# Spill Prevention Control and Countermeasures (SPCC) Plan

#### For:

University of Maryland
1101 Main Administration Building
7901 Regents Drive
College Park, MD 20742
(301) 405-1000

## **SPCC Plan Contact:**

University of Maryland,
Department of Environmental Safety, Sustainability & Risk

Jason Baer, Assistant Director Office of Environmental Affairs
Seneca Building
4716 Pontiac Street

College Park, MD 20742 (301) 405-3163 jbaer123@umd.edu

## **SPCC Plan Preparation Date:**

October 2019

## **Table of Contents**

1.0	INT	RODUCTION	1
2.0	REQ	QUIREMENTS OF THE SPCC PLAN	2
2.1		REPORTING	
2.2	S	SPILL HISTORY	6
2.3	C	CERTIFICATION OF SUBSTANTIAL HARM DETERMINATION	
2	.3.1	Applicability of Substantial Harm Criteria	7
2	.3.2	Certification	
2.4	/	REVIEW OF THE SPCC	
3.0		GENERAL SPCC PLAN REQUIREMENTS	
3.1	// L	LOCATION AND CAMPUS DESCRIPTION	11
3.2			12
3.3			13
3	.3.1		13
3	.3.2	Unde <mark>rground S</mark> torage Tanks ( <mark>UST</mark> s)	
3	.3.3	Port <mark>a</mark> ble <mark>Stora</mark> ge Tanks	
3	.3.4	Sma <mark>ll Quantit</mark> y Oil C <mark>ontainers (Drums)</mark>	14
3	.3.5	Oil-Filled Operating Equipment	14
3	.3.6	Oil Water Separators/Food Grease Interceptors	14
3.4		DISCHARGE PREVENTION MEASURES	16
3.5	S	SPILL EVENTS	17
3.6		POTENTIAL SPILL PREDICTIONS, VOLUMES, RATES, AND CONTROLS	21
3.7	A.A.		23
3.8	7.7		23
3.9			24
3.10	) T	FRAININGSITE SECURITY	25
3.11	l S	SITE SECURITY	25
3.12	2 T	TANK LOADING/UNLOADING	26
3.13		BRITTLE FRACTURE ANALYSIS	
3.14		ALTERNATIVE REQUIREMENTS FOR OIL-FILLED OPERATIONAL EQUIPMENT	
3.15		RECORDKEEPING	
4.0		C REQUIREMENTS FOR ON-SHORE FACILITIES	
4.1		CAMPUS DRAINAGE	
4.2	N	MATERIALS AND CONSTRUCTION	29

	Octob	JCI 2017
4.3	SECONDARY CONTAINMENT	29
4.4	CORROSION PROTECTION	30
4.5	TANK TESTING AND INSPECTIONS	30
4.6	TANK INSTALLATION FAIL-SAFE ENGINEERED	32
4.7	EFFLUENT MONITORING AND VISIBLE OIL LEAKS	32
4.8	MOBILE OR PORTABLE OIL STORAGE TANKS	32
4.9	BURIED AND OUT OF SERVICE PIPE	33
4.10	PIPE SUPPORTS DESIGN	33
4.11	ABOVEGROUND PIPING	34
5.0 SI	PILL PREVENTION CONTROL AND COUNTERMEASURE PLAN CERTIFICATION	N35
	PILL PREVENTION CONTROL AND COUNTERMEASURE PLAN MANAGEMENT	36
Tables	SPCC Log of Review and Technical Changes	
N /	Summary of All Fuel & Oil Storage at University of Maryland	1.0
	Classification of Discharges	
Table 4:	University of Maryland Contacts List	20
Table 5:	Off-Site Notification List	21

## **Cross Reference with SPCC Rule Provisions**

Citation	<b>Description</b> P	lan Section
§112.3(d)(1)	Professional Engineer Certification	Section 5.0
§112.4(a) and (d)	Reporting to Regional Administrator	Sections 2.1 and 2.4
§112.5(a) – (c)	Amendment of Plan and Management of Five-Year Review	Section 2.4, Table 1
§112.7	General requirements for SPCC Plans for all facilities and all oil types: discussion of facility's conformance with rule requirements; deviations from Plan requirements; facility characteristics that must be described in the Plan; spill reporting information in the Plan; emergency procedures; management approval; and regulatory cross-reference.	Throughout plan
§112.7	Management Approval	Section 6.0
§112.7(a)(1)	Discussion of facility's conformance	Section 3.0
§112.7(a)(2)	Deviations from rule	Section 3.0
§112.7(a)(3)	Facility description and diagram	Section 3.0, Figures 1-2
§112.7(a)(3)(i)	List type of oil and capacity	Section 3.3, Appendices C-F
§112.7(a)(3)(ii)	Discharge prevention measures	Section 3.4
§112.7(a)(3)(iii)	Drainage controls	Sections 3.4, 4.1, and 4.3
§112.7(a)(3)(iv)	Countermeasures	Section 3.5, Table - 5, Figure 3
§112.7(a)(3)(v)	Methods of disposal	Section 3.5
§112.7(a)(3)(vi)	Contact list	Sections 2.1 and 3.5, Tables 4-5
§112.7(a)(4)	Notification procedures	Sections 2.1 and 3.5, Tables 4-5
§112.7(a)(5)	Response plan	Section 3.5
§112.7(b)	Fault analysis	Section 3.6, Appendices C-F
§112.7(c)	Secondary containment	Section 3.7, Appendices C-F
§112.7(d)	Contingency planning	Section 3.8
§112.7(e)	Inspections, tests, and records	Sections 3.9 and 3.15

Citation	<b>Description</b> Plan	an Section
§112.7(f)(1)	Employee training and discharge prevention procedures	Sections 3.10 and 3.15
§112.7(f)(2)	Designated person	Section 3.2
§112.7(f)(3)	Annual briefings	Sections 3.10 and 3.15
§112.7(g)	Security (excluding oil production facilities) – Fencing, flow and valve security, starter control access, loading/unloading connection security	Section 3.11
§112.7(h)(1)	Loading/unloading (excluding offshore facilities) - secondary containment	N/A, Section 3.12
§112.7(h)(2)	Preventing vehicles from departing before disconnection	N/A, Section 3.12
§112.7(h)(3)	Inspection of bottom connections	N/A, Section 3.12
§112.7(i)	Brittle fracture evaluation requirements	Section 3.13
§112.7(j)	Conformance with state requirements	Sections 2.1, 3.9 and 3.15
§112.7(k)	Qualified oil-filled operational equipment	Sections 3.14 and 3.15
§112.7(k)(2)(ii)(A)	Oil Spill Contingency Plan	Section 3.14
§112.8(a)	General and specific requirements	Throughout plan
§112.8(b)(1)	Facility drainage - drainage from diked areas	Section 4.1
§112.8(b)(2)	Manual valves	Section 4.1
§112.8(b)(3)	Facility drainage system design	Section 4.1
§112.8(b)(4)	Diversion system	Section 4.1
§112.8(b)(5)	Treatment of drainage water	Section 4.1
§112.8(c)(1)	Bulk storage containers - compatible with stored contents	Section 4.2
§112.8(c)(2)	Secondary containment	Section 4.3, Appendices C-F
§112.8(c)(3)	Drainage of dike water	Sections 4.1 and 4.3
§112.8(c)(4)	Buried tanks	N/A, Section 4.4
§112.8(c)(5)	Partially buried or bunkered tanks	N/A, Section 4.4
§112.8(c)(6)	Aboveground tank integrity testing	Section 4.5
§112.8(c)(7)	Control discharges from heating coils	N/A, Section 4.5
§112.8(c)(8)	Overfill protection	Section 4.6
§112.8(c)(8)(v)	Level gauge inspection	Section 4.6
§112.8(c)(9)	Effluent treatment facilities	N/A, Section 4.7
§112.8(c)(10)	Visible discharges from tanks	Section 4.7
§112.8(c)(11)	Mobile or portable tanks	Section 4.8

Citation	Description	Plan Section
§112.8(d)(1)	Facility transfer operations, pumping, and facility process - cathodic protection and buried pipe inspection	Section 4.9
§112.8(d)(2)	Terminal connections	Section 4.9
§112.8(d)(3)	Piping supports	Section 4.10
§112.8(d)(4)	Aboveground piping inspection and leak testing of buried piping	Section 4.11
§112.8(d)(5)	Vehicle warnings	Section 4.11
§112.20(e)	Certification of Substantial Harm Determination	Section 2.3



## **University of Maryland SPCC**

## Figures and Appendices

#### **Figures**

- 1 Site Location Map
- 2 University of Maryland University Site Map
- 3 Response Action Flowchart
- 4 Table of Inspection Schedules from SP001

### **Appendices**

- A. Spill Reporting Forms & Procedures
- B. Spill History Reports
- C. Table of Aboveground Storage Tanks (ASTs)
- D. Table of Oil-Filled Operational Equipment (Hydraulic Elevators)
- E. Table of Oil-Filled Electrical Components (Transformers)
- F. Table of Transfer Area Fault Analysis
- G. Oil/Water Separator (OWS) SOP and Monthly Inspection Checklist
- H. Engineering Drawings for Oil Associated Piping and Oil/Water Separators
- I. Loading and Unloading Procedures
- J. Periodic Inspection Forms
- K. Annual Inspection Photos
- L. Training Materials
- M. Dike Drainage Instructions and Log

#### 1.0 INTRODUCTION

A Spill Prevention Control and Countermeasure (SPCC) Plan is required to be prepared and implemented to comply with U.S. Environmental Protection Agency (EPA) regulations of Title 40, Code of Federal Regulations, Part 112 (40 CFR 112) as well as the Code of Maryland Regulations (COMAR) 26.10.01.

Facilities are subject to SPCC regulations if: the total aboveground storage tank (AST) capacity exceeds 1,320 gallons or the underground storage tank (UST) capacity exceeds 42,000 gallons, AND the facility can be reasonably expected to discharge oil into or upon the navigable waters of the United States. [40 CFR 112.1] The University of Maryland meets the applicability criteria and has prepared a SPCC Plan accordingly.

The SPCC Plan is not required to be filed with EPA, but a copy must be available for onsite review by the Regional Administrator.

In addition, UMD maintains an Emergency Response and Contingency Plan and a Health and Safety Plan, which are stored onsite for review.

#### 2.0 REQUIREMENTS OF THE SPCC PLAN

[40 CFR 112.1 (e)] In order to comply with the federal regulations governing the implementation of this SPCC Plan, the University is required to:

- Review the SPCC Plan and update as necessary;
- Respond to a spill in accordance with the site-specific procedures as documented in this SPCC Plan;
- Notify the appropriate state and federal agencies in the event of a reportable spill;
- Perform regular inspections;
- Follow all procedures in place by the University for material handling and transfers;
- Train employees on aspects of this SPCC Plan; and
- Keep records of the previously described tasks.

The details of these requirements are discussed in this SPCC Plan.

#### 2.1 REPORTING

All oil spills are to be immediately reported to the Maryland Department of the Environment (MDE), but no later than two (2) hours after becoming aware of the spill (COMAR 26.10.01.03). Spill reporting procedures and the MDE Spill Report Form are included in Appendix A. The additional reporting requirements for EPA and the State of Maryland are covered in 40 CFR Part 110 – Discharge of Oil, 40 CFR Part 112 - Oil Pollution Prevention regulations (the SPCC requirements), and COMAR 26.10.01.03. The specific requirements for each of these are discussed in the following paragraphs.

[40 CFR 110.6] [40 CFR 112.7 (a) (4)] Regulation requires that any discharge to navigable waters that causes a film, sheen, or discoloration of the water surface or adjoining shorelines, or causes a sludge or emulsion to be deposited beneath the water

surface or upon adjoining shorelines be reported immediately to the National Response Center (NRC) at (800-424-8802). The NRC will then notify the EPA as necessary. The NRC will ask the following information regarding the discharge:

- Facility name, address, and phone number
- Date and time of discharge
- Location of incident
- Source and cause of discharge
- Types of material(s) discharged and estimated volume
- Damage, danger or threat posed by the discharge
- Description of all affected media
- Number and types of injuries (if any)
- Possibility of an evacuation
- Weather conditions at the incident location
- Actions being used to stop and/or mitigate the discharge
- Other parties contacted regarding the discharge
- Other information to help emergency personnel respond to the incident

[40 CFR 112.4 (a)] The discharge is also to be reported to the EPA Region III Regional Administrator within sixty (60) days only when either of the following occurs:

- The University discharges a harmful quantity of more than 1,000 gallons of oil into or upon the navigable waters of the United States or adjoining shorelines in a single event; or
- The University discharges a harmful quantity of more than 42 gallons of oil into or upon the navigable waters of the United States or adjoining

shorelines in two spill events within any 12-month period.

[40 CFR 110.3 (a)-(b)] A harmful quantity is defined by as a quantity that:

- 1. Exceeds applicable water quality standards, or
- Causes a film or sheen upon or discoloration of the surface of the water or adjoining shorelines or causes a sludge or emulsion to be deposited beneath the surface of the water or upon adjoining shorelines.

The report sent to EPA should contain, at a minimum, the following information:

- Name of facility
- Name(s) of facility owner or operator
- Location of facility
- Maximum storage or handling capacity of the facility and normal daily throughput
- Description of facility, including maps, flow diagrams, and topographical map
- The cause(s) of the spill(s), including a failure analysis of system or subsystem in which failure occurred
- Corrective actions and/or countermeasures taken
- Description of equipment repairs and replacements made
- Additional preventive measures taken or contemplated to minimize the possibility of recurrence
- Any other pertinent information as requested by EPA

[COMAR 26.10.01.03] A report to the Maryland Department of the Environment (MDE) Emergency Response Division (1-866-633-4686) must be submitted if an oil spill or discharge of <u>ANY</u> quantity of oil occurs. Within two hours after the

detection of the spill, a verbal report that includes the following information must be made:

- Time and location of discharge
- Type of facility involved
- Type and quantity of oil spilled
- Assistance required
- Name, address, and telephone number of persons making report
- Any other pertinent information as requested by MDE

[COMAR 26.10.01.03 E] Additionally, within ten (10) working days after completion of spill cleanup, a written report of the discharge must be submitted to MDE. The MDE Spill Form is included in Appendix A and can also be found online at:

https://mde.maryland.gov/programs/Crossmedia/EmergencyResponse/Documents/mdespillreport.pdf.

The form must include the following information:

- Date, time, and place of oil spill
- Amount and type of oil spilled
- A complete description of circumstances contributing to the spill
- A complete description of containment, removal, and clean-up operations, including disposal sites and costs of operations
- Procedures, methods, and precautions implemented to prevent recurrence
- Certification that the information provided is true and correct to the knowledge of the person signing the report

 Any other information considered necessary or required by MDE for a complete description of the spill incident

#### 2.2 SPILL HISTORY

There have been eight (8) reported spills at this campus since 2017, none of which were greater than 40 gallons. There have been no known harmful quantities of oil being discharged to navigable waterways since the original SPCC in 1999. However, there was one (1) spill in October of 2017 where an estimated 40 gallons of cooking oil and food grease entered the UMD stormwater system. A minor oil sheen was observed on the surface receiving water body, the Paint Branch. The spill was reported to the NRC and to MDE. MDE advised UMD they do not consider food oil/grease as part of their oil spill reporting requirements.

Available spill history information is described and documented on the Spill History Reports in Appendix B. If a spill has affected nearby waterways in the last three years, detailed information regarding the spill can be found on a copy of that report. Information that should be provided on the Spill History Report includes:

- Date, time, and location of spill
- Type and quantity of material spilled
- Cause of the spill
- Cleanup personnel involved
- Indication if spill reached nearby waters

Spill history documentation is maintained at the University within the Department of Environmental Safety, Sustainability, & Risk (ESSR). Blank Spill Reporting Forms are included in this SPCC Plan in Appendix A.

#### 2.3 CERTIFICATION OF SUBSTANTIAL HARM DETERMINATION

Facility: University of Maryland, College Park

Total Number of Oil Storage Tanks: 77

Total Oil Storage Capacity: 684,656 Gallons Largest AST Oil Storage Capacity: 252,762 Gallons

Facility Distance to Navigable Waters: Varies; Approximately 73' (Minimum Distance)

#### 2.3.1 Applicability of Substantial Harm Criteria

Does the University transfer oil over water to or from vessels and does the University have a total storage capacity greater than or equal to 42,000 gallons and conduct operations that include over-water related transfers to and from vessels? **NO** 

Does the University have a total storage capacity greater than or equal to 1 million gallons and does the University 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 storage tank area? **NO** 

Does the University have a total oil storage capacity greater than or equal to 1 million gallons and is the University located at a distance such that a discharge from the University could cause injury to fish and wildlife and sensitive environments? **NO** 

Does the University have a total oil storage capacity greater than or equal to 1 million gallons and is the University located at a distance such that a discharge would shut down a public drinking water intake? **NO** 

Does the University have a total oil storage capacity greater than or equal to 1 million gallons and has the University experienced a reportable oil spill in an amount greater than or equal to 10,000 gallons in the last five (5) years? **NO** 

#### 2.3.2 Certification

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document, and that based on my inquiry of those individuals responsible for obtaining this information, I believe that the submitted information is true, accurate, and complete.

Date: 10/18/19 Signature:

JASON BAER Name:

Title: ASSISTANT DIRECTOR , OFFICE OF ENVIRONMENTAL AFFAIRS

#### 2.4 REVIEW OF THE SPCC

[40 CFR 112.4 (d)] The SPCC Plan will be amended, if after review by the EPA Region III Regional Administrator, it is judged that the information contained herein does not meet the requirements of 40 CFR 112 or an amendment is necessary to prevent and contain discharges from the University.

[40 CFR 112.5 (a)] The SPCC Plan shall be amended within six (6) months whenever there is a change in campus design, construction, operation, or maintenance that materially affects the campus's spill potential, and implemented as soon as possible, but not later than six (6) months following preparation of the amendment.

[40 CFR 112.5 (b)] The SPCC Plan must be reviewed at least once every five (5) years and amended to include more effective prevention and control technology, if such technology will significantly reduce the likelihood of a spill event, has been proven in the field, and is available. The University will implement the amendment as soon as possible, but not later than six (6) months following preparation of the amendment.

In some cases, a registered Professional Engineer (PE) must certify technical changes. If upon review it is determined that the SPCC Plan continues to reflect the conditions of the University at that time or only non-technical changes are required, the Plan does not need to be sealed by a PE. Any time the SPCC Plan is reviewed; the person(s)

performing the review must sign and date the SPCC. No amendment to the SPCC Plan that affects the engineering or operational practices of the University shall satisfy the requirements of 40 CFR 112.5 unless it has been certified by a PE in accordance with 40 CFR 112.3(d).

ESSR staff will complete a review and evaluation of the SPCC Plan at least once every five (5) years. In signing page 8 of this SPCC Plan, the signer/signee attests they have completed review and evaluation of the SPCC Plan for the University of Maryland on the signed date, and will or will not amend the Plan as a result per 40 CFR 112.5(b). The reviews will be documented on the next page.

Table 1. SPCC Log of Review and Technical Changes

Review/ Revision  Date	Details / Comments	Amended Plan (Y/N)	Signature
Dec. 1999	Original SPCC Plan	N/A	Signed and Stamped 1999
Feb. 2003	5-Year Review & Update	Yes	Signed and Stamped 2003
June 2008	5-Year Review & Update	Yes	Signed and Stamped 2008
Feb. 2014	5-Year Review & Update	Yes	Signed and Stamped 2014
June 2016	Administrative changes	No	Not signed 2016
October 2019	5-Year Review & Update	Yes	Signed and Stamped Oct. 2019
November 2019	Updated sections 3.13 and 4.5 to reflect API standards	Yes	Signed and Stamped Nov. 2019
March 5, 2021	Update Tank Lists	No	Kaitlyn Peterson
May 2, 2022	Updated UMD contact list Replace of Phillip Riggs with Mark Alexander	Yes	Kaitlyn Peterson Kaitlyn Peterson
June 6, 2022	Updated Tank Lists and Summary of All Fuel & Oil Storage	Yes	Kaitlyn Peterson

#### 3.0 GENERAL SPCC PLAN REQUIREMENTS

#### 3.1 LOCATION AND CAMPUS DESCRIPTION

[40 CFR 112.7 (a) (1)] UMD's SPCC Plan developed herein conforms to the requirements of the regulation. Full approval of management is included within this SPCC Plan.

[40 CFR 112.7 (a) (2)] This Plan does not deviate from any requirement of 40 CFR 112 as allowed by 40 CFR 112.7(a)(2) (environmental equivalence) and 40 CFR 112.7(d) (impracticability of secondary containment).

[40 CFR 112.7 (a) (3)] UMD is located in College Park, Maryland 20742 within Prince George's County. UMD is approximately 4 miles from the northeast border of Washington, D.C. The campus core is generally bounded by University Boulevard to the north and west, Baltimore Avenue (Route 1) to the east, and Knox Road to the south. Baltimore Avenue bisects the southeastern portion of the campus. The campus consists of over 350 buildings on 1,335 acres of land. The campus consists of paved, unpaved, and construction areas. Accordingly, a significant portion of the campus is considered impervious. The campus is located in a suburban area surrounded by light commercial and residential areas.

The UMD campus maintains a Phase II Municipal Separate Storm Sewer System (MS4) that operates under General Discharge Permit No. 13-SF-5501. The University is permitted by State Discharge Permit No. 08-DP-2618 (NPDES permit MD0063801) to discharge contact and noncontact cooling water, boiler blowdown, condensate and stormwater runoff from twelve (12) outfalls. These outfalls discharge to Campus Creek, Guilford Run and the Paint Branch. Water from these discharge points ultimately flow to the Anacostia River and to the Chesapeake Bay. The UMD main campus operates under Oil Operations Permit No. 2014-OPT-3522 and the Severn Building (#810), located 1.3 miles northwest of the main campus, operates under Oil Operations Permit No. 2018-OPT-6551.

Due to the fact the Severn Building (#810) contains an aboveground storage capacity over the 10,000-gallon limit which would require a P.E. signature, UMD included the off-campus facility in the coverage of this SPCC plan. Additional offsite, non-contiguous properties, owned and operated by UMD, around the UMD campus are not included in this SPCC plan due to the total

volume of their aggregate aboveground storage capacity being less than 1,320 gallons. A site vicinity map is attached as Figure 1.

#### 3.2 FACILITY INFORMATION

#### **Facility Information**

Name of Facility: University of Maryland, College Park

Street: 1101 Main Administration Building, 7901 Regents Dr.

City: College Park State: MD ZIP Code: 20742

County: Prince George's County

#### **Facility Owner and Operator:**

Name: University of Maryland, College Park

Address: 1101 Main Administration Building, 7901 Regents Drive

City, State, Zip Code: College Park, MD 20742

#### **SPCC Plan Contacts:**

#### Primary:

Name: Jason Baer, Assistant Director, Office of Environmental Affairs

Telephone Number: 301-405-3163

Email address: jbaer123@umd.edu

#### **Secondary:**

Name: Kaitlyn Peterson, Environmental Specialist, Office of Environmental Affairs

Telephone Number: 301-405-8604

Email address: Kpeter13@umd.edu

The following sections summarize the oil product storage capacities and their potential failures (e.g. tank overflow, rupture or leakage), containment capacities, flow directions, and flow rates.

#### 3.3 CONTAINER CAPACITIES AND DESCRIPTION

[40 CFR 112.7 (a) (3) (i)] The following sections describe each of the various oil storage container types identified that are operated at the UMD. A summary of the various container types and volumes is listed in Table 2. A detailed list is contained in Appendices C through F.

Table 2: Summary of All Fuel & Oil Storage at University of Maryland

#### 3.3.1 Aboveground Storage Tanks (ASTs)

The University currently has a total of seventy-four (74) permanently installed ASTs and three (3) portable ASTs. Due to the nature of operations and construction projects at UMD, the addition and removal of ASTs occurs often. An updated table of ASTs is located in Appendix C and will be continuously updated as ASTs are added or removed from UMD.

Type/Category	Type of Fuel/Oil	Total Number of Containers	Total Capacity (gallons) <sup>1</sup>
	Gasoline; Fuel Oil; Diesel;		
ASTs	Used Oil; Hydraulic Oil;		
	Motor Oil; Food Grease	75	622,470
Portable ASTs	Diesel (Portable)	4	858
Portable Small (≥55-			
gallons)Quantity Oil	Hydraulic Oil; Food Grease;		
Containers	Waste Oil (Portable)	Varies	Varies
Hydraulic Elevators*	Hydraulic	101	12,625
Transformers*	Mineral Oil	144	49,133
*These volumes are appoximated	Total:	324	685,086

#### 3.3.2 Underground Storage Tanks (USTs)

There are no underground oil/fuel storage tanks at UMD.

#### 3.3.3 Portable Storage Tanks

There are four (4) portable storage tanks at UMD. One (1) 110-gallon diesel fuel tank is mounted on a truck and used for mobile refueling of diesel fired emergency generators, one (1) 200-gallon diesel fuel portable generator, one (1) 80-gallon diesel fuel portable generator, and one (1) 468-gallon portable generator. When not in use, the portable ASTs are stored beneath a covered concrete pad adjacent to the X1 parking lot at the Severn Building (#210). A spill sock is placed at the low point of the concrete pad where it drains to the parking lot to prevent oil from reaching the stormwater system.

#### 3.3.4 Small Quantity Oil Containers (Drums)

The number and location of 55-gallon drums varies day-to-day. Approximately, there are thirty (30) 55-gallon drums and two (2) 150-gallon used food grease containers currently being stored at UMD in various locations. These locations include, but are not limited to, the following:

- Energy Plant (#001)
- South Campus Dining Hall (#026 SDH)
- Stamp Student Union (#163 SSU)
- Manufacturing Building (#148)
- Denton Area Dining hall (#251)
- Ellicott Area Dining Hall (#257)
- Golf Course Indoor Practice Facility (#309)
- Xfinity Center (#360)
- Gossett Football Team House (#379)
- Shuttle Bus Facility (#424)
- Severn Building & Motor Pool (#812)

#### 3.3.5 Oil-Filled Operating Equipment

There are one hundred one (101) oil-filled operating equipment (hydraulic elevators) at UMD, which are described in Appendix D. Regular maintenance and inspections of the oil-filled operating equipment are performed by the UMD Elevator Shop within Facilities Management. An audit of their maintenance and inspection records is performed quarterly.

There are one hundred forty-four (144) oil-filled electrical components (transformers) at UMD, which are described in Appendix E. Regular maintenance and inspections of the oil-filled electrical components are performed by College Park Energy. An audit of their maintenance and inspection records is performed annually.

#### 3.3.6 Oil Water Separators/Food Grease Interceptors

UMD has twelve (12) oil/water separators (OWSs). Eleven (11) of the twelve (12) OWSs are used for wastewater treatment which are not subject to SPCC requirements according to 40 CFR 112.1(d)(6):

• One (1) 1,000-gallon OWS located in the southeast corner of the Steam Plant (#001)

- Two (2) 1,600-gallon OWSs located at the Shuttle Bus Facility (#424). One is located adjacent to the fueling area of the 20,000-gallon diesel tank, the other is located outside of the Shuttle Bus Facility maintenance shop
- One (1) 1,600-gallon OWS on the outside of the Motor Pool (Severn Bldg. #810)
- One (1) 1,600-gallon OWS located in the northeast corner of the fueling island of the Severn Building (#810)
- One (1) 1,600-gallon OWS located in the southwestern corner of Building #426
- One (1) 1,600-gallon OWS located on the ground level in the Mowatt Lane Parking Garage (#404)
- One (1) unknown size\* OWS located outside of the southwest side of the ground level of Terrapin Trail Parking Garage (#403)
- One (1) unknown size\* OWS located within the Stadium Drive Parking Garage (#218)
- One (1) unknown size\* OWS located outside of the Regents Drive Parking Garage (#202)
- One (1) unknown size\* OWS located outside of the Union Lane Parking Garage (#179)
   \*UMD is currently working to determine the size of the OWSs associated with the parking garages. The SPCC will be updated to reflect this information when resolved.

The one (1) at UMD subject to the provisions of 40 CFR 112.7(c) and 40 CFR 112.7(b), (d) is the following:

• A 600-gallon OWS located within the dike at the Plant Operations and Maintenance (#006) fueling area is used in conjunction with the secondary containment dike.

In addition to the OWSs, UMD has twelve (12) food grease interceptors (FGI). FGIs are classified as wastewater pre-treatment equipment, which is not regulated according to 40 CFR 112.1(d)(6). Each FGI is located at a food service dining facility listed below:

- One (1) 7,500-gallon FGI tank is located in the loading dock of the South Campus Dining Hall (#026 SDH)
- One (1) 4,000-gallon FGI tank is located in the loading dock of the Stamp Student Union (#163 SSU)
- One (1) 1,800-gallon FGI tank is located in the upper parking lot island Denton Area Dining hall (#251)

- One (1) 1,800-gallon FGI tank is located in the parking lot of the Ellicott Area Dining Hall (#257)
- One (1) 4,000-gallon FGI tank is located in the interior loading dock of the Xfinity Center (#360)
- One (1) 1,500-gallon FGI tank is located in the rear patio of the Gossett Football Team House (#379)
- One (1) 1,800-gallon FGI tank is located at the rear of Capital One Maryland Stadium Tyser Tower (#361)
- One (1) 500-gallon FGI tank is located in the front stand #S023 of the Capital One Maryland Stadium Stand Concessions (#363)
- One (1) 1,800-gallon FGI tank is located in the exterior loading dock of the Golf Course Club House (#166)
- One (1) 275-gallon FGI tank is located in the interior mechanical room of the Clarice Smith Performing Arts Center (#386)
- One (1) 500-gallon FGI tank is located in the exterior loading dock of the Van Munching Hall (#039)
- One (1) 1,200-gallon FGI tank is located at the rear exterior of the University House Event Center (#164)

The OWSs are inspected on a monthly basis in accordance with the UMD procedures. Monthly inspections are completed using the Monthly Checklist in Appendix G. Solids, oils, and other sediments are removed from the OWSs, as needed, and appropriately disposed offsite. The engineering drawings for the OWS and associated piping are located in Appendix H.

The FGIs and food grease oil containers and drums are regularly maintained by UMD Dining Services. The FGIs are maintained monthly by a third-party contractor, Valley Proteins, Inc. The food grease oil containers and drums are recycled on an as-need basis by Valley Proteins, Inc.

#### 3.4 DISCHARGE PREVENTION MEASURES

[40 CFR 112.7 (a) (3) (ii)] Measures taken to prevent discharge to navigable water include, but are not limited to:

- Design and maintenance of the secondary containment for oil storage containers described in this SPCC Plan.
- Inspections conducted in accordance with inspection schedules outlined in Section 3.9.
- Proper loading and unloading procedures outlined in Section 3.12 and Appendix I.
- Design and maintenance of bulk storage containers in accordance with 40 CFR 112.
- Design and maintenance of oil transfer systems and oil-filled operating equipment in accordance with 40 CFR 112.
- Annual training for all UMD personnel who handle oil products.

[40 CFR 112.7 (a) (3) (iii)] Secondary containment in compliance with 40 CFR 112.7 (c) is presented in Sections 3.7 and 4.3 of this SPCC Plan. In addition, UMD drainage is managed in compliance with 40 CFR 112.8 (b) as discussed in Section 4.1 of this SPCC Plan.

#### 3.5 SPILL EVENTS

In the event of a non-hazardous or non-toxic spill, the operator shall utilize the following procedures:

- 1. Close any open valves and/or turn off all pumps.
- Contain or prevent the migration of the spill without endangering yourself or other personnel. NOTE: DO NOT PUT YOURSELF OR EMPLOYEES IN LIFE THREATENING SITUATIONS.
- The personnel on call shall classify the spill and check the Safety Data Sheets (SDS) for the hazard level. Refer to Section 2.1 regarding reporting requirements.
- 4. Clean up the spill.
  - a. <u>Oil</u>: Place absorbent material on the spilled oil. After the oil has been absorbed, immediately remove the oil/absorbent mixture and dispose of properly.
  - b. <u>Fuel</u>: Follow the SDS cleanup procedures. Spilled petroleum that contaminates soils will require excavation and proper remediation and restoration of the site.

[40 CFR 112.7 (a) (3) (iv) - (vi)]; [40 CFR 112.7 (a) (4)]; [40 CFR 112.7 (a) (5)] Figure 3 illustrates the process for discovery, notification, and response to an oil release. Discharges are classified as either "minor" or "major," depending on the volume and characteristics of the material released. Table 3 can be used to determine whether a discharge is to be classified as "minor" or "major." Contact lists and phone numbers are presented in Tables 4 and 5.

**Table 3: Classification of Discharges** 

Minor Discharge	Quantity of discharge is small (typically involves less than 10 gallons of oil)		
Discharge that poses no significant	Discharged material is easily stopped and controlled at time of discharge		
harm or threat to human health and safety or to the environment.	Discharge is localized near the source		
	Discharged material is not likely to reach water		
	Discharge poses little risk to human health or safety		
	There is little risk of fire or explosion		
Major Discharge	Quantity of discharge is large enough to spread beyond immediate discharge area		
	Discharged material enters water		
Discharge that cannot be safely controlled or cleaned up by UMD	Discharge requires special equipment or training to cleanup		
personnel.	Discharge poses a hazard to human health or safety		
	There is risk of fire or explosion		

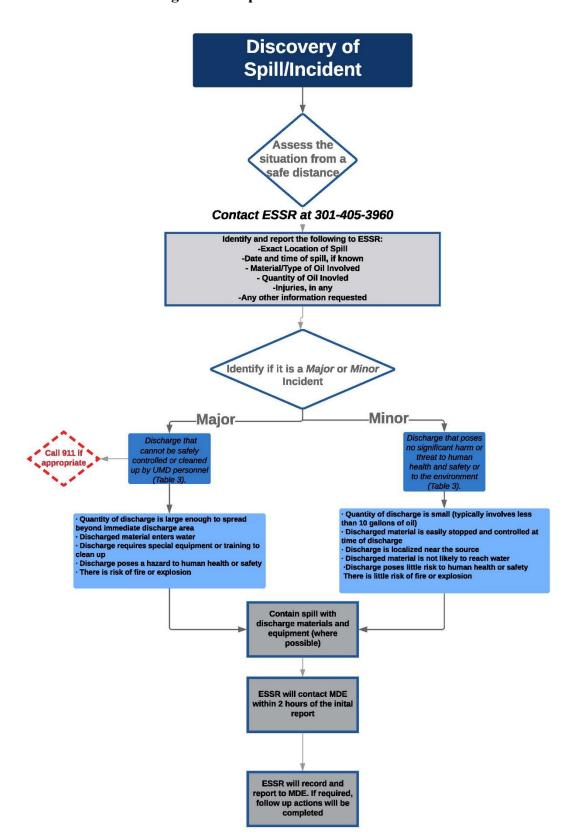


Figure 3: Response Action Flowchart

**Table 4: University of Maryland Contacts List** 

Staff Names	Individual Responsibilities	Contact Info
Jason Baer, Assistant Director, Office of Environmental Affairs, UMD	Primary Contact; Maintain and Implement SPCC	(o) 301-405-3163 (c) 202-441-6391; jbaer123@umd.edu
Kaitlyn Peterson, Environmental Specialist, Office of Environmental Affairs, UMD	Primary Contact; Maintain and Implement SPCC; Perform Inspections; Conduct annual trainings.	(o) 301-405-8604 (c) 202-308-8273; Kpeter13@umd.edu
Mark Schultz, Coordinator for VPAF-FM-O&M-Electric, UMD	Secondary Contact; Implement proper filling procedures and spill response for generators.	(o) 301-405-2222 (c) 443-301-3837; mschult4@umd.edu
Mark Alexander, Operations Manager for College Park Energy, LLC	Secondary Contact; Implement proper filling procedures and spill response for transformers.	(o) 301-405-0426 (c) 240-241-3486, mark.alexander@engie.com
Gregory Thompson, Assistant Director, Dining Services	Secondary Contact; Implement proper filling procedures and spill response for dining services and FGIs.	(c) 240-417-5035 gkt@umd.edu
Martin Culp, Supervisor Construction, VPAF-FM-O&M- Electric, UMD	Secondary Contact; Implement proper filling procedures and spill response for elevators.	(o) 301-405-7074, mculp@umd.edu
Scott Lupin, Associate Director of Environmental Affairs, UMD	Tertiary Contact	(o) 301-405-3698; slupin@umd.edu
Maureen Kotlas, Executive Director, Department of Environmental Safety, Sustainability & Risk, UMD	Tertiary Contact	(o) 301-405-3960; mkotlas@umd.edu

**Table 5: Off-Site Notification List** 

Agency	Phone Number
Local Police Department -College Park PD -UMD PD	(301) 405-3333 (301) 405-3555 or 911
Triumvirate Environmental	(800) 966-9282
National Response Center (NRC)	(800) 424-8802
MDE Emergency Spill Response	(866) 633-4686

#### 3.6 POTENTIAL SPILL PREDICTIONS, VOLUMES, RATES, AND CONTROLS

[40 CFR 112.7 (b)] An overflow from ASTs could potentially occur during loading/unloading operations. To prevent overflows, the ASTs are to be continually attended during loading/unloading. Leaks could potentially occur from worn or corroded seals, valves, fittings, or walls.

