities Services Department currently inspects all tanks 500-gallons or greater monthly and documents the inspections. The Utilities Engineer reviews all inspection logs. An annual report of the inspections is submitted to the Rhode Island Department of Environmental Management as required by the Rhode Island Oil Pollution Control Regulations. (Appendix F)

3.3.3 Underground Storage Tank

The University of Rhode Island North Kingston campus has two underground storage tanks. Each tank is 12,000 gallons. One contains diesel fuel and the other contains gasoline. The tanks are located at the garage and are not operated by the University of Rhode Island. The garage is operated by the State of Rhode Island Department of Transportation.

There are no known underground oil tanks at Narragansett Bay or W. Alton Jones campuses. There are grease traps, described below, which are inspected annually with the municipal wastewater personnel, and pumped on a routine basis. The inspection records are kept on file.

Kingston Campus
There are four underground grease traps on the Kingston Campus. There is one 1,000-gallon, two 1,500-gallon, and one 10,000-gallon grease traps located near dining facilities. They are serviced and pumped by a septic hauler.

W. Alton Jones Campus
There are two underground grease traps at the W. Alton Jones Campus, including one 1,000-gallon grease trap and one 4,000-gallon grease trap.

3.3.4 Hydraulic Oil Equipment

Kingston Campus

There are 69 hydraulic oil-containing elevators located in various buildings at the Kingston Campus. The elevators are operated and maintained by an outside contractor. The

elevators are inspected monthly by the Facilities Department or their designee. Spill kits are nearby in the event of a spill.

W. Alton Jones Campus

There are 2 hydraulic oil-containing elevator located on the ground floor of the North Campus. The elevator is operated and maintained by an outside contractor. The elevator is inspected monthly by the Facilities Department or their designee. Spill kits are nearby in the event of a spill.

Narragansett Bay Campus

There are 6 hydraulic-oil-containing elevators located in various buildings at the Narragansett Bay Campus. The elevators are operated and maintained by an outside contractor. The elevators are inspected monthly by the Facilities Department or their designee. Spill kits are nearby in the event of a spill.

3.3.5 Oil Containing Electrical Transformers

The URI Kingston campus currently owns and operates 88 oil-filled electrical transformers. The transformers are located throughout the campus.

The URI W. Alton Jones campus currently owns and operates one oil-filled electrical transformer. The transformer is located at the Sycamore House.

The URI Narragansett Bay Campus does not own or operate any oil-filled electrical transformers. The transformers are owned and operated by outside vendors.

A description of the URI-owned units is included in Appendix B of this plan. As a best management practice, the oil-filled transformers on URI's property are included in a program of regular inspections described in Section 9.0 of this plan.

3.3.6 Waste Kitchen Oil

The URI Kingston campus stores waste kitchen oil in single-walled tanks. The tanks are in the following locations:

- Butterfield Loading Dock
- Hope Loading Dock
- Memorial Union Rams Den Loading Dock

Spill kits are nearby in the event of a spill.

The URI W. Alton Jones campus stores waste kitchen oil in 55-gallon drums.

In addition, the URI W. Alton Jones has grease traps which are in the following locations:

- Whispering Pines Lodge
- Environmental Education Center

Spill kits are nearby in the event of a spill.

The URI Narragansett Bay Campus does not have any waste kitchen oil containers onsite.

3.3.7 Disposal of Spill Clean-Up and Recovered Materials

Materials collected during spill response and clean-up activities will be managed and disposed of in accordance with applicable state and federal waste regulations.

4.0 POTENTIAL SPILLS - PREDICTION AND CONTROL (§ 112.7(b) & (c))

Per subsection 112.7(b) of the federal regulations, this plan identifies locations where experience indicates that a reasonable potential for equipment failure exists. The regulation requires that the plan include a prediction of the flow direction, rate of flow, and total quantity of oil that could be discharged from the facility because of such a failure. Subsection 112.7(c) further states that containment and/or diversionary structures or equipment to prevent discharged oil from reaching a navigable watercourse should be provided.

Appendix B lists the locations where oil is stored and where spill events could occur, indicates stored oil volumes, estimates potential flow rates and direction, and lists the containment and/or diversionary structures or equipment that are used to prevent discharged oil from reaching a surface water. The information is listed based on the tank's/container's location.

5.0 FACILITY DRAINAGE (§ 112.8(b))

5.1 Drainage Systems

Drainage from the oil storage areas at this facility is differentiated by indoor and outdoor drainage systems.

Indoor Drainage Systems

When practicable, URI stores and handles oil within contained areas or within secondary containment. Oil is stored in various buildings at the URI campuses. Currently, oil storage tanks and containers equal to or exceeding 55 gallons have secondary containment. Physical containment of and response procedures to potential oil releases will greatly reduce, if not completely prevent, oil from reaching the outside environment. There are no floor drains near any oil tanks or containers outlined within this plan.

Outdoor Drainage Systems

The facility has oil storage tank bulk containers and/or delivery areas that are adjacent to, or within proximity to storm drains. However, the tanks are inspected, and deliveries are monitored by URI personnel.

The remaining URI's tanks are not adjacent to storm drains. It is the policy of URI to cover adjacent storm drains prior to oil deliveries to the above-mentioned locations. Additional oil delivery procedures are outlined in Section 8.2.

During periods of wet weather flow, there is a possibility that oil spills to storm drains could reach a local surface water body or navigable waterway and be considered a reportable spill incident by federal definition.

ASTs are located on concrete or asphalt surfaces or within buildings with concrete floors. Except for the oil-filled electrical transformers, all other containers that have the total capacity equal to or greater than 55 gallons, are double-walled or have secondary containment.

6.0 BULK STORAGE TANKS/CONTAINERS (§ 112.8(c))

"Bulk storage container" is defined in the regulations as *any container used to store oil except oil filled electrical, operating, or manufacturing equipment*. For purposes of this plan, the terms "tank" and "container" are used interchangeably. The following drawings showing specific tank details and associated piping are presented in Appendix A:

Figure 18 – Steam Plant Tanks (Kingston, 29,600 gal. No. 2 fuel)
Figure 19 – White Hall (Kingston, 6,000 gal. No. 2 fuel)
Figure 20 – Main Office (W. Alton Jones, 1,000 gal. gasoline)
Figure 21 – 275 – 350 gal. single wall tank
Figure 22 – 275 gal. double wall, Roth tank
Figure 23 – 375 to 1,000 gal. double wall vertical tank
Figure 24 – Generator Base Tanks
Figure 25 – Elevator Hydraulic Oil Reservoir

Figures 21 through 25 are typical drawings that represent multiple tanks at the campuses. Oil storage tank inventories for the *University of Rhode Island* campus are provided in Appendix B. Appendix B lists the figure numbers that corresponds to each tank configuration illustration. Tanks and containers located inside of buildings are not represented on the site plans.

6.1 Tank Materials and Construction (§ 112.8(c)(1))

Tanks are constructed of steel and/or fiberglass that are compatible with the material stored within them and with other conditions of storage.

6.2 Secondary Containment (§ 112.8(c)(2))

The *University of Rhode Island* converted all #2 fuel oil storage tanks to double-walled Roth tanks in 2003.

All the ASTs except for electrical transformers and drums are double-walled or located within a bermed room which provide sufficient secondary containment. The types of secondary containment for the ASTs are listed in Appendix B.

URI's oil delivery contractor performs oil deliveries in compliance with U.S. Department of Transportation (DOT) regulations. The oil delivery contractor maintains absorbent pads and spill containment materials on each oil delivery truck. The delivery contractor is also responsible for providing oil absorbent booms or socks under each loading pipe to prevent spillage or leakage of oil into the environment.

6.3 Buried or Partially Buried Metallic Tanks (§112.8(c)(4) & (5))

There are no partially buried metallic storage tanks at URI.

6.4 Aboveground Storage Tank Integrity Testing Schedule (§112.8(c)(6))

Federal oil pollution prevention regulations set forth in 40 CFR Part 112 require regular visual inspection as well as integrity testing of oil ASTs/containers on a regular schedule. Each of the ASTs at URI has been assessed to determine the most appropriate integrity testing methods as outlined below.

To comply with this requirement, URI has implemented measures equivalent to the requirements of 112.8(c)(6) by adhering to the provisions of the Steel Tank Institution Standard SP001, Inspection of Aboveground Storage Tanks. This standard is hereafter referred to as STI Standard SP001. The standard establishes methods and procedures for the inspection of storage tanks based on the risk of release to the environment with consideration to spill control methods and release detection engineering of the tanks.

URI currently stores oil in aboveground containers ranging in size from 55 gallons to 3,000 gallons, except for three 30,000-gallon tanks located at the Lippitt Steam Plant. These tanks are discussed further at the end of this section. Tanks less than 5,000 gallons shell capacity do not fall under "Category 3" tank specifications which are specific to ASTs without spill control and without continuous release detection monitoring, therefore non-destructive shell testing is not applicable in accordance with STI Standard SP001. This is discussed in greater detail in the following paragraphs.

55-Gallon Drums

In accordance with Table 5.5 "Table of Inspection Schedules" of the STI Standard SP001, "Portable Containers" are subject to monthly visual inspections; no formal shell integrity testing is required. Furthermore, in accordance with clarification provided by U.S. EPA Region I, U.S. Department of Transportation (DOT)-approved 55-gallon drums in good condition are not subject to integrity testing as they are already in conformance with required industry standards.

Accordingly, URI has adopted the environmentally equivalent practice of using only UN Rated [DOT approved] shipping containers for the storage of oil in quantities of less than or equal to 55 gallons. This standard practice is addressed within the annual training provided to all oil handling personnel.

Small Storage Tanks (100 to 5,000-Gallon Capacity)

In accordance with STI Standard SP001, the small storage tanks at URI were evaluated for their risk of release to the environment based on the following conditions:

- the presence of a Continuous Release Detection Method (CRDM),
- the presence of spill control equipment,
- the tank size, and
- the tank type.

As a result, integrity testing is not required if inspections are conducted.

Most of the aboveground oil storage tanks at the three campuses have double-wall containment, making integrity testing impractical. In these cases, the interstitial space on the tank is monitored twice per calendar year by observing the monitoring device, i.e., float in Roth tank, or opening the access port or drain plug to the interstitial compartment and examining for leaks. This will be conducted in lieu of integrity testing. This applies to all double-walled tanks including generator tanks.

Periodic tank integrity testing for the three Kingston Campus Steam Plant ASTs is required and will be conducted during the summer months when the tanks can be more easily taken out of service. The Steel Tank Institute has published "Standard for Inspection of In-Service Shop Fabricated Aboveground Tanks for Storage of Combustible and Flammable Liquids", SP001-03, January 2003 which is a recognized standard for integrity testing smaller, shop fabricated tanks.

6.5 Container Installations – Good Engineering Practices (§112.8(c)(8))

The ASTs and UST are equipped with a type of Overfill Protection Device (OPD) such as liquid level indicators or vent whistles, or the liquid level can be observed while filling the container (e.g., drums, elevator reservoirs, etc.); storm drains are protected when tanks are being filled. Specifically:

- The USTs are all equipped with a monitoring system that continually monitors the system for leaks and contains an OPD, (40 CFR 112.8(c)(8)); and
- ASTs have vent whistles and/or are observed during filling.

Where OPDs are not practical (e.g., 55-gallon drums), observation of container filling in lieu of an OPD, is an acceptable means of providing alternative measures for equivalent environmental protection in accordance with 112.8(c)(8).

6.6 Facility Wastewater Discharges (§ 112.8(c)(9))

The wastewater from the Kingston campus is collected in a municipal sewer system and discharged to the South Kingston Wastewater Treatment Facility. Wastewater from the W. Alton Jones Campus is disposed of onsite via subsurface disposal facilities.

The Narragansett Bay Campus sanitary wastewater discharges to the Town of Narragansett wastewater system and is ultimately discharged at the South Kingston Wastewater Treatment Facility. Treated wastewater is discharged from the treatment plant into the Atlantic Ocean.

By implementing containment procedures, by providing secondary containment in indoor oil storage areas, and by maintaining a supply of absorbent materials in such areas, URI minimizes the potential for oil spills occurring in campus buildings to reach the sewer system, or other waters of the U.S.

6.7 Visible Oil Leaks and Mobile Oil Storage Tanks (§112.8(c)(10) & (11))

Upon discovery, oil leaks that could result in a loss of oil from tank seams, gaskets, rivets, and bolts, are promptly reported to the Department of Public Safety for assessment and corrective action.

Leaks are corrected by Facility Department personnel on an as-needed basis and both written and verbal reports are submitted to the Director of Facilities. The individual, who detects the leak, will initiate repairs or calls for a work order to be developed to ensure the repair will take place. Spill equipment is nearby in the event of a release.

If portable or temporary oil storage containers are used by URI, either active or passive means of secondary containment would be provided. In accordance with the regulation, secondary containment would be required to provide 100% containment of the largest container volume plus sufficient freeboard for precipitation (outdoor storage only).

7.0 TRANSFER OPERATIONS, PUMPING, AND IN-PLANT PROCESSES (§112.8(d))

The principal transfer operations taking place at URI involves the transfer of oil from delivery trucks to ASTs and UST and from the containers to its point of use. In addition, URI transfers products from containers on an as-needed basis. Oil is pumped from the oil storage tanks by various pumping and pipeline systems to its point of final use. No aboveground oil pipes are located where vehicles could cause damage, therefore, no warning is provided to vehicle operators to avoid aboveground oil lines.

7.1 Buried Piping (§ 112.8(d)(1))

URI has both underground and aboveground piping systems. Buried piping that is associated with the UST is double-walled polypropylene piping sloped back towards the UST. Other than piping associated with the one UST, there are no other buried oil carrying piping systems at URI. All accessible aboveground systems are visually inspected monthly as part of the tank inspection procedures (see Appendix D). Buried piping systems are visually inspected whenever they are exposed.

7.2 Out-of-Service Pipelines (§112.8(d)(2) & 112.7(g)(4))

URI currently does not have any out-of-service pipes. However, when pipelines are not in service or are in standby mode for an extended period, the connection at the transfer point is capped and marked to its origin.

7.3 Pipe Supports and Aboveground Pipelines and Valves (§112.8(d)(3) and (4))

Oil transfer pipeline supports have been designed and constructed to minimize abrasion and corrosion and allow for expansion and contraction. The Facilities Department or their designee visually examines the aboveground pipelines, valves, and pipe supports monthly. These inspections are documented, and records kept on file.

The Director of Facilities and/or designee reviews the inspection reports. Integrity testing of the ASTs and associated piping is performed in accordance with the inspection schedule provided in Appendix D.

8.0 TANK TRUCK UNLOADING (§112.8(d) and 112.7(a)(3))

Tank truck unloading at URI consists primarily of bulk deliveries of oil to their respective aboveground and underground storage tanks. Contractors are required to follow URI's established spill prevention guidelines. No loading racks are present at URI.

8.1 Department of Transportation Regulations

An independent oil delivery contractor, under contract with URI, performs tank truck unloading. The unloading procedures implemented by the carriers meet the minimum requirements and regulations established by the Department of Transportation (DOT) (49 CFR 177.834 and 177.837).

8.2 Oil Delivery Procedures

The following are URI's oil delivery guidelines. These guidelines are communicated to contractors selected by URI for oil delivery service.

Delivery procedures implemented by the outside oil delivery contractors meet the minimum requirements and regulations established by the DOT. Absorbent materials and spill containment materials are present on each delivery truck and utilized in the event of a spill event. URI requires the oil delivery contractor to use drip trays under the fill pipes to catch spills or leaks that would otherwise reach the environment. The contractor is present during delivery and has the proper spill equipment in the event of a spill during fueling.

Where installed, overfill alarms are used to prevent overfilling of tanks. The delivery contractor is always present throughout the filling process. Oil delivery is permitted at the university locations as needed.

Tank truck unloading procedures meet the minimum requirements and regulations established by the DOT. In particular, the following procedures are observed during the filling of all bulk ASTs and the UST:

1. No smoking is allowed within 50 feet while unloading oil. URI is a non-smoking facility. No smoking is allowed within buildings.

2. The delivery truck driver is to always remain with the vehicle while unloading.

3. Each delivery of oil is supervised by the delivery truck driver throughout the process, the driver must have unobstructed view of the delivery truck and the storage tank, as well as being within 25 feet of each. Unless the delivery truck's engine is to be used for operation of the pump, no oil shall be unloaded while the engine is running. At the steam plant an operator is always present during the delivery.

4. The URI representative will ensure that the wheels of the delivery truck are blocked/chocked, and that drip pans or oil absorbing pads are placed beneath all hose connections that might be prone to leakage.

5. Storm drains near tanks outlined in Section 5.1 must be covered with magnetic drain covers prior to the unloading of oil.

6. Unloading operations are to be performed only in areas designated for that purpose.

7. The unloading operation is not to begin before the level in the tank is checked and it is verified that the tank has sufficient capacity to receive the volume of oil to be transferred.

8. The drain valve on the truck is to be closed, and the unloading line is to be drained back to the tank before disconnecting the unloading line.

9. Prior to departure of the delivery truck, the lowest drain and the outlets are closely examined for leakage, and if necessary, tightened, adjusted, or replaced to prevent any liquid leakage while in transit.

10. Any leakage or spillage must be immediately reported, including quantity, to the URI Facilities Department.

11. URI employees are not to tamper with the truck at all during loading/unloading procedures (enter truck, climb truck, etc.)

These procedures shall be reviewed during all annual SPCC trainings for URI oil handling personnel.

9.0 INSPECTIONS AND RECORDS (§112.7(e))

Aboveground oil storage tanks, oil containers, and oil-containing equipment are visually inspected on a routine basis by the Facilities Department to determine if there any leaks, spills, or other deficiencies. Deficiencies are reported to the Director of Facilities and/or designee and corrected in a timely manner.

Inspection records of all tanks, containers, secondary containment, and emergency response items are maintained and reviewed by the Director of Facilities and/or designee. Inspection checklists are presented in Appendix D. All records are signed by the appropriate supervisor and kept on file for three years. The Facility Self-Inspection records are kept on file for five years. Spills, leaks and/ or other problems discovered are reported and promptly corrected. Incident logs for various types of spills are maintained by the Facilities Department. URI incident reports are completed for spills of oil to a storm drain or surface water, in the event they occur**.**

URI personnel are instructed to call Campus Police 24/7 to report any spills. 401-874-2121.

All records and the Oil SPCC Plan are maintained by the Facilities Department and made available to RIDEM upon request. URI will submit an annual inspection report to RIDEM by December 31st each year. The report will comprise the monthly inspection reports completed in the previous 12 months.

10.0 SECURITY (§112.7(g))

URI maintains a security staff that monitors access to the property. Site security is maintained 24 hours per day, 7 days per week, 365 days per year. Security rounds are conducted on all shifts and security is augmented using surveillance cameras.

The *University of Rhode Island* campuses do not have fences surrounding all properties. All aboveground oil storage areas on the *University of Rhode Island* campus are inside secured buildings and behind locked doors or otherwise secured areas or are outside and identified properly. Fuel delivery areas are in unfenced areas.

Any unusual environmental conditions detected are immediately reported to the Director of Facilities and/or designee. Lighting provided in and around the facilities is sufficient to provide for the observation of spills during hours of darkness and to deter acts of vandalism that could otherwise result in oil spills. Outdoor oil storage is not readily accessible, protecting against acts of vandalism.

The delivery of oil is monitored by the delivery truck driver and the oil directed to the proper tanks, while monitoring fueling rate and pressure. During all other times the fill ports shall be secured with a lock mechanism to prevent tampering by unauthorized persons.