All the tanks and containers at UMD could potentially rupture through acts of vandalism, extreme weather conditions, or an accidental strike by an object hard enough to penetrate the tank wall. Various measures discussed in this SPCC Plan are designed to prevent such releases and, should they occur, contain the released oil.

The rate of flow from any release is dependent on the type of spill, quantity of liquid that is discharged, and the slope of the land.

The majority of ASTs at UMD are located in areas that are flat with minimal relief. Any spill will be contained, cleaned up, and properly disposed of. All ASTs at UMD have secondary containment, fuel level indicators, and/or protection from vehicles. Associated piping and pipe supports are believed to be designed and installed by reputable companies. It is believed that the design and installation were in a manner that will minimize abrasion and corrosion and allow for expansion and contraction. In the event of associated piping leaking or suffering a catastrophic

event, the spill would be minimal and contained within the immediate area and subject to immediate clean up.

Appendices C-F contain the maximum amount of potential discharges (capacities), direction and location that a potential spill/discharge would travel, and the distance of each equipment from entering navigable waters. There are four (4) fuel transfer areas around the UMD campus:

- Loading and Unloading area at the Plant Operations and Maintenance (#006) parking lot K2
- Refueling area at Severn (#810) fueling island
- Refueling area at Shuttle Bus Facility (#424) fueling station
- 100-gallon UMD Mobile Refueler with a pump rate of 20 GPM

The stationary loading/unloading areas are equipped with zipper drains leading to an OWS in the event of a spill. A 3<sup>rd</sup> party contractor delivers fuel to the loading/unloading and refueling areas and are responsible for the transfer operations. In the event of a major equipment failure, spill kits are available within the vicinity. There are zipper drains surrounding the loading/unloading areas into their corresponding OWS. A 600-gallon OWS located within the dike at the Plant Operations and Maintenance (#006) fueling area is used conjunction with the secondary containment dike; a 1,600-gallon wastewater OWS is located in the northeast corner of the fueling island of the Severn Building (#810), and a 1,600-gallon wastewater OWS is located adjacent to the fueling area of the Shuttle Bus Facility (#424). The OWSs located at the Shuttle Bus Facility (#424) and the Severn Building (#810) are exempt as discussed in Section 3.3.6. Active measures are used to meet SPCC requirements at the unloading areas as described in Section 3.7

The mobile refueler is located in the bed of a truck and is used to refuel most of the ASTs around the UMD campus. The truck is equipped with a spill kit to contain and clean and spills. The mobile refueler is parked beneath a covered concrete pad in the Severn Building (#810) X1 parking lot.

A table of the transfer area fault analysis is located in Appendix F. This table does not consider the time it would take to respond to a spill (e.g., shutting off a pump, or closing a valve), that could greatly reduce the quantity discharged.

Further details on tank loading and unloading are discussed in Section 3.12.

#### 3.7 CONTAINMENT AND DIVERSIONARY STRUCTURES

[40 CFR 112.7 (c)] The stationary ASTs at UMD have appropriate containment by use of secondary containment, dikes, or through the use of double wall tank construction. The secondary containment for these bulk storage tanks is in accordance with 40 CFR 112.8 (c) (2). Fulfilling this requirement also meets the general containment requirement of 40 CFR 112.7 (c) for these tanks.

UMD is currently equipped with emergency spill response kits. Each fuel tank location has a designated spill response kit that consists of at a minimum, but not limited to, personal protective equipment, oil absorbent booms and mats, approved containers for storage and removal of used spill response materials and equipment, emergency response directions and contact list. Additional details on the secondary containment systems are provided in Section 4.3.

The hydraulic elevators are each contained within a sealed room which is not equipped with floor drains. Secondary containment is determined to be impractical for the pad-mounted transformers as they are factory sealed electrical components that contain mineral oil for cooling purposes. EPA rules do not require the specific secondary containment requirements under 40 CFR 112.8(c) for oil-filled electrical equipment, such as a transformer, because they do not meet the definition of a bulk storage container in 40 CFR 112.2. However, they must meet the general secondary containment requirements under 40 CFR 112.7(c) or the alternative requirements for OFOE per 40 CFR 112.7(k). UMD will meet the alternative requirements under 40 CFR 112.7(k), which is discussed in Section 3.14.

Construction contractors on UMD property are expected, as a part of their contract, to have ample secondary containment for all of their heavy equipment and any additional ASTs with a storage capacity 55-gallons and above. UMD staff will routinely conduct a visual check to ensure the contractors are adhering with 40 CFR 112.8 (c) (2).

Secondary containment for mobile/portable tanks is addressed in Section 4.8.

Secondary containment for loading/unloading of fuels is met through active control measures and/or containment.

#### 3.8 PRACTICABILITY OF CONTAINMENT

[40 CFR 112.7 (d)] UMD has determined that use of containment and diversionary structures or readily available equipment to prevent discharged oil from reaching navigable waters is practical

and effective at UMD. Additionally, UMD is implementing the alternative requirements for oil-filled operating equipment as allowed per 40 CFR 112.7(k), which is discussed in Section 3.14.

#### 3.9 INSPECTIONS

[40 CFR 112.7 (e)] Monthly and annual inspections of ASTs in addition to the quarterly inspections of the 55-gallon drums are scheduled and completed by ESSR trained personnel and are performed using the inspection forms included in Appendix J.

55-gallon drums will be formally inspected on an alternative quarterly basis due to the high visibility and constant use of the 55-gallon drums. All oil filled drums are located within the vicinity of ASTs which are inspected on a monthly basis. The ESSR personnel conducting the monthly AST inspections will visually check the condition of the 55-gallon drums monthly and perform a formal inspection quarterly. The drums containing food-oil grease are emptied and visually inspected monthly by a 3<sup>rd</sup> party contractor who recycles the food-oil grease.

Additionally, if at any time problems are discovered during routine operations, the problem and corrective measures will be addressed by trained staff. Inspections are signed by the inspector and maintained electronically on the UMD computer network as well as hardcopies within the Seneca Building. Hardcopies will be stored for three (3) years as required.

Oil-filled electrical and operational equipment is inspected once a year by their designated section. Transformers are inspected by College Park Energy and records of those inspections are maintained within their office in the Central Heating Plant (Bldg. #001). Hydraulic elevators are inspected once a year by Elevator Shop staff of Facilities Management, and records of those inspections are maintained within the Elevator Shop office in South Campus Dining (Bldg. #026).

[COMAR 26.10.01.12 (B) (5)] This regulation requires visual inspection of all aboveground storage tanks, pipelines, valves, pumps, and associated components at least once a month. These inspections will be performed by ESSR staff as part of their regular work activities or while responding to preventative maintenance work orders and will be recorded on the Monthly Inspection Form included in Appendix J. All completed inspections will also be stored in an additional inspection binder on site.

#### 3.10 TRAINING

[40 CFR 112.7 (f) (1)] ESSR will maintain, implement, and train all personnel who handles oil products annually. In addition, ESSR regularly trains its alternative personnel on spill prevention measures, cleanup procedures, reporting requirements and other important information from this SPCC Plan. Training materials and documentation are included in Appendix L. The training materials are also available online for on-demand access for UMD personnel who manage oil with a volume of 55-gallons or more. Records of the in-person training are stored electronically on the UMD computer network and the online training records are stored within either the BioRAFT training records or ESSR training database for each department.

[40 CFR 112.7 (f) (3)] Employees are to receive annual refresher training either online or at the regularly scheduled safety meetings. The following, at a minimum, are emphasized at these meetings:

- Familiarity with the SPCC Plan
- Changes in the SPCC Plan
- Spill prevention and response procedures
- Materials handling and storage
- Inspection and recordkeeping activities
- Any reported spills
- New management practices

#### 3.11 SITE SECURITY

[40 CFR 112.7 (g)] The UMD oil storage is located within several facilities around the campus. Each facility handling, processing, or storing oil is locked and/or secured when the facility is unattended. The two (2) 252,762-gallon and one (1) 8,000-gallon tanks are located within a concrete diked area with limited access. Access to the associated fuel pumps access is limited to Facilities Management personnel. The University of Maryland University Police perform regular patrols on campus. UMD Public Safety also maintains an extensive camera monitoring system across campus.

All existing drain valves are locked in the closed position to prevent any discharge during nonoperation or non-standby status. All existing tanks and drums at UMD that have oil dispensers are kept in the locked/off position when the pump is in a non-operating or standby status.

The loading/unloading connections on pipelines are capped when not in service or when in standby service for an extended time.

Adequate lighting is provided. There is lighting around the buildings, storage facilities, and loading/unloading areas.

#### 3.12 TANK LOADING/UNLOADING

[COMAR 26.10.01.12B] The UMD off-loading areas are located in Parking Lot # K2, adjacent to the Central Heating Plant (CHP) fuel tanks, in Parking Lot #X1 adjacent to the refueling area at Severn Building (#810) fueling island, the refueling area at the Shuttle Bus Facility (#424), and the mobile refueler owned and operated by UMD personnel.

Independent vendors operate the tank trucks; thus, the vendors are responsible for ensuring their operations are performed in accordance with applicable local, state, and federal regulations. The vendors are required to verify all truck drivers have proper training and must be US Department of Transportation (USDOT) licensed. All suppliers must comply with USDOT regulations in 49 CFR 177 and University standard operating procedures. Oil vendors must ensure that the driver understands the site layout, knows the protocol for entering the facility and unloading product, and has the necessary equipment to respond to a discharge from the vehicle or fuel delivery hose. Similar precautions are undertaken during the removal of used oil from the facility. Oil vendors are responsible for cleaning up any spills caused by their delivery operations. Prior to filling, the liquid levels of the AST must be measured, recorded using the checklist in Appendix I, and kept on record for at least 3 years.

The mobile refueler is used to refuel the diesel tanks associated with generators located throughout the UMD campus. The mobile refueler is equipped with a single-walled 100-gallon AST fixed within the bed of a truck. The truck has a spray-on liner in the bed along will spill response materials stored within the storage compartments. Liquid levels are checked prior to filling to minimize spills.

UMD is committed to ensuring the safe transfer of material to and from all oil storage tanks. Oil transfer on campus is either from a tanker truck to a bulk storage tank, the mobile refueler to a

storage tank, removal of food oil grease, or the unloading of drums of oil. Regardless, the potential for discharges during transfer operations is of concern at this facility.

[40 CFR 112.7 (h)] This section requires certain measures for tank car and tank truck loading/unloading racks. Although UMD does perform some loading/unloading activities, it does not operate a loading/unloading rack as defined in SPCC regulations. As a result, the requirements of this section do not apply.

#### 3.13BRITTLE FRACTURE ANALYSIS

[40 CFR 112.7 (i)] There are two (2) field-constructed oil ASTs located at the CHP. The two (2) 252,762-gallon #2 fuel oil bulk storage tanks were constructed in 1973 and 2001 respectively. Both tanks were originally built to API Standard 650. An API Standard 653 external In-Service inspection was conducted by a certified inspector every five (5) years until 2015. In 2015, an API Standard 653 internal inspection was performed by a certified inspector on tank 2A. In 2009, an API Standard 653 internal inspection was performed by a certified inspector on tank 2B. Currently, both tanks are in service and an API Standard 653 external In-Service inspection will continue to be completed every five (5) years and an API Standard 653 internal inspection will be completed every twenty (20) years.

If the two (2) 252,762-gallon #2 fuel oil bulk storage tanks undergo a repair, alteration, or reconstruction, they will be evaluated and inspected by a certified API inspector. In the event the tanks fail their inspection, appropriate actions will be taken to rectify the deficiencies.

## 3.14 ALTERNATIVE REQUIREMENTS FOR OIL-FILLED OPERATIONAL EQUIPMENT

[40 CFR 112.7 (k) (1-2)] UMD meets the qualification requirements listed in 40 CFR 112.7(k) (1) and therefore will use alternative requirements to secondary containment to prevent an oil discharge from the oil-filled operating equipment. The alternative requirements consist of:

- Establish and document the procedures for inspections and/or a monitoring program for detecting equipment failure and/or a discharge.
  - o Transformers are visually inspected annually by College Park Energy. Inspections are maintained within the Central Heating Plant (Bldg. #001) facility.

- Hydraulic Elevators are visually inspected annually by qualified elevator technicians from the Elevator Shop in UMD Facility Maintenance. Regular maintenance is conducted on an as-needed basis. Records are maintained within the Elevator Shop office in South Campus Dining (Bldg. #026).
- A written commitment of manpower, equipment, and materials needed to expeditiously control and cleanup any quantity of oil discharged that is harmful.

[40 CFR 112.7 (k) (2) (ii) (A)] This SPCC plan will serve as an oil spill contingency plan following the provisions of 40 CFR 109.

#### 3.15 RECORDKEEPING

All documentation regarding inspections, training, spill reports, and any other requirements stated in this plan will be stored onsite for a period of at least three (3) years.

#### 4.0 SPCC REQUIREMENTS FOR ON-SHORE FACILITIES

Since UMD is classified as a non-production facility, it is subject to the SPCC requirements listed in 40 CFR 112.8 and as addressed in the following sections.

#### 4.1 CAMPUS DRAINAGE

[40 CFR 112.8 (b) (1 & 2)] There are three (3) stationary, diked oil/fuel storage areas at UMD. All drain valves are maintained in the normal closed position and all retained rainwater will be inspected/tested prior to discharge by/under the supervision of a responsible person. Records of the discharge event are maintained in accordance with this SPCC. The dike drainage form is located within Appendix M. The 100-gallon truck mounted tank is stored in a truck bed equipped with a spray on liner and the truck is equipped with a spill kit.

[40 CFR 112.8 (b) (3-5)] The regulations specify performance requirements for systems used to drain undiked areas with the potential for a discharge. These provisions apply only when the facility owner/operator chooses to use a facility drainage system to meet general secondary containment requirements under 40 CFR 112.7(c) or a more specific containment requirement under 40 CFR 112.7(h)(1), 112.8(c)(2) or 112.12(c)(2). UMD does not use a facility drainage system to meet general secondary containment requirements and therefore, these regulations do not apply.

#### 4.2 MATERIALS AND CONSTRUCTION

[40 CFR 112.8 (c) (1)] All of the stationary ASTs are constructed of metal. 55-gallon drums are constructed of either metal or high-density polyethylene (HDPE) plastic. All ASTs and drums are compatible with the liquids that they contain. The ASTs are also suitable for the pressure and temperature conditions that they encounter.

#### 4.3 SECONDARY CONTAINMENT

[40 CFR 112.8 (c) (2)] All of the ASTs at UMD have proper containment through double-walled construction or specific secondary containment measures. Refer to Appendix C with the details of each tank and its secondary containment.

[40 CFR 112.8 (c) (3)] There are three (3) stationary, diked oil/fuel storage areas at UMD. The 100-gallon truck mounted tank is stored in a truck bed equipped with a spray on liner and the truck is equipped with a spill kit. This tank and diked areas are discussed in Section 4.1.

#### 4.4 CORROSION PROTECTION

[40 CFR 112.8 (c) (4)]; [40 CFR 112.8 (c) (5)] UMD has no USTs and no partially buried tanks.

#### 4.5 TANK TESTING AND INSPECTIONS

[40 CFR 112.8 (c) (6)] Each AST will be visually inspected and subjected to integrity testing such as hydrostatic, radiographic, ultrasonic, acoustic emissions, or other non-destructive shell testing if required. The frequency of inspections and integrity testing is based on the tank manufacturer's recommendations in addition to the Steel Tank Institute (STI) SP001 standard and the American Petroleum Institute (API) 653 standard. Visual inspections will be done at least once a month by ESSR staff in addition to the annual inspections that are done using the inspection forms provided in Appendix J.

All tanks with double-walled containment should have the interstitial space monitored annually to ensure that the inner tank has not failed and remove condensation that could cause corrosion. Integrity testing of all tanks is also needed whenever material repairs are made.

Figure 4 below is the STI SP001 5th Edition schedule of formal inspections required.

Figure 4: Table of Inspection Schedules from SP001

AST Type and Size (U.S. gallons)		Category 1: with spill control and CRDM	Category 2: with spill control, without CRDM	Category 3: without spill control, without CRDM	
Shop-Fabricated ASTs	0 – 1100 (0-4164 liters)	Р	Р	P, E&L(10)	
	1101 - 5,000 (4168-18,927 liters)	Р	P, E&L(10)	[P, E&L(5), I(10)] or [P, L(2), E(5)]	
	5,001 - 30,000 (18,931-113,562 liters)	P, E(20)	[P, E(10), I(20)] or [P, E(5), L(10)]	[P, E&L(5), I(10)] or [P, L(1), E(5)]	
	30,001 - 50,000 (113,566-189,271 liters)	P, E(20)	P, E&L(5), I(15)	P, E&L(5), I(10)	
Field-erected AST		P, E(5), I(10)	P, E&L(5), I(10)	P, E&L(5), I(10)	
Portable Containers		Р	Р	Р	

<sup>\*</sup>Note the following:

Continuous Release Detection Method (CRDM)

- P Periodic AST inspection (PI)
- E Formal External Inspection by certified inspector (FEI)
- I Formal Internal Inspection by certified inspector (FII)
- L Leak test by owner or owner's designee (LT)
- () indicates maximum inspection interval in years. For example, E (5) indicates formal external inspection every five years.

Based on these requirements, seven (7) of the ASTs at UMD require additional inspections in accordance with STI SP001.

- One (1) 6,000-gallon double-walled diesel fuel tank at Lab for the Physical Sciences (#796) is required to have a formal external inspection once every twenty (20) years.
- One (1) 8,000-gallon diked double-walled diesel fuel tank at the Plant Operations and Maintenance (#006) is required to have a formal external inspection once every twenty (20) years.
- Two (2) 10,000-gallon double-walled gasoline fuel tanks at the Severn Building (#810) are required to have a formal external inspection once every twenty (20) years.
- One (1) 10,000-gallon double-walled E-85 fuel tank at the Severn Building (#810) is required to have a formal external inspection once every twenty (20) years.
- One (1) 12,000-gallon double-walled #2 fuel oil tank at the Severn Building (#810) is required to have a formal external inspection once every twenty (20) years.
- One (1) 20,000-gallon double-walled diesel fuel tank at the Shuttle Bus Facility (#424) is required to have a formal external inspection once every twenty (20) years.

The two (2) 252,762-gallon #2 fuel oil bulk storage tanks at the Plant Operations and Maintenance (#006) were constructed in 1973 and 2001 respectively. Both tanks were originally built to API 650 standard. These two ASTs will be inspected in accordance with the API 653 standard. These tanks are required to have monthly routine in-service inspections, a formal external inspection once every five (5) years and an internal inspection once every twenty (20) years (or sooner based on the inspection results).

API 653 standard dictates the internal inspections shall not exceed 10 years unless the tank has one of more leak prevention, detection, corrosion mitigation or containment safeguards.

The two 252,762-gallon #2 fuel oil bulk storage tanks at the Plant Operations and Maintenance (#006) are currently on a twenty (20) year internal inspection schedule with the next internal inspection scheduled for 2029.

Mobile/portable containers, such as 55-gallon drums, are visually inspected quarterly.

Records of inspections and testing are kept on site and are stored electronically on the UMD computer network

[40 CFR 112.8 (c) (7)] This section is not applicable because there are no internal heating coils used on the ASTs at UMD.

#### 4.6 TANK INSTALLATION FAIL-SAFE ENGINEERED

[40 CFR 112.8 (c) (8)] The ASTs at UMD have visual level gauges and all tanks are constantly attended while being filled. Mobile/portable containers are visually checked prior and after being filled.

[40 CFR 112.8 (c) (8) (v)] Level gauges are visually inspected monthly to ensure proper operation and tested annually for accuracy for all ASTs.

#### 4.7 EFFLUENT MONITORING AND VISIBLE OIL LEAKS

[40 CFR 112.8 (c) (9)] This section is not applicable to UMD because there are no treatment facilities at this location.

[40 CFR 112.8 (c) (10)] All oil leaks from piping, tanks, process equipment (including, but not limited to, seams, gaskets, piping, pumps, valves, rivets and bolts), are immediately reported to the ESSR office and properly reported in accordance with UMD oil response procedures. Immediate attention will be given to stopping and repairing the leaking equipment. The area where the release occurs shall be cleaned up and the site restored.

#### 4.8 MOBILE OR PORTABLE OIL STORAGE TANKS

[40 CFR 112.8 (c) (11)] There is one (1) portable storage tank at UMD. One (1) 100-gallon diesel fuel tank is mounted in the bed of a truck. The truck bed is equipped with a spray on liner and contains a spill kit in the event of a spill. The portable fuel tank is used to transport fuel to refuel the generator tanks around the campus. When not in use, the portable fuel tank is parked beneath a covered concrete pad adjacent to the X1 parking lot at the Severn Building (#210). A spill sock is placed at the low point of the concrete pad where it drains to the parking lot to prevent oil from reaching the stormwater system.

UMD has multiple 55-gallon drums around the campus. The exact number varies day to day. Section 3.3.4 lists the various locations where the 55-gallon drums are stored. Where the 55-gallon drums are located outdoors, they are contained either within a storage shed on top of a spill pallet, a 2 drums low-profile workstation, or a single 95-gallon salvage drum. Based on the number of 55-gallon drums stored indoors, appropriately sized spill pallets are being utilized.

#### 4.9 BURIED AND OUT OF SERVICE PIPE

[40 CFR 112.1 (d) (6)] The buried piping for the OWS tanks to treat wastewater are exempt from protective wrapping, coating, and cathodic protection.

[40 CFR 112.8 (d) (1)] UMD does not have any USTs nor out of service piping. UMD does have underground double-walled piping located at the Severn Building (Bldg. #810). The alarm system for the interspatial monitoring system is inspected monthly in compliance with the Oil Operations Permit (Permit # 2018-OPT-6551). The underground double-walled piping was installed prior to 2002 and therefore, is exempt from this regulation.

Additionally, UMD has underground supply and return lines for the 252,762-gallon #2 Fuel Oil tank 2A. The supply and return lines had precision tightness testing completed in September of 2014. The test detects a 0.10 gallon per hour release of oil at 1.5 times the operating pressure and performed for a minimum of 1 hour.

The supply and return line piping were installed prior to 2002 and therefore, is exempt from protective wrapping, coating, and cathodic protection requirements.

UMD has a 600-gallon OWS located within the dike at the CHP fueling area. The OWS is inspected monthly by CHP personnel in compliance with the 40 CFR 112.8(c)(6). The buried piping for the OWS at the CHP was installed prior to 2002 and therefore, is exempt from this regulation.

Oil associated piping engineering drawings are located in Appendix H.

[40 CFR 112.8 (d) (2)] If a section of pipe is taken out of service for an extended period of time, it shall be blind-flanged or capped.

#### 4.10 PIPE SUPPORTS DESIGN

[40 CFR 112.8 (d) (3)] All above ground pipe supports at UMD have been properly designed to minimize abrasion and corrosion and to allow for expansion and contraction of the pipes. Available engineering drawings are located in Appendix H. All other oil associated piping is depicted on the SPCC facility map (Figure 2).

#### 4.11 ABOVEGROUND PIPING

[40 CFR 112.8 (d) (4)] The aboveground piping, valves, pipe fittings, drip pans, pipe supports, and other associated appurtenances serving the ASTs will be inspected monthly with more detailed inspections done annually using the checklists in Appendix J. There are ten (10) ASTs that have aboveground piping, These ASTs and piping are identified on the SPCC facility map (Figure 2).

[40 CFR 112.8 (d) (5)] Employees and contractors are aware of the hazards near the truck unloading areas. If an area onsite is observed to be in danger of being damaged by vehicular traffic, guard posts, or other precautionary measures will be employed.

#### 5.0 SPILL PREVENTION CONTROL AND COUNTERMEASURE PLAN CERTIFICATION

[40 CFR 112.3 (d) (1)] I hereby certify that I or an employee of Trinity Consultants have visited and examined University of Maryland (UMD) at College Park, and being familiar with the provisions of this Spill Prevention, Control, and Countermeasures (SPCC) regulations codified at 40 Code of Federal Regulations (CFR) Part 112 et seq. (40 CFR 112) and this SPCC plan, attest that this carefully thought-out SPCC plan was prepared in accordance with good engineering practices, including consideration of applicable industry standards and with the requirements of 40 CFR 112. Procedures for required inspections and testing have been established and this plan is adequate for this facility. Amendments subsequent to the date of this certification must be documented and certified, separately, by a Registered Professional Engineer as described in Section 2.0 of this plan.

Certifying Engineer: Divya Harrison, P.E.

Signature:

Certification Date: November 11, 2019

**Engineering Seal**:

#### 6.0 SPILL PREVENTION CONTROL AND COUNTERMEASURE PLAN MANAGEMENT APPROVAL

[40 CFR 112.7] We hereby certify that the management of UMD at College Park extends its full approval of this SPCC plan and will commit the necessary resources to fully implement it as described herein. We understand that although this plan has been certified by a Registered Professional Engineer; I, Carlo Colella as the Vice President for Administration & Finance maintain fiduciary responsibility for this SPCC Plan; and I, Maureen Kotlas, the Executive Director of Environmental Safety, Sustainability & Risk, maintain the authority to implement and enforce the preparation of this SPCC plan, ensure proper implementation of the provisions contained within, and compliance with the SPCC regulations. We certify that this SPCC plan will be reviewed and evaluated at least once every five years, as described and documented in Section 2.0 of this plan

	Clell
1 mi	vous
Carlo Colella	

Date

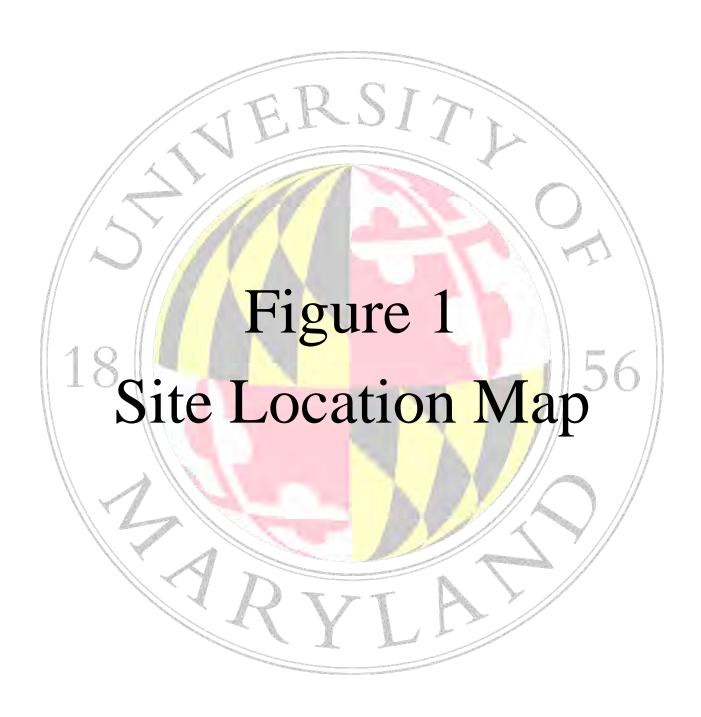
Vice President of Administration & Finance

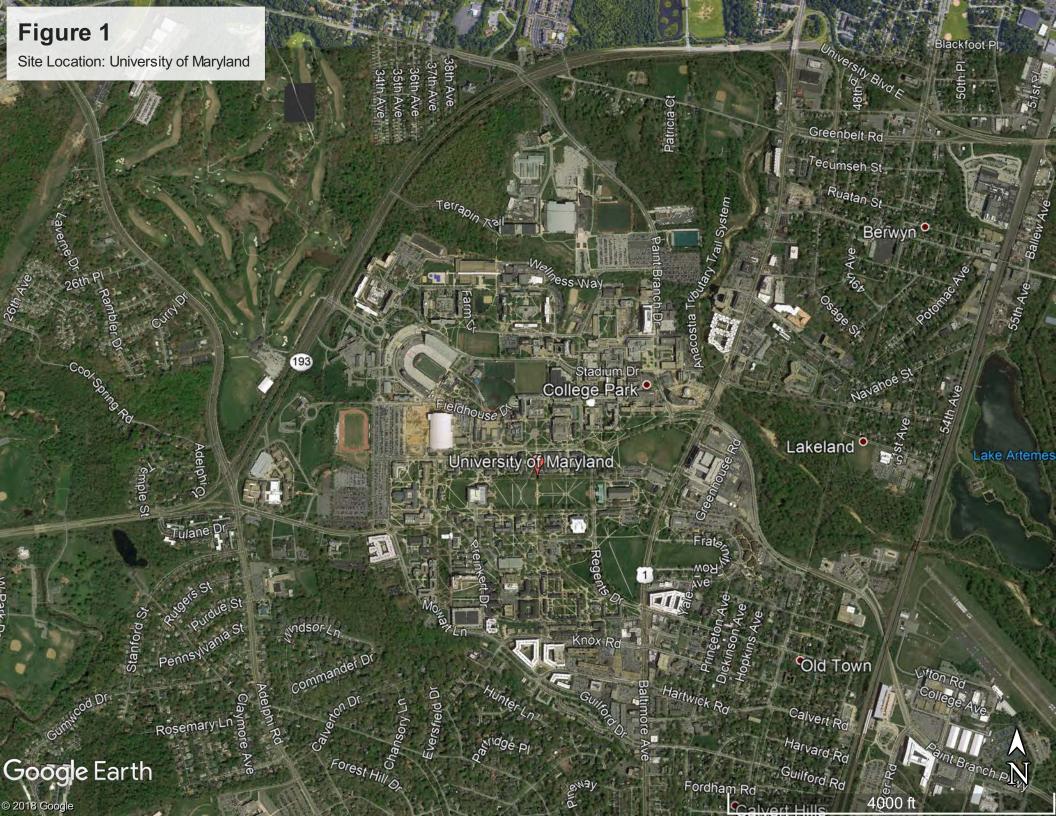
Maureen Kotlas

Date

10-18-2019

Executive Director, Department of Environmental Safety, Sustainability & Risk







2019 SPCC Map Edit Log

Review/ Revision Date	Details / Comments	Amended Plan (Y/N)	Signature		
Oct-19	2019 SPCC Map	NA			