11.0 PERSONNEL TRAINING AND SPILL PREVENTION PROCEDURES (§112.7(f))

The URI training program as described below has been implemented as part of this SPCC Plan.

URI provides training to new oil-handling personnel involved with the operation and maintenance of equipment to prevent the discharge of oil. Additionally, annual training is provided to all oil-handling personnel. Training elements include:

- discharge procedure protocols;
- applicable pollution control laws, rules, and regulations;
- general facility operations; and,
- the contents of the facility's Oil SPCC Plan.

URI will include discharge prevention briefings for oil-handling personnel during the annual training to highlight and describe known discharges as described in 40 CFR 112.1(b), or failures, malfunctioning components, and recently developed precautionary procedures.

URI personnel responsible for overseeing and responding to oil spills at the facility are provided with appropriate hazardous materials spill response training and precautionary measures. Documentation of all such training will be maintained in the Facilities Department and/or the Department of Public Safety/Environmental Health and Safety Department office files.

At URI, Director of Facilities Services is the designated person accountable for oil spill prevention and who reports to university administration.

12.0 SPILL RESPONSE/NOTIFICATION PROCEDURES (§112.7(a)(4))

This section details the response and notification procedures that are to be implemented in the event of any oil spill from the URI campuses that has the potential to reach navigable waters.

12.1 Immediate Response/Notification

Upon discovery of a spill or leak, personnel are instructed to stop the discharge to the extent possible (considering health and safety issues). They are instructed to take immediate measures (such as deploying spill containment pillows) to contain the spill in the immediate area and prevent the oil from reaching a floor drain or storm drain, or navigable waters.

After taking initial containment measures, the person discovering the spill must notify the following:

Name	Title	Office Phone Number	Cell Phone / 24 Hour Number
URI CAMPUS Police	Dispatch	401-874-2121	401-874-2121
The dispatcher will contact the EHS on-call personnel from the emergency call list.			

Once in contact with one of the above, provide the following information:

- Location, date, and time of release;
- An assessment of the potential for the release reaching a catch basin, floor drain, or release to the sewer, or discharge over land to a navigable waterway, wetland or other sensitive receptors;
- Type of oil released (e.g., No. 2 oil, cooking oil, grease);
- Approximate quantity of oil released;
- Source of release;
- Description of release (color, thickness, viscosity, displacement, etc.);
- Name and telephone number of the responsible person in the area where the release occurred;
- Description of immediate response actions taken; and
- Any other information, including potential environmental impacts, that is relevant to assessing the degree of the hazard posed by the release.

URI Public Safety/Environmental Health and Safety personnel will contact the Response Contractor as necessary. In the event of a spill where the Response Contractor is contacted, the Response Contractor will provide professional services for the containment, removal, and disposal of all contaminated material.

For spills that have reached or have the potential to reach a floor drain, catch basin, sanitary or storm sewer, or another sensitive receptor, notification of appropriate regulatory agencies will be made as soon as possible by URI Public Safety/Environmental Health and Safety personnel, or designee as outlined below.

A record of all calls will be logged at the Facilities Department office for compliance notification.

12.2 Spill Notification and Reporting (§112.7(a)(3)(vi))

If a reportable quantity (as defined by federal and state regulations) has been released, the agency contacts listed under the respective scenarios will be notified by telephone by EHS personnel or designee. The table below contains a list of outside responders and agencies that may need to be notified of an oil spill to the environment. Generally, the first three would be needed in the event of a major spill as well as a clean-up contractor

Authority	Notify	Telephone
City of Kingston, Narragansett, and West Greenwich Fire Department	To Report a Fire, Environmental Emergency	9-911 From campus phone 911 otherwise
Rhode Island Department of Environmental Management	Environmental Emergency Compliance and Inspection If no answer, Compliance hours: 800-498-1336	 401-222-1360 401-277-3070 After hours: 800-498-1336
National Response Center	Environmental Emergency	800-424-8802
US Environmental Protection Agency Regional Administrator (Region I)	Environmental Emergency	888-372-7341
Rhode Island State Emergency Planning Commission	Environmental Emergency	Notifications are made to the LEPC
Ambulance/Medical Emergency	Medical Emergency	Campus police 401-874-2121
S. Kingston and Narragansett Wastewater Treatment Facility	Spill to Sewer/Storm Drain	401-788-9771
Contractor from State MPA list. MPA#118 Hazardous Waste and Petroleum Related Emergencies Web site http://www.purchasing.ri.gov/MPA/MPAawards.aspx?MPANumber=118%20&%20MPADesc%20=	Oil Spill Clean-Up	See list

The personnel providing notification should be prepared to offer the following information:

- Identification of the caller;
- Contact phone number;
- Location of spill;
- Type of product spilled;
- Quantity spilled;
- Extent of actual and/or potential water pollution;
- Date and type of spill; and
- Cause of spill.

Following completion of initial response and notification activities Facilities Department personnel will restock emergency equipment, restore the impacted area and properly manage contaminated debris as necessary.

12.3 Federal Requirements for Oil Spill Reporting (§112.4(a))

Under 40 CFR Part 110, the National Response Center (NRC) must be contacted immediately if a discharge of oil reaches waters of the United States. Discharges of oil must be reported if they "cause a film or sheen upon or discoloration of the surface of the water or adjoining shorelines or cause a sludge or emulsion to be deposited beneath the surface of the water or upon adjoining shorelines."

The USEPA must be contacted immediately if a discharge of more than 1,000 gallons in a single discharge or more than 42 gallons in each of two discharges occur within any 12-month period, or if oil reaches a navigable waterway or adjoining shoreline. The following information is required to be submitted to the Regional Administrator of Region I within 60 days (40 CFR 112.4(a)):

1. Name of facility;
2. Name(s) of the owner or operator of the facility;
3. Location of the facility;
4. Maximum storage or handling capacity of the facility and normal daily throughput;
5. Corrective action and countermeasures that were taken, including a description of equipment repairs and replacements;
6. An adequate description of the facility, including maps, flow diagrams, and topographical maps as necessary;
7. The cause(s) of such discharge, including a failure analysis of system or subsystem in which the failure occurred;
8. Additional preventive measures taken or contemplated to minimize the possibility of recurrence; and

9. Such other information as the Regional Administrator may reasonably require pertinent to the Plan or discharge.

Copies of this report should be sent to the following address:

U.S. EPA Region 1
U.S. Environmental Protection Agency
Region 1- New England
1 Congress Street Suite 1100
Boston, MA 02114

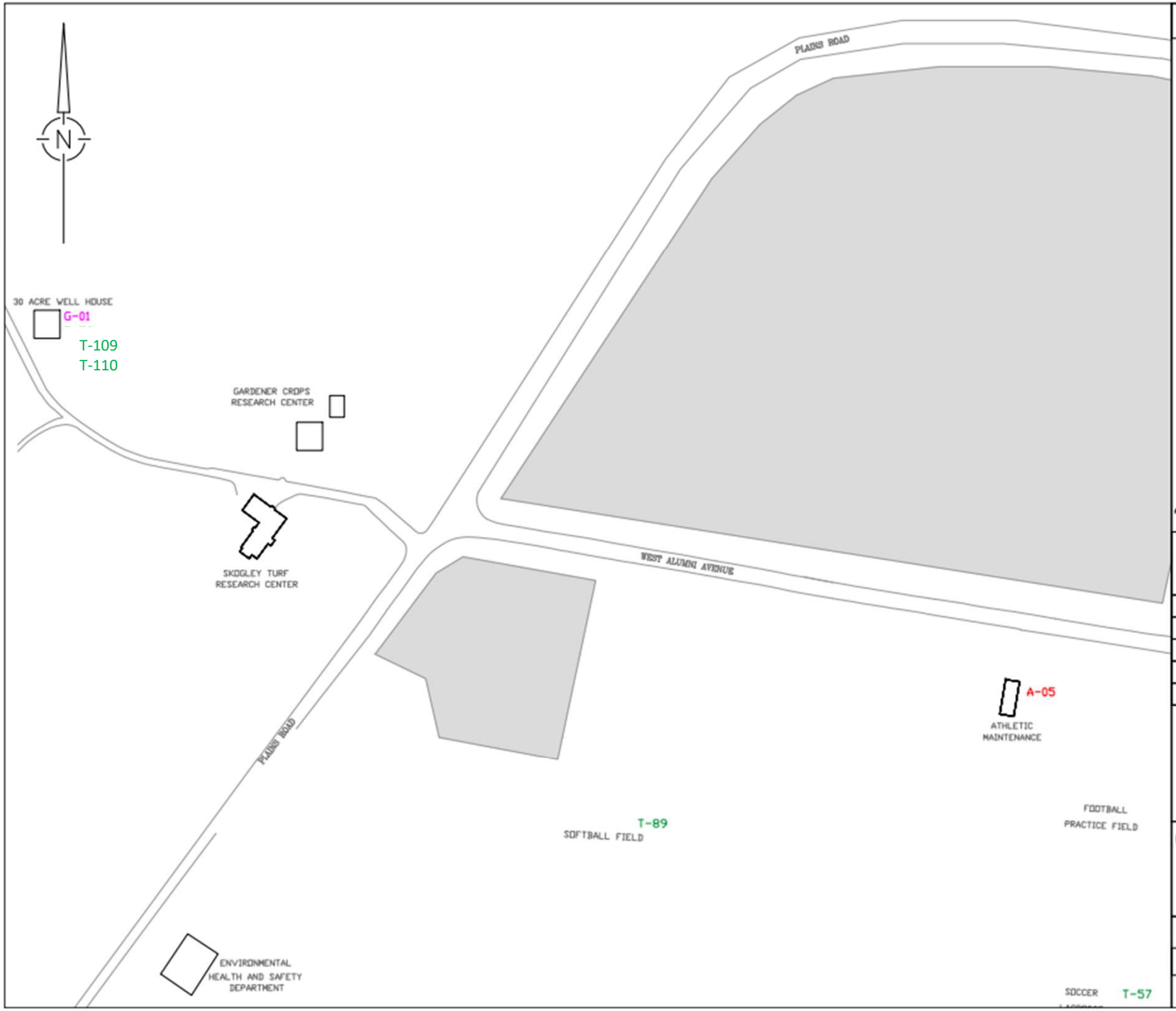
12.4 State Requirements for Oil Spill Reporting

The RIDEM requires notification in the event of an oil spill of any amount. The RIDEM requires that they be notified about the spill immediately at 401.222.3070.

Written notifications for spills are required to be provided to the RIDEM as soon as possible but not more than 10 days following the incident.

A RIDEM Hazardous Material Release Notification Form is included within Appendix E.

Appendix A – Facility Site Plans



General Notes

Buildings Referenced:

30 Acre Well House
Skogley Turf Research Center
Gardener Crops Research Center
Softball Field
Athletic Maintenance
Environmental Health and Safety Department

Drawing Not to Scale - Approximation Used for SPCC Plan Only

C:\Users\karin\OneDrive\Pictures\logo.jpg

TEI	Karin Brett	6/2022
No.	Revision/Issue	Date

Triumvirate Environmental, Inc.

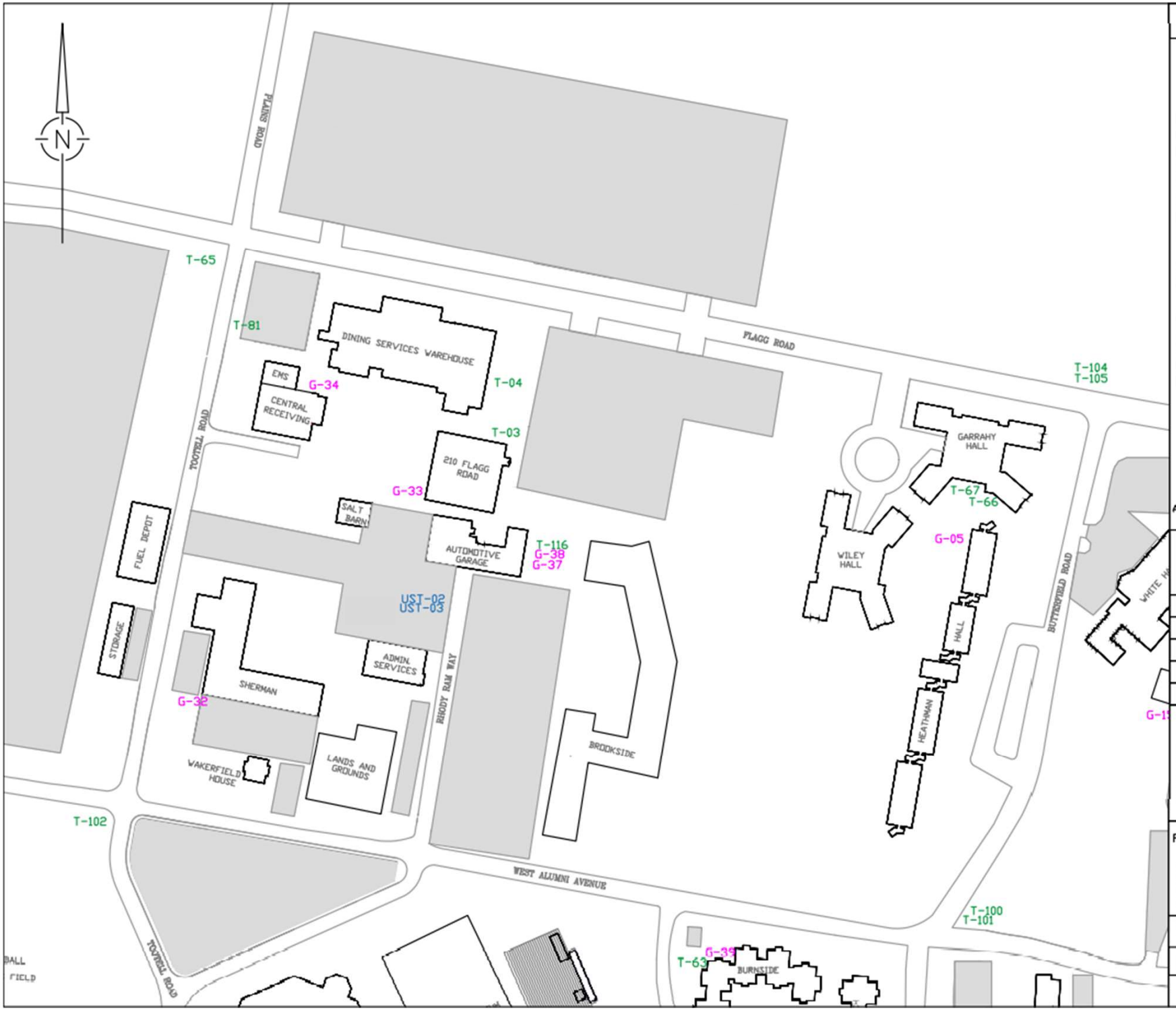
200 Inner Belt Road
Somerville, MA 02431
Phone: (800) 966-9282
Fax: (617) 628-8099
www.Triumvirate.com

Figure 2: North West Section

University of Rhode Island
Kingston Campus
Route 138
South Kingstown, RI 02881

Project	URI SPCC
Date	6/30/22

KC – 2



General Notes

Buildings Referenced:

EMS Building
Central Receiving
Fuel Depot
Storage
Wakerfield House
Sherman Building
Lands and Grounds
Dining Services Warehouse
Salt Barn
210 Flagg Road - Surge Building
Automotive Garage
Brookside Hall
Wiley Hall
Garrahy Hall
Heathman Hall

Drawing Not to Scale - Approximation Used for SPCC Plan Only

C:\Users\karin\OneDrive\Pictures\logo.jpg

TEI	Karin Brett	6/2022
No.	Revision/Issue	Date

Triumvirate Environmental, Inc.

200 Inner Belt Road
Somerville, MA 02431
Phone: (800) 966-9282
Fax: (617) 628-8099
www.Triumvirate.com

Figure 3: North Mid Section

University of Rhode Island
Kingston Campus
Route 138
South Kingstown, RI 02881

Project	URI SPCC
Date	6/30/22

KC – 3

General Notes

Buildings Referenced:

White Hall
Beaupre Center for Chemical and Forensic Science
Phi Gamma Delta
Merrow Hall
Tucker Hall
Watson House
Social Sciences Research Center
Center for Biotechnology and Life Sciences
Chafee Social Science Center
Rodman Hall
Carothers Library
Taft Hall
Coastal Institute
Avedisian
Woowaard Hall
Tyler Hall
Ballentine Hall
Lippitt Steam Plant
Fascitelli Center for Advanced Engineering
Bliss Hall
Kirk Hall
Planetarium
Mallon Center
Botanical Gardens
Greenhouses

Drawing Not to Scale - Approximation Used for SPCC Plan Only

C:\Users\karin\OneDrive\Pictures\logo.jpg

TEI	Karin Brett	6/2022
No.	Revision/Issue	Date

Triumvirate Environmental, Inc.

200 Inner Belt Road
Somerville, MA 02431
Phone: (800) 966-9282
Fax: (617) 628-8099
www.Triumvirate.com

Figure 4: North Mid Section

University of Rhode Island
Kingston Campus
Route 138
South Kingstown, RI 02881

Project	URI SPCC
Date	6/30/22

KC – 4

General Notes

Buildings Referenced:

Hazardous Waste Storage Facility
Fine Arts Center
Fire Station
University Club
Catholic Center
Tucker House

Drawing Not to Scale - Approximation Used for SPCC Plan Only

C:\Users\karin\OneDrive\Pictures\logo.jpg

TEI	Karin Brett	6/2022
No.	Revision/Issue	Date

Triumvirate Environmental, Inc.