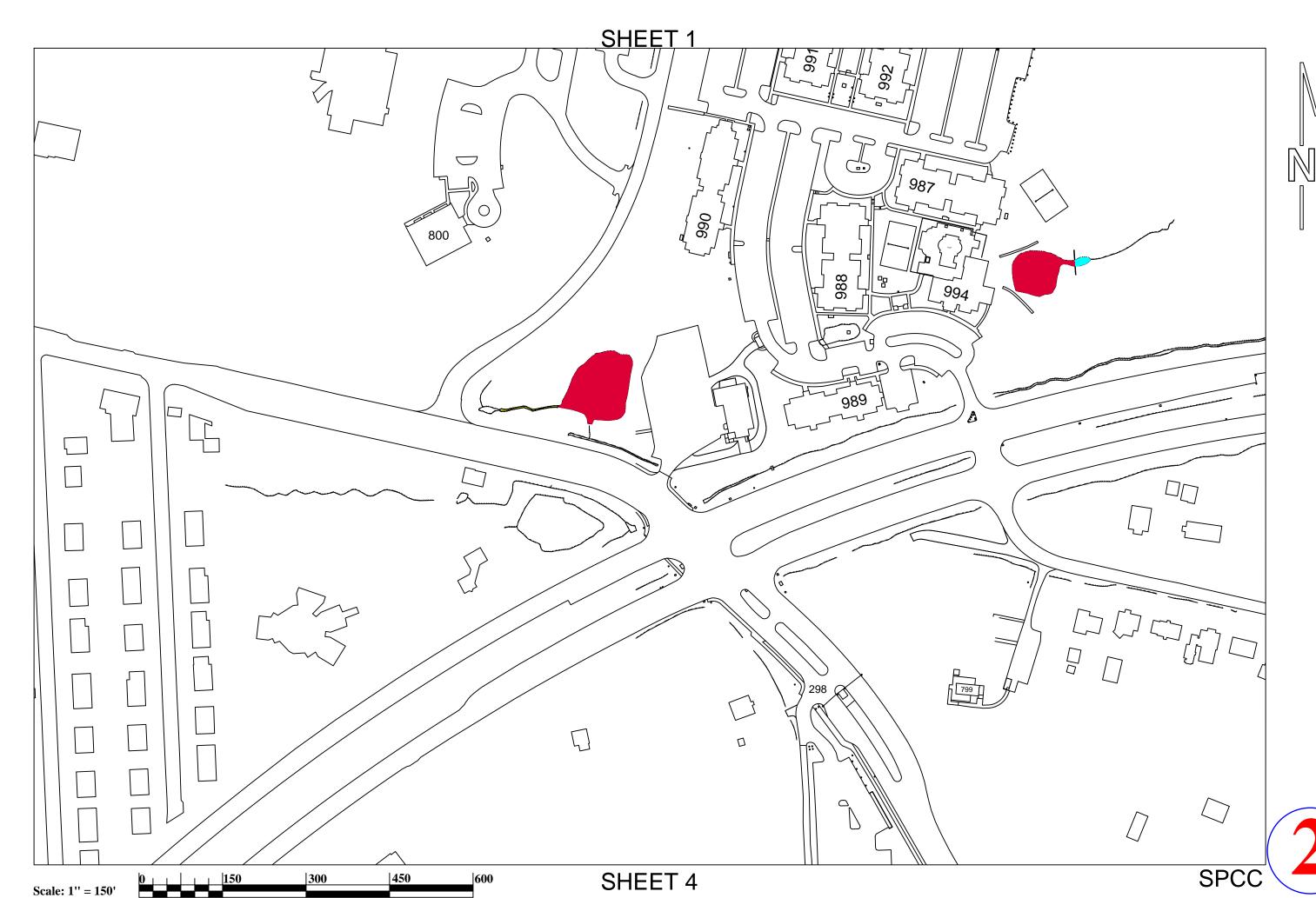
# UNIVERSITY OF MARYLAND

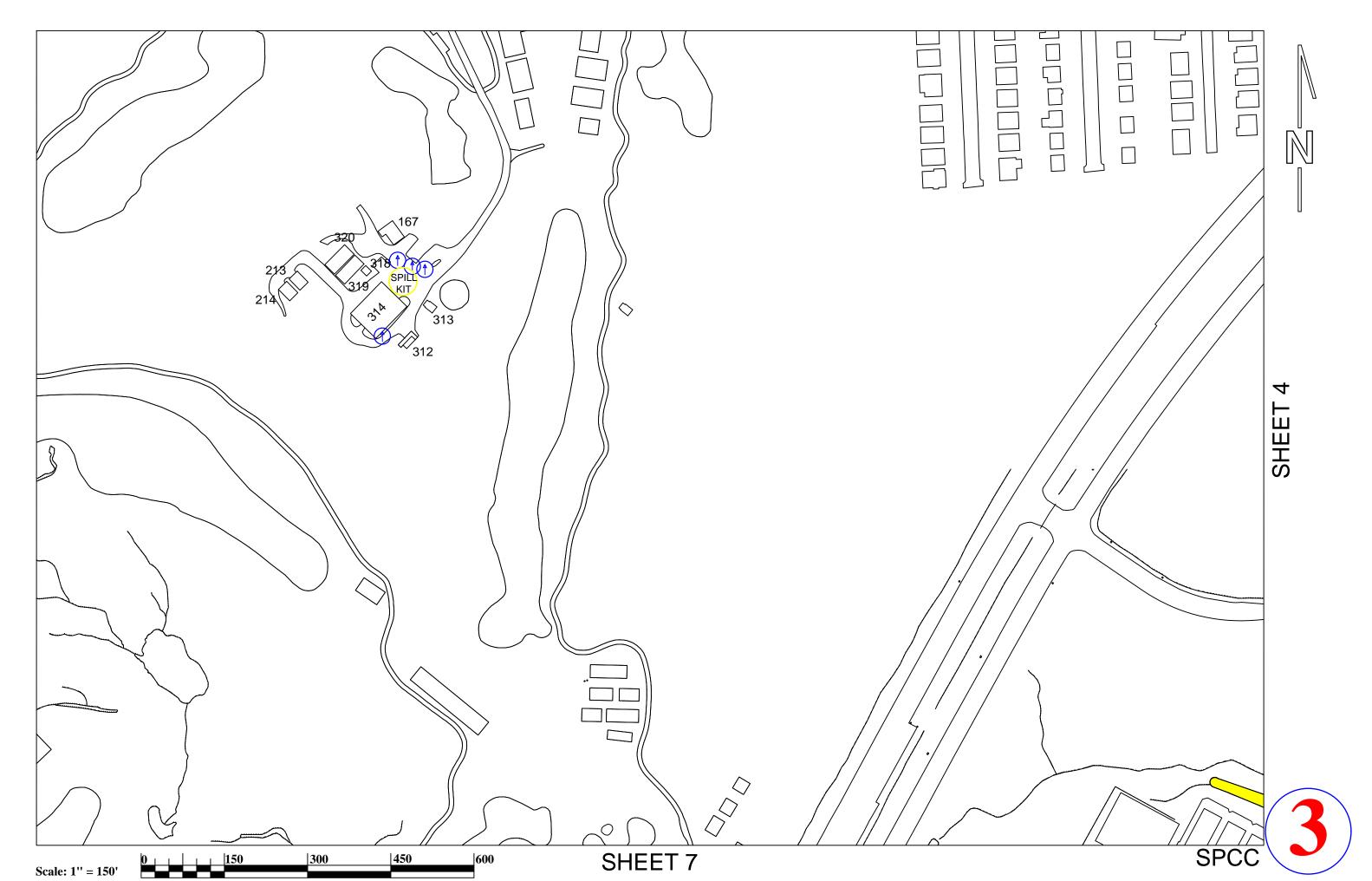
## 



LEGEND	SPCC
ABOVE GROUND PIPING	
ABOVE GROUND TANK	
DRUM STORAGE	
ELEVATOR	E
FUEL DELIVERY AREA	
GENERATOR(DIESEL)	46
GENERATOR(PORTABLE)	
GREASE CONTAINER	
NPDES OUTFALLS	XXX
OIL/WATER SEPARATOR	
SPILL KIT	SPILL KIT
STORMCEPTOR	
TRANSFORMER	T
TURBINE & COMPRESSOR	T/C
UNDERGROUND PIPING	
UNDERGROUND TANK	

LEGEND	STORM FEATURE PRIMARY TYPE			
BIORETETION				
DRY WELL				
ENHANCED FILTER				
INFILTRATION PRACTICE				
LANDSCAPE INFILTRATION				
NON-STRUCTURAL BMP				
OTHER				
PERMEABLE PAVEMENT				
POND				
RAIN GARDEN				
RAINWATER HARVESTING				
REINFORCED TURF				
SAND FILTER				
SWALE				
UNDERGROUND STRUCTURAL T	TREATMENT			
WETLAND				
AREA UNDER CONSTRUCTION				



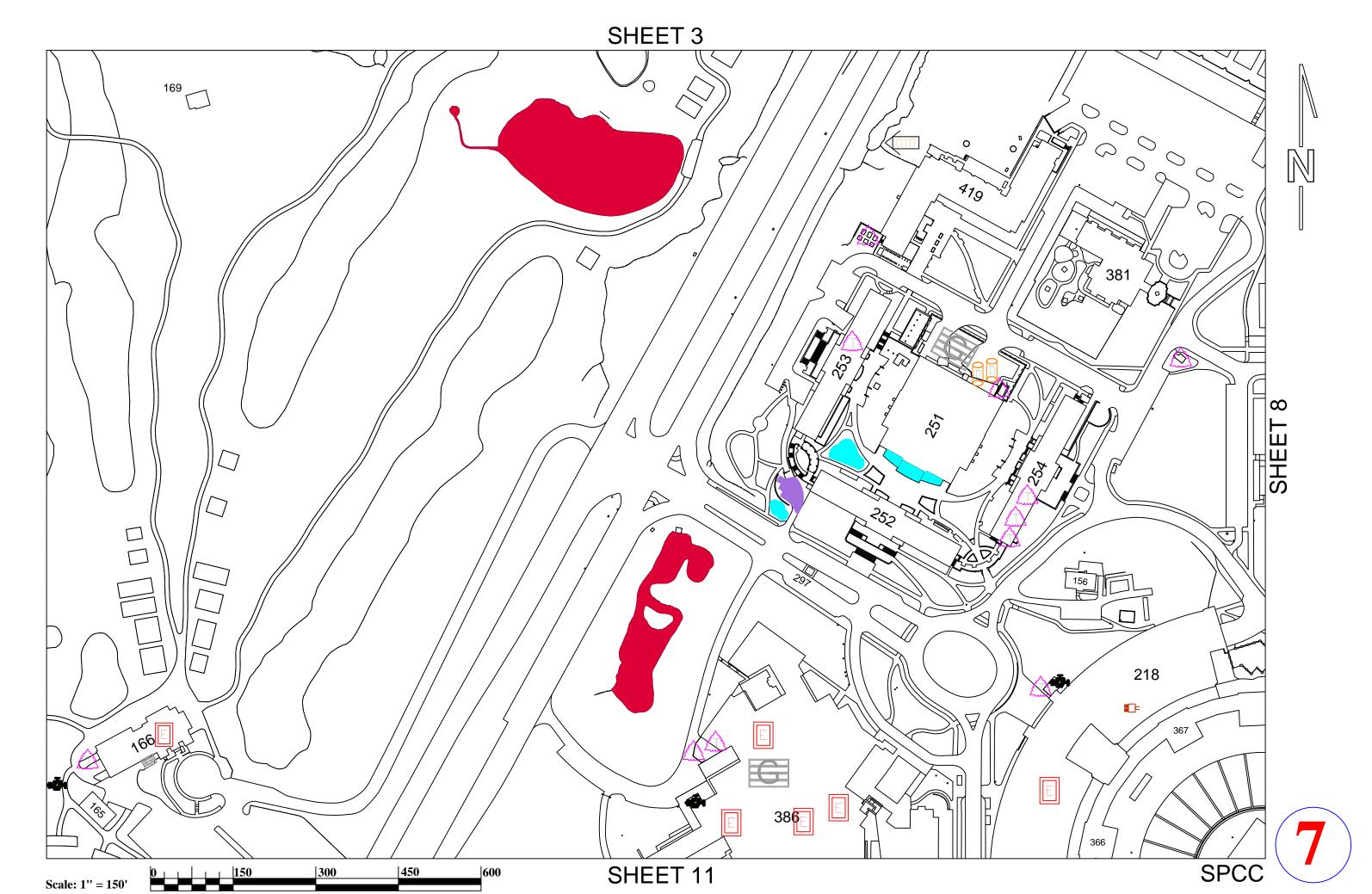


sh\_12388\SPCC\_19 Page -11X17Book-2019(mstr)2.dwg -- 010-sht 4\_7500, Last Update: 10/11/19 - 11:13am, Opened: 10/11/19 - 1:22pm

8\SPCC\_19 Page -11X17Book-2019(mstt)2.dwg -- 012-sht 5\_7500, Last Update: 10/11/19 - 11:13am, Opened: 10/11/19 - 1:22pm

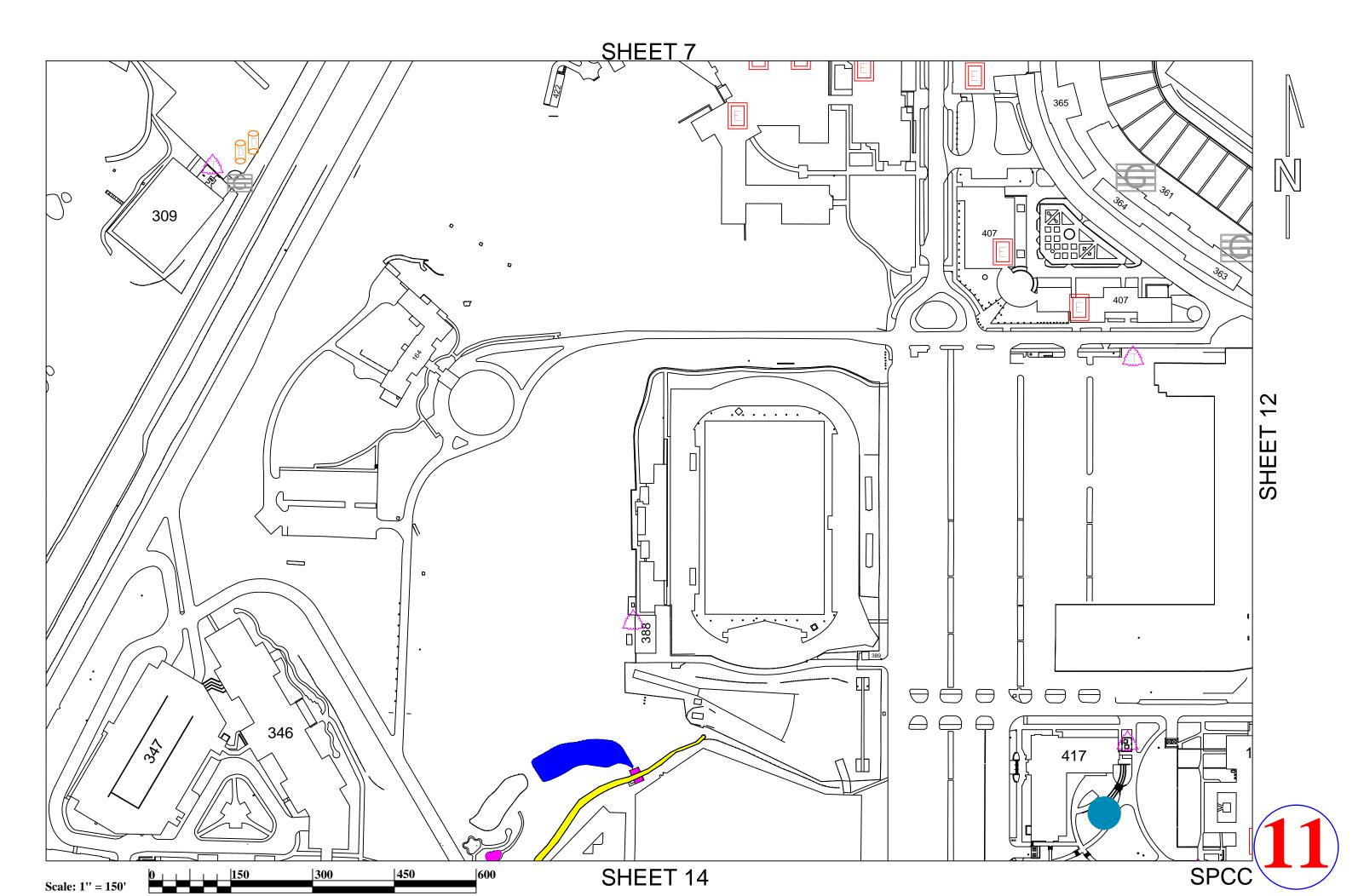
SHEET 10

ublish\_12388\SPCC\_19 Page -11X17Book-2019(mstr)2.dwg -- 013-sht 6\_7500, Last Update: 10/11/19 - 11:13am, Opened: 10/11/19 - 1:22pm

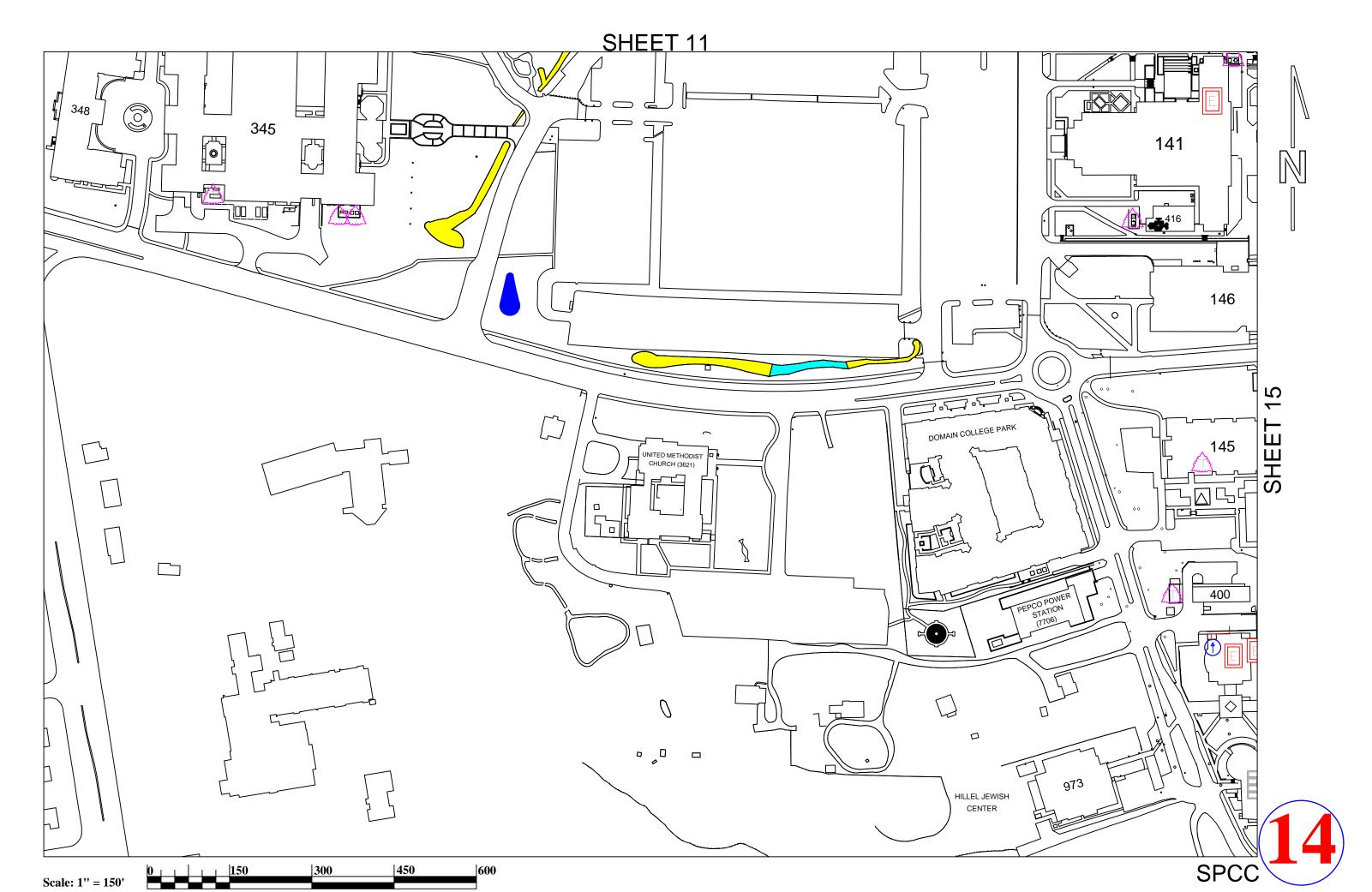


ish\_12388\SPCC\_19 Page -11X17Book-2019(mstr)2.dwg -- 016-sht 9\_7500, Last Update: 10/11/19 - 11:13am, Opened: 10/11/19 - 1:22pm

mp\AcPublish\_12388\SPCC\_19 Page -11X17Book-2019(mstr)2.dwg -- 017-sht 10\_7500, Last Update: 10/ 11/19 - 11:13am, Opened: 10/11/19 - 1:22pm



10/11/19 - 1:22pm 10/ 11/19 - 11:13am, Opened:



mp\AcPublish\_12388\SPCC\_19 Page -11X17Book-2019(mstr)2.dwg -- 025-sht 17\_7500, Last Update: 10/ 11/19 - 11:13am, Opened:



10/11/19 - 1:23pm

450

300

SPCC



MARYLAND DEPARTMENT of the ENVIRONMENT 1800 WASHINGTON BOULEVARD BALTIMORE, MARYLAND. 21230 (410) 537-300 1-800-633-6101 (within Maryland) http://www.mde.state.md.us



### State of Maryland Department of the Environment Emergency Response Division 1800 Washington Blvd. Suite #105 Baltimore, Maryland. 21230-1721



24 HOUR SPILL REPORTING (Toll Free) 1-866-633-4686 EMERGENCY RESPONSE OFFICE (410) 537-3975 RESPONSE OFFICE FACSIMILE (410) 537-3932

PURSUANT TO THE PROVISIONS OF STATE LAW AND REGULATION; (COMAR 26.10.01.03) "A PERSON DISCHARGING OR PERMITTING THE DISCHARGE OF OIL, OR WHO EITHER ACTIVELY OR PASSIVELY PARTICIPATES IN THE DISCHARGE OR SPILLING OF OIL, EITHER FROM A LAND BASED INSTALLATION, INCLUDING VEHICLES IN TRANSIT, OR FROM ANY VESSEL SHIP OR BOAT OF ANY KIND, SHALL REPORT THE INCIDENT IMMEDIATELY TO THE ADMINISTRATION." "THE REPORT OF AN OIL SPILL OR DISCHARGE SHALL BE MADE TO THE ADMINISTRATION IMMEDIATELY, BUT NOT LATER THAN TWO HOURS AFTER DETECTION OF THE SPILL."

\* \* \* FIRE DEPARTMENT PERSONNEL. SEE REVERSE \* \* \*

ADC Map Coord Date of sp	oill: Mo	/ Day / Y	r. 20	1	Time of spill	:	Hours (24	hour clock)
Fire Department Report No.: Police Department Report No.:								
Location of spill - Street address:		Product Name:			Capacity	of Vessel, Vehic	cle or Tank: _ Gallons	
City / Town MD County Zip	(Indicate Gasoline, Diesel, Heating Oil, Chemical Name or UN ID etc.)  Container Type:  (Indicate AST, UST, Transformer, Saddle Tank, Drum			Amount I	N Vessel, Vehic	Vessel, Vehicle or Tank: Gallons Fount Spilled: Gallons		
Transportation Incident:		Contained on Land  Entered Storm Drain or Ditch		Vehicle Tag	Number and Stat	e:		
(Indicate Type of Auto, Truck, Train, Aircraft or Watercraft etc.)  Fixed Facility Incident:		☐ Entered Sanitary Sewer ☐ Is Below Ground ☐ Entered surface waters:			DOT or ICC MC Number: Hull Numbers and Name:			
(Indicate Type of Industrial, Commercial, Residentia	al etc.)	Entered surface waters.						
Person(s) Responsible for Sp. Name:	Zip:		Be Sure to Complete Both Sections  Don't Forget	Name:_ Addres	s:		pill: (N/A if privat	
Drivers Lic.No	S	State:	to Sign Below					
Cause of Spill:  ☐ Motor Vehicle Accident ☐ Personnel Error/Vandalism ☐ Tank/Container/Pipe Leak ☐ Mechanical Failure ☐ Transfer Accident ☐	Spill Mitiga  MDE ERI Federal: State: Local:	Groups that <u>Pa</u> ation: Res D #  Dr:	ponsible #	e Party	Sorbent Di Sorbent Pa Sorbent Bo Sorbent So Overpack	ust: ads: ooms: weeps: Drums :	<u>u</u> to contain/clea Bag each each ea. Stee	s or bales or bales or bales
Responsible Party : Describe circumstances	s contributing to the	spill. (Additional space	e on back)		I		[Optional for FD or G	ov't Personnel]
Responsible Party : Describe Containment ,	Removal and Clea	n-up operations , inclu	ding dispos	sal. (Additio	onal space on b	ack) [	Optional for FD or G	ov't Personnel]
Responsible Party : Procedures, Methods at	nd Precautions inst	ituted to prevent recurr	ance of the	e spill. (Add	ditional space o	n back ) [	Optional for FD or G	ov't Personnel]
THE UNDERSIGNED CERTIFIES THAT THE INFORMATION PROVIDED IS TRUE AND CORRECT TO THE BEST OF HIS OR HER KNOWLEDGE AT THE TIME THE REPORT WAS COMPLETED.								
Print Name: Company or Fire Department: Address : City / State / Zip								
Telephone			-		-			

http://www.mde.state.md.us



### State of Maryland Department of the Environment Emergency Response Division 1800 Washington Blvd. Suite #105 Baltimore, Maryland. 21230-1721



24 HOUR SPILL REPORTING (Toll Free)1-866-633-4686 EMERGENCY RESPONSE OFFICE (410) 537-3975 RESPONSE OFFICE FACSIMILE (410) 537-3932

PURSUANT TO THE PROVISIONS OF STATE LAW AND REGULATION; (Environmental Article 4-401 (i); the "Person Responsible for the discharge includes, The owner of the discharged oil, The owner, operator and / or the person in charge of the oil storage facility, vessel, barge, or vehicle involved at the time of or immediately before the discharge; and Any person who through act or ommission, causes the discharge."

* * * <u>Fire Department</u> * * * a Unknow	and <u>Local</u> or <u>State Government Agencies</u> : Unless you are the responsible party as defined above , Please indicate " In " in any box reuesting information that is unknown or unavailable to you at the time of report.
This Space for continuation ar	nd additional information.
	S THAT THE INFORMATION PROVIDED IS TRUE AND CORRECT TO THE BEST OF HIS OR HER KNOWLEDGE AT THE TIME THE REPORT WAS COMPLETED.  Company or Fire Department:
Address :	City / State / Zip
Telephone	Signature

### EMERGENCY RESPONSE PROCEDURES FOR OIL SPILLS

### ATTEMPT TO STOP THE FLOW OF OIL FROM SPEADING AND FURTHER IMPACTING THE ENVIRONMENT.

#### ALWAYS USE REQUIRED PPE.

- **Control**: close any valves or plug or patch any leaks.
- Contain: use spill containment equipment including absorbent pads and protective booms to prevent further spreading of the oil.
- **Notify:** UMD's Environmental Affairs Unit <u>ASAP</u> by phone at 301-405-3990 with the following information:
  - Time & location of spill
  - Type & quantity of oil spilled
  - Source & cause of spill
  - Description of containment, removal & cleanup operations

Environmental Affairs will then report to MDE 24-Hour Emergency Response Hotline within 2 Hours of recognizing the oil spill. MDE: 1-866-633-4686

If the spill reaches navigable waters, then the Environmental Affairs Unit will also notify the National Response Center at 800-424-8802.

ALWAYS REPORT INCIDENT TO YOUR SUPERVISOR!

#### **Spill History Report**

Date	Spill Amount	Details/ Comments (Please Attach copies of Report Forms)
06/29/17	~3 Gallons	Front-end loader overturned, fuel tank spilled ~3 gallons on the sidewalk between Terrapin Trail and Landscape Lane. No soil or waterway contaminated
07/25/17	3-4 Gallons	Hydraulic line on excavator broke, spilling 3-4 gallons of oil onto concreete surface. No soil or waterway contaminated.
08/15/17	1 Gallon	Hydraulic line on lift blew spilling 1 gallon of oil onto concrete outside of the Bioscience Research Bldg. No soil or waterway contaminated.
09/22/17	15 Gallons	Compost compactor at Ellicott Dining Hall leaked liquid containing cooking oil and food grease into storm drain. Oil sorbnet pads and a boom were deployed at outfall to contain spill, contractor hired to jet and vacuum the grease/oil from stormwater system.
10/18/17	40 Gallons	Compost compactor at Stamp leaked liquid containing cooking oil and food grease into storm drain. Minor sheen observed on Paint Branch Creek. Oil sorbnet pads and a boom were deployed at outfall to contain spill, contractor hired to jet and vacuum the grease/oil from stormwater system.
11/29/17	5 Gallons	Diner employee spilled 5 gallons of used food grease from a 30-gal trash can onto the pavement. Small amount of grease entered stormdrain. None was observed entering surface waters. Oil sorbne pads and a boom were deployed at stormdrain to prevent additional grease from entering the system
12/04/18	15 Gallons	Unknown employee dumped used cooking oil/grease into an unlined dumpster in the loading dock. None was observed entering the stormwater system. The leaking dumpster was removed for repair. Sorbent was used to clea the oil on the pavement and disposed of in the dumpster.
08/05/19	1.5-2 Gallons	Unknown employee overfilled the waste oil AST at the shuttle bus facility. Approx 1.5-2 gallons of oil spilled onto the surrounding concrete and a small patch of soil. None was observed entering the stormwater system. There was already oil sorbent pads deployed prior to the notification of the spill. Loose oil absorbent was used (1 bag) and all cleaning materials in addition to 1 55-gallon drum of soil was removed and disposed of through the University's TSDF.
12/09/20	200 gallons	A nozzle on the fuel dispenser failed to shut off and resulted in an overflow of diesel fuel during the refueling of one of the bus at the Shuttle Bus facility. All fuel was contained on the containment pad at the fueling site. No fuel entered the environment. OEA deployed absorbent materials to the ground surface. A vacuum truck was used to pump water and fuel from the containment OWS in the middle of the fuel pad.
03/03/21	1-2 gallons	At approximately 2.45 am an alert went out about a small spill that occurred at the Shuttle Bus fuel island. The alert mentioned that the spill was from the dispenser nozzle and that all the fuel spilled had been contained to the containment pad and oil/water separator. Upon investigation, it was noted the pump house had fuel pooled in the bottom of the structure and that some had leaked out into the adjacent ground. Absorbent material was used on the ground surface and roughly 4-in of contaminated soil was removed.
08/06/23	9-10 Gallons	Around 1630 on 8/6/21, approximately 9-10 gallons of oil overflowed from the waste oil tank while transferring oil from a portable oil tank into the waste oil tank. At the event of the spill, two shuttle buss technicians quickly placed an absorbent dust from the spill kit on top of the oil. UMD Fire Marshall and 3 shuttle bus technicians finished cleaned up the spill using the absorbent dust and pads from he spill kit next to the tank. All of the spilled oil was contained within the impervious area around the oil tank.
11/22/21	12 Gallons	At approximately 4:28 PM the Fire Marshal's Office was dispatched to the Shuttle Bus Facility for a diesel fuel spill. The leaking diesel fuel was determined to be a contractor spill on University of Maryland property. JPR Fueling was delivering diesel fuel to the Shuttle Bus Facility when a seal between the tank and a discharge valve failed. After containing the initial spill of approximately 8 gallons, the contractor (JRP Fueling) called in another tanker to pump the initial leaking fuel tanker out. Another 4 gallons spilled after the tanker truck was pumped out and was attempted to drive off site.
12/06/21	2 Gallons	At approximately 1600, a call was placed to the University of Maryland CRC of a spill being formed under a whelice at the Severn Building. The CRC contacted the UMD Fire Marshalfs who, in turn, sent out a message to those on call. Once on site, it was discovered that a vehicle was leaking it's ramshission fluid ont the pavement below. The initial UMD personnel on site obtained spill containment materials and placed oil absorbent pads under the vehicle and onto the loose standing oil on the surrounding pavement. At approximately 10:19 the following morning, Tuesday December 7th, he vehicle was towed from the partie to the Motor Poor maintenance facility, UMD Office of Environmental Affairs personnel arrived on scene at approximately 10:30 to further clean up the remaining loose standing oil and used oil absorbent pads.