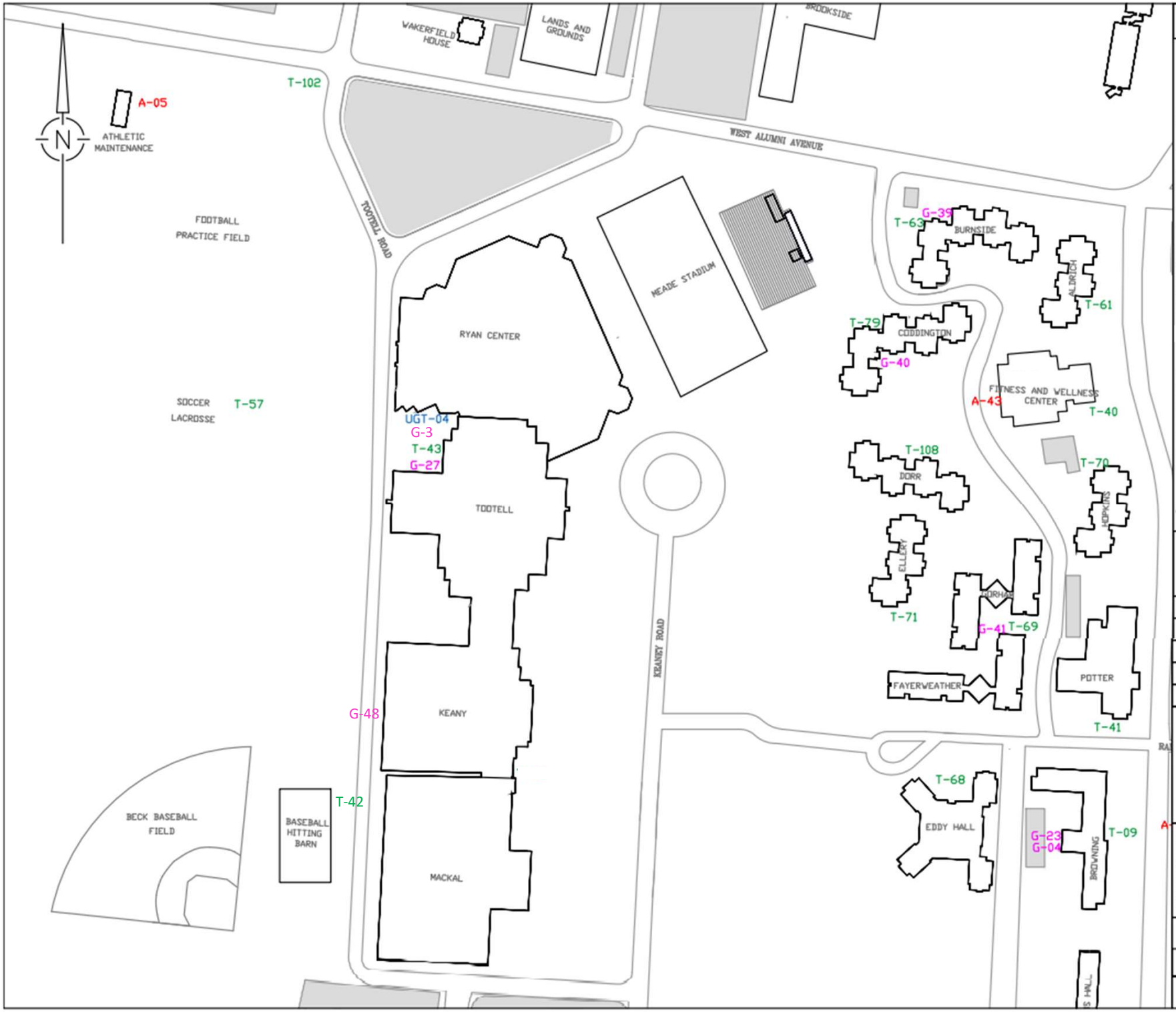
200 Inner Belt Road
Somerville, MA 02431
Phone: (800) 966-9282
Fax: (617) 628-8099
www.Triumvirate.com

Figure 5: North East Section

University of Rhode Island
Kingston Campus
Route 138
South Kingstown, RI 02881

Project	URI SPCC
Date	8/30/22

KC - 5



General Notes

Buildings Referenced:

Football Practice Field
Soccer and Lacrosse Fields
Beck Baseball Field
Baseball Hitting Barn
Ryan Convocation Center
Tootell Hall
Keaney Hall
Macakal Hall
Burnside Hall
Aldrich Hall
Coddington Hall
Dorr Hall

Fitness and Wellness Center
Ellery Hall
Hopkins Hall
Gorham Hall
Potter Clinic
Fayerweather Hall
Eddy Hall
Browning Hall

Drawing Not to Scale - Approximation Used for SPCC Plan Only

C:\Users\karin\OneDrive\Pictures\logo.jpg

TEI	Karin Brett	6/2022
No.	Revision/Issue	Date

Triumvirate Environmental, Inc.

200 Inner Belt Road
Somerville, MA 02431
Phone: (800) 966-9282
Fax: (617) 628-8099
www.Triumvirate.com

Figure 6: Mid West Section

University of Rhode Island
Kingston Campus
Route 138
South Kingstown, RI 02881

Project	URI SPCC
Date	6/30/22

KC - 6

General Notes

Buildings Referenced:

- Hope Commons
- Peck Hall
- Hutchinson Hall
- Roosevelt Hall
- Multicultural Student Services
- Human Resources
- Davis Hall
- Carlotti Hall
- East Hall
- Washburn Hall
- Butterfield Hall
- Bressler Hall
- Memorial Union
- Quinn Hall
- Pastore Hall
- Morrill Hall
- Ranger Hall
- Green Hall
- Edwards Hall
- Swan Hall

Drawing Not to Scale - Approximation Used for SPCC Plan Only

C:\Users\karin\OneDrive\Pictures\logo.jpg

TEI	Karin Brett	6/2022
No.	Revision/Issue	Date

Triumvirate Environmental, Inc.

200 Inner Belt Road
Somerville, MA 02431
Phone: (800) 966-9282
Fax: (617) 628-8099
www.Triumvirate.com

Figure 7: Central Section

University of Rhode Island
Kingston Campus
Route 138
South Kingstown, RI 02881

Project	URI SPCC
Date	8/30/22

KC – 7

General Notes

Buildings Referenced:

Tucker House
Adams House
Foundation and Alumni Engagement
Alumni Center
Grandin IEP House
Ti House
Robert J. Higgins Information Center
Post Office
University Police
Shopping Center
Muslim Community Center

Drawing Not to Scale - Approximation Used for SPCC Plan Only

C:\Users\karin\OneDrive\Pictures\logo.jpg

TEI	Karin Brett	6/2022
No.	Revision/Issue	Date

Triumvirate Environmental, Inc.

200 Inner Belt Road
Somerville, MA 02431
Phone: (800) 966-9282
Fax: (617) 628-8099
www.Triumvirate.com

Figure 8: Mid East Section

University of Rhode Island
Kingston Campus
Route 138
South Kingstown, RI 02881

Project	URI SPCC
Date	6/30/22

KC – 8

General Notes

Buildings Referenced:

Gordon Research Center
3045 Kingston Road
Independence Square II
Tennis Courts
Boss Ice Arena

Drawing Not to Scale - Approximation Used for SPCC Plan Only

C:\Users\karin\OneDrive\Pictures\logo.jpg

TEI	Karin Brett	6/2022
No.	Revision/Issue	Date

Triumvirate Environmental, Inc.

200 Inner Belt Road
Somerville, MA 02431
Phone: (800) 966-9282
Fax: (617) 628-8099
www.Triumvirate.com

Figure 9: South West Section

University of Rhode Island
Kingston Campus
Route 138
South Kingstown, RI 02881

Project	URI SPCC
Date	6/30/22

KC – 9

General Notes

Buildings Referenced:

Adams Hall
Kalla Delta
Weldin Hall
Barlow Hall
Hillside Residence Hall
Christopher House
Chi Omega
Sigma Delta Tau
Alpha Chi Delta
Zeta Beta Tau
Hillel Hall
Sigma Chi
Delta Phi Epsilon
Sigma Kappa
Delta Zeta
Zeta Tau Alpha
Theta Chi
Alpha Delta Pi
Alpha Chi Omega
Transition Center
Child Development Center

Drawing Not to Scale - Approximation Used for SPCC Plan Only

C:\Users\karin\OneDrive\Pictures\logo.jpg

TEI	Karin Brett	6/2022
No.	Revision/Issue	Date

Triumvirate Environmental, Inc.

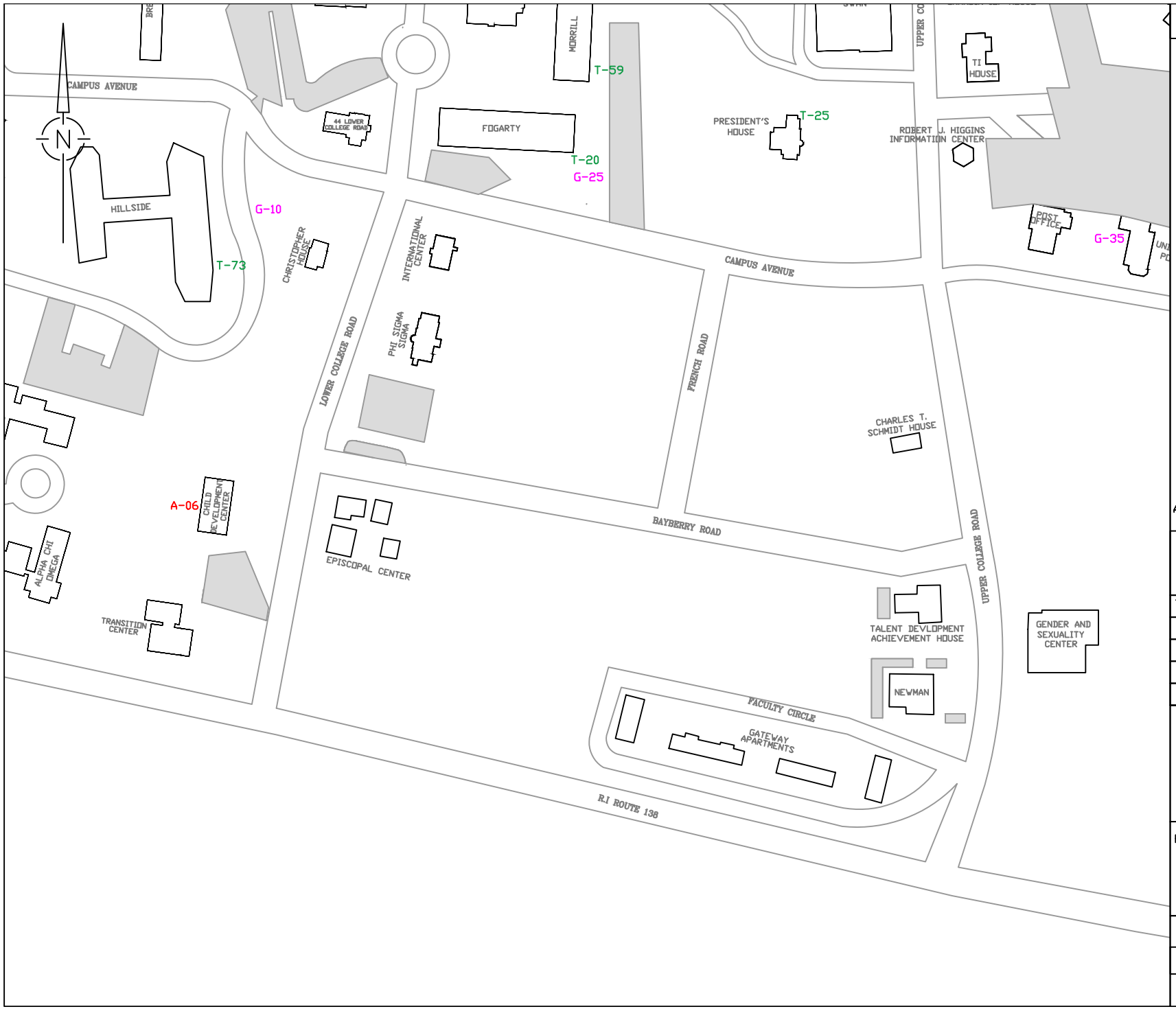
200 Inner Belt Road
Somerville, MA 02431
Phone: (800) 966-9282
Fax: (617) 628-8099
www.Triumvirate.com

Figure 10: South Mid Section

University of Rhode Island
Kingston Campus
Route 138
South Kingstown, RI 02881

Project	URI SPCC
Date	6/30/22

KC – 10



General Notes

Buildings Referenced:

44 Lower College Road
Fogarty Hall
International Center
Phi Sigma Sigma
Episcopal Center
Gateway Apartments
President's House
Charles T. Schmidt House
Talent Development Achievement House
Newman Hall

Drawing Not to Scale - Approximation Used for SPCC Plan Only

C:\Users\karin\OneDrive\Pictures\logo.jpg

TEI	Karin Brett	6/2022
No.	Revision/Issue	Date

Triumvirate Environmental, Inc.

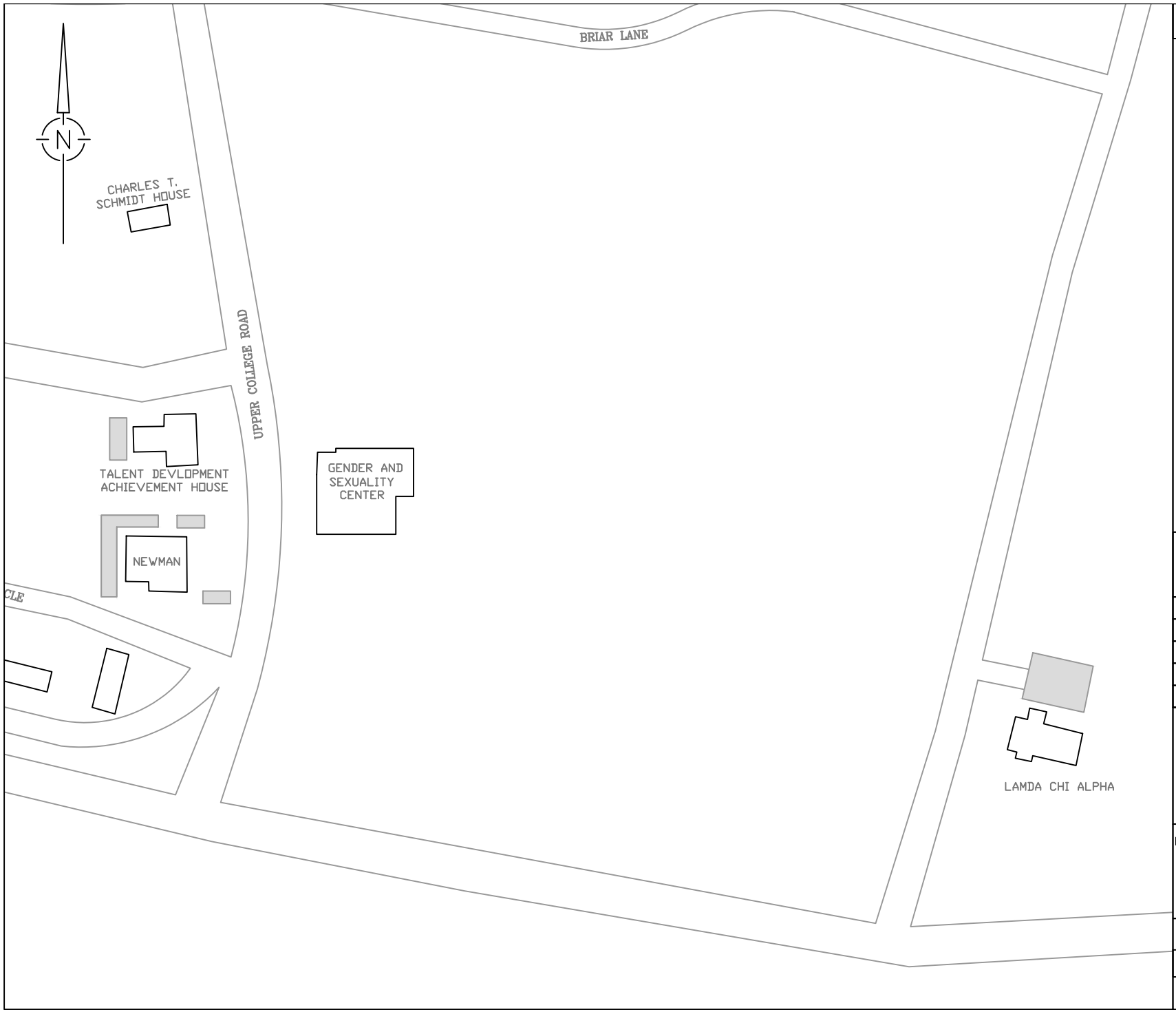
200 Inner Belt Road
Somerville, MA 02431
Phone: (800) 966-9282
Fax: (617) 628-8099
www.Triumvirate.com

Figure 11: South Mid Section

University of Rhode Island
Kingston Campus
Route 138
South Kingstown, RI 02881

Project	URI SPCC
Date	6/30/22

KC – 11



General Notes

Buildings Referenced:

Gender and Sexuality Center
Lambda Chi Alpha

Drawing Not to Scale - Approximation Used for SPCC Plan Only

C:\Users\karin\OneDrive\Pictures\logo.jpg

TEI	Karin Brett	6/2022
No.	Revision/Issue	Date

Triumvirate Environmental, Inc.

200 Inner Belt Road
Somerville, MA 02431
Phone: (800) 966-9282
Fax: (617) 628-8099
www.Triumvirate.com

Figure 12: South East Section

University of Rhode Island
Kingston Campus
Route 138
South Kingstown, RI 02881

Project	URI SPCC
Date	6/30/22

KC – 12

General Notes

Buildings Referenced:

University Graduate Village Apartments

Drawing Not to Scale - Approximation Used for SPCC Plan Only

C:\Users\karin\OneDrive\Pictures\logo.jpg

TEI	Karin Brett	6/2022
No.	Revision/Issue	Date

Triumvirate Environmental, Inc.

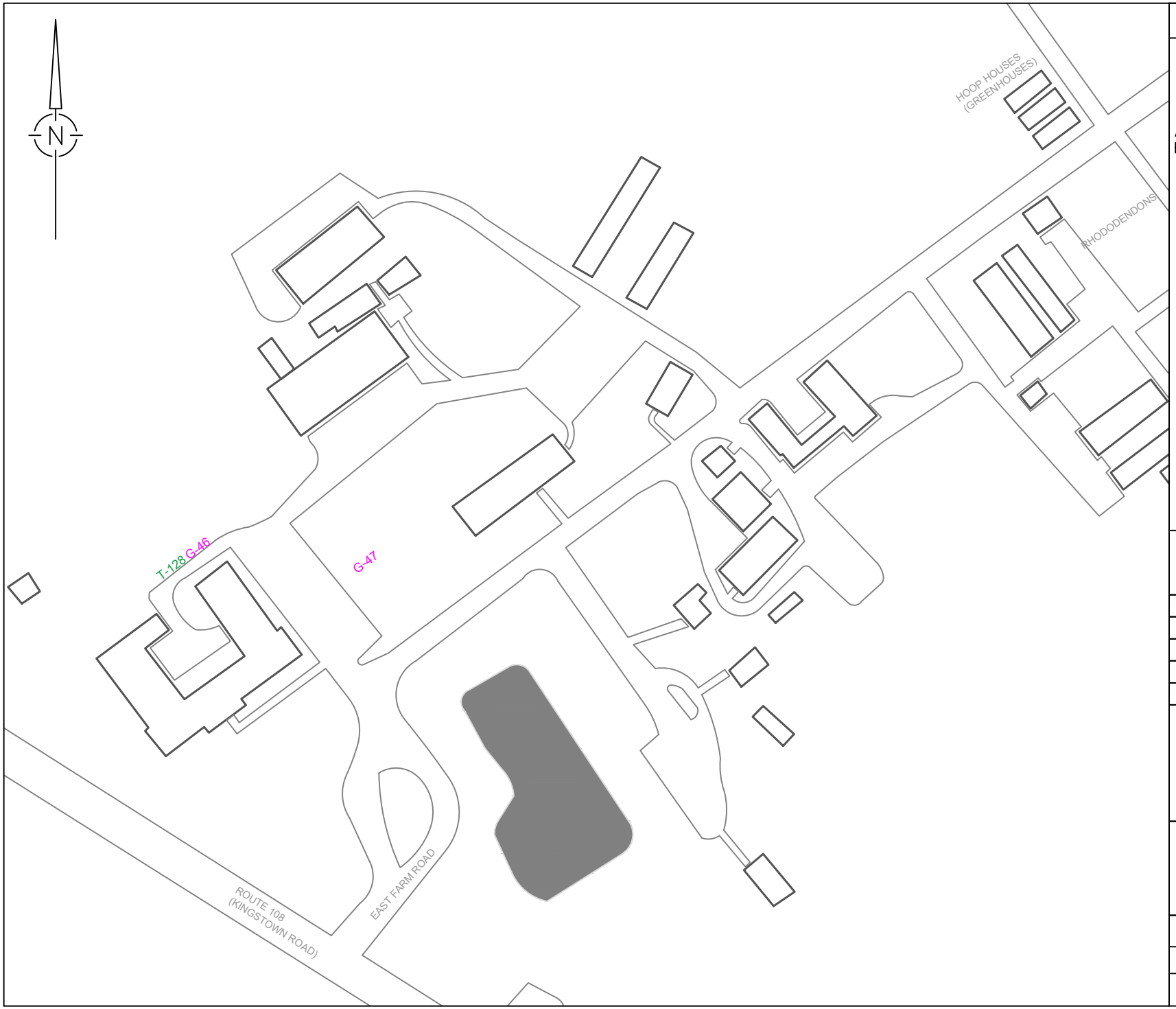
200 Inner Belt Road
Somerville, MA 02431
Phone: (800) 966-9282
Fax: (617) 628-8099
www.Triumvirate.com

Figure 13: Graduate Village

University of Rhode Island
Kingston Campus
Route 138
South Kingstown, RI 02881

Project	URI SPCC
Date	6/30/22

KC – 13



General Notes

Buildings Referenced:

Aquaculture
Building 61

Drawing Not to Scale – Approximation Used for SPCC Plan Only

No.	Revision/Issue	Date

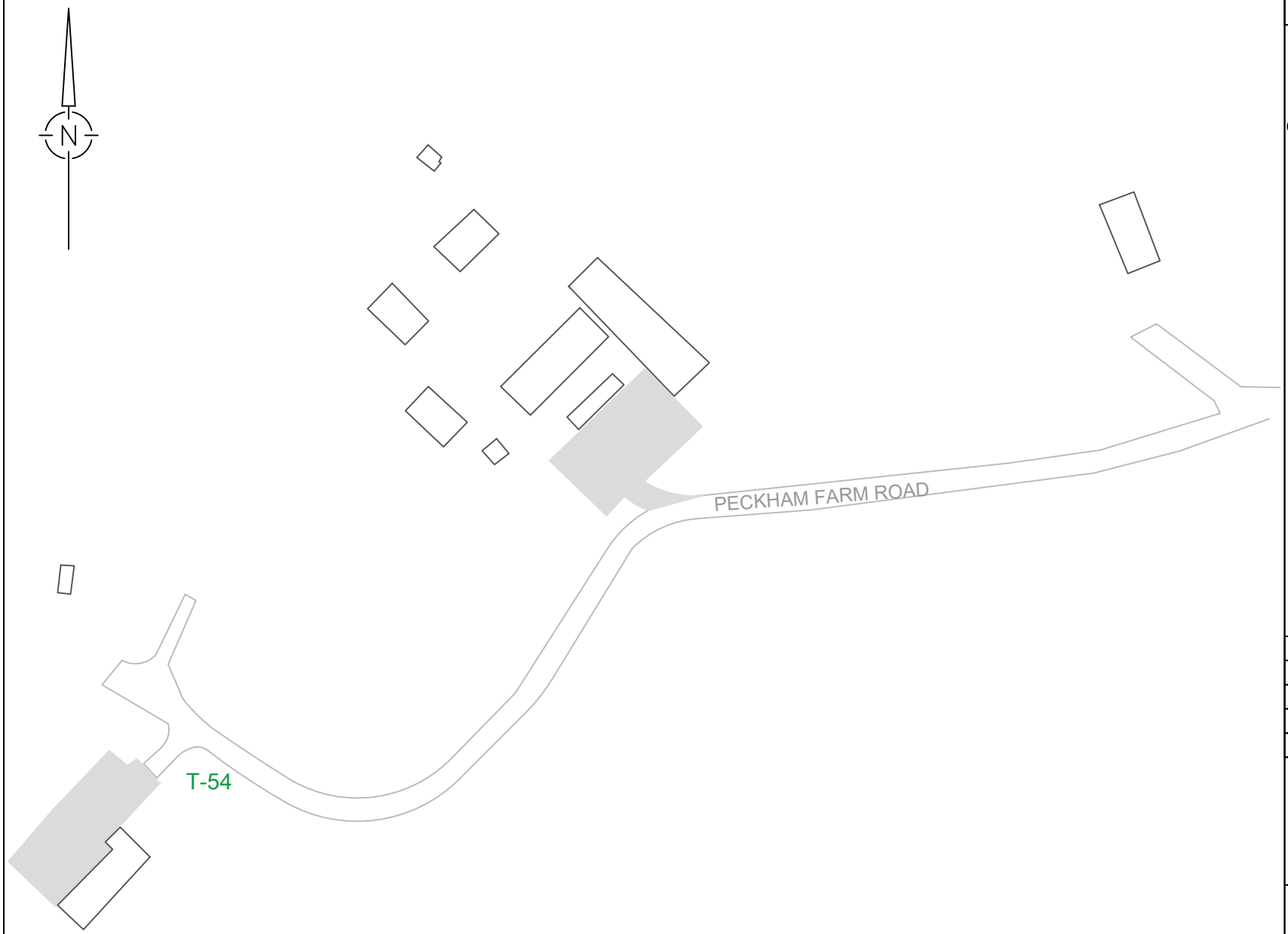
Triumvirate Environmental, Inc.

200 Inner Belt Road
Somerville, MA 02431
Phone: (800) 966-9282
Fax: (617) 628-8099
www.Triumvirate.com

Figure 14: East Farm
University of Rhode Island
Kingston Campus
Route 138
South Kingstown, RI 02881

Project	URI SPCC
Date	6/30/22

KC – 14



General Notes

Buildings Referenced:

Central Lab Animal Facility

Drawing Not to Scale – Approximation Used for SPCC Plan Only

No.	Revision/Issue	Date

Triumvirate Environmental, Inc.

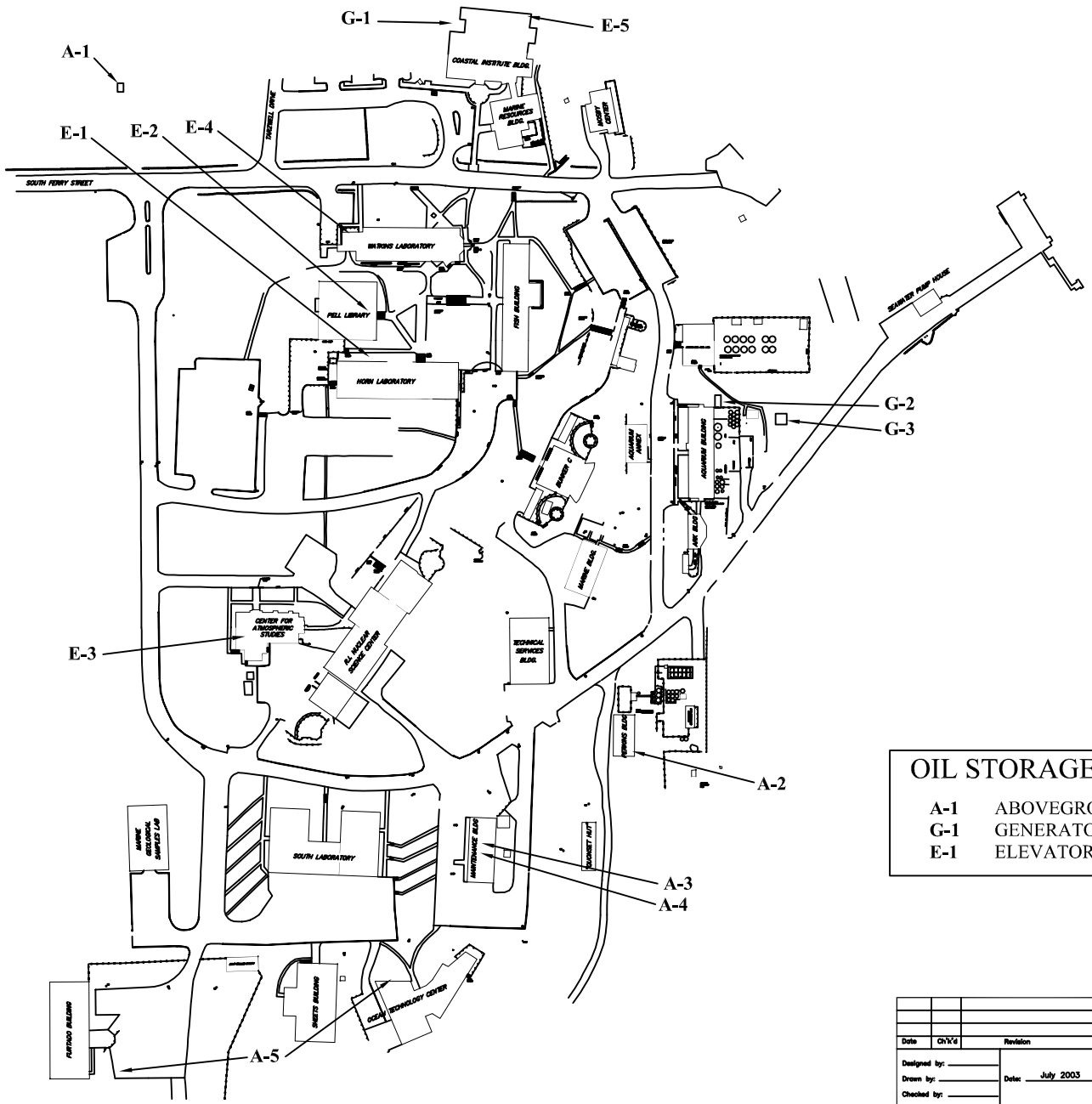
200 Inner Belt Road
Somerville, MA 02431
Phone: (800) 966-9282
Fax: (617) 628-8099
www.Triumvirate.com

Figure 15: Peckham Farm

University of Rhode Island
Kingston Campus
Route 138
South Kingstown, RI 02881

Project	URI SPCC
Date	6/30/22

KC – 15



OIL STORAGE TANK SYMBOLS

A-1	ABOVEGROUND STORAGE TANK
G-1	GENERATOR
E-1	ELEVATOR

Date	Ch'k'd	Revision

Designed by:
Drawn by:
Checked by:
Approved by:

Date: July 2003

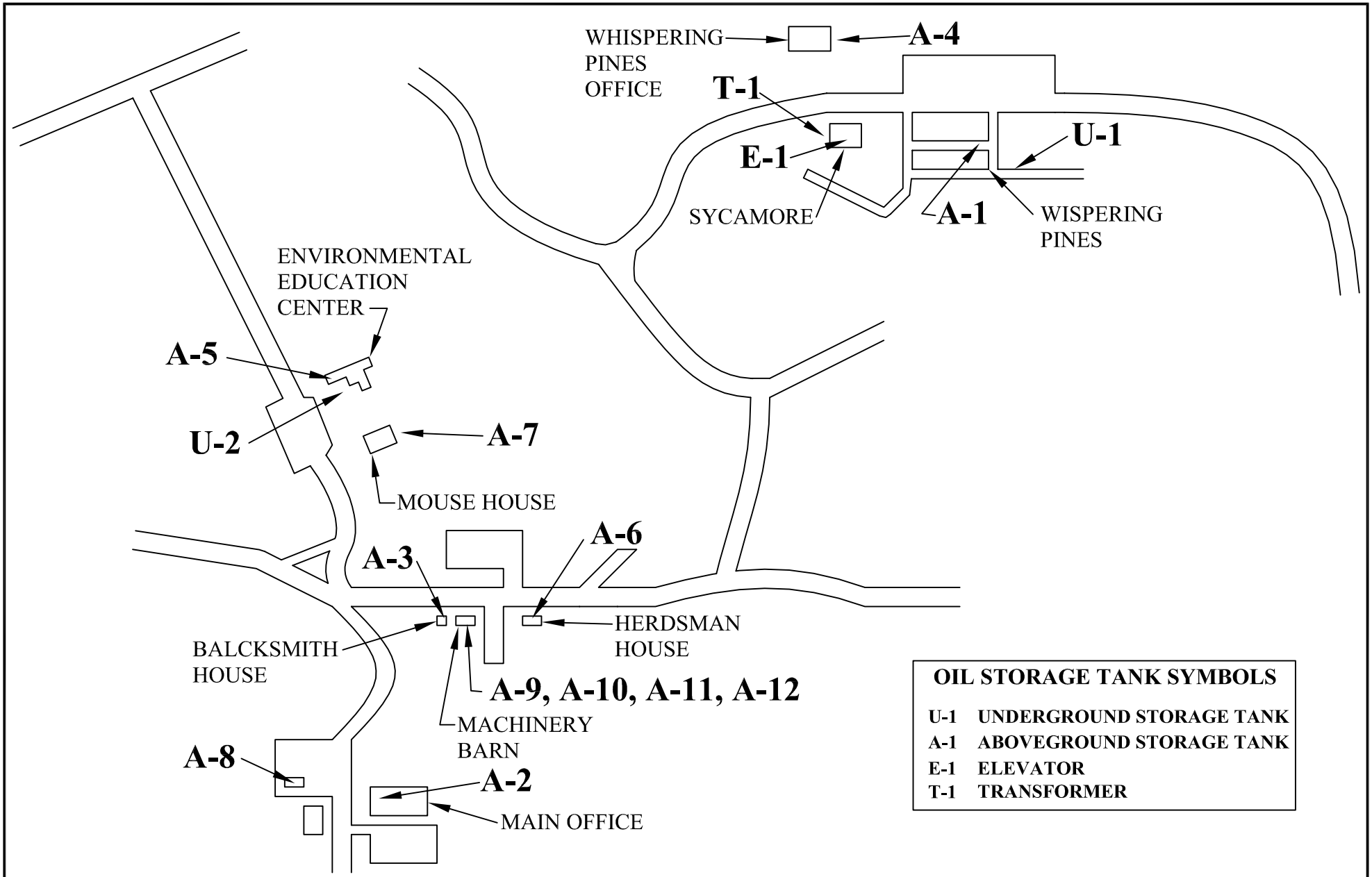
Scale: 1"=80'

University of Rhode Island
Narragansett Bay Campus

SPCC Site Plan

TRIUMVIRATE ENVIRONMENTAL
61 Inner Belt Road
Somerville, MA 02143
Providing Long Term Innovative Solutions

FIGURE
NBC - 16



FILE NAME: WAJ Site SCALE: NTS DRAWN BY: KJS DATE: July 2003 APPROVED BY: JOB NO.:	TRIUMVIRATE ENVIRONMENTAL 61 Inner Belt Road Somerville, MA 02143 *Providing Long Term Innovative Solutions*	SPCC Site Map W. Alton Jones Campus University of Rhode Isand	FIGURE WAJ - 17

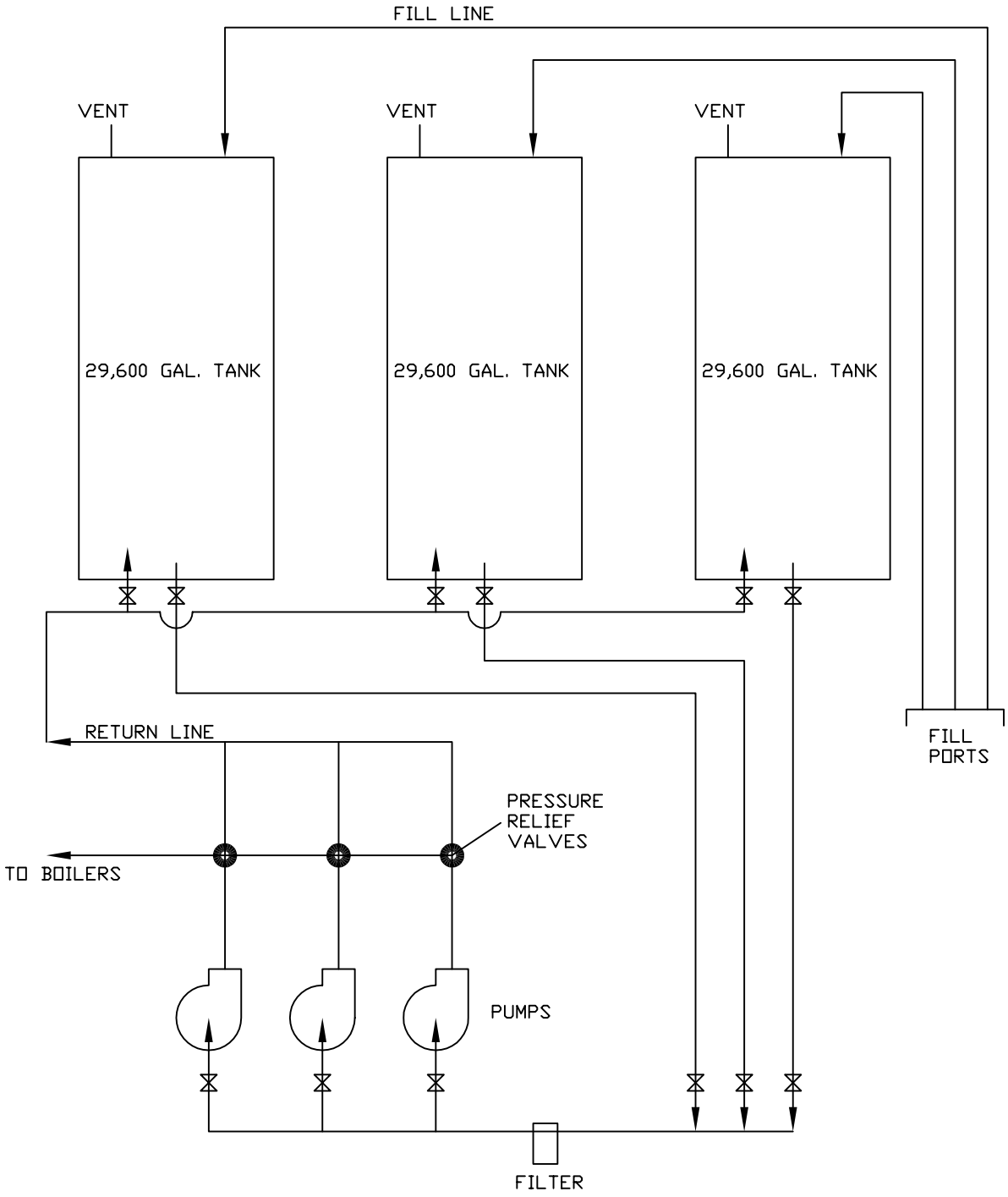


Figure 18
Kingston Campus

Steam Plant Tanks

FILE NAME: _____ SCALE: NTS

DRAWN BY: KJS DATE: Sept 2003

APPROVED BY: _____ JOB NO.: _____

TRIUMVIRATE ENVIRONMENTAL
61 Inner Belt Road
Somerville, MA 02143
Providing Long Term Innovative Solutions