MARYLAND DEPARTMENT of the ENVIRONMENT 1800 WASHINGTON BOULEVARD BALTIMORE, MARYLAND, 21230 (410) 537-300 1-800-833-6101 (within Maryland) http://www.mde.state.md.us



### State of Maryland Department of the Environment Emergency Response Division 1800 Washington Blvd. Suite #105 Baltimore, Maryland. 21230-1721



24 HOUR SPILL REPORTING (Toll Free) 1-866-633-4686 EMERGENCY RESPONSE OFFICE (410) 537-3975 RESPONSE OFFICE FACSIMILE (410) 537-3932

ABC Map Coord Date of spill: Mo. 0 6	/D 2 0 //- 00 4 7	THE DELANT	0.0.0.7		
	Time of spin.				
Fire Department Repor	t No.:	Police Depa	artment Report No.:		
Location of spill - Street address: Terrapin Trail & Landscape Ln.	Product Name: Diesel Fuel		Capacity of Vessel, Vehicle or Tank:		
	(Indicate Gasoline, Diesel, Heating Oil, Chemical Nar	me or UN ID etc.)	Amount IN Vessel, Vehicle or Tank:		
City / Town College Park	Container Type:	· · · · · · · · · · · · · · · · · · ·	Gallons		
MD County Prince George's	Fuel tank on front-end loader (Indicate AST, UST, Transformer, Sadd	In Total D	Estimated Amount Spilled:		
Zip <u>20742</u>	etc.)	ie tank, Drum	Gallons		
Transportation Incident: Front-end loader overturned	☑ Contained on Land		Vehicle Tag Number and State:		
(Indicate Type of Auto, Truck, Train, Aircraft or Watercraft etc.)	Entered Storm Drain or Di	tch	269 UMID#185359		
Fixed Facility Incident:	Entered Sanitary Sewer	dene	DOT or ICC MC Number:		
	☐ Is Below Ground☐ Entered surface waters:		Hull Numbers and Name:		
( Indicate Type of Industrial , Commercial , Residential etc.)					
	iver if Vehicle) Be Sure Comp	any Respo	nsible for Spill: (N/A if private citizen.)		
Name: Vascoe Cross Address:	Name:	University of	of Maryland		
Address	Sections Addres		uin Administration Building gents Drive		
City/State: College Park, MD Zip: 207	742 City/St		e Park, MD Zip: 20742		
Phone:	Former Phone	301-405-1			
Drivers Lic.No. C-620839-751-564 S	tate: MD to Sign Fed. E	mployer ID I	No52-6002033		
Motor Vehicle Accident     Personnel Error/Vandalism     Tank/Container/Pipe Leak     Mechanical Failure     Spill Mitiga     MDE ERD     Federal:     State:     State:	Iniversity of Maryland	Sorbent Du Sorbent Pa Sorbent Bo Sorbent Sv	eads: ~20 each or bales coms: each or bales each or bales each or bales Drums: each or Poly		
Responsible Party : Describe circumstances contributing to the	spill. (Additional space on back)		[Optional for FD or Gov't Personnel]		
A front-end loader overturned on the sidewalk	adjacent to Terrapin Trail and La	ndscape Lan	e, which caused its diesel fuel tank to leak		
approximately 3 gallons onto the concrete.					
Responsible Party: Describe Containment, Removal and Clear	n-up operations , Including disposal. (Addition	onal space on ba	(Optional for FD or Gov't Personnel		
The entirety of the spill was contained immediate disposed of through the University's TSDF.	ely with sorbent on the concrete	sidewalk. The	e used sorbent was cleaned up and properly		
Responsible Party : Procedures, Methods and Precautions instit	uted to prevent recurrance of the spill. (Add	litional space on	back ) [Optional for FD or Gov't Personnel]		
Equipment operators will be retrained on safe of	perating procedures.				
THE UNDERSIGNED CERTIFIES THAT THE INFORMATION PROP Print Name: Alexander Galbreath	VIDED IS TRUE AND CORRECT TO THE BEST O	F HIS OR HER KNO	DWLEDGE AT THE TIME THE REPORT WAS COMPLETED.		
Address: 4716 Pontiac Street	City / State / 7		University of Maryland Park, MD 20742		
Telephone 301-405-7016	Signature		with		



### State of Maryland Department of the Environment Emergency Response Division 1800 Washington Blvd. Suite #105 Baltimore, Maryland. 21230-1721



24 HOUR SPILL REPORTING (Toll Free) 1-886-633-4886 EMERGENCY RESPONSE OFFICE (410) 537-3975 RESPONSE OFFICE FACSIMILE (410) 537-3932

	oill: Mo. <u>07</u>	_/ Day <u>25</u> / Y t No.: N/A			Time of spil	II: 0800 (Approx) Hours (24 hour clock)	
Location of spill - Street addrest Talbot Hall 7569 Calvert Service Lane City / Town College Park MD County Prince Georges Zip 20742  Transportation Incident: Heavy Equipment (Indicate Type of Auto, Truck, Train; Aircraft or Waterc Fixed Facility Incident: Institutional (Indicate Type of Industrial, Commercial, Residential)	raft etc.)	Product Name:  Hydraulic Oil  (Indicate Gasoline, Diesel, Heating Oil, Chemical Name or UN ID a Container Type:  Hydraulic Hose (Indicate AST, UST, Transformer, Saddle Tank, Detc.)  Contained on Land Entered Storm Drain or Ditch Entered Sanitary Sewer Is Below Ground Entered surface waters:			e Tank, Drum	Capacity of Vessel, Vehicle or Tank:  N/A Gallons  Amount IN Vessel, Vehicle or Tank:  N/A Gallons  Estimated Amount Spilled:  3-4 Gallons  Vehicle Tag Number and State:  N/A  DOT or ICC MC Number:  N/A  Hull Numbers and Name:  N/A	
Person(s) Responsible for Sp. Name: Morris Landes (equipm Address: 1120 Wye Oak Buildi 4201 Landscape Lan City/State: College Park, MD Phone: 301-405-2222  Drivers Lic.No.	nent operator) ng e Zip: _207	<del></del>	Be Sure to Complete Both Sections Don't Forget to Sign Below	Name: Address City/Sta Phone:	University of ss: 1120 Wy 4201 Lar ate: College	onsible for Spill: ( N/A if private citizen.)  f Maryland (Building & Landscape Maintenance)  ye Oak Building  ndscape Lane  e Park, MD  Zip: 20742	
Cause of Spill:  Motor Vehicle Accident Personnel Error/Vandalism Tank/Container/Pipe Leak Mechanical Failure Transfer Accident  Responsible Party: Describe circumstances	Spill Mitiga  MDE ERE Federal: State: U Local: Contracto	lentify All Groups that Participated in pill Mitigation: Responsible Party MDE ERD # #   Federal: State: UMD Environmental Affairs Unit Local: Contractor:			Materials used by You to contain/clean-up spill:  Sorbent Dust: 5 Bags Sorbent Pads: each or bales Sorbent Booms: each or bales Sorbent Sweeps: each or bales Overpack Drums: ea. Steel or Poly Other: Soil (used to immediately stop spill); drum for disposal  [Optional for FD or Gov't Personnel] Int of Talbot Hall. One of the hydraulic oil lines broke.		
						ntered a storm drain or waterway. No soil	
was contaminated as a result of t		·-					
to collect the remaining oil. The  Treatment, Storage and Disposa  Responsible Party: Procedures, Methods and	small amount  I Facility (TSD	of soil and sorber  F) for storage, pri	or to off	al was o	drummed ar	nt operator. Coptional for FD or Gov't Personnel on the University's hazardous waste had taken to the University's hazardous waste had back (Optional for FD or Gov't Personnel along hoses on the piece of equipment.	
					· ·		
THE UNDERSIGNED CERTIFIES THAT THE Print Name: Jason Baer Address: 4716 Pontiac Street, Sens Felephone 301-405-3163		Compa	any or F City / S	ire Dep	partment:	OWLEDGE AT THE TIME THE REPORT WAS COMPLETED. University of Maryland Park, MO 20742	



### State of Maryland Department of the Environment Emergency Response Division 1800 Washington Blvd. Suite #105 Baltimore, Maryland. 21230-1721



24 HOUR SPILL REPORTING (Toll Free) 1-866-633-4686 EMERGENCY RESPONSE OFFICE (410) 537-3973 RESPONSE OFFICE FACSIMILE (410) 537-3932

ADC Map Coord Date of spill: Mo. 0 8	/ Day <u>1</u> <u>5</u> / Y	r. 20 <u>1</u> <u>7</u>	Time of spil	l: <u>1</u> <u>5</u> : <u>1</u> <u>5</u> Hours (24 hour clock)
Fire Department Report	No.: <u>n/a</u>		Police Depa	artment Report No.:n/a
Location of spill - Street address: Bioscience Research Building 4066 Campus Dr. City / Town College Park MD County MD Zip 20742  Product Name: Hydraulic Oil (Indicate Gasoline, Diesel, Heating Oil, Chemical Name of Container Type: Hydraulic hose (Indicate AST, UST, Transformer, Saddle				Capacity     of Vessel, Vehicle or Tank:       n/a     Gallons       Amount IN Vessel, Vehicle or Tank:     Gallons       n/a     Gallons       Estimated Amount Spilled:     Gallons
Transportation Incident:  n/a  (Indicate Type of Auto, Truck, Train, Aircraft or Watercraft etc.)  Fixed Facility Incident:  Institutional  (Indicate Type of Industrial, Commercial, Residential etc.)	Contained on Land Entered Storm Drain or Ditch Entered Sanitary Sewer Is Below Ground Entered surface waters:			Vehicle Tag Number and State: n/a  DOT or ICC MC Number: n/a  Hull Numbers and Name: n/a
Name: Douglas D. Downing (equipment opera Address: Bioscience Research Building, Roon 4066 Campus Dr. City/State: College Park, MD Zip: 207 Phone: 301-405-7432	n #1107	Complete Both Sections Addition City/ Pon't Forget Phoi	e: University ess: Bioscier 4066 Ca State: Collect es: 301-405-	nce Research Building, Room #1107 ampus Dr. ge Park, MD Zip: _20742
☐ Motor Vehicle Accident ☐ Personnel Error/Vandalism ☐ Tank/Container/Pipe Leak ☐ Federal	MD Environment	ponsible Par # 	Sorbent D Sorbent P Sorbent B Sorbent S	ads: 6 each or bales each or bales
Responsible Party: Describe circumstances contributing to the	spill. (Additional space	on back)		[Optional for FD or Gov't Personnel]
UMD staff member was operating lift when a hydraulic line blew	, causing approximate	ly 1 gallon of hydr	aulic oil to spill ont	to the concrete outside of the Bioscience Research Building.
No oil entered a storm drain or waterway. No soil was contamin	nated as a result of the	spill. The spill wa	s contained on the	concrete surface.
Responsible Party : Describe Containment , Removal and Clear	n-up operations , includ	ding disposal. (Ad	ditional space on t	[ Optional for FD or Gov't Personnel ]
Sorbent dust, pads, and booms were used to contain and clear	<del></del>			the University's hazardous waste Treatment, Storage and
Disposal facility for storage, prior to off-site disposal. UMD Fac	ilities Maintenance repl	aced the broken h	ydraulic line.	
Responsible Party : Procedures, Methods and Precautions insti	tuted to prevent recurr	ance of the spill. (	Additional space o	on back ) [ Optional for FD or Gov't Personnel ]
N/A - accidental spill due to hose failure. We will request that	equipment maintenance	ce staff inspect rer	naining hoses on t	he piece of equipment.
	; ;			
THE UNDERSIGNED CERTIFIES THAT THE INFORMATION PROPRINT NAME: Alexander Galbreath  Address: 4716 Pontiac Street, Seneca Bidg.  Telephone 301-405-7016	Comp	RRECT TO THE BES any or Fire I City / State Signatu	Department:_ / Zip _Collect	NOWLEDGE AT THE TIME THE REPORT WAS COMPLETED. University of Maryland ge Park, MD 201742



State of Maryland
Department of the Environment
Emergency Response Division
1800 Washington Blvd. Suite #105
Baltimore, Maryland. 21230-1721



24 HOUR SPILL REPORTING (Toll Free) 1-866-833-4686 EMERGENCY RESPONSE OFFICE (410) 537-3975 RESPONSE OFFICE FACSIMILE (410) 537-3932

Abo Map Coord Date of spill: Mo. 0 9	/ Day 2 2 / Y	r. 20 <u>1</u>	7 Time of spil	l: <u>0 7 0 0</u> Hours (24 hour clock)
Fire Department Report	t No.: <u>n/a</u>		_ Police Depa	rtment Report No.: <u>n/a</u>
Location of spill - Street address:  Ellicott Diner Loading Dock  257 Farm Drive  City / Town College Park  MD County Prince George's  Zip 20742	Cooking oil / food  (Indicate Gasoline, Diesel, Heat Container Type: Compost compact (Indicate AST, UST, Tra			Capacity n/a     of Vessel, Vehicle or Tank: Gallons       Amount unknown     IN Vessel, Vehicle or Tank: Gallons       Estimated 15     Amount Spilled: Gallons
Transportation Incident:  n/a  (Indicate Type of Auto, Truck, Train, Aircraft or Watercraft etc.)  Fixed Facility Incident:  Institutional (Indicate Type of Industrial, Commercial, Residential etc.)	Contained on Land  Entered Storm Drain or Ditch Entered Sanitary Sewer Is Below Ground Entered surface waters:			Vehicle Tag Number and State:  n/a  DOT or ICC MC Number:  n/a  Hull Numbers and Name:  n/a
Name: <u>University of Maryland Dining Services</u> Address: <u>4028 Stadium Drive</u> City/State: <u>College Park, MD</u> Zip: <u>207</u> Phone: <u>301-314-8054</u>	river if Vehicle) 742	Complete Both Sections P	lame: University Address: 4028 Sta City/State: College Phone: 301-405-1	e Park, MD Zip: 20742
Cause of Spill:  ☐ Motor Vehicle Accident ☐ Personnel Error/Vandalism ☐ Tank/Container/Pipe Leak ☐ Mechanical Failure ☐ Transfer Accident ☐ Contractor: AAA Storm Water Mgmt.			Party Sorbent Di Sorbent Pa Sorbent Ba Sorbent Sorbent	ads: 20 each or bales  ooms: 1 each or bales  weeps: each or bales  Drums: ea. Steel or Poly
Responsible Party: Describe circumstances contributing to the	spill. (Additional space	on back)	•	[Optional for FD or Gov't Personnel]
Compost compactor at the Ellicott Dining half leaked liquid containing cooking oil and food grease into the storm drain.  Responsible Party: Describe Containment, Removal and Clean-up operations, including disposal. (Additional space on back)  [Optional for FD or Gov't Personnel]				
Oil sorbent pads and a boom were deployed at the outfall to co	ontain the material. The	University his	red a contractor on 9/25	to jet the storm drains and vacuum the grease/oil. The
contractor cleaned over 1,200 linear feet of storm drain piping.	Approximately 5,600 g	allons of wate	er impacted with oil/grea	ise was taken to the Oaks Landfill Leachate
Pretreatment Facility in Laytonville, MD for disposal,				
Responsible Party : Procedures, Methods and Precautions Insti 1) compost compactors sealed to prevent spillage; 2) more fre				
			•	4 4) Oil sorbent booms will be installed in the trench drain to
prevent oil/grease from reaching the stormwater conveyan	ce system. EA and Din	ing Services	will consult with the UMI	D utilities group in order to determine a long-term solution to
prevent drainage to the trench drain from reaching the stor	m drains.			
Print Name: Alexander Galbreath  Address: 4716 Pontiac Street, Suite 0103	OVIDED IS TRUE AND COI	any or Fi	re Department:_ ate / Zip <u>Golleg</u> e	University of MD: Environmental Affairs
Telephone 301-405-7016		Sign	ature/\ldots	Sules -



### State of Maryland Department of the Environment Emergency Response Division 1800 Washington Bivd. Suite #105 Baltimore , Maryland. 21230-1721



24 HOUR SPILL REPORTING (Toll Free)1-866-633-4686 EMERGENCY RESPONSE OFFICE (410) 537-3975 RESPONSE OFFICE FACSIMILE (410) 537-3932

PURSUANT TO THE PROVISIONS OF STATE LAW AND REGULATION; (Environmental Article 4-401 (i); the "Person Responsible for the discharge includes, The owner of the discharged oil, The owner, operator and / or the person in charge of the oil storage facility, vessel, barge, or vehicle involved at the time of or immediately before the discharge; and Any person who through act or ommission, causes the discharge."

\*\* <u>Fire Department</u> \* \* \* and <u>Local</u> or <u>State Government Agencies</u>: Unless you are the responsible party as defined above, Please indicate 'Unknown " in any box revesting information that is unknown or unavailable to you at the time of report.

This Space for continuation and additional information.

During monthly NPDES sampling at Outfall 019, Environmental Affairs (EA) staff observed oil or grease (which was believed to be food-related) in Outfall #019. The material was very viscous and did not move far beyond the immediate area of the outfall. After making the required notification to the Maryland Department of the Environment, EA staff began investigating the watershed serviced by Outfall 019 and discovered evidence of oil/grease residue in the parking area behind the Ellicott Dining Hall (Bkdg. #257).

When EA staff consulted with Greg Thompson of Dining Services regarding the issue, he noted that oily liquid was found leaking from a compost compactor unit near the loading dock on Friday, September 22nd. Greg indicated that a UMD trash truck removed the leaking compactor that day and that dining hall staff had flushed the spilled material into a trench drain located along the northern edge of parking lot #S8. Dining Services believed that the trench drain discharged to a grease trap located in the parking lot in front of the dining hall offices. However, EA staff conducted dye testing of the trench drain and determined that it did not discharge to the grease trap, but rather the trench drain discharges directly to a nearby storm drain inlet that ultimately discharges to Outfall 019.

EA staff deployed oil sorbent booms at Outfall 019 in an attempt to capture the oil/grease that was released, but oily material continued to discharge from the stormwater conveyance system. A contractor was brought in on 9/25 to jet and vacuum the stormwater lines between the Ellicott Dining Hall and Outfall 019 in order to remove residual oil/grease that could be discharged during the next rain event.

Additional measures taken to prevent further illicit discharges from the Ellicott Dining Hall include: 1) Dining Services has hired a contractor to seal the compactors to reduce spillage; 2) Facilities Management will haul compost compactors more frequently to ensure compactors are not overfilled and to minimize the breakdown of food waste inside the compactor during warm weather; 3) Dining Services will add cardboard or other bagasse to the compost compactor prior to filling them with food waste in order to absorb any oil/grease contained in the food waste; and 4) Oil sorbent booms will be installed in the trench drain to prevent oil/grease from reaching the stormwater conveyance system. EA and Dining Services will consult with the UMD utilities group in order to determine a long-term solution to prevent drainage to the trench drain from reaching the storm drains.

	UE AND CORRECT TO THE BEST OF HIS OR HER KNOWLEDGE AT THE TIME THE REPORT WAS COMPLETED.
Print Name: Alexander Galbreath	Company or Fire Department: University of MD; Environmental Affairs
Address: 4716 Pontiac Street, Suite 0103	City / State / Zip College Park MD 20742
Telephone 301-405-7016	Signature / Signature

MARYLAND DEPARTMENT of the ENVIRONMENT 1800 WASHINGTON BOULEVARD BALTIMORE, MARYLAND. 21230 (410) 537-3000 1-880-833-6101 (within Maryland) http://www.mde.state.md.us



# State of Maryland Department of the Environment Emergency Response Division 1800 Washington Blvd. Suite #105 Baltimore, Maryland. 21230-1721



24 HOUR SPILL REPORTING (Toll Free) 1-866-633-4686 EMERGENCY RESPONSE OFFICE (410) 537-3975 RESPONSE OFFICE FACSIMILE (410) 537-3932

ADC Map Coord Date of spill: Mo. 1 0	/ Day 1 8 / Y	⁄r. 20 <u>1</u>	7 Time of spill	: <u>1 1 0 0</u> Hours (24 hour clock)
Fire Department Report	t No.: <u>n/a</u>		Police Depa	rtment Report No.: <u>n/a</u>
Location of spill - Street address:  Stamp Student Union  Fieldhouse Drive  City / Town College Park  MD County Prince George's  Zip 20742	Container Type _Compost com	nod greas Heating OII, Ci : Dactor	nemical Name or UN ID etc.) er, Saddle Tank, Drum	Capacity n/a       of Vessel, Vehicle or Tank:         Amount unknown       [N] Vessel, Vehicle or Tank:         Estimated 40       Amount Spilled:         Gallons
Transportation Incident:  n/a  (Indicate Type of Auto, Truck, Train, Aircraft or Watercraft etc.)  Fixed Facility Incident:  Institutional  (Indicate Type of Industrial, Commercial, Residential etc.)				Vehicle Tag Number and State:  DOT or ICC MC Number:  Hull Numbers and Name:
Name: University of Maryland Stamp Student Address: 3972 Campus Drive  City/State: College Park Zip: 207 Phone: 301-314-5931		Sections	Name: University Address: 3972 Ca	e Park Zip: 20742
<ul> <li>Motor Vehicle Accident</li> <li>Personnel Error/Vandalism</li> <li>Tank/Container/Pipe Leak</li> <li>Mechanical Failure</li> <li>Transfer Accident</li> </ul> Spill Mitiga <ul> <li>MDE ERD</li> <li>Federal :</li> <li>State :</li> <li>Local :</li> </ul>	Groups that Pa	ponsible # 	Party Sorbent Du Sorbent Pa Sorbent Bo Sorbent Sv Overpack I	eads: 25 each or bales each or Poly
Compost compactor at the Stamp Student Union leaked liquid Paint Branch Creek.			ease into the storm drain.	[Optional for FD or Gov't Personnel ]  There was a minor oil sheen on the receiving water body.
Responsible Party : Describe Containment , Removal and Clear	n-up operations, includ	ding dispose	II. (Additional space on ba	ack) [Optional for FD or Gov't Personnel]
Oil sorbent pads and a boom were deployed at the outfall to concontractor cleaned approximately 1,000 linear feet of storm drain Pretreatment Facility in Laytonville, MD for disposal. Responsible Party: Procedures, Methods and Precautions institution 1) compost compactors sealed to prevent spillage; 2) more free compactor of food waste; 3) add cardboard to the compost utilities group in order to determine a long-term solution to present the composition of the compo	in piping. Approximatel tuted to prevent recurre quent hauling of compound compactor prior to filling event drainage to the tree to the prior to the tree tree to the tree tree tree tree tree tree tree	ny 1,600 gal	ons of water impacted with spill. (Additional space on to ensure compactors to ensure compactors or absorb oil/grease; EA are from reaching the storm d	h oil/grease was taken to the Oaks Landfill Leachate  back ) [Optional for FD or Gov't Personnel] are not overfilled and to minimize breakdown time in the ad the Stamp Student Union will consult with the UMD
THE UNDERSIGNED CERTIFIES THAT THE INFORMATION PROPERTIES THE INFORMATION PROPERTIES THE INFOR	VIDED IS TRUE AND COR Compa	any or F City / S	ire Department: \tag{base} tate / Zip \tag{College} tature	University of Maryland Park, MD 20742



State of Maryland
Department of the Environment
Emergency Response Division
1800 Washington Blvd. Suite #105
Baltimore, Maryland. 21230-1721



24 HOUR SPILL REPORTING (Toll Free) 1-866-633-4686 EMERGENCY RESPONSE OFFICE (410) 537-397 RESPONSE OFFICE FACSIMILE (410) 537-3932

ADC Map Goord Date of spill: Mo. 1 1	/ Day <u>2 9</u> / Y	r. 20 <u>1</u>	7 Time of spil	i: <u>1 4 : 1 5</u> Hours (24 hour clock)
Fire Department Report No.: n/a Police Department Report No.: n/a				
Location of spill - Street address:  Denton Dining Hall  3951 Denton Service Ln.  City / Town College Park  MD County Prince George's  Zip 20742  Transportation Incident:  n/a  (Indicate Type of Auto, Truck, Train, Aircraft or Watercraft etc.)  Fixed Facility Incident:  Institutional (Indicate Type of Industrial, Commercial, Residential etc.)	Product Name: Cooking oil / fo (Indicate Gasoline, Diesel, Container Type Trash can (Indicate AST, UST, etc.)  Contained of Entered Sto Is Below Gr	Heating Oil, Che Transformer On Land Orm Drain nitary Sevo	r, Saddle Tank, Drum  or Ditch	Capacity of Vessel, Vehicle or Tank:  30 Gallons  Amount IN Vessel, Vehicle or Tank:  5 Gallons  Estimated Amount Spilled:  5 Gallons  Vehicle Tag Number and State:  n/a  DOT or ICC MC Number:  Hull Numbers and Name:
Name: University of Maryland Dining Services Address: Denton Dining Hall 3951 Denton Service Ln. City/State: College Park, MD Zip: 201 Phone: 301-405-0562	=======================================	Complete Both Sections F	Name: <u>University</u> Address: <u>4716 Po</u> City/State: <u>Collega</u> Phone: <u>301</u>	e Park, MD Zip: 20742
☐ Motor Vehicle Accident ☐ Personnel Error/Vandalism ☐ Tank/Container/Pipe Leak ☐ Mechanical Failure ☐ Transfer Accident ☐ Local:	Identify All Groups that Participated in Spill Mitigation: Responsible Party mnel Error/Vandalism MDE ERD # # Federal: State:			used by You to contain/clean-up spill:  ust: 20 Bags ads: 1 roll each or bales ooms: 1 each or bales weeps: each or bales Drums: ea. Steel or Poly
Responsible Party . Describe circumstances contributing to the	spili. (Additional space	on back)		[Optional for FD or Gov't Personnel]
Diner employee was transporting approximately 5 gallons of u	sed food grease in a 3(	)-gal trash ca	n from the kitchen to the	e oil collection area on the loading dock when the trash can
overturned spilling all of the contents onto the pavement, Som	e grease entered the s	torm drain, b	ut none entered the surf	ace waters.
Responsible Party . Describe Containment , Removal and Clea	n-up operations , include	ding disposal	. (Additional space on b	ack) [Optional for FD or Gov't Personnel]
An oil sorbent boom was deployed at the storm drain to prevenue the grease from the pavement. Used sorbent materials were				
Responsible Party : Procedures, Methods and Precautions inst	tuted to prevent recurr	ance of the s	plil. (Additional space o	n back) [Optional for FD or Gov't Personnel]
Training will be conducted for dining hall employees on proper	oil handling methods a	nd spill respo	onse procedures.	
THE UNDERSIGNED CERTIFIES THAT THE INFORMATION PROPRIET Name: Alexander Galbreath				NOWLEDGE AT THE TIME THE REPORT WAS COMPLETED. University of Maryland
Address: 4716 Pontiac Street, Suite 0103		City / St	ate / Zip _Collect	ge Park, MD 20742
Telephone 301-405-7016		Sigr	nature ///w//	ella)



State of Maryland
Department of the Environment
Emergency Response Division
1800 Washington Blvd. Suite #105
Baltimore, Maryland. 21230-1721



24 HOUR SPILL REPORTING (TOII Free) 1-866-633-4686 EMERGENCY RESPONSE OFFICE (410) 537-3975 RESPONSE OFFICE FACSIMILE (410) 537-3932

Location of spill - Street address:	Product Name			Capacity of Vessel, Vehicle or Tank:		
3951 Denton Service Lane  City / Town College Park, MD  MD County Prince Georges  Zip 20742	Container Typ	al, Heating Oil, Chemical Nam		Amount IN Vessel, Vehicle or Tank:  Compared Gallons  Estimated Amount Spilled:  Gallons  Gallons		
Transportation Incident:  N/A  (Indicate Type of Auto, Truck, Train, Aircraft or Watercraft etc.)  Fixed Facility Incident: Institutional Facility (Indicate Type of Industrial, Commercial, Residential etc.)	Contained  Entered St	on Land torm Drain or Dit anitary Sewer Ground		Vehicle Tag Number and State:  N/A  DOT or ICC MC Number:  N/A  Hull Numbers and Name:  N/A		
Person(s) Responsible for Spill: Name: University of Maryland Dining Services Address: 3951 Denton Service Lane  City/State: College Park, MD Z Phone: 301-405-0562 Drivers Lic.No. N/A	( Driver if Vehicle) p: 20742 State:	Complete Both Sections  Don't Forget City/St	university of Man ss: 4716 Pontiac S ate: College Pa 301-405-3990	nsible for Spill: ( N/A if private citizen.) yland - Office of Environmental Affairs Street, Suite #0103 ark, MD Zip: 20742 No. 52-6002033		
■ Motor Vehicle Accident ■ Personnel Error/Vandalism ■ Tank/Container/Pipe Leak ■ Mechanical Failure ■ Transfer Accident	Mitigation: Re DE ERD # deral: cal: cal:	sponsible Party #	Sorbent Du Sorbent Pa Sorbent Bo Sorbent Sw	each or bales each or bales		
Responsible Party : Describe circumstances contribut	2.4.00.00.00.00.00.00.00.00			[Optional for FD or Gov't Personne		
				loading dock. Dining Services staff notified the Office of		
spill response materials inside the dumpster and on the desponsible Party: Describe Containment, Removal Oil sorbent booms and pads were deployed to con	ground. The dumpster was remo and Clean-up operations, incl atain the spilled cooking oil / f	oved from the facility for uding disposal. (Addition food grease. The spil	repair / replaceme onal space on bac did not reach th	yed to contain the spill. OEA staff deployed additional ent. All spill cleanup materials were collected and disposed cick)  [Optional for FD or Gov't Personne the stormdrain system or waters of the state. All oil was apster. The leaking dumpster was removed for repair		
Responsible Party: Procedures, Methods and Precau						
				back ) [Optional for FD or Gov't Personnel ster. Staff will be retrained regarding proper oil disposal		
THE UNDERSIGNED CERTIFIES THAT THE INFORMA  Print Name: Jason Baer, Assistant Director, Office of Address: 4716 Pontiac Street, Suite, 0103		DRRECT TO THE BEST O Dany or Fire Dep City / State / Z	partment: Uni			



# State of Maryland Department of the Environment Emergency Response Division 1800 Washington Blvd. Suite #105 Baltimore, Maryland. 21230-1721



24 HOUR SPILL REPORTING (Toll Free) 1-866-633-4686 EMERGENCY RESPONSE OFFICE (410) 537-3975 RESPONSE OFFICE FACSIMILE (410) 537-3932

ADC Map Coord Date of spi	II: Mo. <u>0</u> <u>8</u>	/ Day <u>0</u> <u>5</u> / Y	r. 20 <u>1</u>	<u>9</u> 1	Time of spill	: <u>1 3 0 0</u>	_ Hours (24 h	nour clock)
Fire Department Report No.: Police Department Report No.:								
Location of spill - Street addres  8537 Paint Branch Dr	ocation of spill - Street address:  Product Name:  Waste Oil				<u>Capacity</u> of	Vessel, Vehic	le or Tank: _ Gallons	
City / Town College Park MD County Prince Georges Zip 20742		(Indicate Gasoline, Diesel, Heating Oil, Chemical Name or It  Container Type:  AST  (Indicate AST, UST, Transformer, Saddle Ta					Vessel, Vehic	le or Tank: _ Gallons _ Gallons
Transportation Incident:  (Indicate Type of Auto, Truck, Train, Aircraft or Watercr Fixed Facility Incident:  Institutional (Indicate Type of Industrial, Commercial, Residential)	·	Contained of Entered Sto	orm Drai nitary So ound	ewer	Waterway Name Name	Vehicle Tag Nur N/A DOT or ICC MC N/A Hull Numbers ar N/A	Number:	): 
Person(s) Responsible for Sp Name: Shuttle Bus Facility Address: 8537 Paint Branch Dr  City/State: College Park, MD Phone: (301) 314-7269 Drivers Lic.No.	Zip: 2074.		Be Sure to Complete Both Sections  Don't Forget to Sign Below	Name: Address City/Sta Phone:	University of Ma S: 1101 Main Ad 7901 Regent ate: College P 301-405-1000	dministration Building s Drive ark, MD	( N/A if private	citizen.)
Cause of Spill:  ☐ Motor Vehicle Accident ☐ Personnel Error/Vandalism ☐ Tank/Container/Pipe Leak ☐ Mechanical Failure ☐ Transfer Accident ☐	Spill Mitiga  MDE ERI Federal: State: L Local:	Groups that <u>Pa</u> Ition: Res  D #  Iniversity of Maryland	ponsible #	Party	Sorbent D Sorbent Pa Sorbent Ba Sorbent Sorbent D	ads:	Bags each each each	or bales or bales or bales
Responsible Party : Describe circumstances	contributing to the	spill. (Additional space	e on back)			[Opti	ional for FD or Go	ov't Personnel]
An unknown individual overfilled	the waste oi	tank located out	tside of	the mair	ntenance sh	nop of the Shuttle	Bus Facility. T	The spill was
discovered on Monday, Augu	st 5, 2019 a	approximately	13:00.	Most o	f the spill v	vas covered by	sorbent pads	prior to the
discovery by the reporting indi								
Responsible Party : Describe Containment ,	Removal and Clea	n-up operations , inclu	ding dispos	sal. (Additio	onal space on b	eack) [ Opti	ional for FD or Go	ov't Personnel]
The entirety of the spill was cleaned	ed up by collec	cting the saturated	d sorben	pads, p	lacing 1 bag	of sheen clean loo	ose absorbent t	o absorb the
remaining oil, and a 55-gallon	drum of the c	ontaminated soi	il was re	moved.	All cleanin	ng materials were	cleaned up a	nd properly
disposed of through the Univer	•							
Responsible Party : Procedures, Methods an	d Precautions inst	ituted to prevent recurr	rance of the	e spill. (Add	ditional space o	n back ) [ Opti	ional for FD or Go	ov't Personnel]
Shuttle Bus personnel will be retr	ained in prop	er disposal proce	dures. Ir	additio	n to the trair	ning, a longer nipp	ole will be instal	led between
the tank and the locking cap to pre	vent overfills ir	the future as wel	l as a the	installa	tion of a com	nbination tank gaug	ge and audible /	visual alarm.
THE UNDERSIGNED CERTIFIES THAT THE Print Name: Kaitlyn Peterson, Office of E Address: 4716 Pontiac Street, 0103 Telephone 301-405-8604	E INFORMATION PRO		any or _ City /	Fire De	partment: <u>L</u> Zip College P	John versity of Marylan		JMPLETED. 
L								



# State of Maryland Department of the Environment Emergency Response Division 1800 Washington Blvd. Suite #105 Baltimore, Maryland. 21230-1721



24 HOUR SPILL REPORTING (Toll Free) 1-866-633-4686 EMERGENCY RESPONSE OFFICE (410) 537-3975 RESPONSE OFFICE FACSIMILE (410) 537-3932

ADC Map Coord Date of spill: Mo. 1 2	/ Day <u>0</u> <u>9</u> / Yr. 20 <u>2</u> <u>0</u> T	ime of spill:	1 5 4 5 Hours (24 hour clock)
Fire Department Report	rt No.: F	Police Depart	tment Report No.:
Location of spill - Street address:  8537 Paint Branch Drive, Bldg. 424  City / Town  College Park  MD County Prince George's	Product Name: Ultra Low Sulfur Diesel Fuel (Indicate Gasoline, Diesel, Heating Oil, Chemical Name Container Type: AST / Fuel Dispenser	e or UN ID etc.)	Capacity of Vessel, Vehicle or Tank:  20,000 Gallons  Amount IN Vessel, Vehicle or Tank:  Gallons  Estimated Amount Spilled:
Zip <u>20742</u>	(Indicate AST, UST, Transformer, Saddle etc.)	Tank, Drum	200 Gallons
Transportation Incident:  (Indicate Type of Auto, Truck, Train, Aircraft or Watercraft etc.)  Fixed Facility Incident:  Institutional (university) - shuttle bus maintenance facility (Indicate Type of Industrial, Commercial, Residential etc.)	<ul> <li>■ Contained on Land</li> <li>□ Entered Storm Drain or Dit</li> <li>□ Entered Sanitary Sewer</li> <li>□ Is Below Ground</li> <li>□ Entered surface waters:</li> </ul>	Waterway Name	Vehicle Tag Number and State:  N/A  DOT or ICC MC Number:  N/A  Hull Numbers and Name:  N/A
Name: Edwin Brown (facility maintenance manager - evening: Address: 8537 Paint Branch Drive, Bldg. 424  City/State: College Park, MD Zip: 2074 Phone: (301) 314-8631	Complete Both Sections  42  Don't Forget Phone:	University of Mary S: 1101 Main Adn 7901 Regents l ate: College Par 301-405-3960	ninistration Building
Cause of Spill:         □ Motor Vehicle Accident       Spill Mitigation:       Responsible Party         □ Personnel Error/Vandalism       MDE ERD # #       #         □ Tank/Container/Pipe Leak       □ Federal:       □ State:       □ State:         □ Transfer Accident       □ Local:       □ Contractor:       Triumvirate Environmental			dised by You to contain/clean-up spill:  st: 5 Bags ds: 10 each or bales oms: 3 each or bales reeps: each or bales Orums: 1 ea. Steel or Poly
Responsible Party : Describe circumstances contributing to th			[Optional for FD or Gov't Personnel]
A nozzle on the fuel dispenser failed to shut off			
MDE was notified of the spill by phone at approxin Responsible Party: Describe Containment, Removal and Cle		ad been asses	sed and cleanup operations had been initiated.
The Office of Environmental Affairs respond	ed for the University. Absorbent	materials we	ere used to remove the fuel on the ground
surface. All liquid was contained to the contain	nment pad at the fueling facility. A	vacuum truc	k was used to pump water and fuel from the
containment sump in the middle of the fueling Responsible Party: Procedures, Methods and Precautions ins			<u>-</u>
			- '
We will contact a contractor t	o service the fuel dispenser a	nd ensure 1	that it is operating properly.
THE UNDERSIGNED CERTIFIES THAT THE INFORMATION PER Print Name: Jason Baer  Address: 4716 Pontiac Street, #0103 (Seneca Building)	Company or Fire De City / State / 2	partment:_ <u>U</u> Zip College Par	Jniversity of Maryland rk, MD 20742
Telephone 202-441-6391 (cell)	Signature	( )as	on Baer

http://www.mde.state.md.us

MDE

# State of Maryland Department of the Environment Emergency Response Division 1800 Washington Blvd. Suite #105 Baltimore, Maryland. 21230-1721



24 HOUR SPILL REPORTING (Toll Free) 1-866-633-4686 EMERGENCY RESPONSE OFFICE (410) 537-3975 RESPONSE OFFICE FACSIMILE (410) 537-3932