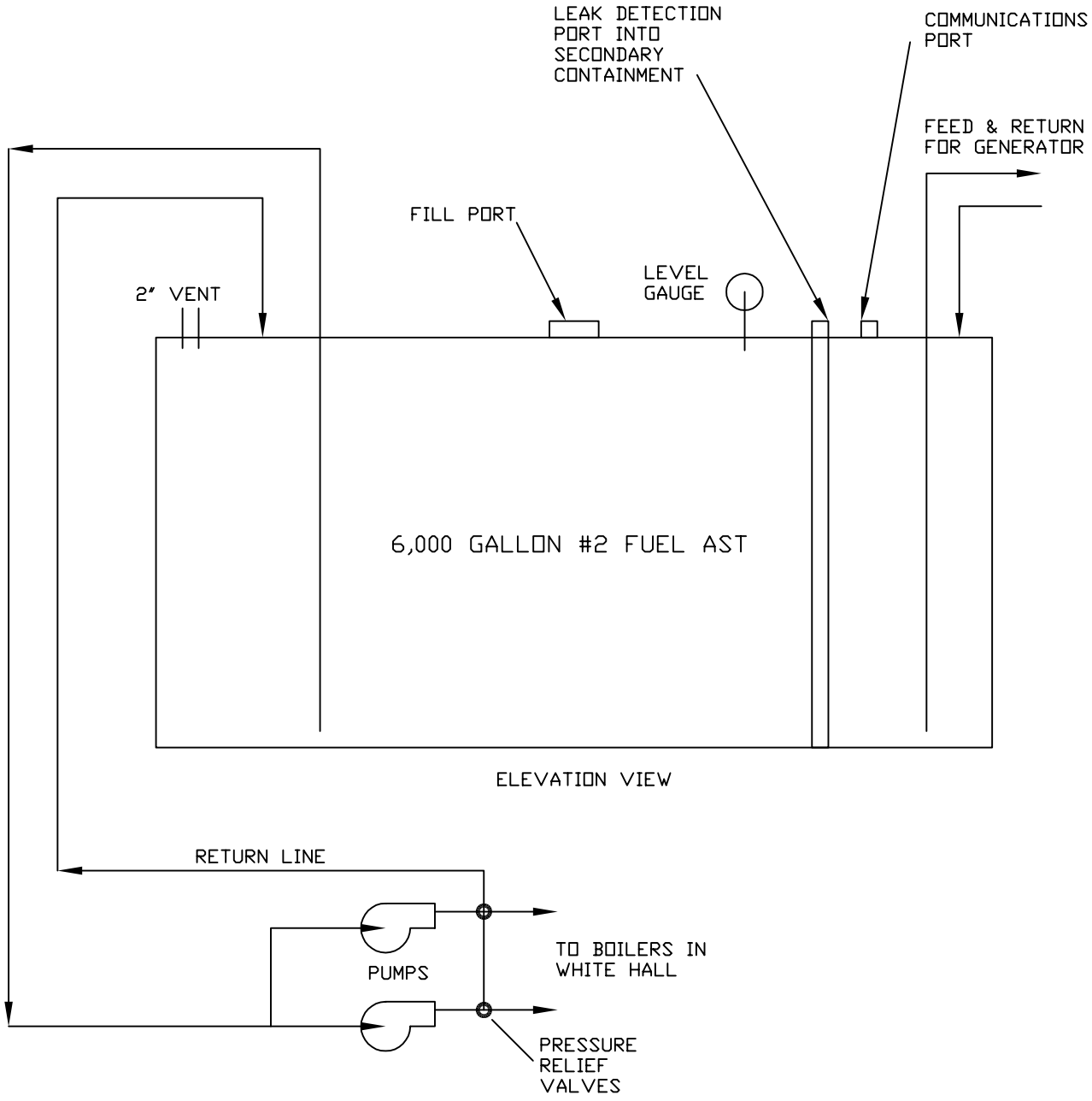


Figure 19
Kingston Campus

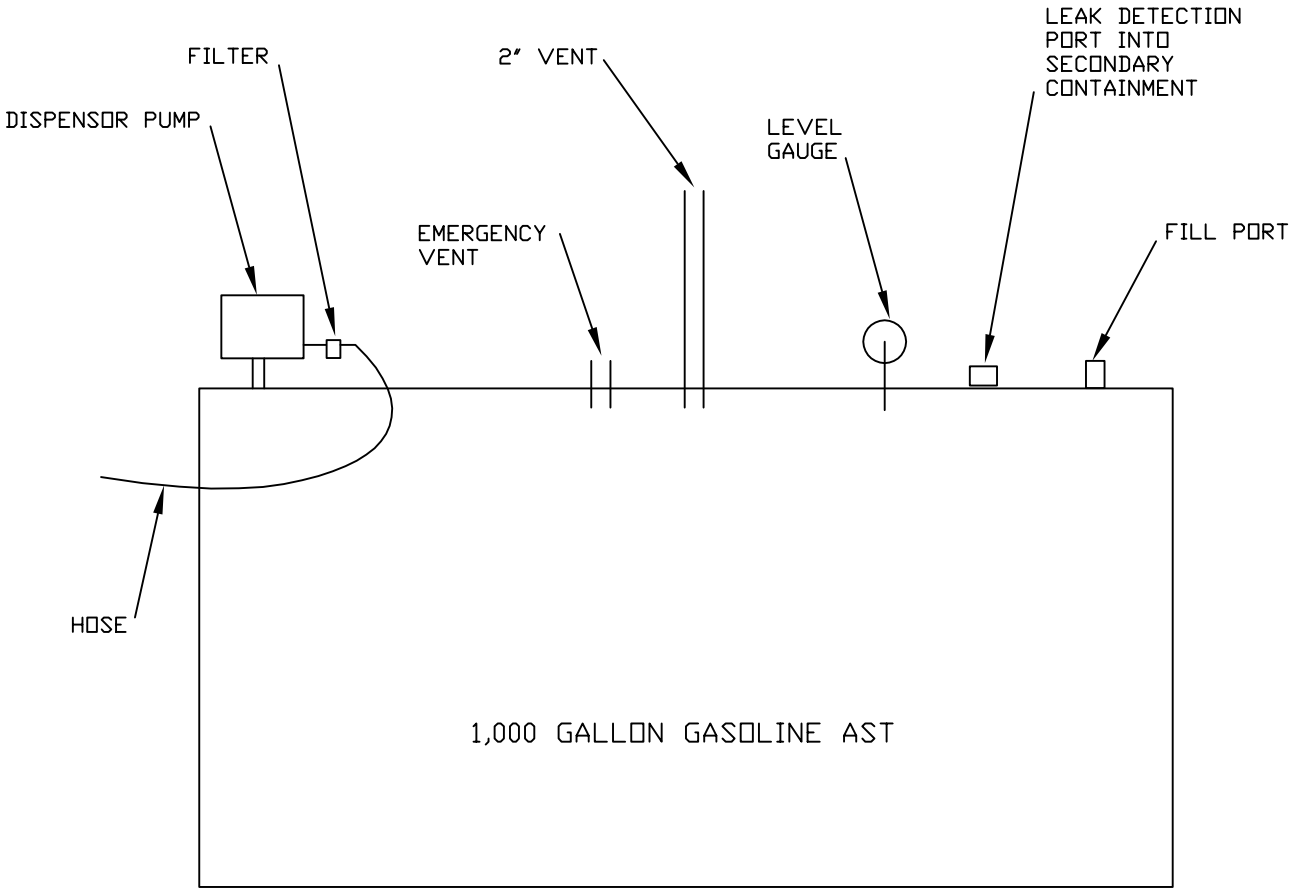
6,000 Gal. White Hall AST

FILE NAME: _____ SCALE: NTS

DRAWN BY: KJS DATE: Sept 2003

APPROVED BY: _____ JOB NO.: _____

TRIUMVIRATE ENVIRONMENTAL
61 Inner Belt Road
Somerville, MA 02143
Providing Long Term Innovative Solutions

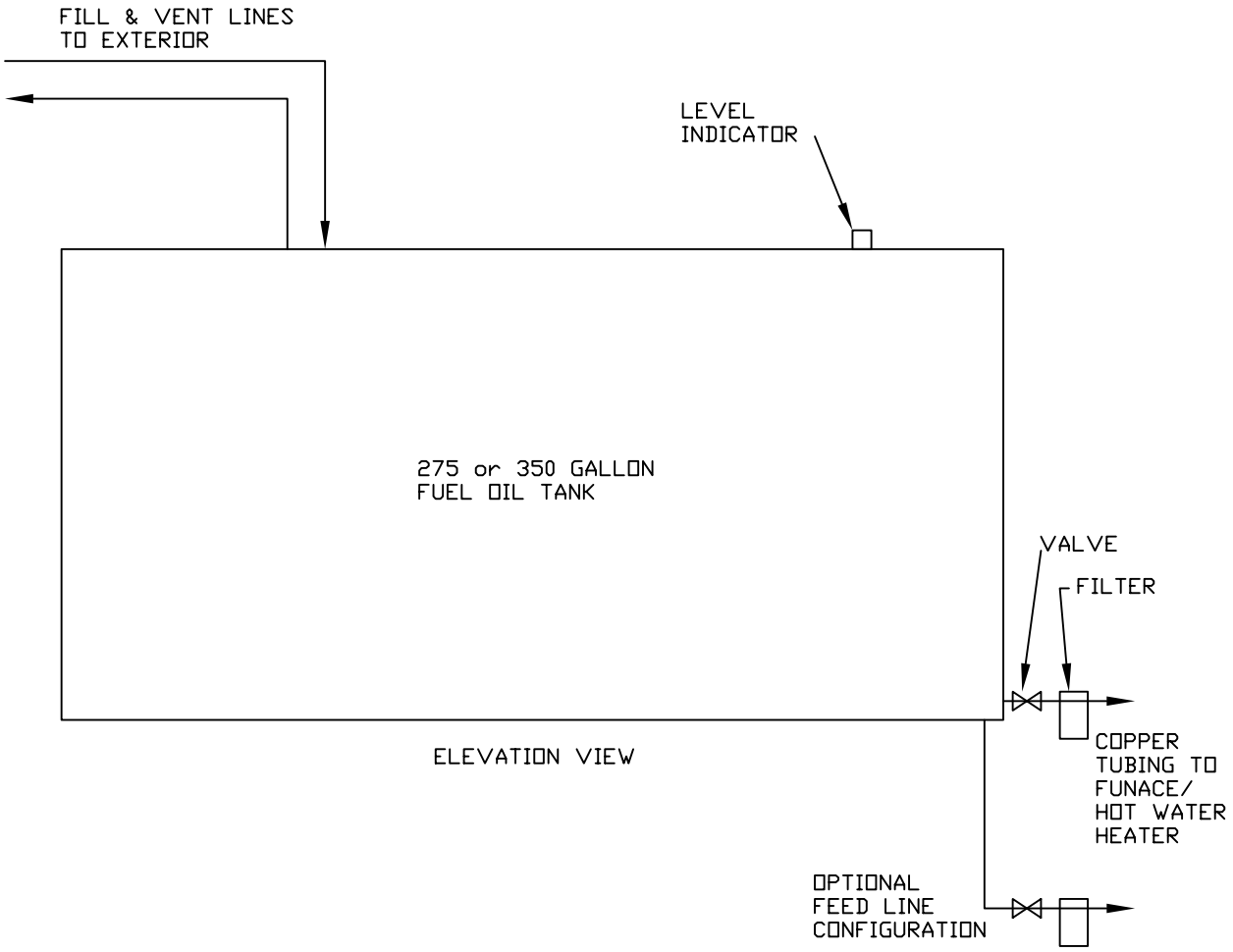


ELEVATION VIEW

Figure 20
W. Alton Jones Campus
1,000 Gal. Gasoline AST

FILE NAME: _____ SCALE: NTS
DRAWN BY: KJS DATE: Sept 2003
APPROVED BY: _____ JOB NO.: _____

TRIUMVIRATE ENVIRONMENTAL
61 Inner Belt Road
Somerville, MA 02143
Providing Long Term Innovative Solutions



ELEVATION VIEW

Figure 21

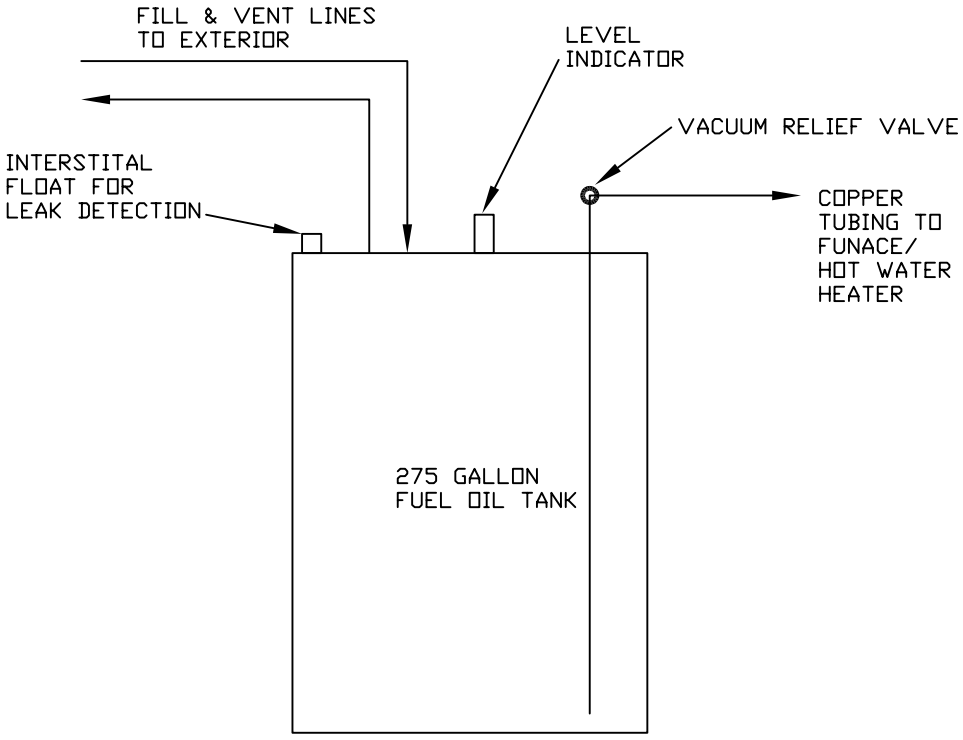
275 - 350 Gal. Single Wall

FILE NAME: _____ SCALE: NTS

DRAWN BY: KJS DATE: Sept 2003

APPROVED BY: _____ JOB NO.: _____

TRIUMVIRATE
ENVIRONMENTAL
61 Inner Belt Road
Somerville, MA 02143
Providing Long Term Innovative Solutions



ELEVATION VIEW

Figure 22

275 Gal. Double Wall (Roth)

FILE NAME:

DRAWN BY: KJS

APPROVED BY:

SCALE: NTS

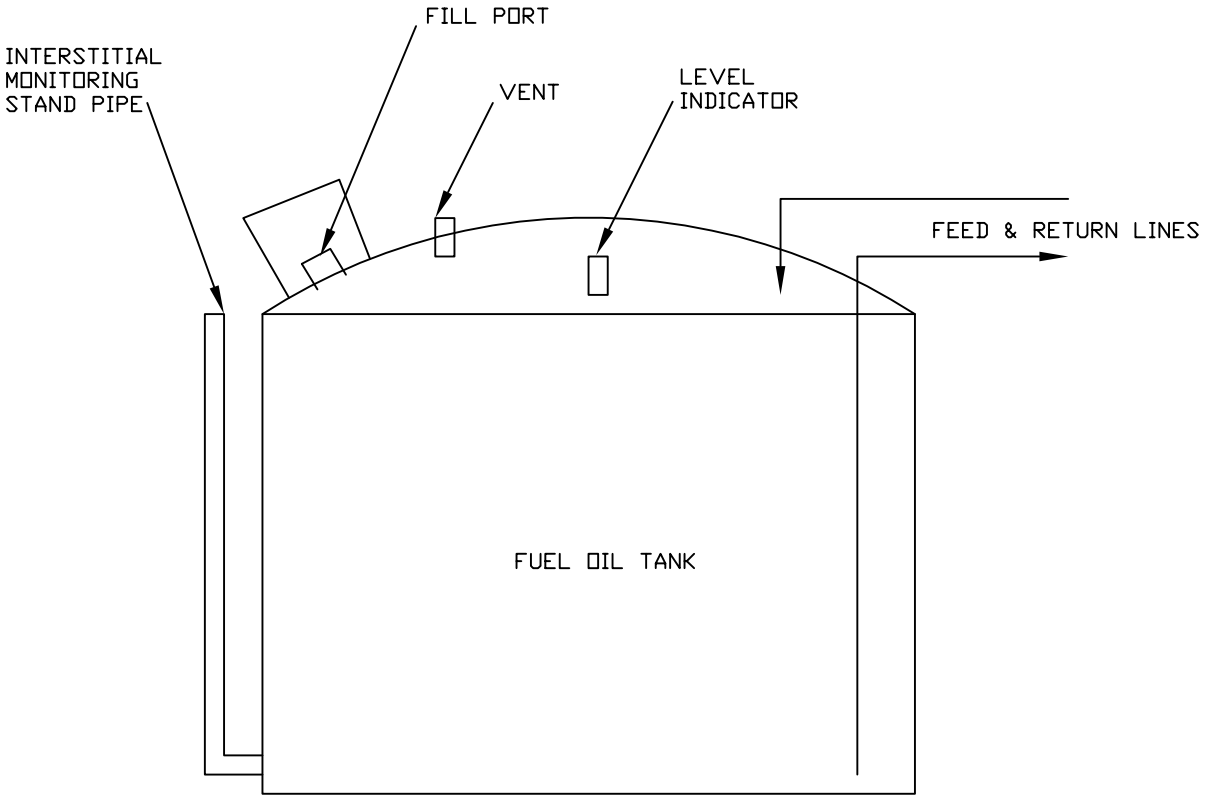
DATE: Sept 2003

JOB NO.:

TRIUMVIRATE
ENVIRONMENTAL

61 Inner Belt Road
Somerville, MA 02143

Providing Long Term Innovative Solutions



ELEVATION VIEW

Figure 23

375 to 1,000 Gal. Double Wall

FILE NAME: _____ SCALE: NTS

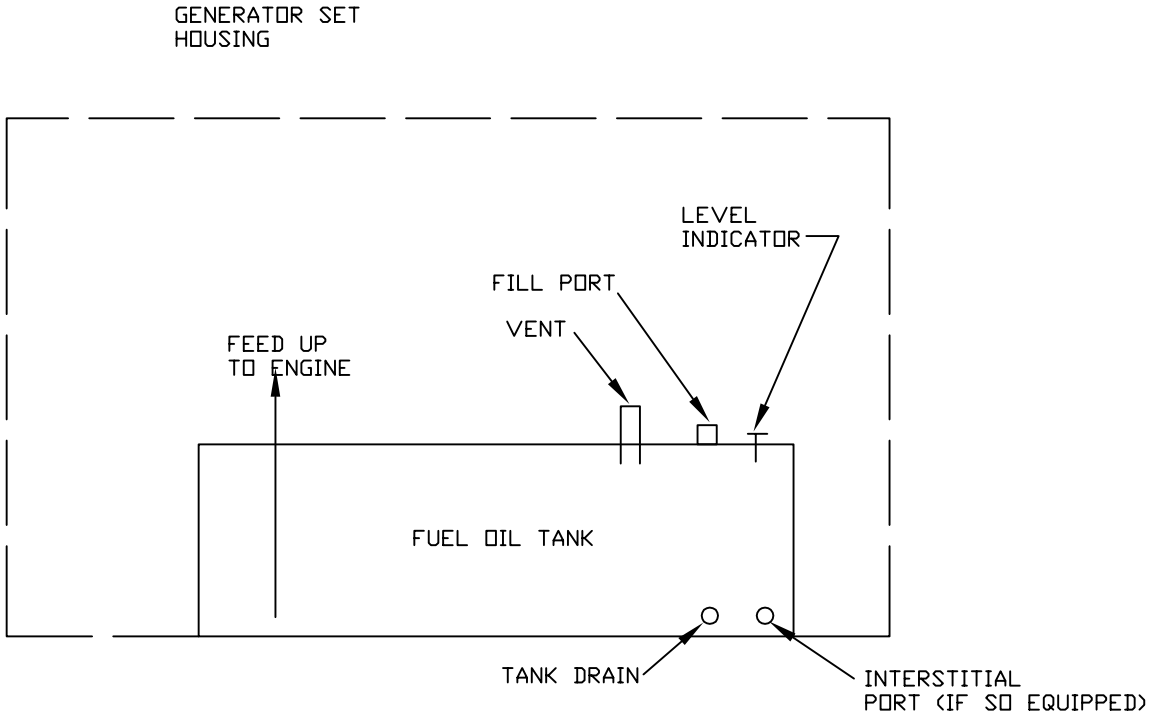
DRAWN BY: KJS DATE: Sept 2003

APPROVED BY: _____ JOB NO.: _____

TRIUMVIRATE
ENVIRONMENTAL

61 Inner Belt Road
Somerville, MA 02143

Providing Long Term Innovative Solutions



ELEVATION VIEW

Figure 24

Generator Base Tanks

FILE NAME:

DRAWN BY: KJS

APPROVED BY:

SCALE: NTS

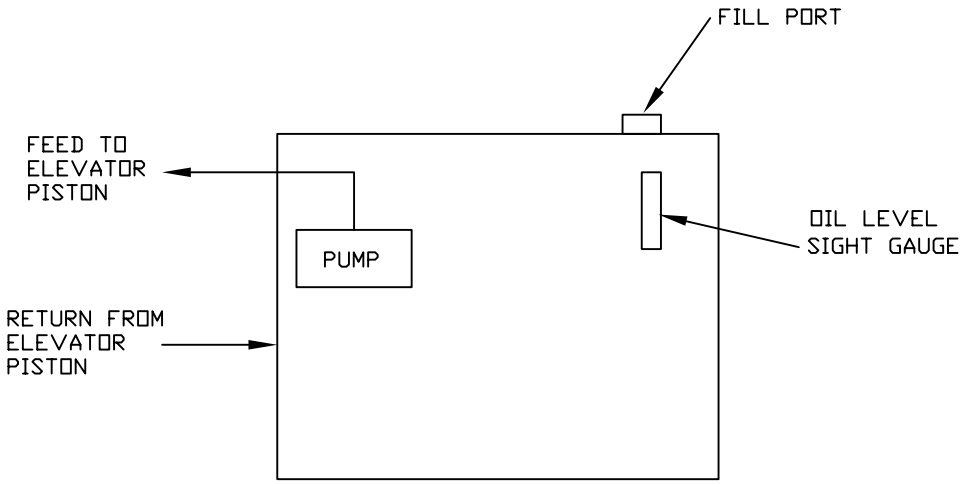
DATE: Sept 2003

JOB NO.:

TRIUMVIRATE
ENVIRONMENTAL

61 Inner Belt Road
Somerville, MA 02143

Providing Long Term Innovative Solutions



ELEVATION VIEW

Figure 25
Elevator Hydraulic Oil Reservoir

TYPE E TANK

FILE NAME: _____ SCALE: NTS

DRAWN BY: KJS DATE: Sept 2003

APPROVED BY: _____ JOB NO.: _____

TRIUMVIRATE
ENVIRONMENTAL
61 Inner Belt Road
Somerville, MA 02143
Providing Long Term Innovative Solutions

Appendix B – Oil Storage Inventory, Spill Prediction and Impacts Assessment

Campus	ID #	Contents	Location	AST/UST	Inside/Outside	Secondary Containment	Direction of Flow	Capacity (gals)	Drawing Reference
KING	A-01	#2 Fuel Oil/Diesel	Adams House	AST	Inside	double walled	Contained in interstitial space	275	Figure 8
KING	A-04	#2 Fuel Oil/Diesel	Peckham Farm - Central Lab Animal Facility	AST	Inside	double walled	Contained in interstitial space	275	Figure 15
KING	A-05	#2 Fuel Oil/Diesel	Athletic Maintenance	AST	Outside	double walled	Contained in interstitial space	275	Figure 2
KING	A-06	#2 Fuel Oil/Diesel	Child Development Center	AST	Outside	double walled	Contained in interstitial space	500	Figure 10
KING	A-07	#2 Fuel Oil/Diesel	Christopher House	AST	Inside	double walled	Contained in interstitial space	275	Figure 10
KING	A-09	#2 Fuel Oil/Diesel	East Farm - Building 61	AST	Inside	double walled	Contained in interstitial space	275	Figure 14
KING	A-10	#2 Fuel Oil/Diesel	Wakerfield House	AST	Inside	double walled	Contained in interstitial space	275	Figure 3
KING	A-11	Waste Oil	Automotive Garage	AST	Inside	spill pallets	Contained in spill pallet (4 x 55)	220	Figure 3
KING	A-12	Lube Oil	Automotive Garage	AST	Inside	spill pallets	Contained in spill pallet (8 x 55)	440	Figure 3
KING	A-13	Lube Oil	Automotive Garage	AST	Inside	spill pallets	Contained in spill pallets (12 x 55)	660	Figure 3
KING	A-14	Waste Oil	Automotive Garage	AST	Inside	poly containment basin & concrete walls & floor	Contained in the containment basin. Note: liquid level indicator located inside building where waste oil is poured into receiving funnel to prevent overfill. Periodically replaced instead of integrity testing.	275	Figure 3
KING	A-15	#2 Fuel Oil/Diesel	Charles T. Schmidt House	AST	Inside	double walled	Contained in interstitial space	275	Figure 11
KING	A-16	Waste Oil	Hazardous Waste Storage Facility	AST	Outside	double walled	Contained in interstitial space	110	Figure 5
KING	A-17	#2 Fuel Oil/Diesel	Lippitt Hall - Steam Plant	AST	Outside	concrete lined containment	Contained in interstitial space	29600	Figure 4
KING	A-18	#2 Fuel Oil/Diesel	Lippitt Hall - Steam Plant	AST	Outside	concrete lined containment	Contained in interstitial space	29600	Figure 4
KING	A-19	#2 Fuel Oil/Diesel	Lippitt Hall - Steam Plant	AST	Outside	concrete lined containment	Contained in interstitial space	29600	Figure 4
KING	A-20	#2 Fuel Oil/Diesel	International Center	AST	Inside	double walled	Contained in interstitial space	550	Figure 11
KING	A-21	#2 Fuel Oil/Diesel	University Police	AST	Inside	double walled	Contained in interstitial space	550	Figure 8
KING	A-23	#2 Fuel Oil/Diesel	Environmental Health and Safety Department - 177 Plains Road	AST	Inside	double walled	Contained in interstitial space	275	Figure 2
KING	A-24	#2 Fuel Oil/Diesel	Tucker House	AST	Inside	double walled	Contained in interstitial space	275	Figure 5
KING	A-30	#2 Fuel Oil/Diesel	Talent Development Achievement House	AST	Inside	double walled	Contained in interstitial space	550	Figure 11
KING	A-31	Lube Oil	Kirk Hall	AST	Outside	double walled	Contained in interstitial space	110	Figure 4
KING	A-32	Cooking Oil	Butterfield Hall	AST	Outside	double walled	Contained in interstitial space	150	Figure 7
KING	A-34	Cooking Oil	Hope Commons	AST	Outside	double walled	Contained in interstitial space	900	Figure 7
KING	A-35	Cooking Oil	Memorial Union	AST	Outside	double walled	Contained in interstitial space	150	Figure 7
KING	A-39	#2 Fuel Oil/Diesel	Lambda Chi Alpha	AST	Inside	double walled	Contained in interstitial space	550	Figure 12
KING	A-41	#2 Fuel Oil/Diesel	Grandin IEP House	AST	Inside	double walled	Contained in interstitial space	550	Figure 8
KING	A-42	#2 Fuel Oil/Diesel	Carothers Library	AST	Outside	Pad Mounted	Contained in interstitial space	285	Figure 4
KING	A-43	#2 Fuel Oil/Diesel	Anna Fascitelli Fitness & Wellness Center	AST	Outside	Pad Mounted	Contained in interstitial space	80	Figure 6
KING	E-01	Hydraulic oil	Ballentine Hall	Elevator	Inside	concrete floor and walls	Contained in room. Diked threshold	55	Figure 4
KING	E-02	Hydraulic oil	Barlow Hall	Elevator	Inside	Insufficient Containment	Contained in room. Diked threshold	160	Figure 10
KING	E-03	Hydraulic oil	Bliss Hall	Elevator	Inside	concrete floor and walls	Contained in room. Diked threshold in 3rd floor mechan	150	Figure 4
KING	E-04	Hydraulic oil	Butterfield Hall	Elevator	Inside	concrete floor and walls with steel threshold	Contained in room. Diked threshold	160	Figure 7
KING	E-05	Hydraulic oil	Social Sciences Research Center	Elevator	Inside	concrete floor and walls	Contained in room. Diked threshold	105	Figure 4
KING	E-06	Hydraulic oil	Coastal Institute	Elevator	Inside	concrete floor and walls	Contained in room. Diked threshold	200	Figure 4
KING	E-07	Hydraulic oil	Ryan Convocation Center	Elevator	Inside	concrete floor and walls	Contained in room. Diked threshold	200	Figure 6
KING	E-08	Hydraulic oil	Ryan Convocation Center	Elevator	Inside	concrete floor and walls	Contained in room. Diked threshold	200	Figure 6
KING	E-09	Hydraulic oil	Ryan Convocation Center	Elevator	Inside	concrete floor and walls	Contained in room. Diked threshold	120	Figure 6
KING	E-11	Hydraulic oil	Fine Arts	Elevator	Inside	concrete floor and walls	Contained in room. Diked threshold	100	Figure 5
KING	E-12	Hydraulic oil	Fine Arts	Elevator	Inside	concrete floor and walls	Contained in room. Diked threshold	100	Figure 5
KING	E-13	Hydraulic oil	Foundation & Alumni Engagement	Elevator	Inside	concrete floor and walls	Contained in room. Diked threshold	140	Figure 8
KING	E-14	Hydraulic oil	Green Hall	Elevator	Inside	concrete floor and walls with steel threshold	Contained in room. Diked threshold	135	Figure 7
KING	E-15	Hydraulic oil	Swan Hall	Elevator	Inside	None	Contained in room. Diked threshold	100	Figure 7
KING	E-17	Hydraulic oil	Kirk Hall	Elevator	Inside	concrete floor and walls	Contained in room. Diked threshold	150	Figure 4
KING	E-18	Hydraulic oil	Carothers Library	Elevator	Inside	None	Contained in room. Diked threshold	150	Figure 4
KING	E-19	Hydraulic oil	Carothers Library	Elevator	Inside	concrete floor and walls	Contained in room. Diked threshold	150	Figure 4
KING	E-20	Hydraulic oil	Memorial Union	Elevator	Inside	concrete floor and walls	Contained in room. Diked threshold	150	Figure 7

Campus	ID #	Contents	Location	AST/UST	Inside/Outside	Secondary Containment	Direction of Flow	Capacity (gals)	Drawing Reference
KING	E-21	Hydraulic oil	Memorial Union	Elevator	Inside	None	Contained in room. Diked threshold	150	Figure 7
KING	E-22	Hydraulic oil	Morrill Hall	Elevator	Inside	None	Contained in room. Diked threshold	150	Figure 7
KING	E-23	Hydraulic oil	Multicultural Student Center	Elevator	Inside	concrete floor and walls	Contained in room. Diked threshold	100	Figure 7
KING	E-24	Hydraulic oil	Potter Health	Elevator	Inside	concrete floor and walls	Contained in room. Diked threshold	100	Figure 6
KING	E-25	Hydraulic oil	Quinn Hall	Elevator	Inside	concrete floor and walls	Contained in room. Diked threshold	100	Figure 7
KING	E-26	Hydraulic oil	Roosevelt Hall	Elevator	Inside	concrete floor and walls	Contained in room. Diked threshold	250	Figure 7
KING	E-27	Hydraulic oil	Tyler Hall	Elevator	Inside	concrete floor and walls	Contained in room. Diked threshold	80	Figure 4
KING	E-28	Hydraulic oil	Weldin Hall	Elevator	Inside	Insufficient Containment volume	Contained in room. Diked threshold	150	Figure 10
KING	E-29	Hydraulic oil	White Hall	Elevator	Inside	concrete floor and walls	Contained in building. Storage tank not near elevator pit	150	Figure 4
KING	E-30	Hydraulic oil	White Hall	Elevator	Inside	concrete floor and walls	Contained in building. Storage tank not near elevator pit	150	Figure 4
KING	E-31	Hydraulic oil	Alumni Center	Elevator	Inside	concrete floor and walls	Contained in building. Storage tank not near elevator pit	60	Figure 8
KING	E-32	Hydraulic oil	Browning Hall	Elevator	Inside	concrete floor and walls	Contained in building. Storage tank not near elevator pit	155	Figure 6
KING	E-33	Hydraulic oil	Hope Commons	Elevator	Inside	concrete floor and walls	Contained in building. Storage tank not near elevator pit	79	Figure 7
KING	E-34	Hydraulic oil	Hope Commons	Elevator	Inside	concrete floor and walls	Contained in building. Storage tank not near elevator pit	123	Figure 7
KING	E-35	Hydraulic oil	Merrow Hall	Elevator	Inside	concrete floor and walls	Contained in building. Storage tank not near elevator pit	89	Figure 4
KING	E-36	Hydraulic oil	Garrahy Hall	Elevator	Inside	concrete floor and walls	Contained in building. Storage tank not near elevator pit	140	Figure 3
KING	E-37	Hydraulic oil	Wiley Hall	Elevator	Inside	concrete floor and walls	Contained in building. Storage tank not near elevator pit	140	Figure 3
KING	E-38	Hydraulic oil	Wiley Hall	Elevator	Inside	concrete floor and walls	Contained in building. Storage tank not near elevator pit	140	Figure 3
KING	E-39	Hydraulic oil	Eddy Hall	Elevator	Inside	concrete floor and walls	Contained in building. Storage tank not near elevator pit	140	Figure 6
KING	E-40	Hydraulic oil	Eddy Hall	Elevator	Inside	concrete floor and walls	Contained in building. Storage tank not near elevator pit	140	Figure 6
KING	E-41	Hydraulic oil	Peck Hall	Elevator	Inside	concrete floor and walls	Contained in building. Storage tank not near elevator pit	89	Figure 7
KING	E-42	Hydraulic oil	Rodman Hall	Elevator	Inside	concrete floor and walls	Contained in building. Storage tank not near elevator pit	100	Figure 4
KING	E-43	Hydraulic oil	210 Flagg Road - Surge Building	Elevator	Inside	concrete floor and walls	Contained in building. Storage tank not near elevator pit	68	Figure 3
KING	E-44	Hydraulic oil	Center for Biotechnology & Life Sciences	Elevator	Inside	concrete floor and walls	Contained in building. Storage tank not near elevator pit	230	Figure 4
KING	E-45	Hydraulic oil	Center for Biotechnology & Life Sciences	Elevator	Inside	concrete floor and walls	Contained in building. Storage tank not near elevator pit	595	Figure 4
KING	E-46	Hydraulic oil	Ti House	Elevator	Inside	concrete floor and walls	Contained in building. Storage tank not near elevator pit	150	Figure 8
KING	E-47	Hydraulic oil	Lippitt Hall - Steam Plant	Elevator	Inside	concrete floor and walls	Contained in building. Storage tank not near elevator pit	165	Figure 4
KING	E-48	Hydraulic oil	Avedesian	Elevator	Inside	concrete floor and walls	Contained in building. Storage tank not near elevator pit	160	Figure 4
KING	E-49	Hydraulic oil	Avedisian	Elevator	Inside	concrete floor and walls	Contained in building. Storage tank not near elevator pit	430	Figure 4
KING	E-50	Hydraulic oil	Beaupre Center	Elevator	Inside	concrete floor and walls	Contained in building. Storage tank not near elevator pit	160	Figure 4
KING	E-51	Hydraulic oil	Beaupre Center	Elevator	Inside	concrete floor and walls	Contained in building. Storage tank not near elevator pit	430	Figure 4
KING	E-52	Hydraulic oil	Fascitelli Center of Advanced Engineering	Elevator	Inside	concrete floor and walls	Contained in building. Storage tank not near elevator pit	160	Figure 4
KING	E-53	Hydraulic oil	Fascitelli Center of Advanced Engineering	Elevator	Inside	concrete floor and walls	Contained in building. Storage tank not near elevator pit	160	Figure 4
KING	E-54	Hydraulic oil	Fascitelli Center of Advanced Engineering	Elevator	Inside	concrete floor and walls	Contained in building. Storage tank not near elevator pit	430	Figure 4
KING	E-58	Hydraulic oil	Anna Fascitelli Fitness & Wellness Center	Elevator	Inside	concrete floor and walls	Contained in building. Storage tank not near elevator pit	160	Figure 6
KING	E-59	Hydraulic oil	East Hall	Elevator	Inside	concrete floor and walls	Contained in building. Storage tank not near elevator pit	80	Figure 7
KING	E-60	Hydraulic oil	Fogarty Hall	Elevator	Inside	concrete floor and walls	Contained in building. Storage tank not near elevator pit	150	Figure 11
KING	E-61	Hydraulic oil	Hillside Residence Hall	Elevator	Inside	concrete floor and walls	Contained in building. Storage tank not near elevator pit	200	Figure 10
KING	E-62	Hydraulic oil	Hillside Residence Hall	Elevator	Inside	concrete floor and walls	Contained in building. Storage tank not near elevator pit	200	Figure 10
KING	E-63	Hydraulic oil	Pastore Hall	Elevator	Inside	concrete floor and walls	Contained in building. Storage tank not near elevator pit	100	Figure 7
KING	E-64	Hydraulic oil	Ranger Hall	Elevator	Inside	concrete floor and walls	Contained in building. Storage tank not near elevator pit	200	Figure 7
KING	E-65	Hydraulic oil	Tootell Hall	Elevator	Inside	concrete floor and walls	Contained in building. Storage tank not near elevator pit	80	Figure 6
KING	E-66	Hydraulic oil	Woodward Hall	Elevator	Inside	concrete floor and walls	Contained in building. Storage tank not near elevator pit	100	Figure 4
KING	E-67	Hydraulic oil	Brookside Hall	Elevator	Inside	concrete floor and walls	Contained in building. Storage tank not near elevator pit	200	Figure 3
KING	E-68	Hydraulic oil	Brookside Hall	Elevator	Inside	concrete floor and walls	Contained in building. Storage tank not near elevator pit	200	Figure 3
KING	E-69	Hydraulic oil	Brookside Hall	Elevator	Inside	concrete floor and walls	Contained in building. Storage tank not near elevator pit	200	Figure 3
KING	E-70	Hydraulic oil	Brookside Hall	Elevator	Inside	concrete floor and walls	Contained in building. Storage tank not near elevator pit	200	Figure 3
KING	E-71	Hydraulic oil	Avedisian	Elevator	Inside	concrete floor and walls	Contained in building. Storage tank not near elevator pit	80	Figure 4
KING	E-72	Hydraulic oil	Carlotti Hall	Elevator	Inside	concrete floor and walls	Contained in building. Storage tank not near elevator pit	150	Figure 7
KING	E-73	Hydraulic oil	Chafee Hall	Elevator	Inside	concrete floor and walls	Contained in building. Storage tank not near elevator pit	300	Figure 4
KING	E-74	Hydraulic oil	Chafee Hall	Elevator	Inside	concrete floor and walls	Contained in building. Storage tank not near elevator pit	300	Figure 4