ADC Map Coord Date of spi	ill: Mo. <u>0</u> <u>8</u>	/ Day <u>0</u> <u>6</u> / Y	r. 20 <u>2</u>	<u>1</u> 1	Time of spill	l: <u>1 6 3</u>	<u>0</u> Hours	(24 hour clock)
Fire Depa	rtment Report	t No.:		F	Police Depa	artment Repo	rt No.:	
Location of spill - Street addres	SS:	Product Name: Used Oil			Capacity 550	of Vessel, \	Vehicle or Tank: Gallons	
Shuttle Bus Facility		(Indicate Gasoline, Diesel, Heating Oil, Chemical Name or UN ID etc.)			Amount	IN Vessel, \	Vehicle or Tank:	
City / Town College Park	<u></u>	Container Type:				500		Gallons
MD County Prince George's		AST				Estimated	<u>Amount Sp</u>	illed:
Zip		(Indicate AST, UST, etc.)	Transform	ner, Saddle	e Tank, Drum	10		Gallons
Transportation Incident:		<ul><li>■ Contained of</li><li>■ Entered Store</li></ul>		in or Dit	ch	Vehicle Tag	Number and	State:
( Indicate Type of Auto, Truck, Train, Aircraft or Waterca	raft etc.)	☐ Entered Sa				DOT or ICC	MC Number:	
Fixed Facility Incident:		☐ Is Below Gr			Vaterway Name			
Transportation at an Institution		■ Entered sur	face wa	ters:		Hull Numbers and Name:	:	
(Indicate Type of Industrial, Commercial, Residential	etc.)							
Person(s) Responsible for Sp Name: Shuttle Bus Technician Address: 8537 Paint Branch Dr		river if Vehicle)	Be Sure to Complete Both Sections	Name: Addres	University of Ma	aryland-Shuttle Bus Branch Dr	Facility	private citizen.)
•	Zip: <u>2074</u>	2	Don't	-			Zip: <u>2074</u>	<del>1</del> 2
Phone: (301) 314-7267		Nata.	Forget to Sign		(301) 314-726		3	
Drivers Lic.No		state:	Below	rea. El	mpioyer iD	No. <u>52-600203</u>	3	
Cause of Spill:  ☐ Motor Vehicle Accident ☐ Personnel Error/Vandalism ☐ Tank/Container/Pipe Leak ☐ Mechanical Failure ☐ Transfer Accident ☐	Spill Mitiga  MDE ERI Federal: State: Local:	Groups that Paration: Res	ponsible #	e Party	Sorbent D Sorbent P Sorbent B Sorbent S Overpack	Just:         3           Jads:         10           Jooms:            Joweeps:		each or bales
Responsible Party : Describe circumstances	contributing to the	e spill. (Additional spac	e on back)				[Optional for FD	or Gov't Personne
Around 1630 on 8/6/21, app	proximately	10 gallons of oi	l overfl	owed fr	rom the us	sed oil tank	while transfe	erring oil from a
		portable oil tan	k into tł	ne used	d oil tank.			
Responsible Party : Describe Containment ,	Removal and Clea	an-up operations , inclu	ding dispos	sal. (Additio	onal space on b	pack)	[ Optional for FD	or Gov't Personne
Two technicians from the S	huttle Bus fa	acility immediat	ely use	d loose	e absorber	nt to contain	and absorb	the spill. UMD
Fire Marshall and 3 shuttle								<del>`</del>
spill kit next to the tar		•						
Responsible Party : Procedures, Methods ar	nd Precautions inst	tituted to prevent recuri	rance of the	e spill. (Add	ditional space of	on back )	[ Optional for FD	or Gov't Personne
The facility inspected their								
3/4 to 7/8 full. It was noted the	at the 9V ba	attery in the ala	rm was	low an	nd once it v	was replace	d, the alarm	was tested an
determined to be in working	order. The us	sed oil tank was	also p	<u>ump</u> ed	out on 8/0	7/2021 and	will be pump	ed out regularly
THE UNDERSIGNED CERTIFIES THAT THE	E INFORMATION PR							WAS COMPLETED.
Print Name: Kaitlyn Peterson Address: 4716 Pontiac Street		Comp			Ppartment: <u>College P</u>	University of Marylan Park, MD 20742	<u>u</u>	
Telephone 202-308-8273			-	gnature	-	, 20112		
Totophono				griatui <del>C</del>				

http://www.mde.state.md.us

MDE

# State of Maryland Department of the Environment Emergency Response Division 1800 Washington Blvd. Suite #105 Baltimore, Maryland. 21230-1721



24 HOUR SPILL REPORTING (TOII Free) 1-866-633-4686 EMERGENCY RESPONSE OFFICE (410) 537-3975 RESPONSE OFFICE FACSIMILE (410) 537-3932

ADC Map Coord Date of spill: Mo. 1 1 / Day 2 2 / Yr. 20 2 1 Time of spill: 1 4 2 8 Hours (24 hour clock)							
Fire Department Report	t No.:		Police Depa	artment Report No.:			
Location of spill - Street address: Shuttle Bus Facility-University of Maryland  8537 Paint Branch Dr  City / Town College Park, MD  MD County Prince George's  Zip 20742	Product Name: Diesel (Indicate Gasoline, Diesel, F Container Type: Tanker (Low Pressure (Indicate AST, UST, etc.)	Bulk Liquid)		Capacityof Vessel, Vehicle or Tank: 			
Transportation Incident:  Fuel delivery tanker  (Indicate Type of Auto, Truck, Train, Aircraft or Watercraft etc.)  Fixed Facility Incident:  Institutional  (Indicate Type of Industrial, Commercial, Residential etc.)	□ Contained o □ Entered Sto □ Entered Sar □ Is Below Gro □ Entered sur	rm Drain o nitary Sew ound	J. O. Name	Vehicle Tag Number and State:  421E95  DOT or ICC MC Number:  536632  Hull Numbers and Name:			
Name: Dennis Address: Refused to provide information  City/State: Zip: Phone:	river if Vehicle)	Complete Both Sections A  Don't Forget P	ame: JRP Fueling/Jan ddress: 10487 Lakerio #8115	VA Zip: 23005			
<ul> <li>Motor Vehicle Accident</li> <li>□ Personnel Error/Vandalism</li> <li>□ Tank/Container/Pipe Leak</li> <li>■ Mechanical Failure</li> <li>□ Transfer Accident</li> <li>Spill Mitigation</li> <li>□ MDE ERI</li> <li>□ Federal :</li> <li>□ State :</li> <li>□ Local :</li> <li>□ Local :</li> </ul>	Or: On-Call First Respon	ponsible F #se, Triumvirate	Sorbent Do Sorbent Pa Sorbent Bo Sorbent Sorbe	rads: each or bales each or bales			
At approximately 4:28 PM the Fire Marshal's 0	 Office was dispate	ched to the	e Shuttle Bus Fac	cility for a diesel fuel spill. The leaking diesel			
fuel was determined to be a contractor sp	ill on University	of Marylar	nd property. JRI	P Fueling was delivering diesel fuel to the			
Shuttle Bus Facility when a seal between the Responsible Party: Describe Containment, Removal and Clean							
Shuttle Bus employees deployed oil boo	Shuttle Bus employees deployed oil booms and loose absorbent to contain the spill. The contractor (JRP) deployed oil						
absorbent pads underneath the tanker and discharge valve as well as a 5 gallon bucket to collect the trickle of diesel							
still leaking from the valve. Once it was determined the fuel had penetrated the soil adjacent to the parking lot, Shuttle							
Responsible Party : Procedures, Methods and Precautions instituted to prevent recurrance of the spill. (Additional space on back ) [Optional for FD or Gov't Personnel]							
Install signage at fuel pad instructing all load	ling and unloadir	ng to be do	one with vehicle	on the fuel pad where the OWS is located.			
THE UNDERSIGNED CERTIFIES THAT THE INFORMATION PRO		any or Fir	re Department: <u> </u>	UMD-ESSR			
Address: 4716 Pontiac St Telephone (301) 405-8604		-	ate / Zip <u>College Pa</u> ature	-dir, IVID, 20142			

http://www.mde.state.md.us



### State of Maryland Department of the Environment Emergency Response Division 1800 Washington Blvd. Suite #105 Baltimore, Maryland. 21230-1721



24 HOUR SPILL REPORTING (Toll Free)1-866-633-4686 EMERGENCY RESPONSE OFFICE (410) 537-3975 RESPONSE OFFICE FACSIMILE (410) 537-3932

PURSUANT TO THE PROVISIONS OF STATE LAW AND REGULATION; (Environmental Article 4-401 (i); the "Person Responsible for the discharge includes, The owner of the discharged oil, The owner, operator and / or the person in charge of the oil storage facility, vessel, barge, or vehicle involved at the time of or immediately before the discharge; and Any person who through act or ommission, causes the discharge."

\* \* \* Fire Department \* \* \* and Local or State Government Agencies : Unless you are the responsible party as defined above , Please indicate ' Unknown " in any box reuesting information that is unknown or unavailable to you at the time of report. This Space for continuation and additional information. 8 gallons, the contractor (JRP Fueling) called in another tanker to pump the initial leaking fuel tanker out. After the tanker was fulling emptied to the best of their abilities, the initial tanker started his tanker in an effort to leave UMD. However, once the tanker was put into gear, diesel began to spill again from the same discharge valve (approximately an additional 4 gallons). Bus employees began to removed the contaminated soil and rocks. It was determined that the extent of the contaminated area was too expansive for the employees to handle and a contractor was contacted take over the clean-up operations. The impervious areas impacted where cleaned using loose absorbent and sweeping the material up into a 55-gallon drum. Once all the loose fuel was removed, the contaminated area was packed with loose absorbent for the night and to be re-evaluated in the morning. The following afternoon, Tuesday November 23rd, at 1:30pm, First Call Environmental was hired by the contractor (JRP) to remediate the contaminated area. First Call arrived with three (3) employees equipped with a hand shovel. It was determined this would not suffice and First Call initiated arrangements for earth-moving equipment and a roll-off to be delivered at the site. Monday, November 29th, Darnell Jackson of First Call contacted UMD stating First Call will be at Shuttle Bus circa 1:00pm on Nov 29 to begin the remediation project. UMD plans to continue to evaluate the remediation project and determine is additional work is needed due to the fact the area impacted is a sand filter BMP. On Monday, November 29th, First Call removed approximately 1 cubic yard of contaminated soil with an excavator. The soil was placed into a lined roll-off dumpster and transported to Clean Harbors Environmental in Baltimore for disposal. First Call finished and left UMD around 5 pm. THE UNDERSIGNED CERTIFIES THAT THE INFORMATION PROVIDED IS TRUE AND CORRECT TO THE BEST OF HIS OR HER KNOWLEDGE AT THE TIME THE REPORT WAS COMPLETED. Company or Fire Department: UIVIU-⊏55K Print Name: Kaitlyn Peterson City / State / Zip College Park, MD 20742 Address: 4716 Pontiac Street Signature Kaitlyn Peterson Telephone (301) 405-8604

http://www.mde.state.md.us



# State of Maryland Department of the Environment Emergency Response Division 1800 Washington Blvd. Suite #105 Baltimore, Maryland. 21230-1721



24 HOUR SPILL REPORTING (Toll Free) 1-866-633-4686 EMERGENCY RESPONSE OFFICE (410) 537-3975 RESPONSE OFFICE FACSIMILE (410) 537-3932

ADC Map Coord Date of spill: Mo. 1 2 / Day 0 6 / Yr. 20 2 1 Time of spill: 1 6 0 0 Hours (24 hour clock)						
Fire Department Report	t No.:		Police Depa	rrtment Report No.:		
Location of spill - Street address: 5245 Greenbelt Rd.	Product Name:  petroleum product			Capacity of Vessel, Vehicle or Tank:  Gallons		
City / Town College Park MD County Prince George's Zip 20740	(Indicate Gasoline, Diesel, F Container Type: Vehicle (Indicate AST, UST, etc.)	:		Amount IN Vessel, Vehicle or Tank:  2 Gallons  Estimated Amount Spilled: 2 Gallons		
Transportation Incident: Auto (Indicate Type of Auto, Truck, Train, Aircraft or Watercraft etc.) Fixed Facility Incident: Institutional (Indicate Type of Industrial, Commercial, Residential etc.)	Contained o	orm Drain or D nitary Sewer ound	Mare way Name Name Name Name Name Name Name Name	Vehicle Tag Number and State:  22427SG MD  DOT or ICC MC Number:  Hull Numbers and Name:		
Person(s) Responsible for Spill: (Dr. Name: Address: 5245 Greenbelt Rd.  City/State: College Park, MD Zip: 20740 Phone: Drivers Lic.No.		Complete Both Sections  Don't Forget  Name City/S Phon	e: University of Ma ess: 5245 Greenb State: College P e: (301) 405-5482	rark, MD Zip: 20740		
<ul> <li>Motor Vehicle Accident</li> <li>Personnel Error/Vandalism</li> <li>Tank/Container/Pipe Leak</li> <li>Mechanical Failure</li> <li>Transfer Accident</li> <li>Local :</li> <li>Contractor</li> </ul>	Groups that <u>Pa</u> ation: Res D #  University of Maryland	ponsible Party #	Sorbent D Sorbent P Sorbent B Sorbent S Overpack	ads: 12 pads each or bales ooms: each or bales weeps: each or bales Drums: each or bales Steel or Poly		
Responsible Party : Describe circumstances contributing to the				[Optional for FD or Gov't Personnel]		
At approximately 1600, a call was place						
at the Severn Building. The CRC contact Once on site, it was discovered that a ve Responsible Party: Describe Containment, Removal and Clea	hicle was leaki	ng it's transn	nission fluid	onto the pavement below.		
The initial UMD personnel on site obtained spill containment materials and placed oil absorbent pads under the vehicle						
and onto the loose standing oil on the su	rrounding pave	ement. The v	ehicle was	not able to be moved due to the loss of		
all it's transmission fluid, so in the mean time, absorbent pads were placed atop of all the loose standing oil and under  Responsible Party: Procedures, Methods and Precautions instituted to prevent recurrance of the spill. (Additional space on back)  [Optional for FD or Gov't Personnel]						
Ensure that proper maintenance of vehic	les are being p	reformed an	d pre-start ι			
Check vehicles after parking for long peri	<del>-</del>			• • • • • • • • • • • • • • • • • • • •		
THE UNDERSIGNED CERTIFIES THAT THE INFORMATION PROPRINT Name:  Kaitlyn Peterson  Address: 4716 Pontiac Street, Suite 0103  Telephone 202-308-8273			epartment: Land	University of Maryland		

http://www.mde.state.md.us



### State of Maryland Department of the Environment Emergency Response Division 1800 Washington Blvd. Suite #105 Baltimore, Maryland. 21230-1721



24 HOUR SPILL REPORTING (Toll Free)1-866-633-4686 EMERGENCY RESPONSE OFFICE (410) 537-3975 RESPONSE OFFICE FACSIMILE (410) 537-3932

PURSUANT TO THE PROVISIONS OF STATE LAW AND REGULATION; (Environmental Article 4-401 (i); the "Person Responsible for the discharge includes, The owner of the discharged oil, The owner, operator and / or the person in charge of the oil storage facility, vessel, barge, or vehicle involved at the time of or immediately before the discharge; and Any person who through act or ommission, causes the discharge."

\*\*\* Fire Department \*\*\* and Local or State Government Agencies : Unless you are the responsible party as defined above , Please indicate ' Unknown " in any box reuesting information that is unknown or unavailable to you at the time of report. This Space for continuation and additional information. the vehicle over night. At approximately 10:19 the following morning, Tuesday December 7th, the vehicle was towed from the parking lot to the Motor Pool maintenance facility. UMD Office of Environmental Affairs personnel arrived on scene at approximately 10:30 to further clean up the remaining loose standing oil and used oil absorbent pads. All clean up materials were placed in 15-gallon liners and disposed of in accordance to regulations. THE UNDERSIGNED CERTIFIES THAT THE INFORMATION PROVIDED IS TRUE AND CORRECT TO THE BEST OF HIS OR HER KNOWLEDGE AT THE TIME THE REPORT WAS COMPLETED. Print Name: Kaitlyn Peterson Company or Fire Department: University of Maryland Address: 4716 Pontiac Street, Suite 0103 City / State / Zip College Park, MD 20742 **Telephone** 202-308-8273 Signature



S5C   Gudelsky Veterinary Science   795   1   80   Instantaneous   Diesel   Double Wall   Day Tank   Day tank for Generator   7   7   7   7   7   7   7   7   7	Ditch
S5C   Gudelsky Veterinary Science   795   1   80   Instantaneous   Diesel   Double Wall   Day Tank   Day tank for Generator   7   7   7   7   7   7   7   7   7	75' E Ditch 75' E Ditch 75' E Ditch 75' NE Ditch 180' S Stream 180' S Pond 53' SE Pond 500' W Pond 500' W Pond 500' W Pond 5' SE Pond 5' SE Pond 20' SE Pond
S5D   Gudeisky Veterinary Science   795   1   80   Gradual to   Instantaneous   Diesel   Double Wall   Day Tank   Day tank for Generator   77   78   78   Lab for Physical Sciences   796   4   6,000   Instantaneous   Diesel   Double Wall   Lube Cube   AST for Generator   77   78   78   AST   VERT. AST   1   78   AST	75' E Ditch 75' NE Ditch 180' S Stream 180' S Stream Varies Varies 53' SE Pond 70' NE StormDrain 500' W Pond 500' W Pond 5' SE Pond 5' SE Pond 20' SE Pond 20' SE Pond
S7	75' NE
S7	180' S Stream  180' S Stream  180' S Stream  Varies Varies  53' SE Pond  70' NE StormDrain  500' W Pond  500' W Pond  5' SE Pond  5' SE Pond  20' SE Pond  20' SE Pond
78AB	180' S Stream  Varies Varies  53' SE Pond  70' NE StormDrain  500' W Pond  500' W Pond  5' SE Pond  5' SE Pond  20' SE Pond
Record   R	Varies         Varies           53' SE         Pond           70' NE         StormDrain           500' W         Pond           500' W         Pond           500' W         Pond           5' SE         Pond           5' SE         Pond           20' SE         Pond           50' NE         Pond
Severn	53' SE
968   Johnson-Whittle Hall	70' NE StormDrain 500' W Pond 500' W Pond 500' W Pond 500' W Pond 5' SE Pond 5' SE Pond 20' SE Pond
96A         Pyon-Chen Hall         434 PCH         8         555         Instantaneous         Diesel         Double Wall         HORIZ. AST         Generator         7/2           38A         Golf Maintenance         318         9         1,000         Instantaneous         Gasoline         Double Wall         AST         HORIZ. AST         60           38B         Golf Maintenance         318         9         500         Instantaneous         Diesel         Double Wall         AST         HORIZ. AST         60           38C         Golf Maintenance         314         9         280         Instantaneous         Waste Oil         Double Wall         AST         HORIZ. AST         60           52A         Grounds Operations         328         10         1,000         Instantaneous         Gasoline         Double Wall         AST         HORIZ. AST         5           52B         Grounds Operations         328         10         1,500         Instantaneous         Diesel         Double Wall         AST         HORIZ. AST         5           52C         Grounds Operations         328         10         280         Instantaneous         Diesel         Double Wall         AST         HORIZ. AST         2	500' W Pond 500' W Pond 500' W Pond 5' SE Pond 5' SE Pond 20' SE Pond 50' NE Pond
38A Golf Maintenance 318 9 1,000 Instantaneous Gasoline Double Wall AST HORIZ. AST 60  38B Golf Maintenance 318 9 500 Instantaneous Diesel Double Wall AST HORIZ. AST 60  38C Golf Maintenance 314 9 280 Instantaneous Waste Oil Double Wall AST HORIZ. AST 60  52A Grounds Operations 328 10 1,000 Instantaneous Gasoline Double Wall AST HORIZ. AST 528 Grounds Operations 328 10 1,500 Instantaneous Diesel Double Wall AST HORIZ. AST 528 Grounds Operations 328 10 1,500 Instantaneous Diesel Double Wall AST HORIZ. AST 529 Gradual to Instantaneous Diesel Double Wall AST HORIZ. AST 529 Gradual to Instantaneous Diesel Double Wall AST HORIZ. AST 529 Gradual to Instantaneous Diesel Double Wall AST HORIZ. AST 529 Gradual to Instantaneous Diesel Double Wall AST Generator 150 Gradual to Instantaneous Diesel Double Wa	500' W Pond 500' W Pond 500' W Pond 5' SE Pond 5' SE Pond 20' SE Pond 50' NE Pond
38B Golf Maintenance 318 9 500 Instantaneous Diesel Double Wall AST HORIZ. AST 600 Instantaneous Diesel Double Wall AST HORIZ. AST 600 Instantaneous Maste Oil Double Wall AST HORIZ. AST 600 Instantaneous Maste Oil Double Wall AST HORIZ. AST 600 Instantaneous Gasoline Double Wall AST HORIZ. AST 500 Instantaneous Diesel Double Wall AST Generator 100 Instant	500' W Pond 500' W Pond 5' SE Pond 5' SE Pond 20' SE Pond 50' NE Pond
38C Golf Maintenance 314 9 280 Instantaneous Waste Oil Double Wall AST HORIZ. AST 60  52A Grounds Operations 328 10 1,000 Instantaneous Gasoline Double Wall AST HORIZ. AST 5  52B Grounds Operations 328 10 1,500 Instantaneous Diesel Double Wall AST HORIZ. AST 5  52C Grounds Operations 328 10 280 Instantaneous Diesel Double Wall Lube Cube HORIZ. AST 2  67adual to Instantaneous Diesel Double Wall Lube Cube HORIZ. AST 2  67adual to Gradual to Instantaneous Diesel Double Wall AST Generator 15  67adual to Instantaneous Diesel Double Wall AST Generator 15  67adual to Instantaneous Diesel Double Wall AST Generator 15  67adual to Instantaneous Diesel Double Wall AST Generator 15  67adual to Instantaneous Diesel Double Wall AST Generator 15  67adual to Instantaneous Diesel Double Wall AST Generator 15  67adual to Instantaneous Diesel Double Wall AST Generator 14  67B Xfinity Center 360 10 500 Instantaneous Diesel Double Wall AST Generator 14	500' W Pond 5' SE Pond 5' SE Pond 20' SE Pond 50' NE Pond
S2A   Grounds Operations   328   10   1,000   Instantaneous   Gasoline   Double Wall   AST   HORIZ. AST   550   Instantaneous   Gasoline   Double Wall   AST   HORIZ. AST   550   Instantaneous   Diesel   Double Wall   AST   HORIZ. AST   550   Instantaneous   Diesel   Double Wall   AST   HORIZ. AST   550   Instantaneous   Diesel   Double Wall   Lube Cube   HORIZ. AST   Candual to   Double Wall   AST   Generator   150   Instantaneous   Diesel   Double Wall   AST   Gen	5' SE Pond 5' SE Pond 20' SE Pond 50' NE Pond
S2B   Grounds Operations   328   10   1,500   Instantaneous   Diesel   Double Wall   AST   HORIZ. AST   5	5' SE Pond 20' SE Pond 50' NE Pond
52B         Grounds Operations         328         10         1,500         Instantaneous         Diesel         Double Wall         AST         HORIZ. AST         5           52C         Grounds Operations         328         10         280         Instantaneous         Waste Oil         Double Wall         Lube Cube         HORIZ. AST         2           71         Research Greenhouse         398         10         800         Instantaneous         Diesel         Double Wall         AST         Generator         15           84         Wye Oak Building         428         10         521         Instantaneous         Diesel         Double Wall         AST         Generator         2:           67A         Xfinity Center         360         10         500         Instantaneous         Diesel         Double Wall         AST         Generator         1           67B         Xfinity Center         360         10         500         Instantaneous         Diesel         Double Wall         AST         Generator         14           67B         Xfinity Center         360         10         500         Instantaneous         Diesel         Double Wall         AST         Generator         14	20' SE Pond .50' NE Pond
52C         Grounds Operations         328         10         280         Instantaneous         Waste Oil         Double Wall         Lube Cube         HORIZ. AST         2           71         Research Greenhouse         398         10         800         Instantaneous         Diesel         Double Wall         AST         Generator         15           84         Wye Oak Building         428         10         521         Instantaneous         Diesel         Double Wall         AST         Generator         2:           67A         Xfinity Center         360         10         500         Instantaneous         Diesel         Double Wall         AST         Generator         1           67B         Xfinity Center         360         10         500         Instantaneous         Diesel         Double Wall         AST         Generator         14           67B         Xfinity Center         360         10         500         Instantaneous         Diesel         Double Wall         AST         Generator         14	.50' NE Pond
71         Research Greenhouse         398         10         800         Instantaneous         Diesel         Double Wall         AST         Generator         15           84         Wye Oak Building         428         10         521         Instantaneous         Diesel         Double Wall         AST         Generator         2:           67A         Xfinity Center         360         10         500         Instantaneous         Diesel         Double Wall         AST         Generator         1           67B         Xfinity Center         360         10         500         Instantaneous         Diesel         Double Wall         AST         Generator         14           67B         Xfinity Center         360         10         500         Instantaneous         Diesel         Double Wall         AST         Generator         14           67B         Xfinity Center         360         10         500         Instantaneous         Diesel         Double Wall         AST         Generator         14	
84         Wye Oak Building         428         10         521         Instantaneous         Diesel         Double Wall         AST         Generator         2:           67A         Xfinity Center         360         10         500         Instantaneous         Diesel         Double Wall         AST         Generator         1           67B         Xfinity Center         360         10         500         Instantaneous         Diesel         Double Wall         AST         Generator         14           Gradual to	1 SW StormDanie
67A         Xfinity Center         360         10         500         Instantaneous         Diesel         Double Wall         AST         Generator         1           67B         Xfinity Center         360         10         500         Instantaneous         Diesel         Double Wall         AST         Generator         14           Gradual to         Gradual to         Gradual to         Gradual to         Gradual to         Gradual to	21' SW StormDrain
67B Xfinity Center 360 10 500 Instantaneous Diesel Double Wall AST Generator 14 Gradual to	115' E Pond
Gradual to	.45' NE Pond
	22' SW Pond
Gradual to	
Gradual to	55' S Pond
78C         Shuttle Bus         424         11         550         Instantaneous         Waste Oil         Double Wall         AST         HORIZ. AST         1           Gradual to         Gradual to         HORIZ. AST         1	180' S Stream
94 Cole Field House 162 12 4,250 Instantaneous Diesel Double Wall HORIZ. AST AST for Generator 82 Gradual to	32' NW 5
79A         Severn         810         12         12,000         Instantaneous         #2 Fuel Oil         Double Wall         HORIZ. AST         AST         3:           Gradual to	39' NE StormDrain
79B Severn 810 12 10,000 Instantaneous Gasoline Double Wall HORIZ. AST AST 58	8' NW StormDrain
	8' NW StormDrain
Gradual to   Gradual to     Gradual to     Gradual to     Gradual to	88' E StormDrain
Gradual to     Gradual to	4' NW StormDrain
Gradual to   Gradual to   Gradual to   Severn   810   12   280   Instantaneous   Motor oil   Double Wall   Lube Cube   AST   34	34' NW StormDraii
Gradual to	ontained -
Gradual to	
Gradual to	ontained -
89A Severn 810 12 80 Instantaneous Diesel Double Wall HORIZ. AST Portable Generator V  Gradual to	Varies Varies
89B Severn 810 12 468 Instantaneous Diesel Double Wall HORIZ. AST Portable Generator V Gradual to	Varies Varies
	Varies Varies
	34' E Pond
95 IDEA Factory 228 13 700 Instantaneous Diesel Double Wall HORIZ. AST AST for Generator 15	55' SW 3
	40' NE Stream
Gradual to 42 Stadium Parking Garage 218 14 400 Instantaneous Diesel Double Wall AST Generator 10	100' N 10
81 Atlantic Building 224 15 2,220 Instantaneous Diesel Double Wall HORIZ. AST Generator 90	90' NW 4
Gradual to	60' NE 4

		ı	1	I I					T	ı	
20	Campus Recreation Center	68	15	576	Gradual to Instantaneous	Diesel	Double Wall	HORIZ. AST	Generator	50' N	Stream
82	Physical Sciences Complex	415	15	660	Gradual to Instantaneous	Diesel	Double Wall	HORIZ. AST	Generator	90' NW	4
21	School of Public Health	255	15	660	Gradual to Instantaneous	Diesel	Double Wall	HORIZ. AST	Generator	50' W	19
	A.V. Williams	115	16	60	Gradual to	Diesel	Double Wall	AST		NE NE	
25					Instantaneous Gradual to				Day tank		4
27	Animal Science	142	16	1,000	Instantaneous Gradual to	Diesel	Double Wall	AST	AST for Generator	5' S	4
11	Seneca	812	17	250	Instantaneous Gradual to	Diesel	Double Wall	HORIZ. AST	Generator	130' SW	StormDrain
66A	Bioscience Research Bldg	413	20	1,350	Instantaneous Gradual to	Diesel	Double Wall	HORIZ. AST	Generator	14' N	4
66B	Bioscience Research Bldg	413	20	1,350	Instantaneous	Diesel	Double Wall	HORIZ. AST	Generator	14' N	4
37	Cole Field House	162	20	275	Gradual to Instantaneous	Diesel	Double Wall	AST	Generator	140' NE	4
19	Dorchester	64	20	60	Gradual to Instantaneous	Diesel	Double Wall	HORIZ. AST	Generator	78' SW	5
69	H. J. Patterson	73	20	675	Gradual to Instantaneous	Diesel	Double Wall	HORIZ. AST	Generator	75' NE	4
6	Patuxent	10	20	1,000	Gradual to Instantaneous	Diesel	Double Wall	Lube Cube	AST for Generator	3' E	4
63	SCUB 3	392	20	1,350	Gradual to			HORIZ. AST		100' SE	4
					Gradual to	Diesel	Double Wall		Generator		4
30A	Stamp Student Union	163	20	150	Instantaneous Gradual to	Food Grease	Sec. Cont.	AST	Used Food Oil/Grease	Contained	-
30B	Stamp Student Union	163	20	150	Instantaneous Gradual to	Food Grease	Sec. Cont.	AST	Used Food Oil/Grease	Contained	-
26	Computer Instructional Center	406	21	150	Instantaneous Gradual to	Diesel	Double Wall	HORIZ. AST	Generator	168' NE	3
80B	Engineering Laboratory Basement	89	21	250	Instantaneous	Hydraulic oil	Double Wall	HORIZ. AST	Hydraulic Tank	Contained	-
80A	Engineering Laboratory Ground level	89	21	250	Gradual to Instantaneous	Hydraulic oil	Double Wall	HORIZ. AST	Hydraulic Tank	Contained	-
64A	SCUB 4	405	21	1,350	Gradual to Instantaneous	Diesel	Double Wall	HORIZ. AST	Generator	15' S	3
64B	SCUB 4	405	21	1,350	Gradual to Instantaneous	Diesel	Double Wall	HORIZ. AST	Generator	15' SW	3
64C	SCUB 4	405	21	1,000	Gradual to Instantaneous	Diesel	Double Wall	Lube Cube	AST for Generator	155' SW	3
75	Anne Arundel Hall	60	23	60	Gradual to Instantaneous	Diesel	Double Wall	Lube Cube	AST for Generator	170' NE	Grass
85	SCUB 5	416	23	189	Gradual to Instantaneous	Diesel	Double Wall	HORIZ. AST	Generator	Contained	5.400
					Gradual to						
15	Van Munching	39	23	500	Instantaneous Gradual to	Diesel	Double Wall	HORIZ. AST	Generator	10' S	12
9	Calvert Hall	15	24	250	Instantaneous Gradual to	Diesel	Double Wall	HORIZ. AST	Generator	10' SW	14
16R	Marie Mount	46	24	530	Instantaneous Gradual to	Diesel	Double Wall	Lube Cube	AST for Generator	15' NW	5
14R	McKeldin	35	24	215	Instantaneous	Diesel	Double Wall	HORIZ. AST	AST for Generator	18' NE	5
86	Former CP Police Station	3	25	700	Gradual to Instantaneous	Diesel	Double Wall	HORIZ. AST	Generator	140' S	1
61	Leornardtown Community Cntr.	250	25	125	Gradual to Instantaneous	Diesel	Double Wall	HORIZ. AST	Generator	50' NE	7
3	Plant Ops./Maint.	6	25	250	Gradual to Instantaneous	Waste Oil	Double Wall	HORIZ. AST	HORIZ. AST	31' SSE	5
62	Plant Ops./Maint.	6	25	280	Gradual to Instantaneous	Waste Oil	Double Wall	HORIZ. AST	HORIZ. AST	31' SSE	5
1B	Plant Ops./Maint.	6	25	8,000	Gradual to Instantaneous	Diesel	Double Wall	HORIZ. AST	HORIZ. AST	20' SE	5
	Plant Ops./Maint.				Gradual to Instantaneous			VERT. AST			
2A	• •	6	25	252,762	Gradual to	#2 Fuel Oil	Dike		AST	20' SE	5
2B	Plant Ops./Maint.	6	25	252,762	Instantaneous Gradual to	#2 Fuel Oil	Dike	VERT. AST	AST	20' SE	5
83	Pocomoke Building	7	25	2,400	Instantaneous Gradual to	Diesel	Double Wall	HORIZ. AST	Generator	50' SE	StormDrain
4	Ritchie Coliseum	4	25	250	Instantaneous Gradual to	Diesel	Double Wall	HORIZ. AST	Generator	5' E	5
65	Steam Plant	1	25	300	Instantaneous Gradual to	Diesel	Double Wall	HORIZ. AST	Generator	200' N	1
7	Steam Plant	1	25	250	Instantaneous Gradual to	Used Oil	Sec. Cont.	AST	HORIZ. AST	150' N	1
10	SCUB 1	19	28	250 623 328	Instantaneous	Diesel	Double Wall	Lube Cube	AST for Generator	50' E	6

Total Storage: 623,328



#### Appendix D: Table of Oil-Filled Operational Equipment

Hydaulic Elevators

ID	Bldg. Name	Bldg. #	Capacity	Contents	Room #	Receiving Outfall
1	Laboratory for Physical Sciences	796	Apprx. 125	Hydraulic oil	100	Contained
2	Chesapeake	338		Hydraulic oil	1103	Contained
3	Xfinity Center	360	Apprx. 125	Hydraulic oil	2301	Contained
4	Arena Parking Garage	403	Apprx. 125	Hydraulic oil	Level A	Contained
5	Arena Parking Garage	403		Hydraulic oil	Level A	Contained
6	Arena Parking Garage	403		Hydraulic oil	Level A	Contained
7	Golf Course Club House	166	Apprx. 125	Hydraulic oil	B0100D	Contained
8	Stadium Garage (PG 3)	218		Hydraulic oil	NW Level G	Contained
9	Stadium Garage (PG 3)	218		Hydraulic oil	SW Level G	Contained
10	Clarice Smith Performing Arts	386		Hydraulic oil	1206	Contained
11	Clarice Smith Performing Arts	386		Hydraulic oil	1232	Contained
12	Clarice Smith Performing Arts	386		Hydraulic oil	2175	Contained
13	Clarice Smith Performing Arts	386		Hydraulic oil	1201	Contained
14	Clarice Smith Performing Arts	386		, Hydraulic oil	1724	Contained
15	Clarice Smith Performing Arts	386		Hydraulic oil	1752	Contained
16	Clarice Smith Performing Arts	386		Hydraulic oil	1524	Contained
17	Clarice Smith Performing Arts	386	• •	Hydraulic oil	0728	Contained
18	Campus Recreation Center	068		Hydraulic oil	B0114	Contained
19	Campus Recreation Center	068	• •	, Hydraulic oil	B0101	Contained
20	Chem. & Nucl. Engineering	090		Hydraulic oil	1145	Contained
21	Chem. & Nucl. Engineering	090		, Hydraulic oil	1213	Contained
22	Chem. & Nucl. Engineering	090		Hydraulic oil	1303	Contained
23	Cambridge Area Dining Hall	097		Hydraulic oil	B0105	Contained
24	Animal Science	142		Hydraulic oil	0418	Contained
25	School Of Public Health	255		Hydraulic oil	0315	Contained
26	School Of Public Health	255		Hydraulic oil	0245	Contained
27	School Of Public Health	255		Hydraulic oil	0123	Contained
28	Institute for Phy. Sci. and Tech.	085		Hydraulic oil	B0103A	Contained
29	Cambridge Hall	096		Hydraulic oil	0211	Contained
30	A.V. Williams	115		Hydraulic oil	1152A	Contained
31	A.V. Williams	115		Hydraulic oil	1152A	Contained
32	Energy Research	223		Hydraulic oil	0200	Contained
33	Kim Engineering Building	225		Hydraulic oil	1104	Contained
34	Kim Engineering Building	225		Hydraulic oil	1104	Contained
35	Kim Engineering Building	225		Hydraulic oil	1224	Contained
36	Tech. Advancement Prog Bldg	387		Hydraulic oil	1111	Contained
37	J. M. Patterson Hall	083		Hydraulic oil	1206	Contained
38	Biomolecular Sciences Building	296		Hydraulic oil	1114E	Contained
39	Samuel Riggs IV Alumni Bldg.	407	Apprx. 125	Hydraulic oil	1120A	Contained
40	Samuel Riggs IV Alumni Bldg.	407	Apprx. 125	Hydraulic oil	1120A	Contained
41	Patuxent	010	Apprx. 125	Hydraulic oil	B0103	Contained
42	Jimenez Hall	034	Apprx. 125	Hydraulic oil	0102B	Contained
43	Mitchell Building	052	Apprx. 125	Hydraulic oil	0116A	Contained
44	Dorchester Hall	064	Apprx. 125	Hydraulic oil	0124A	Contained
45	H. J. Patterson Hall	073		Hydraulic oil	0203	Contained
46	Holzapfel Hall	074	Apprx. 125	Hydraulic oil	0116B	Contained
47	Symons Hall	076	Apprx. 125	Hydraulic oil	3313	Contained
48	Physics	082	Apprx. 125	Hydraulic oil	0116	Contained
49	Physics	082	Apprx. 125	Hydraulic oil	SB0333A	Contained
50	Chemistry	091	Apprx. 125	Hydraulic oil	0515A	Contained
51	Health Center	140	Apprx. 125	Hydraulic oil	0109	Contained
52	Health Center	140	Apprx. 125	Hydraulic oil	0170L	Contained
	caitii Gentei	1 - 10	1 PPIN 123	1,	U 1, UL	Jonanica

#### Appendix D: Table of Oil-Filled Operational Equipment

**Hydaulic Elevators** 

_			Hydaulic Elevate		I	
53	Cole Field House	162	• •	Hydraulic oil	SO1000	Contained
54	Stamp Student Union	163		Hydraulic oil	B1004	Contained
55	Stamp Student Union	163		Hydraulic oil	B0202	Contained
56	Stamp Student Union	163		Hydraulic oil	B0202	Contained
57	Stamp Student Union	163	Apprx. 125	Hydraulic oil	SB0240	Contained
58	Stamp Student Union	163	Apprx. 125	Hydraulic oil	SB0201	Contained
59	Stamp Student Union	163	Apprx. 125	Hydraulic oil	B0106M	Contained
60	Stamp Student Union	163	Apprx. 125	Hydraulic oil	B0106M	Contained
61	Football Team Building	379	Apprx. 125	Hydraulic oil	0108	Contained
62	Chemistry	091	Apprx. 125	Hydraulic oil	0515B	Contained
63	Mathematics	084	Apprx. 125	Hydraulic oil	5200A	Contained
64	Mathematics	084	Apprx. 125	Hydraulic oil	4920	Contained
65	Microbiology	231	Apprx. 125	Hydraulic oil	0118A	Contained
66	Nyumburu Cultural Center	232	Apprx. 125	Hydraulic oil	100	Contained
67	Geology	237	Apprx. 125	Hydraulic oil	1116	Contained
68	Martin Hall	088	Apprx. 125	Hydraulic oil	0203A	Contained
69	Martin Hall	088	Apprx. 125	Hydraulic oil	0401A	Contained
70	Computer Science Instr. Center	406	Apprx. 125	Hydraulic oil	1119	Contained
71	Van Munching Hall	039	Apprx. 125	Hydraulic oil	B0504	Contained
72	Van Munching Hall	039	Apprx. 125	Hydraulic oil	B0504	Contained
73	Van Munching Hall	039	Apprx. 125	Hydraulic oil	B0504	Contained
74	Van Munching Hall	039	Apprx. 125	Hydraulic oil	0101A	Contained
75	Van Munching Hall	039	Apprx. 125	Hydraulic oil	0101A	Contained
76	Van Munching Hall	039	Apprx. 125	Hydraulic oil	0102A	Contained
77	Van Munching Hall	039	Apprx. 125	Hydraulic oil	0102A	Contained
78	Anne Arundel Hall	060	Apprx. 125	Hydraulic oil	0113	Contained
79	Tawes Fine Arts	141	Apprx. 125	Hydraulic oil	0146	Contained
80	Benjamin Hall	143	Apprx. 125	Hydraulic oil	107	Contained
81	Architecture	145	Apprx. 125	Hydraulic oil	0104	Contained
82	South Campus Dining Hall	026	Apprx. 125	Hydraulic oil	0195	Contained
83	South Campus Dining Hall	026	Apprx. 125	Hydraulic oil	0119A	Contained
84	South Campus Dining Hall	026	Apprx. 125	Hydraulic oil	0119A	Contained
85	Shoemaker Hall	037	Apprx. 125	Hydraulic oil	0141	Contained
86	LeFrak Hall	038	Apprx. 125	Hydraulic oil	0211A	Contained
87	Taliaferro Hall	043	Apprx. 125	Hydraulic oil	B0105	Contained
88	Skinner Bldg.	044		Hydraulic oil	0101	Contained
89	Marie Mount Hall	046	Apprx. 125	Hydraulic oil	0407A	Contained
90	Marie Mount Hall	046	Apprx. 125	Hydraulic oil	0403A	Contained
91	Woods Hall	047	Apprx. 125	Hydraulic oil	B0200D	Contained
92	Journalism	059	Apprx. 125	Hydraulic oil	1100	Contained
93	Somerset Hall	063	Apprx. 125	Hydraulic oil	0118	Contained
94	Lee Building	071	Apprx. 125	Hydraulic oil	0117C	Contained
95	Main Administration	077	Apprx. 125	Hydraulic oil	B0119A	Contained
96	Queen Anne's Hall	061	Apprx. 125	Hydraulic oil	104	Contained
97	Ritchie Coliseum	004	Apprx. 125	Hydraulic oil	0102	Contained
98	Annapolis Hall	008	Apprx. 125	Hydraulic oil	0104	Contained
99	Parking Garage #5	404	Apprx. 125	Hydraulic oil	NW Level G	Contained
100	Parking Garage #5	404	Apprx. 125	Hydraulic oil	NE Level G	Contained
101	Susquehanna Hall	233	Apprx. 125	Hydraulic oil	1126	Contained

Total Capacity (Approx.)



#### Appendix E: Table of Oil-Filled Electrical Equipment Transformers

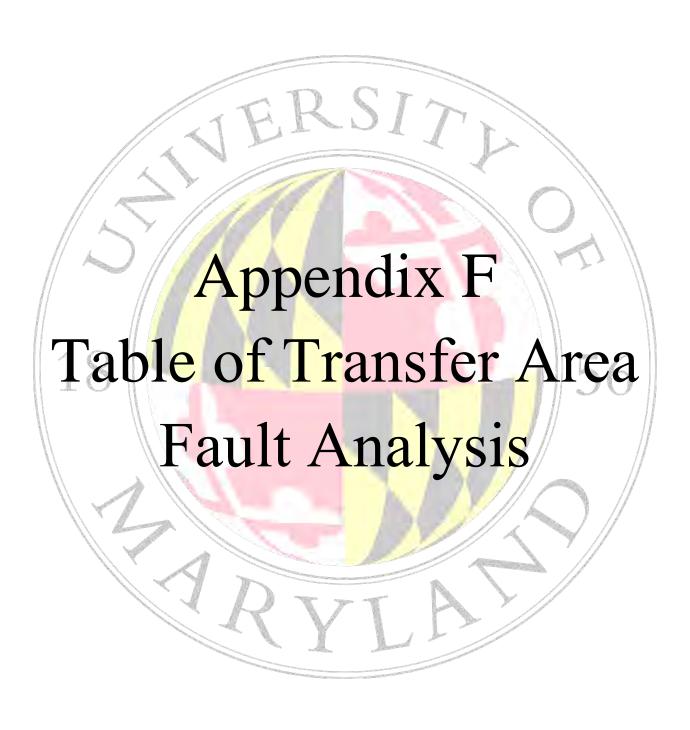
			Transform	1013			
Transformer ID	Bldg. Name	Bldg. #	Capacity (gallons)	Contents	Location Details	Storm Drain Location	Receiving Outfall
1	Laboratory for Physical Sciences	796	365	Mineral Oil	West 796	26' NE	Pond
2	Laboratory for Physical Sciences	796	423	Mineral Oil	South 796	20' SW	Pond
3	Chesapeake Building	338	494	Mineral Oil	North 338	219 NE	Pond 200ft SE
4	Xfinity Arena A	360	542	Mineral Oil	North 360	105' NE	Pond 400ft N
5	Xfinity Arena B	360	378	Mineral Oil	North 360	105' NE	Pond 400ft N
6	Xfinity Arena C	360	370	Mineral Oil	North 360	105' NE	Pond 400ft N
7	Research Greenhouse	398	450	Mineral Oil	B398	200' NE	Pond 200ft E
8	Arena Parking Garage (PG-4)	403	296	Mineral Oil	South 403	105' NE	Pond 400ft N
9	Shuttle Bus Facility	424	276	Mineral Oil	SW 107	124' NW	Wetlands 100ft NE
10	North Field Lights/Shuttle Bus Facility	424	217	Mineral Oil	S. Nor Sub	690' SW	004
11	Golf Course Club House	166	163	Mineral Oil	Southwest 166	20' NE	Ditch 400ft SE
12	Indoor Practice Facility	309	163	Mineral Oil	Southwest 309	290' E	Ditch 290ft SE
13	Stadium Garage #3	218	166	Mineral Oil	Northwest 218	36' SW	Stream 1000ft N
14	Denton Area Dining Hall	251	370	Mineral Oil	Northeast 251	175' NE	Stream 700ft N
15	Easton Hall	253	370	Mineral Oil	B353	203' SE	Storm Drain
16	Ellicott Area Dining Hall	257	458	Mineral Oil	Southwest 257B	63' E	Stream 500ft N
17	Hagerstown Hall	258	370	Mineral Oil	Northeast 258	67' NW	D 1 500(1 N 5
18	Center For Young Children	381	170	Mineral Oil	Southwest 381B	150' W	Pond 500ft NE
19	Clarice Smith Performing Arts Center Trans #1	386	730	Mineral Oil	West 386	28' SW	Stream 200ft NW
20	Clarice Smith Performing Arts Center Trans #2	386	730	Mineral Oil	West 386	35' SW	Stream 200ft NW
21	Oakland Hall	419	641	Mineral Oil	B419	66' SW	Storm Drain
22	Cumberland Hall	122	378	Mineral Oil	Southeast 122	205' SE	Stream 600ft N
23	Animal Science	142	162	Mineral Oil	Northwest 142	125' SW	004
24	Animal Science Animal Science	142	242	Mineral Oil	Northwest 142 (ESW)	65' SW	004 004
25		142	242	Mineral Oil Mineral Oil	Northwest 142	65' SW 190' SW	
26 27	Manufacturing Atlantic Building	148 224	348 391		North 148 Northeast 224 (ESW)	34' W	Pond 190ft E 004
28	Ü	224	585	Mineral Oil Mineral Oil	. ,	34 W	004
29	Atlantic Building	224	675	Mineral Oil	Northeast 224 (ESW)	34 W	004
30	Atlantic Building  Jull Hall	227	325	Mineral Oil	Northeast 224 (ESW) Northwest 227	100' W	004
			400	Mineral Oil		58' E	
31 32	School Of Public Health West School Of Public Health	255 255	675	Mineral Oil	B255 B255	40' SE	Storm Drain Storm Drain
33	Laplata Hall	259	370	Mineral Oil	Room 0112	40 SE 47' E	Stream 500ft N
34	Laplata Hall	259	188	Mineral Oil	Room 0112	47 E	Stream 500ft N
35	Bryd Stadium North Lights	368	320	Mineral Oil	Southeast 256	430' E	004
36	Physical Sciences Complex	415	589	Mineral Oil	B415	57' SE	Storm Drain
37	Campus Recreation Center	068	523	Mineral Oil	Northeast 068	150' SW	Stream 100ft N
38	Chem & Nuclear Engineering	090	311	Mineral Oil	Room 1141	130 3W	004
39	Chem & Nuclear Engineering  Chem & Nuclear Engineering	090	257	Mineral Oil	Room 1141	12' NW	004
40	Engineering Research	093	229	Mineral Oil	South 093	31' W	004
41	Cambridge Community Center	097	496	Mineral Oil	Southwest 099	225' SW	Stream 800ft NE
42	Agriculture Shed	102	105	Mineral Oil	East 142	60' SW	Stream 800ft NE
43	A.V. Williams-N Wing - PH II	115	690	Mineral Oil	Northeast 115	61' SE	004
44	A.V. Williams-N Wing - PH II	115	690	Mineral Oil	Northeast 115	61' SE	004
45	A.V. Williams-S Wing - PH I	115	725	Mineral Oil	Southeast 115	NA to Storm Drain	004
46	Energy Research	223	296	Mineral Oil	Southeast 223	30' S	Stream 300ft E
47	Energy Research	223	512	Mineral Oil	Southeast 223	30' S	Stream 300ft E
48	Energy Research	223	378	Mineral Oil	Northwest 223	100' E to stream	Stream 300ft E
49	Kim Engineering	225	378	Mineral Oil	West 225	100'E	004
50	Kim Engineering	225	378	Mineral Oil	West 225	100'E	004
51	Biomolecular Sciences Building	296	477	Mineral Oil	Southwest 296	100' SW	Stream 200ft NE
52	Tech. Advancement Prog Bldg	387	393	Mineral Oil	Southeast 387	4' W	Pond 100ft N
53	Central Animal Resources	087	176	Mineral Oil	East 087	11' W	004
54	College Park Marriott Hotel & Conference Center-East	345	256	Mineral Oil	345-2	88' SW	Storm Drain
55	College Park Marriott Hotel & Conference Center-East	345	296	Mineral Oil	345-1	127' SW	Storm Drain
56	College Park Marriott Hotel & Conference Center-West	345	448	Mineral Oil	345-3	100' SW	Storm Drain
57	Tyser Tower	361	641	Mineral Oil	B361	38' SW	Storm Drain
58	Kehoe Sports Facility	388	176	Mineral Oil	West 388	257' S	Ditch 200ft SW
59	Riggs Alumni Center	407	613	Mineral Oil	Southeast 407	41' W	003
60	Knight Hall	417	287	Mineral Oil	B417	68' SW	Storm Drain
61	Capital One Field at Maryland Stadium	125	263	Mineral Oil	B125	109'	Storm Drain
62	Health Center	140	257	Mineral Oil	Southwest 140	57' ESE	005
63	Hornbake Library	147	563	Mineral Oil	Northeast 147	38' SE	002
64	Varsity Sports Team House	158	165	Mineral Oil	North 158	11' W	004
65	Cole Field House	162	267	Mineral Oil	East 162	15' N	004
66	Edward St. John Learning & Teaching Center	226	126	Mineral Oil	South 226	NA	002
67	Edward St. John Learning & Teaching Center	226	105	Mineral Oil	Northwest 226	89' N	002
68	Football Team Building	379	450	Mineral Oil	Northeast 379	20' N	004
69	SCUB III	392	257	Mineral Oil	West 392	23' N	004
70	SCUB III Addition	392	646	Mineral Oil	West 392	23' N	004
71	Patuxent	010	288	Mineral Oil	Southwest 010	100' E	004
72	Jimenez Hall	034	198	Mineral Oil	Southeast 140	45' E	005