Campus	ID #	Contents	Location	AST/UST	Inside/Outside	Secondary Containment	Direction of Flow	Capacity (gals)	Drawing Reference
KING	G-01	#2 Fuel Oil/Diesel	30 Acre Well House	Generator	Outside	Double Walled	Contained within diked area	767	Figure 2
KING	G-02	#2 Fuel Oil/Diesel	Lippitt Hall - Steam Plant	Generator	Outside	Double Walled	Downhill	350	Figure 4
KING	G-03	#2 Fuel Oil/Diesel	Ryan Convocation Center	Generator	Inside	concrete floor and walls	Contaiend within building	800	Figure 6
KING	G-04	#2 Fuel Oil/Diesel	Eddy Hall	Generator	Outside	Double Walled	Downward to parking lot	500	Figure 6
KING	G-05	#2 Fuel Oil/Diesel	Garrahy/Wiley	Generator	Outside	Double Walled	Contained in interstitial space	500	Figure 3
KING	G-06	#2 Fuel Oil/Diesel	Tyler Hall	Generator	Outside	Double Walled	Contained in interstitial space	350	Figure 4
KING	G-07	#2 Fuel Oil/Diesel	Hope Commons	Generator	Outside	Double Walled	Contained in interstitial space	1000	Figure 7
KING	G-08	#2 Fuel Oil/Diesel	Center for Biotechnology & Life Sciences	Generator	Outside	Double Walled	Contained in interstitial space	2000	Figure 4
KING	G-09	#2 Fuel Oil/Diesel	Avedisian	Generator	Inside	Double Walled	Concrete & soil	150	Figure 4
KING	G-10	#2 Fuel Oil/Diesel	Hillside Residence Hall	Generator	Outside	Double Walled	Contained in interstitial space	693	Figure 10
KING	G-11	#2 Fuel Oil/Diesel	Memorial Union	Generator	Outside	Double Walled	Contained in interstitial space	1530	Figure 7
KING	G-14	#2 Fuel Oil/Diesel	Butterfield Hall	Generator	Outside	Double Walled	Contained in interstitial space	1036	Figure 7
KING	G-15	#2 Fuel Oil/Diesel	Beaupre Center	Generator	Inside	Double Walled	Contained in interstitial space	150	Figure 4
KING	G-16	#2 Fuel Oil/Diesel	White Hall	Generator	Outside	Double Walled	Containment Room	415	Figure 4
KING	G-17	#2 Fuel Oil/Diesel	Ranger Hall	Generator	Outside	Double Walled	Concrete	140	Figure 7
KING	G-18	#2 Fuel Oil/Diesel	Anna Fascitelli Fitness & Wellness Center	Generator	Outside	Double Walled	Contained in interstitial space	80	
KING	G-21	#2 Fuel Oil/Diesel	Barlow/Weldin	Generator	Outside	Double Walled	Contained in interstitial space	408	Figure 10
KING	G-22	#2 Fuel Oil/Diesel	Butterfield Hall	Generator	Outside	Double Walled	Downhill	408	Figure 7
KING	G-23	#2 Fuel Oil/Diesel	Browning Hall	Generator	Outside	Double Walled	Downward to parking lot	389	Figure 6
KING	G-24	#2 Fuel Oil/Diesel	Coastal Institute	Generator	Outside	Double Walled	Radial Direction	300	Figure 4
KING	G-25	#2 Fuel Oil/Diesel	Fogarty Hall	Generator	Outside	Double Walled	Contained in interstitial space	196	Figure 11
KING	G-26	#2 Fuel Oil/Diesel	Boss Ice Rink	Generator	Outside	Double Walled	Concrete	227	Figure 9
KING	G-27	#2 Fuel Oil/Diesel	Tootell Hall	Generator	Outside	Double Walled	Contained in interstitial space	200	Figure 6
KING	G-32	#2 Fuel Oil/Diesel	Sherman Building	Generator	Outside	Double Walled	General Containment	415	Figure 3
KING	G-33	#2 Fuel Oil/Diesel	210 Flagg Road - Surge Building	Generator	Outside	Double Walled	General Containment	765	Figure 3
KING	G-34	#2 Fuel Oil/Diesel	EMS Building	Generator	Outside	Double Walled	General Containment	415	Figure 3
KING	G-35	#2 Fuel Oil/Diesel	University Police	Generator	Outside	Double Walled	General Containment	237	Figure 8
KING	G-37	#2 Fuel Oil/Diesel	Brookside Hall	Generator	Outside	Double Walled	Contained in interstitial space	1530	Figure 3
KING	G-38	#2 Fuel Oil/Diesel	Brookside Hall	Generator	Outside	Double Walled	Contained in interstitial space	332	Figure 3
KING	G-39	#2 Fuel Oil/Diesel	Burnside Hall	Generator	Outside	Double Walled	Contained in interstitial space	142	Figure 6
KING	G-40	#2 Fuel Oil/Diesel	Coddington Hall	Generator	Outside	Double Walled	Contained in interstitial space	142	Figure 6
KING	G-41	#2 Fuel Oil/Diesel	Fayerweather Hall	Generator	Outside	Double Walled	Contained within soil	316	Figure 6
KING	G-42	#2 Fuel Oil/Diesel	Fascitelli Engineering Building	Generator	Outside	Double Walled	General Containment	350	Figure 4
KING	G-43	#2 Fuel Oil/Diesel	Avedisian	Generator	Outside	Double Walled	Concrete & soil	130	Figure 4
KING	G-44	#2 Fuel Oil/Diesel	Keaney Hall	Generator	Inside	concrete floor and walls	Contained inside. Flow to outdoors. No swales or draina	275	Figure 6
KING	G-45	#2 Fuel Oil/Diesel	Hazardous Waste Storage Facility	Generator	Outside	Double Walled	General Containment	65	Figure 5
KING	G-46	#2 Fuel Oil/Diesel	East Farm - Aquaculture	Generator	Outside	Double Walled	Contained in interstitial space	475	Figure 14
KING	G-47	#2 Fuel Oil/Diesel	East Farm - Aquaculture	Generator	Outside	Double Walled	Contained in interstitial space	300	Figure 14
KING	G-48	#2 Fuel Oil/Diesel	Ballentine Hall	Generator	Outside	Double Walled	Contained in interstitial space	500	Figure 4
KING	G-49	#2 Fuel Oil/Diesel	Greenhouses	Generator	Outside	Double Walled	Contained in interstitial space	285	
KING	T-02	Transformer oil	East Hall	Transformer	Inside	Pad Mounted	Contained in interstitial space	225	Figure 7
KING	T-03	Transformer oil	210 Flagg Road - Surge Building	Transformer	Outside	Pad Mounted	Concrete	198	Figure 3
KING	T-04	Transformer oil	Dining Warehouse	Transformer	Outside	Pad Mounted	Concrete	163	Figure 3
KING	T-05	Transformer oil	Carlotti Hall	Transformer	Outside	Pad Mounted	Contained with concrete curb & gravel	410	Figure 7
KING	T-06	Transformer oil	Davis Hall	Transformer	Outside	Pad Mounted	Radial direction: soil/gravel	119	Figure 7
KING	T-08	Transformer oil	Bliss Hall	Transformer	Outside	Pad Mounted	Concrete/asphalt	200	Figure 4
KING	T-09	Transformer oil	Browning Hall	Transformer	Outside	Pad Mounted	Contained with concrete curb & gravel	423	Figure 6
KING	T-10	Transformer oil	Roosevelt Hall	Transformer	Outside	Pad Mounted	Contained with concrete curb & gravel	200	Figure 7
KING	T-12	Transformer oil	Kirk Hall	Transformer	Outside	Pad Mounted	Radial direction: soil	163	Figure 4
KING	T-13	Transformer oil	Carothers Library	Transformer	Outside	Pad Mounted	General Containment	415	Figure 4
KING	T-14	Transformer oil	Carothers Library	Transformer	Outside	Pad Mounted	General Containment	377	Figure 4

Campus	ID #	Contents	Location	AST/UST	Inside/Outside	Secondary Containment	Direction of Flow	Capacity (gals)	Drawing Reference
KING	T-16	Transformer oil	Kirk Hall	Transformer	Outside	Pad Mounted	Radial direction: soil	440	Figure 4
KING	T-18	Transformer oil	Bressler Hall	Transformer	Outside	Pad Mounted	With gravel & concrete	507	Figure 7
KING	T-19	Transformer oil	Edwards Hall	Transformer	Outside	Pad Mounted	Radial direction: soil	200	Figure 7
KING	T-20	Transformer oil	Fogarty Hall	Transformer	Outside	Pad Mounted	Radial direction: soil	200	Figure 11
KING	T-22	Transformer oil	Swan Hall	Transformer	Outside	Pad Mounted	Concrete	380	Figure 7
KING	T-23	Transformer oil	Pastore Hall	Transformer	Outside	Pad Mounted	General Containment	170	Figure 7
KING	T-24	Transformer oil	Pastore Hall	Transformer	Outside	Pad Mounted	General Containment	126	Figure 7
KING	T-25	Transformer oil	President's House	Transformer	Outside	Pad Mounted	General Containment	200	Figure 11
KING	T-27	Transformer oil	Ballentine Hall	Transformer	Outside	Pad Mounted	With concrete dike wall and gravel	200	Figure 4
KING	T-28	Transformer oil	Social Sciences Research Center	Transformer	Outside	Pad Mounted	Contained in interstitial space	200	Figure 4
KING	T-29	Transformer oil	Lippit Steam Plant	Transformer	Outside	Pad Mounted	Soil: into storm drain	200	Figure 4
KING	T-31	Transformer oil	University Club	Transformer	Outside	Pad Mounted concrete curb & gravel	With concrete curb & gravel	110	Figure 5
KING	T-32	Transformer oil	Woodward Hall	Transformer	Outside	Pad Mounted	To concrete then storm drain within 50 ft	200	Figure 4
KING	T-33	Transformer oil	Fine Arts	Transformer	Outside	Pad Mounted gravel	Radial direction: gravel	260	Figure 5
KING	T-34	Transformer oil	Greenhouses	Transformer	Outside	Pad Mounted soil	Radial direction: gravel	200	Figure 4
KING	T-35	Transformer oil	Rodman Hall	Transformer	Outside	Pad Mounted	To soil & then concrete	200	Figure 4
KING	T-36	Transformer oil	Tyler Hall	Transformer	Outside	Pad Mounted	Radial Direction: Soil	200	Figure 4
KING	T-39	FR3 Envirotemp	White Hall	Transformer	Outside	Pad Mounted	To asphalt	450	Figure 4
KING	T-40	Transformer oil	Anna Fascitelli Fitness & Wellness Center	Transformer	Outside	Pad Mounted	With concrete curb & gravel	263	Figure 6
KING	T-41	Transformer oil	Potter Health	Transformer	Outside	Pad Mounted	Contained within soil	160	Figure 6
KING	T-42	Transformer oil	Keaney/Mackal	Transformer	Outside	Pad Mounted	Along roadway. No storm drain nearby	200	Figure 6
KING	T-43	Transformer oil	Tootell Hall	Transformer	Outside	Pad Mounted	Radial direction: storm drain within 50 feet	150	Figure 6
KING	T-44	FR3 Envirotemp	Butterfield Hall	Transformer	Outside	Pad Mounted	With curb & gravel	226	Figure 7
KING	T-45	Transformer oil	Barlow Hall	Transformer	Outside	Pad Mounted	Contained with concrete curb & gravel	444	Figure 10
KING	T-46	Transformer oil	Weldin Hall	Transformer	Outside	Pad Mounted	Contained with concrete curb & gravel	352	Figure 10
KING	T-47	Transformer oil	University Graduate Village Apartments A	Transformer	Outside	Pad Mounted soil	Radial direction: soil	100	Figure 13
KING	T-48	Transformer oil	University Graduate Village Apartments B & C	Transformer	Outside	Pad Mounted soil	Radial direction: soil	100	Figure 13
KING	T-49	Transformer oil	University Graduate Village Apartments D	Transformer	Outside	Pad Mounted soil	Radial direction: soil	100	Figure 13
KING	T-50	Transformer oil	University Graduate Village Apartments E	Transformer	Outside	Pad Mounted soil	Radial direction: soil	100	Figure 13
KING	T-51	Transformer oil	University Graduate Village Apartments F	Transformer	Outside	Pad Mounted soil	Radial direction: soil	100	Figure 13
KING	T-52	Transformer oil	University Graduate Village Apartments G	Transformer	Outside	Pad Mounted soil	Radial direction: soil	100	Figure 13
KING	T-53	Transformer oil	30 Acre Well House	Transformer	Outside	Pad Mounted	Contaiend with conrete	200	Figure 2
KING	T-54	Transformer oil	Central Lab Animal Facility	Transformer	Outside	Pad Mounted	Contained with curb & gravel	175	Figure 15
KING	T-56	Transformer oil	Boss Ice Rink	Transformer	Outside	Concrete pad and gravel	Radial: contaiend within gravel	653	Figure 9
KING	T-57	Mineral oil	Soccer Field	Transformer	Outside	Pad Mounted	General Containment	158	Figure 6
KING	T-58	Transformer oil	Multicultural Student Center	Transformer	Outside	Pad Mounted	Contained within soil	200	Figure 7
KING	T-59	Transformer oil	Morrill Hall	Transformer	Outside	Pad Mounted	General Containment	500	Figure 7
KING	T-60	FR3 Envirotemp	Hope Commons	Transformer	Outside	Pad Mounted	Contained with soil	480	Figure 7
KING	T-61	Mineral oil	Aldrich Hall	Transformer	Outside	Pad Mounted	General Containment	206	Figure 6
KING	T-62	FR3 Envirotemp	Merrow/Tucker	Transformer	Outside	Pad Mounted	Contained within soil	240	Figure 4
KING	T-63	Mineral oil	Burnside Hall	Transformer	Outside	Pad Mounted	General Containment	236	Figure 6
KING	T-64	FR3 Envirotemp	Peck/Hutchinson	Transformer	Outside	Concrete pad and soil	Contained within soil	240	Figure 7
KING	T-65	Transformer oil	Plains and Flagg Parking Lot	Transformer	Outside	Concrete pad and soil	Contaiend within soil	180	Figure 3
KING	T-66	FR3 Envirotemp	Garrahy Hall	Transformer	Outside	Concrete pad and soil	Contaiend within soil	503	Figure 3
KING	T-67	FR3 Envirotemp	Wiley Hall	Transformer	Outside	Concrete pad and soil	Contaiend within soil	472	Figure 3
KING	T-68	FR3 Envirotemp	Eddy Hall	Transformer	Outside	Concrete pad and soil	Contained within soil	428	Figure 6
KING	T-69	Mineral oil	Fayerweather/Gorham	Transformer	Outside	Pad Mounted	Contained within soil	461	Figure 6
KING	T-70	Mineral oil	Hopkins Hall	Transformer	Outside	Pad Mounted	Contained within interstitial space	275	Figure 6
KING	T-71	Mineral oil	Ellery Hall	Transformer	Outside	Pad Mounted	General Containment	224	Figure 6
KING	T-72	Transformer oil	Taft Hall	Transformer	Outside	Pad Mounted	General Containment	55	Figure 4
KING	T-73	Transformer oil	Hillside Residence Hall	Transformer	Outside	Pad Mounted	General Containment	400	Figure 10

Campus	ID #	Contents	Location	AST/UST	Inside/Outside	Secondary Containment	Direction of Flow	Capacity (gals)	Drawing Reference
KING	T-74	Transformer oil	Kirk Hall	Transformer	Outside	Pad Mounted	General Containment	300	Figure 4
KING	T-75	Transformer oil	Peckham Farm	Transformer	Outside	Pad Mounted	General Containment	200	Figure 15
KING	T-77	Mineral oil	Center for Biotechnology & Life Sciences	Transformer	Outside	Pad Mounted	Radial Direction	471	Figure 4
KING	T-78	FR3 Envirotemp	Coastal Institute	Transformer	Outside	Pad Mounted	Contained in soil	55	Figure 4
KING	T-79	Mineral oil	Coddington Hall	Transformer	Outside	Pad Mounted	Conained in interstitial space	336	Figure 6
KING	T-80	FR3 Envirotemp	30 Acre Well House	Transformer	Outside	Pad Mounted	General Containment	200	Figure 2
KING	T-81	Mineral oil	EMS Station	Transformer	Outside	Pad Mounted	Contained in interstitial sapce	200	Figure 3
KING	T-82	Mineral oil	Ranger Hall	Transformer	Inside	Pole Mount	General Containment	202	Figure 7
KING	T-86	Mineral oil	Ranger Hall	Transformer	Outside	Pole Mount	General Containment	254	Figure 7
KING	T-87	FR3 Envirotemp	Beaupre Center	Transformer	Outside	Pad Mounted	General Containment	628	Figure 4
KING	T-89	Mineral oil	Softball Field	Transformer	Outside	Pole Mount	General Containment	56	Figure 2
KING	T-100	FR3 Envirotemp	Substation 1A and 2A - Butterfield Road and West Alumni Ave.	Transformer	Outside	Pad Mounted	General Containment	403	Figure 3
KING	T-101	FR3 Envirotemp	Substation 2A - Butterfield Road and West Alumni Avenue	Transformer	Outside	Pad Mounted	Includes transformer T-2 (1110 gal), switch T-2A (279),	2596	Figure 3
KING	T-101	FR3 Envirotemp	Substation 1A - Butterfield Road and Alumni Avenue	Transformer	Outside	Pad Mounted	Includes transformer T-2 (1110 gal), switch T-2A (279),	2596	Figure 3
KING	T-102	Transformer oil	Substation 3 - west Alumni Avenue and Tootell Road	Transformer	Outside	Pad Mounted	Includes transformer T-2 (1110 gal), switch T-2A (279), regul	1399	Figure 3
KING	T-104	FR3 Envirotemp	Substation 4 - Flagg Road and Butterfield Road	Transformer	Outside	Pad Mounted	Includes transformer T-2 (1110 gal), switch T-2A (279),	2596	Figure 3
KING	T-105	FR3 Envirotemp	Substation 5 - Flagg Road and Butterfield Road	Transformer	Outside	Pad Mounted	General Containment	2596	Figure 3
KING	T-106	Mineral oil	Fascitelli Center of Advanced Engineering	Transformer	Outside	Pad Mounted	Contained with concrete curb & gravel	696	Figure 4
KING	T-108	Mineral oil	Dorr Hall	Transformer	Inside	Pad Mounted	Conained in interstitial space	229	Figure 6
KING	T-109	Mineral oil	30 Acre Well House	Transformer	Outside	Pole Mount	Downward	160	Figure 2
KING	T-110	Mineral oil	30 Acre Well House	Transformer	Outside	Pole Mount	Downward	134	Figure 2
KING	T-116	Transformer oil	Brookside Hall	Transformer	Outside	Pad Mounted	Contained in interstitial space	542	Figure 3
KING	T-122	Transformer oil	Fuel Station	Transformer	Outside	Pad Mounted	General Containment	56	Figure 3
KING	T-126	Mineral oil	Fine Arts	Transformer	Outside	Pad Mounted	General Containment	260	Figure 5
KING	T-127	Mineral oil	Hazardous Waste Storage Facility	Transformer	Outside	Pole Mount	Downward	75	Figure 5
KING	T-128	Mineral oil	East Farm - Aquaculture	Transformer	Outside	Pad Mounted	Contained in soil	300	Figure 14
KING	UGT-01	Grease	Butterfield Hall	UST	Outside	concrete floor and walls	Contained in interstitial space	1208	Figure 7
KING	UGT-03	Grease	Memorial Union	UST	Outside	concrete floor and walls	Contained in interstitial space	1500	Figure 7
KING	UGT-04	Grease	Ryan Convocation Center	UST	Outside	concrete floor and walls	Contained in interstitial space	1000	Figure 6
KING	UGT-05	Grease	Hope Commons	UST	Outside	concrete floor and walls	Contained in interstitial space	10,000	Figure 7
KING	UST-02	Gasoline	Automotive Garage - Fuel Depot	UST	Outside	double walled	Owned & Operated by RI DOA/DOT	12000	Figure 3
KING	UST-03	#2 Fuel Oil/Diesel	Automotive Garage - Fuel Depot	UST	Outside	double walled	Owned & Operated by RI DOA/DOT	12000	Figure 3
NBC	A-01	#2 Fuel Oil/Diesel	Water Pumping Station	AST	Outside	Double walled	Contained in interstitial sapce	1,000	Figure 16
NBC	A-03	Waste Oil	Sea Water Pump House	AST	Outside	Double walled	Contained in spill pallet (2 x 55)	110	Figure 16
NBC	A-04	Lube Oil	Maintenance	AST	Inside	spill pallet	Contained in spill pallet (2 x 55)	110	Figure 16
NBC	A-05	Hydraulic oil	Shipping and Receiving	AST	Outside	spill pallet	Contained in spill pallet (3 x 55)	165	Figure 16
NBC	A-06	Waste Oil	Marine Logistics Building	AST	Inside	spill pallet	Contained in interstitial space	337	Figure 16
NBC	E-01	Hydraulic oil	Horn	Elevator	Inside	concrete floor and walls	Contained in interstitial space	150	Figure 16
NBC	E-03	Hydraulic oil	Center for Atmospheric Chemisty Studies	Elevator	Inside	concrete floor and walls	Contained in interstitial space	150	Figure 16
NBC	E-04	Hydraulic oil	Watkins	Elevator	Inside	concrete floor and walls	Contained in interstitial space	80	Figure 16
NBC	E-05	Hydraulic oil	Coastal Institute	Elevator	Inside	concrete floor and walls	Contained in interstitial space	150	Figure 16
NBC	E-06	Hydraulic oil	Ocean Science & Exploration Center	Elevator	Inside	concrete floor and walls	Contained in interstitial space	120	Figure 16
NBC	G-01	#2 Fuel Oil/Diesel	Coastal Institute	Generator	Outside	double walled	Contained in interstitial sapce	265	Figure 16
NBC	G-02	#2 Fuel Oil/Diesel	Aquaculture Building	Generator	Outside	double walled	Contained in interstitial sapce	693	Figure 16
NBC	G-03	#2 Fuel Oil/Diesel	Sea Water Pump House	Generator	Outside	steel contaiment basin	Contained in secondary containment basin	250	Figure 16
NBC	G-04	#2 Fuel Oil/Diesel	Ocean Science & Exploration Center	Generator	Outside	double walled	Contained in interstitial sapce	649	Figure 16
NBC	G-05	#2 Fuel Oil/Diesel	Kohler	Generator	Outside	double walled	On a mounted portable trailer	77	Figure 16
NBC	G-06	#2 Fuel Oil/Diesel	Cummins/Owens	Generator	Outside	double walled	Pad Mounted	30	Figure 16
WAJ	A-01	#2 Fuel Oil/Diesel	Whispering Pines Main Lodge	AST	Outside	double walled	Contained in interstitial space. Note: storm water trench	1000	Figure 17
WAJ	A-02	#2 Fuel Oil/Diesel	Main Office Building	AST	Inside	double walled	Contained in interstitial space	275	Figure 17