#### Appendix E: Table of Oil-Filled Electrical Equipment Transformers

92	Plant Sciences	14' N 14' N 388' SE 42' NE 40' E 40' E 40' E 45' E 63' N 31' S 52' S 60' SW 15' E 75' SW 150' NW 165' NW 180' NW 140' N NA to Outfall 212' E 105' S 36' S 76' NW 53' NE 283' SW 73' SE 145' NW 66' SW 66' SW West 400 78' SE 22' W 62' SE 49 SW 99' E 99' E 99' R 100' SE 215' SW NA to Outfall 260' N 62' S 135' ENE 400' E 240' E 146' NE 38' E 100' W 68' N	002 002 002 002 003 005 005 005 005 004 004 003 003 003 003 003 003 003 004 Pond 003 001 012 Storm Drain 178' SE 012 006 014 014
Proceedings	Tys	14' N 388' SE 42' NE 40' E 40' E 40' E 45' E 63' N 31' S 52' S 60' SW 15' E 75' SW 150' NW 165' NW 140' N NA to Outfall 212' E 105' S 105' S 36' S 76' NW 53' NE 283' SW 73' SE 145' NW 66' SW West 400 78' SE 22' W 62' SE 49 SW 99' E 99' E 99' R 100' SE 215' SW NA to Outfall 2260' N 62' S 240' E 146' NE 38' E 100' W 68' N	002 Storm Drain 005 005 005 006 007 008 009 004 004 003 003 003 003 003 003 004 Pond 003 001 012 Storm Drain Storm Drain Storm Drain 78' SE 012 006 014
76	76	388' SE 42' NE 40' E 40' E 45' E 63' N 31' S 52' S 60' SW 15' E 75' SW 165' NW 180' NW 140' N NA to Outfall 212' E 105' S 36' S 76' NW 53' NE 283' SW 73' SE 145' NW 66' SW West 400 78' SE 22' W 62' SE 49 SW 99' E 99' E 99' B 99' B 99' E 99' S 215' SW NA to Outfall 260' N 62' S 215' SW NA to Outfall 260' N 62' SE 215' SW NA to Outfall 260' N 62' SE 215' SW NA to Outfall 260' N 62' SE 215' SW NA to Outfall 260' N 62' SE 215' SW NA to Outfall 260' N 62' SE 215' SW NA to Outfall 260' N 62' SE 215' SW NA to Outfall 260' N 62' SE 215' SW NA to Outfall 260' N 62' SE 215' SW NA to Outfall 260' N 62' SE 215' SW NA to Outfall 260' N 62' SE 215' SW NA to Outfall 260' N 62' SE 146' NE 38' E 100' W 68' N	Storm Drain
Process	Processor   Proc	42' NE 40' E 40' E 40' E 45' E 63' N 31' S 52' S 60' SW 15' E 75' SW 150' NW 140' N NA to Outfall 212' E 105' S 36' S 76' NW 53' NE 283' SW 73' SE 145' NW 66' SW West 400 78' SE 22' W 62' SE 49 SW 99' E 99' E 9' N 100' SE 215' SW NA to Outfall 260' N 62' S 135' ENE 400' E 240' E 146' NE 38' E	005 005 005 005 005 005 006 007 008 008 003 003 003 003 003 003 004 Pond 003 001 012 Storm Drain 005 012 Storm Drain Storm Drain Storm Drain 78' SE 012 006 014
78	78	40' E 40' E 40' E 45' E 63' N 31' S 52' S 60' SW 15' E 75' SW 150' NW 165' NW 140' N NA to Outfall 212' E 105' S 36' S 76' NW 53' NE 283' SW 73' SE 145' NW 66' SW West 400 78' SE 22' W 62' SE 49 SW 99' E 99' E 9' N 100' SE 215' SW NA to Outfall 260' N 62' S 135' ENE 400' E 240' E 146' NE 38' E	005 005 005 006 007 008 008 008 008 008 008 008 008 008
79	Page	40' E 45' E 63' N 31' S 52' S 60' SW 15' E 75' SW 150' NW 165' NW 180' NW 140' N NA to Outfall 212' E 105' S 36' S 76' NW 53' NE 283' SW 73' SE 145' NW 66' SW West 400 78' SE 22' W 62' SE 49 SW 99' E 99' E 9' N 100' SE 215' SW NA to Outfall 260' N 62' S 135' ENE 400' E 240' E 146' NE 38' E 100' W 68' N	005 002 004 004 003 003 003 003 003 003 003 003
80   Symons Hall   076   296   Mineral Oil   Southwest 076   63 P N N N N N N N N N N N N N N N N N N	Symons Hall	45' E 63' N 31' S 52' S 60' SW 15' E 75' SW 150' NW 165' NW 140' N NA to Outfall 212' E 105' S 36' S 76' NW 53' NE 283' SW 73' SE 145' NW 66' SW West 400 78' SE 22' W 62' SE 49 SW 99' E 99' E 9' N 100' SE 215' SW NA to Outfall 260' N 62' S 135' ENE 400' E 240' E 146' NE 38' E 100' W 68' N	002 004 004 003 003 003 003 003 003 003 003
B1	B11	63' N 31' S 52' S 60' SW 15' E 75' SW 150' NW 165' NW 180' NW 140' N NA to Outfall 212' E 105' S 36' S 76' NW 53' NE 283' SW 73' SE 145' NW 66' SW 66' SW West 400 78' SE 22' W 62' SE 49 SW 99' E 99' E 99' B 99' E 91' N 100' SE 215' SW NA to Outfall 260' N 62' S 135' ENE 400' E 240' E 146' NE 38' E	004 004 004 003 003 003 003 003 003 003
82	Physics   0.82	52' S 60' SW 15' E 75' SW 150' NW 165' NW 165' NW 140' N NA to Outfall 212' E 105' S 36' S 76' NW 53' NE 283' SW 73' SE 145' NW 66' SW West 400 78' SE 22' W 62' SE 49 SW 99' E 99' E 99' E 99' S 100' SE 215' SW NA to Outfall 260' N 62' S 135' ENE 400' E 240' E 146' NE 38' E 100' W 68' N	003 003 003 003 003 003 003 003 003 004 Pond 003 001 012 Storm Drain 005 012 Storm Drain Storm Drain Storm Drain 78' SE 012 006 014
Section	Section   Sect	60' SW 15' E 75' SW 150' NW 165' NW 165' NW 180' NW 140' N NA to Outfall 212' E 105' S 36' S 76' NW 53' NE 283' SW 73' SE 145' NW 66' SW West 400 78' SE 22' W 62' SE 49 SW 99' E 99' E 99' R 100' SE 215' SW NA to Outfall 260' N 62' S 135' ENE 400' E 240' E 146' NE 38' E 100' W 68' N	003 003 003 003 003 003 003 004 Pond 003 001 012 Storm Drain Storm Drain Storm Drain 78' SE 012 006 014
Secondary   Seco	85	15' E 75' SW 150' NW 165' NW 180' NW 140' N NA to Outfall 212' E 105' S 36' S 76' NW 53' NE 283' SW 73' SE 145' NW 66' SW West 400 78' SE 22' W 62' SE 49 SW 99' E 99' E 99' N 100' SE 215' SW NA to Outfall 260' N 62' S 135' ENE 400' E 240' E 146' NE 38' E 100' W 68' N	003 003 003 003 003 003 004 Pond 003 001 012 Storm Drain Storm Drain Storm Drain Storm Drain 78' SE 012 006 014
Section   Sculp N A	86	75' SW 150' NW 165' NW 165' NW 140' N NA to Outfall 212' E 105' S 36' S 76' NW 53' NE 283' SW 73' SE 145' NW 66' SW 66' SW West 400 78' SE 22' W 62' SE 49 SW 99' E 99' B 99' B 99' B 99' B 100' SE 215' SW NA to Outfall 260' N 62' S 135' ENE 400' E 240' E 146' NE 38' E 100' W 68' N	003 003 003 003 003 004 Pond 003 001 012 Storm Drain Storm Drain 78' SE 012 006 014
Scub IV A	877	150' NW 165' NW 180' NW 140' N NA to Outfall 212' E 105' S 105' S 36' S 76' NW 53' NE 283' SW 73' SE 145' NW 66' SW 66' SW West 400 78' SE 22' W 62' SE 49 SW 99' E 99' E 9' N 100' SE 215' SW NA to Outfall 260' N 62' S 135' ENE 400' E 240' E 146' NE 38' E 100' W 68' N	003 003 003 003 004 Pond 003 001 012 Storm Drain Storm Drain Storm Drain Storm Drain 78' SE 012 006 014
Sear	Search   V   Search   Search   Search   Search   Search   V   Search   V   Search   V   Search   V   Search   V   Search   Search   V   Search	165' NW 180' NW 140' N NA to Outfall 212' E 105' S 105' S 36' S 76' NW 53' NE 283' SW 73' SE 145' NW 66' SW West 400 78' SE 22' W 62' SE 49 SW 99' E 99' B 99' B 100' SE 215' SW NA to Outfall 260' N 62' S 135' ENE 400' E 240' E 146' NE 38' E 100' W 68' N	003 003 003 004 Pond 003 003 001 012 Storm Drain Storm Drain Storm Drain Storm Drain 78' SE 012 006 014
Septimary   Sept	Scub IV C	180' NW 140' N NA to Outfall 212' E 105' S 105' S 36' S 76' NW 53' NE 283' SW 73' SE 145' NW 66' SW 66' SW West 400 78' SE 22' W 62' SE 49 SW 99' E 99' B 99' B 99' B 100' SE 215' SW NA to Outfall 260' N 62' S 135' ENE 400' E 240' E 146' NE 38' E 100' W 68' N	003 003 004 Pond 003 003 001 012 Storm Drain 005 012 Storm Drain Storm Drain Storm Drain 78' SE 012 006 014
90   Scub IV D	900   Scub IV D	140' N NA to Outfall 212' E 105' S 105' S 36' S 76' NW 53' NE 283' SW 73' SE 145' NW 66' SW West 400 78' SE 22' W 62' SE 49 SW 99' E 99' B 99' B 100' SE 215' SW NA to Outfall 260' N 62' S 135' ENE 400' E 240' E 146' NE 38' E 100' W 68' N	003 004 Pond 003 003 001 012 Storm Drain 005 012 Storm Drain Storm Drain 5torm Drain 78' SE 012 006 014
91	91	NA to Outfall 212' E 105' S 105' S 36' S 76' NW 53' NE 283' SW 73' SE 145' NW 66' SW 66' SW West 400 78' SE 22' W 62' SE 49 SW 99' E 99' E 9' N 100' SE 215' SW NA to Outfall 260' N 62' S 135' ENE 400' E 240' E 146' NE 38' E 100' W 68' N	004 Pond 003 003 001 012 Storm Drain 005 012 Storm Drain Storm Drain Storm Drain 78' SE 012 006 014
92	92	212' E 105' S 105' S 36' S 76' NW 53' NE 283' SW 73' SE 145' NW 66' SW 66' SW West 400 78' SE 22' W 62' SE 49 SW 99' E 99' E 9' N 100' SE 215' SW NA to Outfall 260' N 62' S 135' ENE 400' E 240' E 146' NE 38' E 100' W 68' N	Pond 003 003 001 012 Storm Drain 005 012 Storm Drain Storm Drain Storm Drain 78' SE 012 006 014
93	93	105' S 105' S 36' S 76' NW 53' NE 283' SW 73' SE 145' NW 66' SW 66' SW West 400 78' SE 22' W 62' SE 49 SW 99' E 99' E 9' N 100' SE 215' SW NA to Outfall 260' N 62' S 135' ENE 400' E 240' E 146' NE 38' E 100' W 68' N	003 003 001 012 Storm Drain 005 012 Storm Drain Storm Drain 78' SE 012 006 014
94   Engineering Laboratory   0.89   3.20   Mineral Oil   West 0.89   1.05° S     95   The Hotel Parking Lot   - 1.00   Mineral Oil   East Adj. Campus Drive   3.6° S     96   Tawes Fine Arts   141   250   Mineral Oil   B.141   53° NE     97   Tawes Scub   141   457   Mineral Oil   B.141   53° NE     98   Benjamin   143   296   Mineral Oil   B.141   53° NE     99   Architecture   145   3.20   Mineral Oil   Room 80103   73° SE     100   SCUB V   416   475   Mineral Oil   Room 80103   73° SE     101   SCUB V   418   523   Mineral Oil   B416   145° NW     101   SCUB V   418   523   Mineral Oil   B419   66° SW     102   SCUB V   418   523   Mineral Oil   B419   66° SW     103   Van Munching (Addition)   039   359   Mineral Oil   Northwest 0.39   78° SE     105   Memorial Chapel   009   75   Mineral Oil   Northwest 0.39   78° SE     106   Shoemaker   0.37   237   Mineral Oil   Northwest 0.39   78° SE     107   Lefrak Hall   0.38   3.30   Mineral Oil   South 0.37   62° SE     108   Morrill Hall   0.40   153   Mineral Oil   South 0.37   62° SE     109   Tydings Hall   0.40   153   Mineral Oil   South 0.40   99° E     110   Skinner   0.42   250   Mineral Oil   Southwest 0.42   99° E     111   Francis Scott Key Hall   0.48   189   Mineral Oil   South 0.40   215° SW     112   Preinkert Field House   0.54   218   Mineral Oil   South 0.54   215° SW     113   Chincoteague   0.59   140   Mineral Oil   South 0.54   215° SW     114   Somerset Hall   0.63   374   Mineral Oil   South 0.54   215° SW     115   SCUB II   0.67   520   Mineral Oil   South 0.67   400° E     116   Lee   0.71   153   Mineral Oil   South 0.67   400° E     117   Main Admin   0.77   253   Mineral Oil   South 0.67   400° E     118   Kappa Alpha #IFrat. Row   136   300   Mineral Oil   Southwest 2.46   40° N     129   Leonardtown Modular   240   180   Mineral Oil   Southwest 2.47   40° SE     120   Leonardtown Modular   241   210   Mineral Oil   Southwest 2.46   45° SE     121   Leonardtown Modular   245   210   Mineral Oil   Southwest 2.47   40° SE     122	94	105' S 36' S 76' NW 53' NE 283' SW 73' SE 145' NW 66' SW 66' SW West 400 78' SE 22' W 62' SE 49 SW 99' E 99' E 9' N 100' SE 215' SW NA to Outfall 260' N 62' S 135' ENE 400' E 240' E 146' NE 38' E 100' W 68' N	003 001 012 Storm Drain 005 012 Storm Drain Storm Drain 78' SE 012 006 014
95	95	36' S 76' NW 53' NE 283' SW 73' SE 145' NW 66' SW 66' SW West 400 78' SE 22' W 62' SE 49 SW 99' E 99' E 99' N 100' SE 215' SW NA to Outfall 260' N 62' S 135' ENE 400' E 240' E 146' NE 38' E 100' W 68' N	001 012 Storm Drain 005 012 Storm Drain Storm Drain 78' SE 012 006
96	96	76' NW 53' NE 283' SW 73' SE 145' NW 66' SW 66' SW West 400 78' SE 22' W 62' SE 49 SW 99' E 99' E 9' N 100' SE 215' SW NA to Outfall 260' N 62' S 135' ENE 400' E 240' E 146' NE 38' E 100' W 68' N	012 Storm Drain 005 012 Storm Drain Storm Drain Storm Drain 78' SE 012 006 014
97	97	53' NE 283' SW 73' SE 145' NW 66' SW 66' SW West 400 78' SE 22' W 62' SE 49 SW 99' E 99' E 9' N 100' SE 215' SW NA to Outfall 260' N 62' S 135' ENE 400' E 240' E 146' NE 38' E 100' W 68' N	Storm Drain 005 012 Storm Drain Storm Drain Storm Drain 78' SE 012 006 014
98         Benjamin         143         296         Mineral Oil         Southwest 143         283' SW           99         Architecture         145         320         Mineral Oil         Room B0103         73' SE           100         SCUB V         416         475         Mineral Oil         B416         145' NW           101         SCUB VI         418         1523         Mineral Oil         B419         66' SW           103         Van Munching (Addition)         039         359         Mineral Oil         Northeast 039         West 400           104         Van Munching         039         418         Mineral Oil         Northeast 039         78' SE           105         Memorial Chapel         009         75         Mineral Oil         Northeast 039         78' SE           106         Shoemaker         037         237         Mineral Oil         South 037         62' SE           107         Lefrak Hall         048         330         Mineral Oil         West Mech Rm.         49 SW           108         Morrill Hall         040         153         Mineral Oil         Southwest 042         99' E           110         Skinner         044         252         Miner	98	73' SE 145' NW 66' SW 66' SW West 400 78' SE 22' W 62' SE 49 SW 99' E 99' E 9' N 100' SE 215' SW NA to Outfall 260' N 62' S 135' ENE 400' E 240' E 146' NE 38' E 100' W 68' N	012 Storm Drain Storm Drain Storm Drain 78' SE 012 006 014
100   SCUB V	100   SCUB V   416   475   Mineral Oil   B416	145' NW 66' SW 66' SW West 400 78' SE 22' W 62' SE 49 SW 99' E 99' E 9' N 100' SE 215' SW NA to Outfall 260' N 62' S 135' ENE 400' E 240' E 146' NE 38' E 100' W 68' N	Storm Drain Storm Drain Storm Drain 78' SE 012 006 014
101   SCUB VI   418   523   Mineral Oil   B419   66' SW   102   SCUB VI   418   194   Mineral Oil   B419   66' SW   103   Van Munching (Addition)   039   359   Mineral Oil   Northeast 039   West 400   104   Van Munching   039   418   Mineral Oil   Northeast 039   78' SE   105   Memorial Chapel   009   75   Mineral Oil   Northeast 039   78' SE   105   Memorial Chapel   009   75   Mineral Oil   South 037   62' SE   107   Lefrak Hall   038   330   Mineral Oil   South 037   62' SE   107   Lefrak Hall   038   330   Mineral Oil   West Mech Rm.   49 SW   108   Morrill Hall   040   153   Mineral Oil   West Mech Rm.   49 SW   108   Morrill Hall   042   100   Mineral Oil   Southwest 042   99' E   110   Skinner   044   252   Mineral Oil   Southwest 042   99' E   110   Skinner   044   252   Mineral Oil   Southwest 048   99' E   111   Francis Scott Key Hall   048   189   Mineral Oil   Northeast 048   100' SE   112   Preinkert Field House   054   218   Mineral Oil   South 054   215' SW   113   Chincoteague   059   140   Mineral Oil   South 054   215' SW   113   Chincoteague   059   140   Mineral Oil   Northeast 063   260' N   115   SCUB II   067   520   Mineral Oil   Northeast 063   260' N   115   SCUB II   067   520   Mineral Oil   South 067   62' S   116   Lee   071   153   Mineral Oil   South 067   62' S   116   Lee   071   153   Mineral Oil   South 067   62' S   116   Lee   071   153   Mineral Oil   South 067   62' S   116   Lee   071   153   Mineral Oil   South 067   62' S   116   Lee   071   153   Mineral Oil   South 067   62' S   116   Leonardtown Modular   240   180   Mineral Oil   East 126   240' E   119   Beta Theta PI H6 Frat. Row   131   302   Mineral Oil   South 067   62' S   118   Kappa Alpha #1Frat. Row   131   302   Mineral Oil   South 067   62' S   118   Leonardtown Modular   240   180   Mineral Oil   Southwest 201   100' W   122   Leonardtown Modular   243   130   Mineral Oil   Southwest 244   240' E   120   Leonardtown Modular   244   210   Mineral Oil   Southwest 245   23' N   125   Leonardtown Modular	101	66' SW 66' SW West 400 78' SE 22' W 62' SE 49 SW 99' E 99' E 9' N 100' SE 215' SW NA to Outfall 260' N 62' S 135' ENE 400' E 240' E 146' NE 38' E 100' W 68' N	Storm Drain Storm Drain 78' SE 012 006 014
102   SCUB VI   418   194   Mineral Oil   B419   66'SW     103   Van Munching (Addition)   039   359   Mineral Oil   Northeast 039   West 400     104   Van Munching   039   418   Mineral Oil   Northeast 039   West 400     105   Memorial Chapel   009   75   Mineral Oil   Room Elec   22'W     106   Shoemaker   037   237   Mineral Oil   South 037   62'SE     107   Lefrak Hall   038   330   Mineral Oil   West Mech Rm.   49 SW     108   Morrill Hall   040   153   Mineral Oil   West Mech Rm.   49 SW     109   Tydings Hall   042   100   Mineral Oil   Southwest 042   99'E     109   Tydings Hall   042   100   Mineral Oil   Southwest 042   99'E     110   Skinner   044   252   Mineral Oil   Southwest 042   99'E     111   Francis Scott Key Hall   048   189   Mineral Oil   South 054   215'SW     113   Chincoteague   059   140   Mineral Oil   South 054   215'SW     114   Somerset Hall   063   374   Mineral Oil   South 067   62'S     116   Lee   071   153   Mineral Oil   South 067   62'S     116   Lee   071   153   Mineral Oil   South 067   62'S     117   Main Admin   077   253   Mineral Oil   South 067   62'S     118   Kappa Alpha #1Frat. Row   136   302   Mineral Oil   South 067   62'S     119   Beta Theta Pi #6 Frat. Row   131   302   Mineral Oil   South 067   62'S     120   Sigma Kappa #10 Frat. Row   131   302   Mineral Oil   South 067   62'S     121   Leonardtown Modular   238   180   Mineral Oil   East 126   240'E     122   Leonardtown Modular   240   180   Mineral Oil   Southwest 201   100'W     123   Leonardtown Modular   241   180   Mineral Oil   Southwest 243   45'W     125   Leonardtown Modular   245   210   Mineral Oil   Southwest 246   45'SE     130   Leonardtown Modular   246   210   Mineral Oil   Southwest 247   43'SE     131   Leonardtown Modular   247   210   Mineral Oil   Southwest 248   58'E     132   Leonardtown Modular   249   210   Mineral Oil   Southwest 249   58'N     133   Ellicott Hall   256   379   Mineral Oil   Northeast 248   58'E     131   Leonardtown Modular   249   210   Mineral Oil   Northe	102   SCUB VI   418   194   Mineral Oil   B419   103   Van Munching (Addition)   039   359   Mineral Oil   Northeast 039   104   Van Munching   039   418   Mineral Oil   Northwest 039   105   Memorial Chapel   009   75   Mineral Oil   Room Elec   106   Shoemaker   037   237   Mineral Oil   South 037   107   Lefrak Hall   038   330   Mineral Oil   West Mech Rm.   108   Morrill Hall   040   153   Mineral Oil   West Mech Rm.   108   Morrill Hall   042   100   Mineral Oil   West O40   109   Tydings Hall   042   100   Mineral Oil   Southwest 042   110   Skinner   044   252   Mineral Oil   Southwest 042   111   Francis Scott Key Hall   048   189   Mineral Oil   South 054   111   Francis Scott Key Hall   048   189   Mineral Oil   South 054   113   Chincoteague   059   140   Mineral Oil   South 054   113   Chincoteague   059   140   Mineral Oil   South 054   114   Somerset Hall   063   374   Mineral Oil   South 067   114   Somerset Hall   063   374   Mineral Oil   South 067   115   SCUB II   067   520   Mineral Oil   South 067   116   Lee   071   153   Mineral Oil   South 067   118   Kappa Alpha #IFrat. Row   126   302   Mineral Oil   South 077   118   Kappa Alpha #IFrat. Row   126   302   Mineral Oil   South 077   118   Kappa Alpha #IFrat. Row   131   302   Mineral Oil   South 077   122   Leonardtown Office Building   201   144   Mineral Oil   Southwest 201   122   Leonardtown Modular   248   189   Mineral Oil   Southwest 201   122   Leonardtown Modular   240   180   Mineral Oil   Southwest 241   125   Leonardtown Modular   240   180   Mineral Oil   Southwest 243   126   Leonardtown Modular   244   180   Mineral Oil   Southwest 245   126   Leonardtown Modular   245   210   Mineral Oil   Southwest 246   129   Leonardtown Modular   246   210   Mineral Oil   Southwest 247   126   Leonardtown Modular   247   210   Mineral Oil   Southwest 248   129   Leonardtown Modular   248   210   Mineral Oil   Southwest 249   120   Mineral Oil   Southwest 249   120   Mineral Oil   Southwest 245   120   Mineral Oil   Southwest 245   1	66' SW West 400 78' SE 22' W 62' SE 49 SW 99' E 99' B 9' N 100' SE 215' SW NA to Outfall 260' N 62' S 135' ENE 400' E 240' E 146' NE 38' E 100' W 68' N	Storm Drain 78' SE 012 006 014
103	103	West 400 78' SE 22' W 62' SE 49 SW 99' E 99' B 100' SE 215' SW NA to Outfall 260' N 62' S 135' ENE 400' E 240' E 146' NE 38' E 100' W 68' N	78' SE 012 006 014
104	104	78' SE 22' W 62' SE 49 SW 99' E 99' E 9' N 100' SE 215' SW NA to Outfall 260' N 62' S 135' ENE 400' E 240' E 146' NE 38' E 100' W 68' N	012 006 014
105   Memorial Chapel   009   75   Mineral Oil   Room Elec   22 'W   106   Shoemaker   037   237   Mineral Oil   South 037   62' SE   107   Lefrak Hall   038   330   Mineral Oil   West Mech Rm.   49 SW   108   Morrill Hall   040   153   Mineral Oil   West Mech Rm.   49 SW   109   Tydings Hall   042   100   Mineral Oil   Southwest 042   99' E   110   Skinner   044   252   Mineral Oil   Southwest 042   99' E   110   Skinner   044   252   Mineral Oil   Southwest 042   99' E   111   Francis Scott Key Hall   048   189   Mineral Oil   Southwest 042   99' N   111   Francis Scott Key Hall   048   189   Mineral Oil   South 054   215' SW   113   Chincoteague   059   140   Mineral Oil   South 054   215' SW   113   Chincoteague   059   140   Mineral Oil   South 054   215' SW   114   Somerset Hall   063   374   Mineral Oil   South 067   62' S   116   Lee   071   153   Mineral Oil   South 067   62' S   116   Lee   071   153   Mineral Oil   South 067   62' S   116   Lee   071   153   Mineral Oil   South 067   62' S   116   Lee   071   153   Mineral Oil   South 067   62' S   118   Kappa Alpha #1Frat. Row   126   302   Mineral Oil   South 077   400' E   118   Kappa Alpha #1Frat. Row   126   302   Mineral Oil   South 077   400' E   119   Beta Theta Pi #i6 Frat. Row   131   302   Mineral Oil   South 077   400' E   120   Sigma Kappa #10 Frat. Row   135   302   Mineral Oil   Southwest 201   100' W   121   Leonardtown Modular   240   180   Mineral Oil   Southwest 201   100' W   123   Leonardtown Modular   240   180   Mineral Oil   Southwest 201   100' W   124   Leonardtown Modular   244   210   Mineral Oil   Southwest 245   23' N   125   Leonardtown Modular   244   210   Mineral Oil   Southwest 245   23' N   126   Leonardtown Modular   244   210   Mineral Oil   Southwest 245   23' N   126   Leonardtown Modular   244   210   Mineral Oil   Southwest 245   23' N   127   Leonardtown Modular   244   210   Mineral Oil   Southwest 245   23' N   128   Leonardtown Modular   245   210   Mineral Oil   Southwest 245   23' N   128   Leonardtow	105   Memorial Chapel   009   75   Mineral Oil   Room Elec   106   Shoemaker   037   237   Mineral Oil   South 037   107   Lefrak Hall   038   330   Mineral Oil   West Mech Rm.   108   Morrill Hall   040   153   Mineral Oil   West Mech Rm.   109   Tydings Hall   042   100   Mineral Oil   Southwest 042   110   Skinner   044   252   Mineral Oil   Southwest 042   110   Skinner   044   252   Mineral Oil   Southwest 044   111   Francis Scott Key Hall   048   189   Mineral Oil   Northeast 048   112   Preinkert Field House   054   218   Mineral Oil   South 054   113   Chincoteague   059   140   Mineral Oil   South 054   114   Somerset Hall   063   374   Mineral Oil   Northeast 063   115   SCUB II   067   520   Mineral Oil   South 067   116   Lee   071   153   Mineral Oil   South 067   116   Lee   071   153   Mineral Oil   South 067   117   Main Admin   077   253   Mineral Oil   South 077   118   Kappa Alpha #1Frat. Row   126   302   Mineral Oil   South 077   118   Kappa Alpha #1Frat. Row   131   302   Mineral Oil   North 131   120   Sigma Kappa #10 Frat. Row   135   302   Mineral Oil   East 135   121   Leonardtown Office Building   201   144   Mineral Oil   Southwest 201   122   Leonardtown Modular   240   180   Mineral Oil   Southwest 201   124   Leonardtown Modular   240   180   Mineral Oil   Southwest 201   125   Leonardtown Modular   240   180   Mineral Oil   Southwest 244   125   Leonardtown Modular   241   241   Mineral Oil   Southwest 243   126   Leonardtown Modular   242   180   Mineral Oil   Southwest 245   128   Leonardtown Modular   246   210   Mineral Oil   Northwest 246   129   Leonardtown Modular   247   210   Mineral Oil   Northwest 246   129   Leonardtown Modular   248   210   Mineral Oil   Northwest 247   130   Leonardtown Modular   249   210   Mineral Oil   Northwest 248   131   Leonardtown Modular   249   210   Mineral Oil   Northwest 249   132   Leonardtown Modular   249   210   Mineral Oil   Northwest 249   132   Leonardtown Modular   249   210   Mineral Oil   Northwest 249   132   Leonardtown M	22' W 62' SE 49 SW 99' E 99' E 9' N 100' SE 215' SW NA to Outfall 260' N 62' S 135' ENE 400' E 240' E 146' NE 38' E 100' W 68' N	006 014
106	106	62' SE 49 SW 99' E 99' E 99' N 100' SE 215' SW NA to Outfall 260' N 62' S 135' ENE 400' E 240' E 146' NE 38' E 100' W 68' N	014
107	107	49 SW 99' E 99' E 99' N 100' SE 215' SW NA to Outfall 260' N 62' S 135' ENE 400' E 240' E 146' NE 38' E 100' W 68' N	
108   Morrill Hall	108	99' E 99' E 99' N 100' SE 215' SW NA to Outfall 260' N 62' S 135' ENE 400' E 240' E 146' NE 38' E 100' W 68' N	014
Tydings Hall	Tydings Hall	99' E 9' N 100' SE 215' SW NA to Outfall 260' N 62' S 135' ENE 400' E 240' E 146' NE 38' E 100' W	
110	110   Skinner	9' N 100' SE 215' SW NA to Outfall 260' N 62' S 135' ENE 400' E 240' E 146' NE 38' E 100' W 68' N	005
111	111	100' SE 215' SW  NA to Outfall 260' N 62' S 135' ENE 400' E 240' E 146' NE 38' E 100' W 68' N	005
112	112	215' SW  NA to Outfall  260' N  62' S  135' ENE  400' E  240' E  146' NE  38' E  100' W  68' N	005
113	113         Chincoteague         059         140         Mineral Oil         East 059           114         Somerset Hall         063         374         Mineral Oil         Northeast 063           115         SCUB II         067         520         Mineral Oil         South 067           116         Lee         071         153         Mineral Oil         Room Mech           117         Main Admin         077         253         Mineral Oil         South 077           118         Kappa Alpha #1Frat. Row         126         302         Mineral Oil         East 126           119         Beta Theta Pi #6 Frat. Row         131         302         Mineral Oil         North 131           120         Sigma Kappa #10 Frat. Row         135         302         Mineral Oil         East 135           121         Leonardtown Office Building         201         144         Mineral Oil         Southwest 201           122         Leonardtown Modular         238         180         Mineral Oil         West 238           123         Leonardtown Modular         240         180         Mineral Oil         East 240           124         Leonardtown Modular         242         180         Mineral Oil	NA to Outfall 260' N 62' S 135' ENE 400' E 240' E 146' NE 38' E 100' W 68' N	005 014
114   Somerset Hall   063   374   Mineral Oil   Northeast 063   260' N   115   SCUB II   067   520   Mineral Oil   South 067   62' S   116   Lee   071   153   Mineral Oil   Room Mech   135' ENE   117   Main Admin   077   253   Mineral Oil   South 077   400' E   118   Kappa Alpha #1Frat. Row   126   302   Mineral Oil   South 077   400' E   119   Beta Theta Pi #6 Frat. Row   131   302   Mineral Oil   North 131   146' NE   120   Sigma Kappa #10 Frat. Row   135   302   Mineral Oil   Southwest 201   100' W   122   Leonardtown Modular   238   180   Mineral Oil   Southwest 201   100' W   122   Leonardtown Modular   240   180   Mineral Oil   East 242   93' N   124   Leonardtown Modular   242   180   Mineral Oil   East 242   93' N   125   Leonardtown Modular   243   170   Mineral Oil   Southeast 244   44' W   127   Leonardtown Modular   244   210   Mineral Oil   Southwest 243   45' W   126   Leonardtown Modular   245   210   Mineral Oil   Southwest 244   44' W   127   Leonardtown Modular   246   210   Mineral Oil   Southwest 245   23' N   128   Leonardtown Modular   246   210   Mineral Oil   Southwest 245   23' N   129   Leonardtown Modular   246   210   Mineral Oil   Southwest 247   44' SE   130   Leonardtown Modular   247   210   Mineral Oil   Southwest 247   44' SE   130   Leonardtown Modular   248   210   Mineral Oil   Northwest 249   58' N   132   Leonardtown Modular   249   210   Mineral Oil   Northwest 249   58' N   132   Leonardtown Modular   249   210   Mineral Oil   Northwest 249   58' N   132   Leonardtown Modular   249   210   Mineral Oil   Northwest 249   58' N   134   Central Heating Plant   001   213   Mineral Oil   Northwest 200   106' NW   135   Central Heating Plant   001   213   Mineral Oil   Northeast 001   11' W   135   Central Heating Plant   001   213   Mineral Oil   Northeast 001   106' NW   135   Central Heating Plant   001   213   Mineral Oil   Northeast 001   106' NW   135   Central Heating Plant   001   213   Mineral Oil   Northeast 001   106' NW   135   Central Heating Plant   001   213	114         Somerset Hall         063         374         Mineral Oil         Northeast 063           115         SCUB II         067         520         Mineral Oil         South 067           116         Lee         071         153         Mineral Oil         Room Mech           117         Main Admin         077         253         Mineral Oil         South 077           118         Kappa Alpha #1Frat. Row         126         302         Mineral Oil         East 126           119         Beta Theta Pi #6 Frat. Row         131         302         Mineral Oil         North 131           120         Sigma Kappa #10 Frat. Row         135         302         Mineral Oil         East 135           121         Leonardtown Modular         238         180         Mineral Oil         Southwest 201           122         Leonardtown Modular         238         180         Mineral Oil         West 238           123         Leonardtown Modular         240         180         Mineral Oil         East 240           124         Leonardtown Modular         241         180         Mineral Oil         Northwest 243           126         Leonardtown Modular         243         170         Mineral Oil	260' N 62' S 135' ENE 400' E 240' E 146' NE 38' E 100' W 68' N	005
115   SCUB II   067   520   Mineral Oil   South 067   62' S   116   Lee   071   153   Mineral Oil   Room Mech   135' ENE   117   Main Admin   077   253   Mineral Oil   South 077   400' E   118   Kappa Alpha #1Frat. Row   126   302   Mineral Oil   East 126   240' E   119   Beta Theta Pi #6 Frat. Row   131   302   Mineral Oil   North 131   146' NE   120   Sigma Kappa #10 Frat. Row   135   302   Mineral Oil   East 135   38' E   121   Leonardtown Office Building   201   144   Mineral Oil   Southwest 201   100' W   122   Leonardtown Modular   238   180   Mineral Oil   West 238   68' N   123   Leonardtown Modular   240   180   Mineral Oil   East 240   11' N   124   Leonardtown Modular   242   180   Mineral Oil   East 242   93' N   125   Leonardtown Modular   243   170   Mineral Oil   Northwest 243   45' W   126   Leonardtown Modular   244   210   Mineral Oil   Southeast 244   44' W   127   Leonardtown Modular   245   210   Mineral Oil   Southwest 245   23' N   128   Leonardtown Modular   246   210   Mineral Oil   Northwest 245   23' N   128   Leonardtown Modular   247   210   Mineral Oil   Northwest 245   23' N   128   Leonardtown Modular   247   210   Mineral Oil   Northwest 246   45' SE   129   Leonardtown Modular   248   210   Mineral Oil   Northwest 247   44' SE   130   Leonardtown Modular   248   210   Mineral Oil   Northwest 249   58' N   131   Leonardtown Modular   249   210   Mineral Oil   Northwest 249   58' N   132   Leonardtown Modular   249   210   Mineral Oil   Northwest 249   58' N   132   Leonardtown Modular   256   359   Mineral Oil   Northwest 250   68' N   133   Ellicott Hall   256   379   Mineral Oil   Northeast 001   11' W   135   Central Heating Plant   001   213   Mineral Oil   Northeast 001   106' NW	115         SCUB II         067         520         Mineral Oil         South 067           116         Lee         071         153         Mineral Oil         Room Mech           117         Main Admin         077         253         Mineral Oil         South 077           118         Kappa Alpha #1Frat. Row         126         302         Mineral Oil         East 126           119         Beta Theta Pi #6 Frat. Row         131         302         Mineral Oil         North 131           120         Sigma Kappa #10 Frat. Row         135         302         Mineral Oil         East 135           121         Leonardtown Office Building         201         144         Mineral Oil         Southwest 201           122         Leonardtown Modular         238         180         Mineral Oil         West 238           123         Leonardtown Modular         240         180         Mineral Oil         East 240           124         Leonardtown Modular         242         180         Mineral Oil         Norhtwest 243           125         Leonardtown Modular         243         170         Mineral Oil         Norhtwest 243           126         Leonardtown Modular         244         210         Mi	62' S 135' ENE 400' E 240' E 146' NE 38' E 100' W 68' N	005
116	116         Lee         071         153         Mineral Oil         Room Mech           117         Main Admin         077         253         Mineral Oil         South 077           118         Kappa Alpha #1Frat. Row         126         302         Mineral Oil         East 126           119         Beta Theta Pi #6 Frat. Row         131         302         Mineral Oil         North 131           120         Sigma Kappa #10 Frat. Row         135         302         Mineral Oil         East 135           121         Leonardtown Office Building         201         144         Mineral Oil         Southwest 201           122         Leonardtown Modular         238         180         Mineral Oil         West 238           123         Leonardtown Modular         240         180         Mineral Oil         East 240           124         Leonardtown Modular         242         180         Mineral Oil         East 242           125         Leonardtown Modular         243         170         Mineral Oil         Northwest 243           126         Leonardtown Modular         244         210         Mineral Oil         Southeast 244           127         Leonardtown Modular         245         210	135' ENE 400' E 240' E 146' NE 38' E 100' W 68' N	014
117	117         Main Admin         077         253         Mineral Oil         South 077           118         Kappa Alpha #1Frat. Row         126         302         Mineral Oil         East 126           119         Beta Theta Pi #6 Frat. Row         131         302         Mineral Oil         North 131           120         Sigma Kappa #10 Frat. Row         135         302         Mineral Oil         East 135           121         Leonardtown Office Building         201         144         Mineral Oil         Southwest 201           122         Leonardtown Modular         238         180         Mineral Oil         West 238           123         Leonardtown Modular         240         180         Mineral Oil         East 240           124         Leonardtown Modular         242         180         Mineral Oil         East 242           125         Leonardtown Modular         243         170         Mineral Oil         Norhtwest 243           126         Leonardtown Modular         244         210         Mineral Oil         Southeast 244           127         Leonardtown Modular         245         210         Mineral Oil         Norhtwest 245           128         Leonardtown Modular         246	400' E 240' E 146' NE 38' E 100' W 68' N	005
119         Beta Theta Pi #6 Frat. Row         131         302         Mineral Oil         North 131         146' NE           120         Sigma Kappa #10 Frat. Row         135         302         Mineral Oil         East 135         38' E           121         Leonardtown Office Building         201         144         Mineral Oil         Southwest 201         100' W           122         Leonardtown Modular         238         180         Mineral Oil         West 238         68' N           123         Leonardtown Modular         240         180         Mineral Oil         East 240         11' N           124         Leonardtown Modular         242         180         Mineral Oil         East 242         93' N           125         Leonardtown Modular         243         170         Mineral Oil         Northwest 243         45' W           126         Leonardtown Modular         244         210         Mineral Oil         Southwest 244         44' W           127         Leonardtown Modular         245         210         Mineral Oil         Northwest 245         23' N           128         Leonardtown Modular         246         210         Mineral Oil         Northwest 247         44' SE           13	119         Beta Theta Pi #6 Frat. Row         131         302         Mineral Oil         North 131           120         Sigma Kappa #10 Frat. Row         135         302         Mineral Oil         East 135           121         Leonardtown Office Building         201         144         Mineral Oil         Southwest 201           122         Leonardtown Modular         238         180         Mineral Oil         West 238           123         Leonardtown Modular         240         180         Mineral Oil         East 240           124         Leonardtown Modular         242         180         Mineral Oil         Norhtwest 243           125         Leonardtown Modular         243         170         Mineral Oil         Norhtwest 243           126         Leonardtown Modular         244         210         Mineral Oil         Southeast 244           127         Leonardtown Modular         245         210         Mineral Oil         Southwest 245           128         Leonardtown Modular         246         210         Mineral Oil         Norhtwest 246           129         Leonardtown Modular         247         210         Mineral Oil         Northwest 247           130         Leonardtown Modular	146' NE 38' E 100' W 68' N	005
120         Sigma Kappa #10 Frat. Row         135         302         Mineral Oil         East 135         38' E           121         Leonardtown Office Building         201         144         Mineral Oil         Southwest 201         100' W           122         Leonardtown Modular         238         180         Mineral Oil         West 238         68' N           123         Leonardtown Modular         240         180         Mineral Oil         East 240         11' N           124         Leonardtown Modular         242         180         Mineral Oil         East 242         93' N           125         Leonardtown Modular         243         170         Mineral Oil         Norhtwest 243         45' W           126         Leonardtown Modular         244         210         Mineral Oil         Southwest 244         44' W           127         Leonardtown Modular         245         210         Mineral Oil         Norhtwest 245         23' N           128         Leonardtown Modular         246         210         Mineral Oil         Northwest 246         45' SE           129         Leonardtown Modular         247         210         Mineral Oil         Northwest 246         45' SE           131 <td>120         Sigma Kappa #10 Frat. Row         135         302         Mineral Oil         East 135           121         Leonardtown Office Building         201         144         Mineral Oil         Southwest 201           122         Leonardtown Modular         238         180         Mineral Oil         West 238           123         Leonardtown Modular         240         180         Mineral Oil         East 240           124         Leonardtown Modular         242         180         Mineral Oil         Norhtwest 242           125         Leonardtown Modular         243         170         Mineral Oil         Norhtwest 243           126         Leonardtown Modular         244         210         Mineral Oil         Southwest 244           127         Leonardtown Modular         245         210         Mineral Oil         Southwest 245           128         Leonardtown Modular         246         210         Mineral Oil         Norhtwest 246           129         Leonardtown Modular         247         210         Mineral Oil         Northwest 247           130         Leonardtown Modular         248         210         Mineral Oil         Northwest 248           131         Leonardtown Modular         &lt;</td> <td>38' E 100' W 68' N</td> <td>005</td>	120         Sigma Kappa #10 Frat. Row         135         302         Mineral Oil         East 135           121         Leonardtown Office Building         201         144         Mineral Oil         Southwest 201           122         Leonardtown Modular         238         180         Mineral Oil         West 238           123         Leonardtown Modular         240         180         Mineral Oil         East 240           124         Leonardtown Modular         242         180         Mineral Oil         Norhtwest 242           125         Leonardtown Modular         243         170         Mineral Oil         Norhtwest 243           126         Leonardtown Modular         244         210         Mineral Oil         Southwest 244           127         Leonardtown Modular         245         210         Mineral Oil         Southwest 245           128         Leonardtown Modular         246         210         Mineral Oil         Norhtwest 246           129         Leonardtown Modular         247         210         Mineral Oil         Northwest 247           130         Leonardtown Modular         248         210         Mineral Oil         Northwest 248           131         Leonardtown Modular         <	38' E 100' W 68' N	005
121         Leonardtown Office Building         201         144         Mineral Oil         Southwest 201         100' W           122         Leonardtown Modular         238         180         Mineral Oil         West 238         68' N           123         Leonardtown Modular         240         180         Mineral Oil         East 240         11' N           124         Leonardtown Modular         242         180         Mineral Oil         East 242         93' N           125         Leonardtown Modular         243         170         Mineral Oil         Norhtwest 243         45' W           126         Leonardtown Modular         244         210         Mineral Oil         Southwest 244         44' W           127         Leonardtown Modular         245         210         Mineral Oil         Southwest 245         23' N           128         Leonardtown Modular         246         210         Mineral Oil         Norhtwest 246         45' SE           129         Leonardtown Modular         247         210         Mineral Oil         Northeast 248         58' E           130         Leonardtown Modular         248         210         Mineral Oil         Northwest 249         58' N           131	121         Leonardtown Office Building         201         144         Mineral Oil         Southwest 201           122         Leonardtown Modular         238         180         Mineral Oil         West 238           123         Leonardtown Modular         240         180         Mineral Oil         East 240           124         Leonardtown Modular         242         180         Mineral Oil         Fast 242           125         Leonardtown Modular         243         170         Mineral Oil         Norhtwest 243           126         Leonardtown Modular         244         210         Mineral Oil         Southwest 244           127         Leonardtown Modular         245         210         Mineral Oil         Southwest 245           128         Leonardtown Modular         246         210         Mineral Oil         Norhtwest 246           129         Leonardtown Modular         247         210         Mineral Oil         Southwest 247           130         Leonardtown Modular         248         210         Mineral Oil         Northwest 248           131         Leonardtown Modular         249         210         Mineral Oil         Northwest 249           132         Leonardtown Modular         250	100' W 68' N	005
122         Leonardtown Modular         238         180         Mineral Oil         West 238         68' N           123         Leonardtown Modular         240         180         Mineral Oil         East 240         11' N           124         Leonardtown Modular         242         180         Mineral Oil         East 242         93' N           125         Leonardtown Modular         243         170         Mineral Oil         Norhtwest 243         45' W           126         Leonardtown Modular         244         210         Mineral Oil         Southeast 244         44' W           127         Leonardtown Modular         245         210         Mineral Oil         Southwest 245         23' N           128         Leonardtown Modular         246         210         Mineral Oil         Northwest 246         45' SE           129         Leonardtown Modular         247         210         Mineral Oil         Northeast 247         44' SE           130         Leonardtown Modular         248         210         Mineral Oil         Northeast 248         58' E           131         Leonardtown Modular         249         210         Mineral Oil         Northwest 249         58' N           132	122         Leonardtown Modular         238         180         Mineral Oil         West 238           123         Leonardtown Modular         240         180         Mineral Oil         East 240           124         Leonardtown Modular         242         180         Mineral Oil         Bast 242           125         Leonardtown Modular         243         170         Mineral Oil         Norhtwest 243           126         Leonardtown Modular         244         210         Mineral Oil         Southeast 244           127         Leonardtown Modular         245         210         Mineral Oil         Southwest 245           128         Leonardtown Modular         246         210         Mineral Oil         Norhtwest 246           129         Leonardtown Modular         247         210         Mineral Oil         Southwest 247           130         Leonardtown Modular         248         210         Mineral Oil         Northeast 248           131         Leonardtown Modular         249         210         Mineral Oil         Northwest 249           132         Leonardtown Modular         250         350         Mineral Oil         Southwest 250	68' N	006
123         Leonardtown Modular         240         180         Mineral Oil         East 240         11' N           124         Leonardtown Modular         242         180         Mineral Oil         East 242         93' N           125         Leonardtown Modular         243         170         Mineral Oil         Norhtwest 243         45' W           126         Leonardtown Modular         244         210         Mineral Oil         Southeast 244         44' W           127         Leonardtown Modular         245         210         Mineral Oil         Southwest 245         23' N           128         Leonardtown Modular         246         210         Mineral Oil         Norhtwest 246         45' SE           129         Leonardtown Modular         247         210         Mineral Oil         Southwest 247         44' SE           130         Leonardtown Modular         248         210         Mineral Oil         Northeast 248         58' E           131         Leonardtown Modular         249         210         Mineral Oil         Northwest 249         58' N           132         Leonardtown Modular         250         350         Mineral Oil         Northwest 249         58' N           133	123         Leonardtown Modular         240         180         Mineral Oil         East 240           124         Leonardtown Modular         242         180         Mineral Oil         East 242           125         Leonardtown Modular         243         170         Mineral Oil         Norhtwest 243           126         Leonardtown Modular         244         210         Mineral Oil         Southeast 244           127         Leonardtown Modular         245         210         Mineral Oil         Southwest 245           128         Leonardtown Modular         246         210         Mineral Oil         Norhtwest 246           129         Leonardtown Modular         247         210         Mineral Oil         Southwest 247           130         Leonardtown Modular         248         210         Mineral Oil         Northeast 248           131         Leonardtown Modular         249         210         Mineral Oil         Northwest 249           132         Leonardtown Modular         250         350         Mineral Oil         Southwest 250		007
124         Leonardtown Modular         242         180         Mineral Oil         East 242         93' N           125         Leonardtown Modular         243         170         Mineral Oil         Norhtwest 243         45' W           126         Leonardtown Modular         244         210         Mineral Oil         Southeast 244         44' W           127         Leonardtown Modular         245         210         Mineral Oil         Southwest 245         23' N           128         Leonardtown Modular         246         210         Mineral Oil         Norhtwest 246         45' SE           129         Leonardtown Modular         247         210         Mineral Oil         Southwest 247         44' SE           130         Leonardtown Modular         248         210         Mineral Oil         Northeast 248         58' E           131         Leonardtown Modular         249         210         Mineral Oil         Northwest 249         58' N           132         Leonardtown Modular         250         350         Mineral Oil         Northwest 249         58' N           133         Ellicott Hall         256         379         Mineral Oil         Room 0119         57' N           134	124         Leonardtown Modular         242         180         Mineral Oil         East 242           125         Leonardtown Modular         243         170         Mineral Oil         Norhtwest 243           126         Leonardtown Modular         244         210         Mineral Oil         Southeast 244           127         Leonardtown Modular         245         210         Mineral Oil         Southwest 245           128         Leonardtown Modular         246         210         Mineral Oil         Norhtwest 246           129         Leonardtown Modular         247         210         Mineral Oil         Southwest 247           130         Leonardtown Modular         248         210         Mineral Oil         Northeast 248           131         Leonardtown Modular         249         210         Mineral Oil         Northwest 249           132         Leonardtown Modular         250         350         Mineral Oil         Southwest 250	11' N	007
125         Leonardtown Modular         243         170         Mineral Oil         Norhtwest 243         45' W           126         Leonardtown Modular         244         210         Mineral Oil         Southeast 244         44' W           127         Leonardtown Modular         245         210         Mineral Oil         Southwest 245         23' N           128         Leonardtown Modular         246         210         Mineral Oil         Norhtwest 246         45' SE           129         Leonardtown Modular         247         210         Mineral Oil         Southwest 247         44' SE           130         Leonardtown Modular         248         210         Mineral Oil         Northeast 248         58' E           131         Leonardtown Modular         249         210         Mineral Oil         Northwest 249         58' N           132         Leonardtown Modular         250         350         Mineral Oil         Southwest 250         68' N           133         Ellicott Hall         256         379         Mineral Oil         Northeast 001         11' W           134         Central Heating Plant         001         418         Mineral Oil         Northeast 001         11' W           135 </td <td>125         Leonardtown Modular         243         170         Mineral Oil         Norhtwest 243           126         Leonardtown Modular         244         210         Mineral Oil         Southeast 244           127         Leonardtown Modular         245         210         Mineral Oil         Southwest 245           128         Leonardtown Modular         246         210         Mineral Oil         Norhtwest 246           129         Leonardtown Modular         247         210         Mineral Oil         Southwest 247           130         Leonardtown Modular         248         210         Mineral Oil         Northeast 248           131         Leonardtown Modular         249         210         Mineral Oil         Northwest 249           132         Leonardtown Modular         250         350         Mineral Oil         Southwest 250</td> <td></td> <td>007</td>	125         Leonardtown Modular         243         170         Mineral Oil         Norhtwest 243           126         Leonardtown Modular         244         210         Mineral Oil         Southeast 244           127         Leonardtown Modular         245         210         Mineral Oil         Southwest 245           128         Leonardtown Modular         246         210         Mineral Oil         Norhtwest 246           129         Leonardtown Modular         247         210         Mineral Oil         Southwest 247           130         Leonardtown Modular         248         210         Mineral Oil         Northeast 248           131         Leonardtown Modular         249         210         Mineral Oil         Northwest 249           132         Leonardtown Modular         250         350         Mineral Oil         Southwest 250		007
126         Leonardtown Modular         244         210         Mineral Oil         Southeast 244         44' W           127         Leonardtown Modular         245         210         Mineral Oil         Southwest 245         23' N           128         Leonardtown Modular         246         210         Mineral Oil         Northwest 246         45' SE           129         Leonardtown Modular         247         210         Mineral Oil         Southwest 247         44' SE           130         Leonardtown Modular         248         210         Mineral Oil         Northeast 248         58' E           131         Leonardtown Modular         249         210         Mineral Oil         Northwest 249         58' N           132         Leonardtown Modular         250         350         Mineral Oil         Southwest 250         68' N           133         Ellicott Hall         256         379         Mineral Oil         Room 0119         57' N           134         Central Heating Plant         001         418         Mineral Oil         Northeast 001         11' W           135         Central Heating Plant         001         213         Mineral Oil         West 006         106' NW	126         Leonardtown Modular         244         210         Mineral Oil         Southeast 244           127         Leonardtown Modular         245         210         Mineral Oil         Southwest 245           128         Leonardtown Modular         246         210         Mineral Oil         Norhtwest 246           129         Leonardtown Modular         247         210         Mineral Oil         Southwest 247           130         Leonardtown Modular         248         210         Mineral Oil         Northeast 248           131         Leonardtown Modular         249         210         Mineral Oil         Northwest 249           132         Leonardtown Modular         250         350         Mineral Oil         Southwest 250		007
127         Leonardtown Modular         245         210         Mineral Oil         Southwest 245         23' N           128         Leonardtown Modular         246         210         Mineral Oil         Norhtwest 246         45' SE           129         Leonardtown Modular         247         210         Mineral Oil         Southwest 247         44' SE           130         Leonardtown Modular         248         210         Mineral Oil         Northeast 248         58' E           131         Leonardtown Modular         249         210         Mineral Oil         Northwest 249         58' N           132         Leonardtown Modular         250         350         Mineral Oil         Southwest 250         68' N           133         Ellicott Hall         256         379         Mineral Oil         Room 0119         57' N           134         Central Heating Plant         001         418         Mineral Oil         Northeast 001         11' W           135         Central Heating Plant         001         213         Mineral Oil         West 006         106' NW	127         Leonardtown Modular         245         210         Mineral Oil         Southwest 245           128         Leonardtown Modular         246         210         Mineral Oil         Norhtwest 246           129         Leonardtown Modular         247         210         Mineral Oil         Southwest 247           130         Leonardtown Modular         248         210         Mineral Oil         Northeast 248           131         Leonardtown Modular         249         210         Mineral Oil         Northwest 249           132         Leonardtown Modular         250         350         Mineral Oil         Southwest 250		007
128         Leonardtown Modular         246         210         Mineral Oil         Norhtwest 246         45' SE           129         Leonardtown Modular         247         210         Mineral Oil         Southwest 247         44' SE           130         Leonardtown Modular         248         210         Mineral Oil         Northeast 248         58' E           131         Leonardtown Modular         249         210         Mineral Oil         Northwest 249         58' N           132         Leonardtown Modular         250         350         Mineral Oil         Southwest 250         68' N           133         Ellicott Hall         256         379         Mineral Oil         Room 0119         57' N           134         Central Heating Plant         001         418         Mineral Oil         Northeast 001         11' W           135         Central Heating Plant         001         213         Mineral Oil         West 006         106' NW	128         Leonardtown Modular         246         210         Mineral Oil         Norhtwest 246           129         Leonardtown Modular         247         210         Mineral Oil         Southwest 247           130         Leonardtown Modular         248         210         Mineral Oil         Northeast 248           131         Leonardtown Modular         249         210         Mineral Oil         Northwest 249           132         Leonardtown Modular         250         350         Mineral Oil         Southwest 250		005
129         Leonardtown Modular         247         210         Mineral Oil         Southwest 247         44' SE           130         Leonardtown Modular         248         210         Mineral Oil         Northeast 248         58' E           131         Leonardtown Modular         249         210         Mineral Oil         Northwest 249         58' N           132         Leonardtown Modular         250         350         Mineral Oil         Southwest 250         68' N           133         Ellicott Hall         256         379         Mineral Oil         Room 0119         57' N           134         Central Heating Plant         001         418         Mineral Oil         Northeast 001         11' W           135         Central Heating Plant         001         213         Mineral Oil         West 006         106' NW	129         Leonardtown Modular         247         210         Mineral Oil         Southwest 247           130         Leonardtown Modular         248         210         Mineral Oil         Northeast 248           131         Leonardtown Modular         249         210         Mineral Oil         Northwest 249           132         Leonardtown Modular         250         350         Mineral Oil         Southwest 250		005
130         Leonardtown Modular         248         210         Mineral Oil         Northeast 248         58' E           131         Leonardtown Modular         249         210         Mineral Oil         Northwest 249         58' N           132         Leonardtown Modular         250         350         Mineral Oil         Southwest 250         68' N           133         Ellicott Hall         256         379         Mineral Oil         Room 0119         57' N           134         Central Heating Plant         001         418         Mineral Oil         Northeast 001         11' W           135         Central Heating Plant         001         213         Mineral Oil         West 006         106' NW	130         Leonardtown Modular         248         210         Mineral Oil         Northeast 248           131         Leonardtown Modular         249         210         Mineral Oil         Northwest 249           132         Leonardtown Modular         250         350         Mineral Oil         Southwest 250		006
131         Leonardtown Modular         249         210         Mineral Oil         Northwest 249         58' N           132         Leonardtown Modular         250         350         Mineral Oil         Southwest 250         68' N           133         Ellicott Hall         256         379         Mineral Oil         Room 0119         57' N           134         Central Heating Plant         001         418         Mineral Oil         Northeast 001         11' W           135         Central Heating Plant         001         213         Mineral Oil         West 006         106' NW	131Leonardtown Modular249210Mineral OilNorthwest 249132Leonardtown Modular250350Mineral OilSouthwest 250		006 006
132         Leonardtown Modular         250         350         Mineral Oil         Southwest 250         68' N           133         Ellicott Hall         256         379         Mineral Oil         Room 0119         57' N           134         Central Heating Plant         001         418         Mineral Oil         Northeast 001         11' W           135         Central Heating Plant         001         213         Mineral Oil         West 006         106' NW	132 Leonardtown Modular 250 350 Mineral Oil Southwest 250		006
133         Ellicott Hall         256         379         Mineral Oil         Room 0119         57' N           134         Central Heating Plant         001         418         Mineral Oil         Northeast 001         11' W           135         Central Heating Plant         001         213         Mineral Oil         West 006         106' NW			006
134         Central Heating Plant         001         418         Mineral Oil         Northeast 001         11' W           135         Central Heating Plant         001         213         Mineral Oil         West 006         106' NW			Stream 500ft
135         Central Heating Plant         001         213         Mineral Oil         West 006         106' NW	134 Central Heating Plant 001 418 Mineral Oil Northeast 001		004
			016
136 Ritchie Coliseum 004 296 Mineral Oil East 004 7' E		7' E	005
137         Service Building Annex         005         279         Mineral Oil         East 005         155' SE		155' SE	
138 Plant Maintenance Shops 006 263 Mineral Oil West 006 111' NW	138 Plant Maintenance Shops 006 263 Mineral Oil West 006	111' NW	016
139 Motor Transport Facility 011 275 Mineral Oil Northwest 011 166' NE	139 Motor Transport Facility 011 275 Mineral Oil Northwest 011	166' NE	016 016
140         Parking Garage #5         404         325         Mineral Oil         Norhtwest 404         140' SW		140' SW	
141         Susquehanna Hall         233         194         Mineral Oil         West 233         130' SW			016
142         Harford Hall         014         147         Mineral Oil         Southeast 014         110' W			016 016 12 004
442	143 Leonardtown Modular 239 180 Mineral Oil Southwest 239	250' E	016 016 12 004 014
143 Leonardtown Modular 239 180 Mineral Oil Southwest 239 250 E  144 Leonardtown Modular 241 170 Mineral Oil Southwest 241 76' E			016 016 12 004