Campus	ID #	Contents	Location	AST/UST	Inside/Outside	Secondary Containment	Direction of Flow	Capacity (gals)	Drawing Reference
WAJ	A-03	#2 Fuel Oil/Diesel	Blacksmith's House	AST	Inside	double walled	Contained in interstitial space	275	Figure 17
WAJ	A-04	#2 Fuel Oil/Diesel	Whispering Pines	AST	Outside	double walled	Contained in interstitial space	600	Figure 17
WAJ	A-05	#2 Fuel Oil/Diesel	Environmental Education Center	AST	Inside	double walled	Contained in interstitial space	550	Figure 17
WAJ	A-06	#2 Fuel Oil/Diesel	Herdmans's House	AST	Inside	double walled	Contained in interstitial space	275	Figure 17
WAJ	A-07	#2 Fuel Oil/Diesel	Mouse House	AST	Outside	double walled	Contained in interstitial space	600	Figure 17
WAJ	A-08	Gasoline	Nature Coop	AST	Outside	double walled	Contained in interstitial space. Inspect interstitial space	1000	Figure 17
WAJ	A-09	Hydraulic oil	Machinery Barn	AST	Inside	double walled	Spill Pallet - Workout W side of barn (holds fuel for farm	55	Figure 17
WAJ	A-10	Cooking Oil	Machinery Barn	AST	Inside	double walled	Spill Pallet		Figure 17
WAJ	A-13	Cooking Oil	Whispering Pines	AST	Outside	double walled	Contained in interstitial space	150	Figure 17
WAJ		#2 Fuel Oil/Diesel	Caretaker's House	AST	Outside	double walled	Contained in interstitial space	600	Figure 17
WAJ	E-01	Hydraulic oil	Sycamore House	Elevator	Inside	concrete floor and walls with diked threshold	Contained in interstitial space	55	Figure 17
WAJ	G-05	#2 Fuel Oil/Diesel	Water Pumping station	Generator	Outside	double walled	Pad Mounted	137	Figure 17
WAJ	T-01	Mineral oil	Sycamore House	Transformer	Outside	concrete pad soil	Contained in interstitial space	120	Figure 17
WAJ	UGT-01	grease	Whispering Pines	UST	Outside	none - septic tank	Contained in interstitial space	1000	Figure 17
WAJ	UGT-02	grease	Machinery Barn	UST	Outside	none - septic tank	Contained in interstitial space	4000	Figure 17

Appendix C – Applicability of Substantial Harm Criteria

APPLICABILITY OF THE
SUBSTANTIAL HARM CRITERIA CHECKLIST

Facility Name: University of Rhode Island
Facility Address: South Ferry Road, Narragansett, RI

1. Does the facility transfer oil over water to or from vessels and does the facility have a total oil storage capacity greater than or equal to 42,000 gallons?

   Yes:_____ No:___X___

2. Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and does the facility lack secondary containment that is sufficiently large to contain the capacity of the largest aboveground oil storage tank plus sufficient freeboard to allow for precipitation within any aboveground oil storage tank area?

   Yes:_____ No:___X___

3. Does the facility have a total oil storage capacity greater than or equal to one million gallons and is the facility located at a distance such that a discharge from the facility could cause injury to fish, wildlife, and sensitive environments.

   Yes:_____ No:___X___

4. Does the facility have a total oil storage capacity of greater than or equal to 1 million gallons and is the facility located at a distance such that a discharge from the facility would shut down a public drinking water intake?

   Yes:_____ No:___X___

5. Does the facility have a total oil storage capacity greater than or equal to one million gallons and has the facility experienced a reportable oil spill in an amount greater than or equal to 10,000 gallons within the last five years?

   Yes:_____ No:___X___

APPLICABILITY OF THE
SUBSTANTIAL HARM CRITERIA CHECKLIST

Facility Name: Heritage Valley Sewickley Hospital
Facility Address: 720 Blackburn Road, Sewickley, PA 15143

1. Does the facility transfer oil over water to or from vessels and does the facility have a total oil storage capacity greater than or equal to 42,000 gallons?

Yes:_____ No:___X___

2. Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and does the facility lack secondary containment that is sufficiently large to contain the capacity of the largest aboveground oil storage tank plus sufficient freeboard to allow for precipitation within any aboveground oil storage tank area?

Yes:_____ No:___X___

3. Does the facility have a total oil storage capacity greater than or equal to one million gallons and is the facility located at a distance such that a discharge from the facility could cause injury to fish, wildlife, and sensitive environments.

Yes:_____ No:___X___

4. Does the facility have a total oil storage capacity of greater than or equal to 1 million gallons and is the facility located at a distance such that a discharge from the facility would shut down a public drinking water intake?

Yes:_____ No:___X___

5. Does the facility have a total oil storage capacity greater than or equal to one million gallons and has the facility experienced a reportable oil spill in an amount greater than or equal to 10,000 gallons within the last five years?

Yes:_____ No:___X___

APPLICABILITY OF THE
SUBSTANTIAL HARM CRITERIA CHECKLIST

Facility Name: University of Rhode Island
Facility Address: Route 138, South Kingston, RI

1. Does the facility transfer oil over water to or from vessels and does the facility have a total oil storage capacity greater than or equal to 42,000 gallons?

Yes:_____ No:___X___

2. Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and does the facility lack secondary containment that is sufficiently large to contain the capacity of the largest aboveground oil storage tank plus sufficient freeboard to allow for precipitation within any aboveground oil storage tank area?

Yes:_____ No:___X___

3. Does the facility have a total oil storage capacity greater than or equal to one million gallons and is the facility located at a distance such that a discharge from the facility could cause injury to fish, wildlife, and sensitive environments.

Yes:_____ No:___X___

4. Does the facility have a total oil storage capacity of greater than or equal to 1 million gallons and is the facility located at a distance such that a discharge from the facility would shut down a public drinking water intake?

Yes:_____ No:___X___

5. Does the facility have a total oil storage capacity greater than or equal to one million gallons and has the facility experienced a reportable oil spill in an amount greater than or equal to 10,000 gallons within the last five years?

Yes:_____ No:___X___

APPLICABILITY OF THE
SUBSTANTIAL HARM CRITERIA CHECKLIST

Facility Name: University of Rhode Island
Facility Address: 401 Victory Highway, West Greenwich RI

1. Does the facility transfer oil over water to or from vessels and does the facility have a total oil storage capacity greater than or equal to 42,000 gallons?

Yes:_____ No:___X___

2. Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and does the facility lack secondary containment that is sufficiently large to contain the capacity of the largest aboveground oil storage tank plus sufficient freeboard to allow for precipitation within any aboveground oil storage tank area?

Yes:_____ No:___X___

3. Does the facility have a total oil storage capacity greater than or equal to one million gallons and is the facility located at a distance such that a discharge from the facility could cause injury to fish, wildlife, and sensitive environments.

Yes:_____ No:___X___

4. Does the facility have a total oil storage capacity of greater than or equal to 1 million gallons and is the facility located at a distance such that a discharge from the facility would shut down a public drinking water intake?

Yes:_____ No:___X___

5. Does the facility have a total oil storage capacity greater than or equal to one million gallons and has the facility experienced a reportable oil spill in an amount greater than or equal to 10,000 gallons within the last five years?

Yes:_____ No:___X___

Appendix D – AST and Piping Inspection Checklist

MONTHLY FUEL TANK INSPECTION REPORT

CAMPUS: ***KINGSTON***

TANK ID NO., LOCATION AND SIZE:

MONTHLY INSPECTIONS	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER
INSPECTION ITEMS												
EXTERIOR OF TANK												
PIPES												
VALVES												
GAUGES												
FILTERS												
CIRCULATOR PUMP												
CATHODIC PROTECTION												
SIGNS OF WEAR												
CRACKS												
WEAR												
CORROSION												
EXCESSIVE SETTLEMENT OF STRUCTURE												
CONDITION OF TANK INSULATION												
EQUIPMENT GAGES												
FOUNDATION AND SUPPORT STRUCTURE												
MARKINGS LEGIBLE AND VISIBLE												
REPAIRS REQUIRED												
WORK ORDERS FOR REPAIRS SUBMITTED												
CORRECTIVE ACTION TAKEN												
REPAIRS MADE AND WHEN COMPLETED												
MONITORING OF GROUND WATER												
ATTACH NOTES IF NECESSARY												
TANK CLOSURE												
TEMPORARY OR PERMANENT (DATE)												
SIGNATURE AND ADDRESS OF INSPECTOR												
DATE OF INSPECTION												

Appendix E – RIDEM Hazardous Material Release Notification Form

Office of Land Revitalization & Sustainable Materials Management
Site Remediation Section

HAZARDOUS MATERIAL RELEASE NOTIFICATION FORM

THIS FORM IS NOT TO BE USED TO REPORT AN IMMINENT HAZARD

1. Notifier Information:

Name:

Address:

Phone:

Email:

Status: ☐ Environmental Professional ☐ Secured Creditor
☐ Owner ☐ Voluntary
☐ Operator

If Environmental Professional is selected, please supply the follow information for your client below:

Name:

Address:

Phone:

Email:

Status: ☐ Owner ☐ Secured Creditor
☐ Operator ☐ Voluntary

2. Property Information:

Name of Site:

Site Address:

Plat/Lot Numbers:

Approximate Acreage of Property:

Latitude/Longitude:

Site Land Usage Type: ☐ Residential ☐ Industrial/Commercial

Location of Release (Attach site sketch as necessary):

3. Release Information:

Date of Discovery:

Source:

Release Media:

Hazardous Materials and Concentrations (Attach certificates of analysis as necessary):

Extent of Contamination:

Approximate acreage of Contaminated Area:

4. Resource Information:

Site Land Usage: ☐ Industrial/Commercial ☐ Residential

Adjacent Land Usage: ☐ Industrial/Commercial ☐ Residential

Site Groundwater Class: ☐ GA/GAA ☐ GB

Adjacent Groundwater Class: ☐ GA/GAA ☐ GB
(if different than site groundwater classification within 500 feet)

Nearest Surface Water or Wetland: ☐ Less Than 500 Feet ☐ Greater Than 500 Feet

Potential for adverse impact? ☐ Yes ☐ No

5. Potentially Responsible Parties:

Name:

Address:

Status: ☐ Owner ☐ Operator ☐ Other:

Name:

Address:

Status: ☐ Owner ☐ Operator ☐ Other:

6. Measures taken or proposed to be taken in response to Release:

Check all that apply: ☐ Site Investigation ☐ Short-Term/Emergency
☐ EXPRESS Policy ☐ Dig & Haul Policy

7. Other significant remarks about Release (Will a background determination be made?)

Signature: _____ **Date:** _____

Title: _____

Appendix F – Regulatory Cross Reference

SPCC Plan – Regulatory Cross Reference

TRIUMVIRATE ENVIRONMENTAL

Regulatory Citation	Requirement	SPCC Plan Section
112.3(a)	Initial Plan preparation	Section 1.3
112.3(d)	Certified by a registered PE	Section 1.2
112.3(e)(1)	Plan location	Section 1.1
112.4	Spill history and response	Section 2.3
112.5	Plan amendments	Section 1.3
112.7 General Requirements	Management approval	Section 1.5
	Plan follows sequence or includes a cross-reference	Table of Contents and Appendix F
	Facilities, procedures, methods or equipment that are not yet fully operational	Section 3.2
112.7(a)(2)	Reasons for plan deviations, alternative measures and equivalent environmental protection	Sections 1.4, 6.4, and 6.5
112.7(a)(3)	Describes physical layout and includes a diagram	Section 2.0 and Appendix A
112.7(a)(3)(i)	Types of oil and storage capacities for fixed and mobile or portable containers	Section 3.2 and Appendix B
112.7(a)(3)(ii)	Discharge prevention measures	Sections 3.0 and 8.0
112.7(a)(3)(iii)	Discharge or drainage controls	Section 3.0 and 5.0
112.7(a)(3)(iv)	Countermeasures for discharge discovery, response and cleanup	Section 3.0
112.7(a)(3)(v)	Methods of disposal of recovered materials	Section 3.3.6
112.7(a)(3)(vi)	Contact lists and phone numbers	Section 12.2
112.7(a)(4)	Information and procedures for oil discharge reporting	Section 12.0
112.7(a)(5)	Plan organized so response procedures are readily usable	Refer to Table of Contents, Section 12.0
112.7(b)	Prediction of direction, rate of flow, and total quantity of oil where reasonable potential for equipment failure	Section 4.0 and Appendix B
112.7(c)	Appropriate containment and/or diversionary structures or equipment are provided to prevent a discharge; identify which are present	Appendix B
112.7(d)	Where secondary containment is impracticable	Not Applicable
112.7(e)	Inspections and tests and records signed by inspector	Section 9.0
112.7(f)(1)	Training of oil-handling personnel	Section 11.0
112.7(f)(2)	Person designated as accountable	Section 11.0

SPCC Plan – Regulatory Cross Reference

Regulatory Citation	Requirement	SPCC Plan Section
112.7(f)(3)	Discharge prevention briefings conducted at least 1/year for oil handling personnel	Section 11.0
112.7(g)	Descriptions of security- access, out of service pipes and loading racks, lighting	Section 10.0
112.7(h)	Tank car and tanks truck loading racks present	Section 8.0
112.7(h)(1)	Loading rack containment system	Not Applicable
112.7(h)(2)	Loading rack - Interlocked warning light or physical barriers, warning signs, brake systems	Not Applicable
112.7(h)(3)	Loading rack – inspection of drains and outlets on tankers prior to filling and departure	Not Applicable
112.7(i)	Brittle fracture evaluation of field constructed aboveground containers	Not Applicable
112.7(j)	Conformance with applicable, more stringent state rules and regulations	Section 12.4
112.7(k)	Qualified oil-filled operational equipment present at the facility – secondary containment/alternative measures	Section 3.3
112.8(b) Facility Drainage		
112.8(b)(1)	Drainage from diked storage areas restrained by valves or manually activated pumps	Not Applicable
112.8(b)(2)	Diked storage drain valves are manual, open-and-closed design; retained storm water is inspected before discharged	Not Applicable
112.8(b)(3)	Undiked area drainage flow receptors (ponds, catchment basins, or returned), and located away from flood areas	Not Applicable
112.8(b)(4)	If not engineered as 112.(b)(3) facility is equipped with a diversion system to retain the oil in the facility	Section 5.0
112.8(b)(5)	Continuous treatment of facility drainage waters	Section 5.0
112.8(c) Bulk Storage Containers		
112.8(c)(1)	Bulk storage containers are compatible with material stored	Section 6.1
112.8(c)(2)	Secondary containment for bulk storage containers	Section 6.2

SPCC Plan – Regulatory Cross Reference

Regulatory Citation	Requirement	SPCC Plan Section
112.8(c)(3)	Control of drainage of uncontaminated rainwater from diked areas	Not Applicable
112.8(c)(4)	Corrosion protection or leak testing of completely buried metal tanks installed after 1974	Section 6.3
112.8(c)(5)	Buried section of partially buried tanks protected from corrosion or cathodic protection	Section 6.3
112.8(c)(6)	Integrity testing of aboveground containers, criteria and recordkeeping	Section 6.4
112.8(c)(7)	Control of leakage through heating coils	Section 6.0
112.8(c)(8)	Liquid level sensing controls	Section 6.5
112.8(c)(9)	Observation of treatment facilities effluent	Section 6.6
112.8(c)(10)	Prompt correction and removal of visible discharges of oil	Section 6.7
112.8(c)(11)	Secondary containment and positioning of mobile or portable containers	Section 6.7
112.8(d) Facility Transfer Operations		
112.8(d)(1)	Buried piping	Section 7.1
112.8(d)(2)	Piping connections at transfer points and out-of-service piping	Section 7.2
112.8(d)(3)	Pipe supports	Section 7.3
112.8(d)(4)	Inspections of aboveground valves, piping and appurtenances; testing on buried piping	Section 7.3
112.8(d)(5)	Vehicle warnings	Section 7.0
112.20(f)	Facility Response Plan applicability	Appendix C