Total Oil Storage:

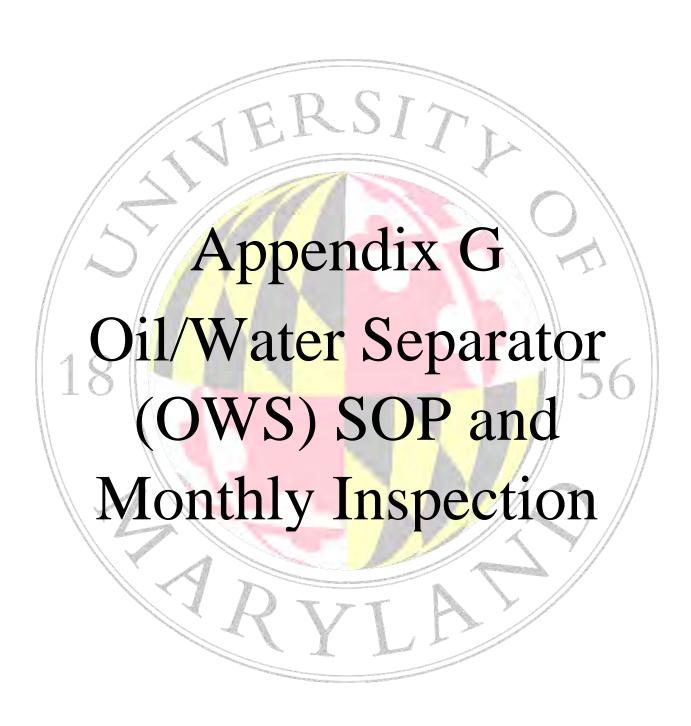
49,133



#### Appendix F Table of Transfer Area Fault Analysis

Transfer Area	Bldg. Name	Bldg.#	Company	Largest Compartment (gallons)	Flow Rate (GPM)	Est. Spill Rate (gal/hr)	Product Transferred	Storm Drain Location	Receiving Outfall
Parking Lot K2	Plant Operations and Maintenance	006	Mansfield Energy- Petrol Express	8,500	300	Gradual to Instantaneous	Diesel	20' SE	5
Fuel Island**	Severn	810	James River Petroleum	10,000	13	Gradual to Instantaneous	Gasoline, E-85	58' NW	StormDrain
Refueling Area	Shuttle Bus Facility	424	Carroll Fuel	3,500	350	Gradual to Instantaneous	Diesel	55' S	Pond
Mobile Refuler	Various	-	University of Maryland	100	20	Gradual to Instantaneous	Diesel	-	-

<sup>\*\*</sup>Values are estimated



#### SOP 11: OIL/WATER SEPARATOR (OWS) MAINTENANCE

Oil/water separators (OWS) are structural devices intended to allow oils (and substances lighter than water) to be intercepted and be removed for disposal. Substances heavier than water settle into sludge at the bottom of the unit. The remaining water passes through the unit into the sanitary sewer system.

OWS units are generally required where petroleum-based products, wastes containing petroleum, or oily and/or flammable materials are used, produced, or stored. OWS units should not be used to manage stormwater or flow from vehicle washing facilities. High flow rates through an OWS will reduce the structure's ability to separate materials. Detergents and solvents can emulsify oil and grease, allowing the particles to enter the sewer, so these should not be disposed of in drains entering the OWS.

#### General OWS Maintenance Requirements

- 1. Each OWS at a facility may receive different materials in different quantities, so the cleanout schedule may not be the same for every OWS at a facility.
- 2. Employees performing inspections of an OWS must be properly trained and be familiar with the maintenance of that specific structure, since function can vary based on design. Third-party firms may be utilized to perform quarterly inspections.
- 3. Do not drain petroleum, oil, or lubricants directly to an OWS. The structures are designed to manage these materials at low and medium concentrations in sanitary sewage, not as slug loads.
- 4. Do not drain antifreeze, degreasers, detergents, fuels, alcohols, solvents, coolant, or paint to the OWS.
- 5. Separator compartment covers should be tightly sealed to ensure drainage only enters the first compartment of the OWS.
- 6. Drains should be kept free of debris and sediment to the maximum extent practicable.
- 7. Spill cleanup materials should be maintained in the area served by the OWS.

#### **OWS Inspection Procedures**

Daily inspection of an OWS should include a visual examination of the area served by the OWS for evidence of spills or leaks.

Monthly inspections of an OWS should include the following:

- 1. Visually examine the area served by the OWS for evidence of spills or leaks.
- 2. Inspect the point of discharge (i.e., sewer manhole) for evidence of petroleum bypassing the OWS.
- 3. Inspect drains for any signs of unauthorized substances entering the OWS.
- 4. Examine the OWS for signs of leaks or any malfunction.
- 5. Complete the Monthly OWS Inspection Checklist, attached, during the inspection.
- 6. Take the following measurements to benchmark function of the OWS:
  - A. Distance from rim of access cover to bottom of structure
  - B. Distance from rim of access cover to top of sludge layer
  - C. Depth of sludge layer (C = A B)

Nov. 2017 Page 1 of 2



- D. Distance from rim of access cover to the oil/water interface
- E. Distance from rim of access cover to the top of the liquid surface
- F. Depth of oil layer (F = D E)

#### **OWS** Cleaning Procedures

Cleaning of the OWS is required when there has been a spill to the OWS that exceeds ten gallons of oil, one gallon of detergent or solvent, or any material prohibited by the owner of the sanitary sewer. Cleaning is also required when the levels of accumulated sludge and/or oil meet the manufacturer's recommended levels for cleaning. This will vary based on the manufacturer of the OWS. If the manufacturer's recommendations are unknown, the following guidelines are appropriate for determining when to clean:

- 1. When sludge accumulates to 25% of the wetted height of the separator compartment; or
- 2. When oil accumulates to 5% of the wetted height of the separator compartment; or
- 3. When 75% of the retention capacity of the OWS is filled.

Cleaning should be performed a minimum of once per year. When cleaning is required, it shall be performed by licensed OWS maintenance companies. Materials removed from the OWS must be disposed of in accordance with applicable state and federal regulations.

#### Documentation of Cleaning and Service

The operator of the premises where the OWS is located shall maintain a log describing the date and type of all inspections, service and maintenance performed in connection with the Separator. Documentation shall include the identity of the inspector (or the identity of the person or entity that performed the service and/or maintenance). Records shall also document the amount of residue removed from the OWS each time it was cleaned, and how removed materials were disposed. This documentation shall be maintained for a minimum of five years.

#### Attachments

1. Monthly OWS Inspection Checklist





#### Oil-Water Separator Inspection and Maintenance Checklist

Facility:							
<b>Location/Address:</b>							
Date:	Time:	<b>Weather Conditions:</b>		<b>Date of Last Inspection:</b>			
Inspector: Title:							
Rain in Last 48 Hours							
Pretreatment:   vegetated filter strip   swale   turf grass   forebay   other, specify:   none							
Site Plan or As-Bu	Site Plan or As-Built Plan Available:   Yes  No						

Inspection Item		Comment	Action Needed
1. PRETREATMENT			recucu
Sediment has accumulated.	□Yes □No □N/A		□Yes □No
Trash and debris have accumulated.	□Yes □No □N/A		□Yes □No
2. INLETS	T		T
Inlets are in poor structural condition.	□Yes □No □N/A		□Yes □No
Sediment, trash, or debris has accumulated and/or is blocking the inlets.	□Yes □No □N/A		□Yes □No
3. OIL CONTAINMENT CHAMBER	<u> </u>		Т
Oil volume threshold has been reached.	□Yes □No □N/A		□Yes □No
Oil-absorbing pads are saturated.	□Yes □No □N/A		□Yes □No
4. SEDIMENT COLLECTION CHAM	BER		
Sediment accumulation threshold has been reached.	□Yes □No □N/A		□Yes □No
Sludge accumulation threshold at bottom of chamber has been reached.	□Yes □No □N/A		□Yes □No
4. OTHER SYSTEM COMPONENTS	<u> </u>		
Structural deterioration is evident.	□Yes □No □N/A		□Yes □No
Spills or leaks are evident.	□Yes □No □N/A		
5. OUTLETS			
Outlets in poor structural condition.	□Yes □No □N/A		□Yes □No
Sediment, trash or debris is blocking outlets.	□Yes □No □N/A		□Yes □No
Erosion is occurring around outlets.	□Yes □No □N/A		□Yes □No
6. OTHER	1		T
Evidence of ponding water on area draining to system.	□Yes □No □N/A		□Yes □No
Evidence that water is not being conveyed through the system.	□Yes □No □N/A		□Yes □No
Additional Notes			
Wet weather inspection needed □ Yes	□ No		

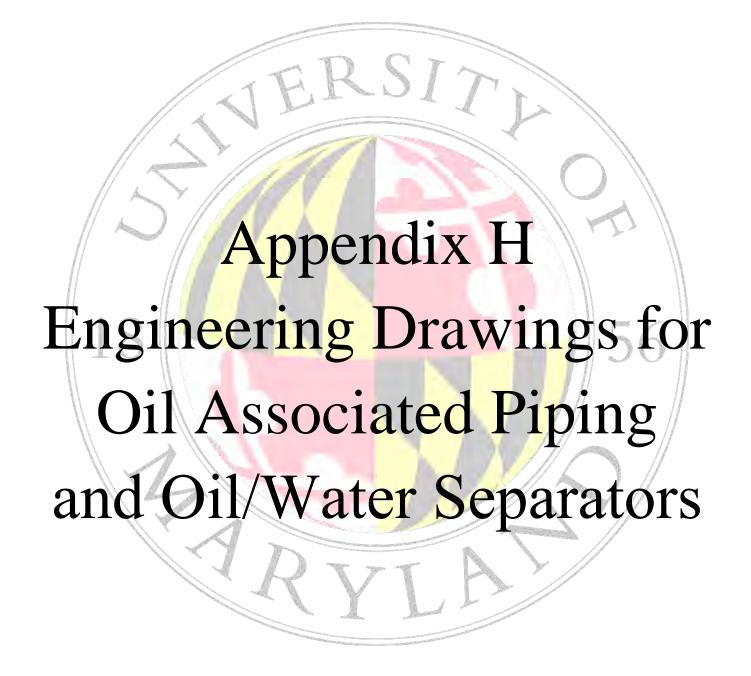
<sup>\*</sup>Do not enter underground detention chambers to inspect system unless Occupational Safety & Health Administration (OSHA) regulations for confined space entry are followed.

<sup>\*</sup>Follow inspection and maintenance instructions and schedules provided by system manufacturer and installer.

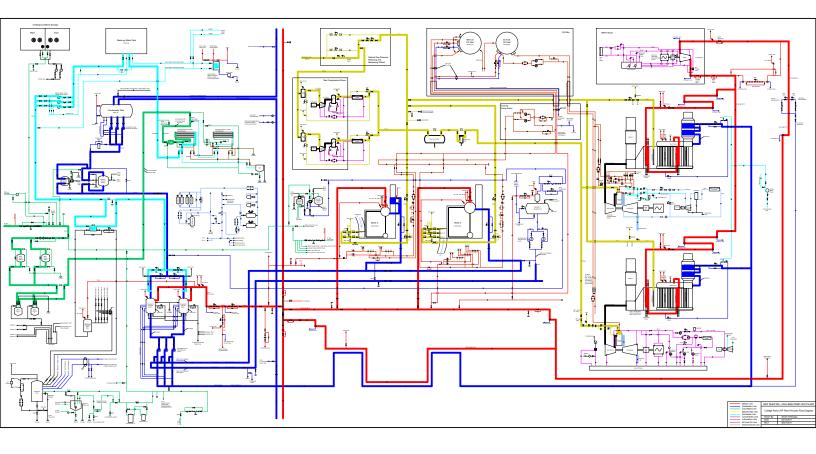
<sup>\*</sup> Properly dispose of all wastes.

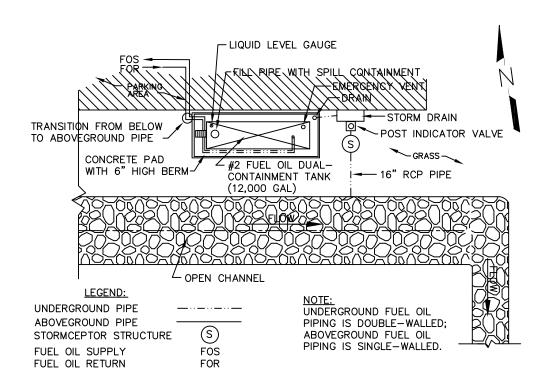
Measurements	A	Distance from rim of access cover to bottom of structure
	В	Distance from rim of access cover to top of sludge layer
	C = A - B	Depth of sludge layer
	D	Distance from rim of access cover to the oil/water interface
	Е	Distance from rim of access cover to the top of the liquid surface
	F = D - E	Depth of oil layer

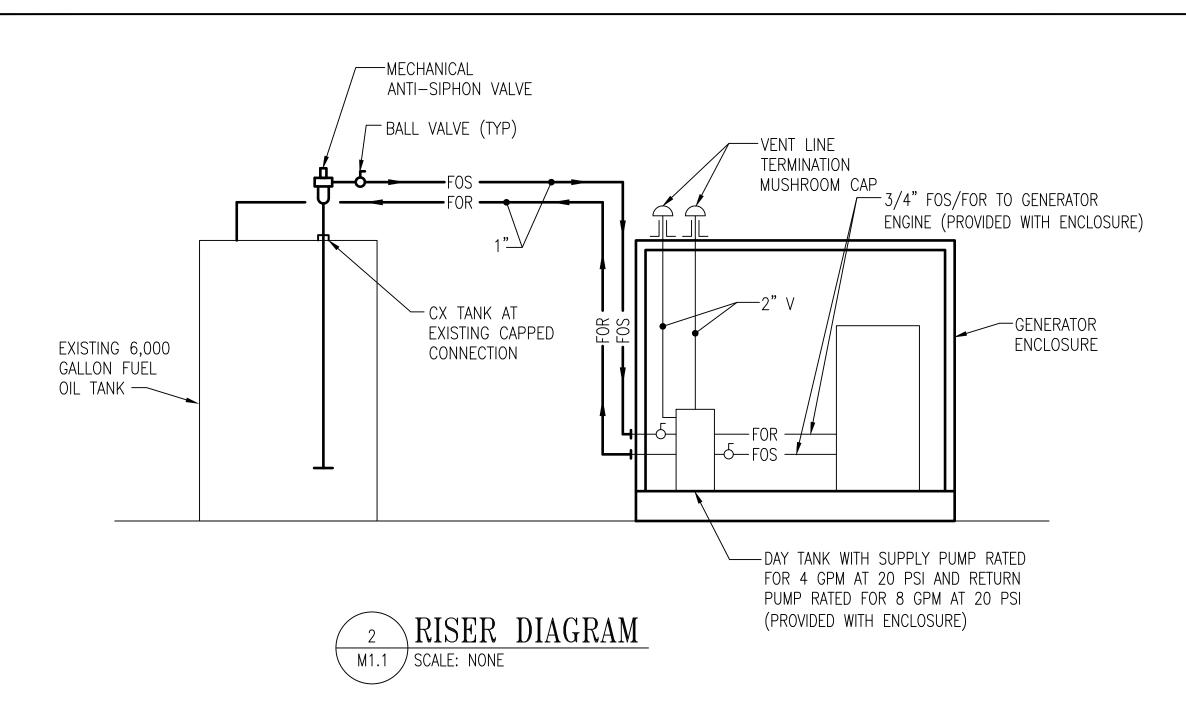
If the values for "C" and/or "F" are greater than those in the manufacturer's recommendations, the OWS must be cleaned by a licensed OWS maintenance company.











#### RECOVERY AFTER POWER FAILURE SEQUENCE OF OPERATIONS

#### **GENERAL:**

- 1. THE DDC SYSTEM SHALL MONITOR THE BUILDING'S POWER SOURCE SERVING SWITCHBOARD A AND SWITCHBOARD B.
- 2. UPON A POWER FAILURE TO EITHER SWITCHBOARD, THE BAS SHALL DISABLE THE CONTROL SEQUENCES FOR CHILLERS ACC-796-01-01, ACC-796-01-02, AND ACC-796-01-03.

#### RECOVERY AFTER POWER FAILURE SERVING SWITCHBOARD "B"

- 3. UPON RESTORATION OF POWER FROM THE GENERATOR SERVING SWITCHBOARD B (AS DETERMINED FROM MONITORING AUTOMATIC TRANSFER SWITCH POSITION), CONFIRM POWER IS AVAILABLE (NORMAL OR EMERGENCY) AT SWITCHBOARD A. ONCE POWER IS AVAILABLE AT SWITCHBOARD A:
- a. BUILDING CHILLER ACC-796-01-03 SHALL REMAIN DISABLED.
- b. ROTATE LEAD / LAG STATUS OF PROCESS COOLING CHILLERS (ACC-796-01-01 AND ACC-796-01-02) TO BE OPPOSITE OF STATUS BEFORE UTILITY POWER OUTAGE. ENABLE EXISTING PROCESS COOLING CHILLED WATER SEQUENCE OF OPERATION WITH THE FOLLOWING MODIFICATIONS:
- i. LAG PROCESS COOLING CHILLER SHALL REMAIN DISABLED. CLOSE ASSOCIATED CHILLED WATER ISOLATION VALVE.
- ii. DELAY START OF LEAD PROCESS COOLING CHILLER FOR 60 SECONDS.
- iii. MONITOR THE GENERATOR OUTPUT THROUGH THE REMOTE GENERATOR ANNUNCIATOR PANEL LOCATED IN ROOM 1209A AND PROVIDE CURRENT LIMITING SIGNAL TO CHILLER TO PREVENT EXCEEDING THE CAPACITY OF GENERATOR.

#### RECOVERY AFTER POWER FAILURE SERVING SWITCHBOARD A

- 4. CONFIRM POWER IS AVAILABLE AT SWITCHBOARD B AND DETERMINE IF IT IS SERVED BY NORMAL OR EMERGENCY POWER (AS DETERMINED FROM MONITORING AUTOMATIC TRANSFER SWITCH POSITION).
- 5. IF SWITCHBOARD B IS SERVED BY GENERATOR POWER, FOLLOW THE "RECOVERY AFTER POWER FAILURE SERVING SWITCHBOARD B" SEQUENCE OF OPERATION.
- 6. IF SWITCHBOARD B IS SERVED BY UTILITY POWER, FOLLOW THE "RESTORATION OF NORMAL POWER SEQUENCE OF OPERATION."

#### RESTORATION OF NORMAL POWER

- 7. UPON RESTORATION OF POWER FROM THE UTILITY (AS DETERMINED FROM MONITORING AUTOMATIC TRANSFER SWITCH POSITION):
- a. ROTATE LEAD / LAG STATUS OF PROCESS COOLING CHILLERS (ACC-796-01-01 AND ACC-796-01-02) TO BE OPPOSITE OF STATUS BEFORE RESTORATION OF POWER. ENABLE EXISTING PROCESS COOLING CHILLED WATER SEQUENCE OF
- b. ENABLE BUILDING CHILLER ACC-796-01-03 AFTER 120 SECOND DELAY.

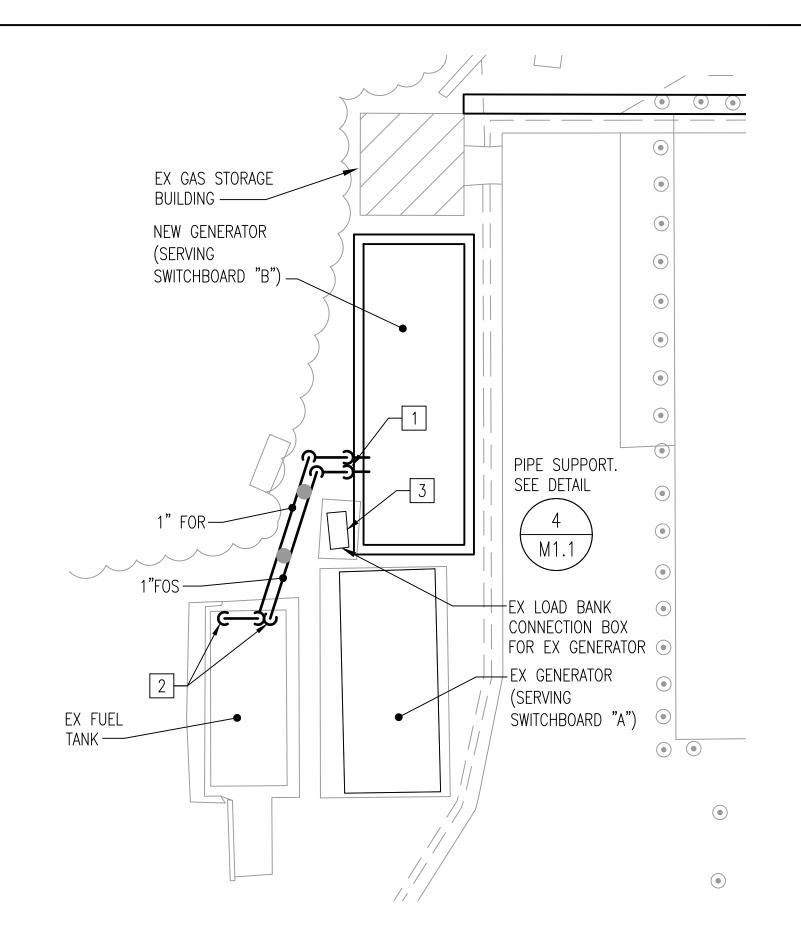
#### GENERATOR MONITORING SYSTEM SEQUENCE OF OPERATIONS

1. THE DDC SYSTEM SHALL MONITOR THE DAY TANK'S COMBINATION LOW FUEL / HIGH FUEL LEVEL ALARM AND LEAK DETECTOR THROUGH A MODBUS CONNECTION TO THE REMOTE GENERATOR ANNUNCIATOR PANEL LOCATED IN ROOM 1209A. ANNUNCIATE AN ALARM THROUGH THE BUILDING'S GRAPHIC USER INTERFACE WHEN ALARMS ARE ACTIVATED.

BMS SYSTEM CONTROLLER									
POINT I.D. #	POINT DESCRIPTION	A1	АО	DI	DO	ALARM			NOTES
		Al				HI/LOW	MAINT.	FAILURE	NOTES
1	ACC796-01-0-1, CHILLER ENABLE (EX POINT)		-		X	- 11			1
2	ACC-796-01-02, CHILLER ENABLE (EX POINT)	1 = 1	11		X				1
3	ACC-796-01-03, CHILLER ENABLE (EX POINT)				Х				1
4	ACC-796-01-02, CHILLER CURRENT LIMITING		X	1		- 1			1
5	ACC-796-01-03, CHILLER CURRENT LIMITING		Х						1
6	AUTOMATIC TRANSFER SWITCH POSITION			Х					1
7	REMOTE GENERATOR ANNUNCIATOR PANEL					- 1			1,2

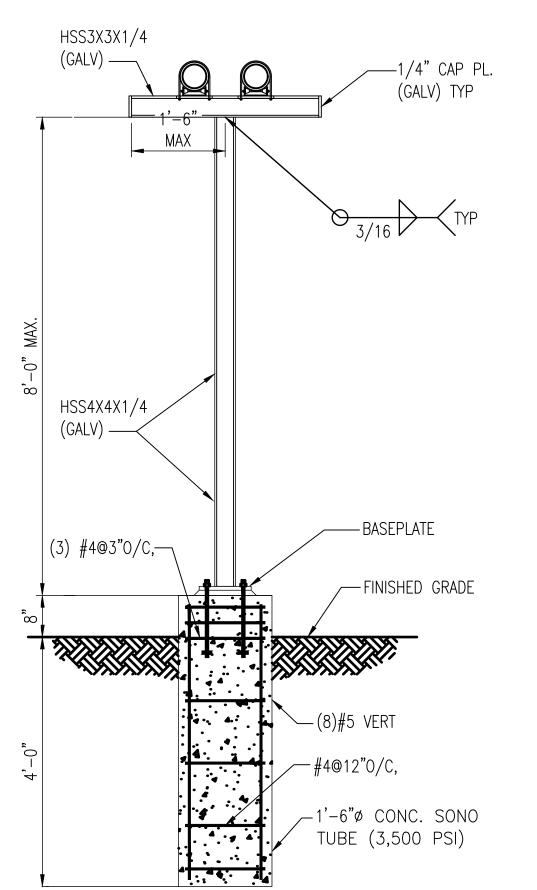
NOTES: 1. MONITIORED THROUGH MODBUS CONNECTION. 2. REFER TO ELECTRICAL DRAWINGS FOR EQUIPMENT LOCATIONS.

> BUILDING CONTROL MODIFICATIONS M1.1 / SCALE: NONE



GENERATOR SITE PLAN – NEW WORK (





TYPICAL PIPE SUPPORT DETAIL SCALE: NONE



1 1" FOS & FOR DN. EXTEND TO DAY TANK LOCATED IN GENERATOR ENCLOSURE. COORDINATE LOCATION WITH GENERATOR MANUFACTURER.

2 CONNECT TO EX TANK THROUGH EX UNUSED 4" TANK CONNECTION.

3 EXISTING LOAD BANK CONNECTION CABINET WILL BE REMOVED UNDER SEPARATE CONTRACT PRIOR TO THIS CONTRACT.

### **ABBREVIATIONS**

AIR COOLED CHILLER ANALOG INPUT ANALOG OUTPUT

CONC CONCRETE

CONNECT TO EXISTING

DIGITAL INPUT DIGITAL OUTPUT

EXISTING

FUEL-OIL RETURN

FUEL-OIL SUPPLY

GALVANIZED GALLONS PER MINUTE

HOLLOW STRUCTURAL SECTION

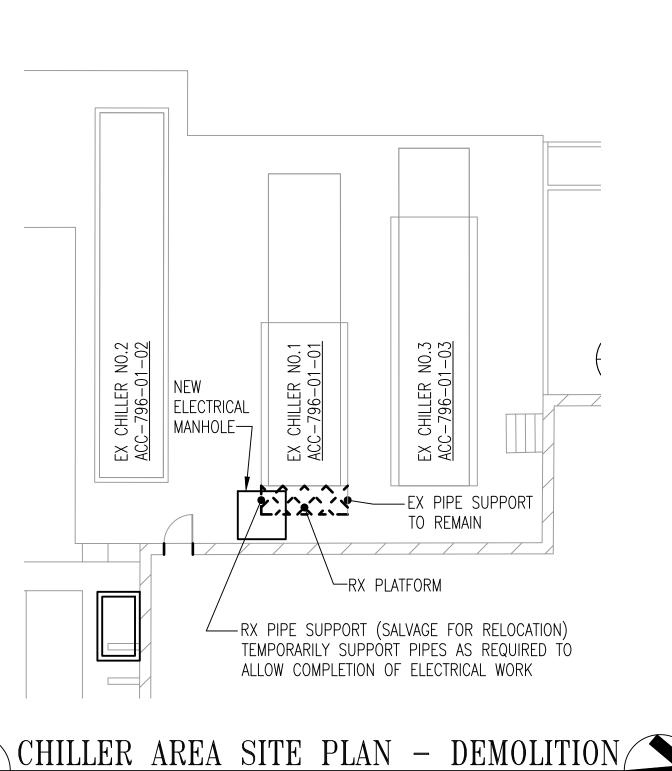
MAXIMUM

ON CENTER

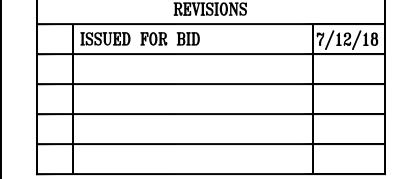
POUNDS PER SQUARE INCH PLATE

REMOVE EXISTING

TYP TYPICAL



M1.1 SCALE: 1" = 10'

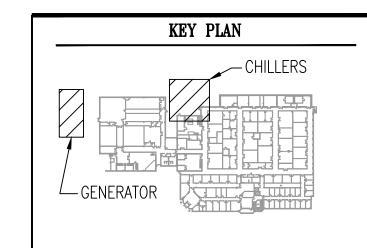


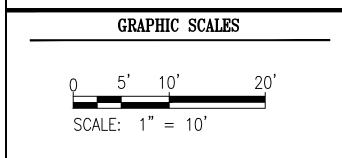


LPS ELECTRICAL UPGRADE -SWITCHBOARD B

BLDG: LABORATORY OF PHYSICAL SCIENCE BLDG NO.: 796

UMD PROJECT NO.: 15-667-765









PROFESSIONAL CERTIFICATION.

I HEREBY CERTIFY THAT THESE DOCUMENTS WERE
PREPARED OR APPROVED BY ME, AND THAT I AM A DULY
LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF
THE STATE OF MARYLAND, LICENSE NO. 20215 EXPIRATION DATE: <u>10/12/2019</u>



801 South Caroline Street, Baltimore, Maryland 21231

MECH SITE PLAN & CONTROLS NEW WORK & DEMOLITION

Drawing No.

Scale: 1" = 10' Sheet 14 of 22 Date: 7/12/2018 Des: GGG | Drawn: PBF | Check: GGG





#### Highland Manufacturing Locations

One Highland Road Stoystown, PA 15563-0338 (814) 893-5701 FAX 893-6126

99 West Elizabethtown Road Manheim, PA 17545-9410 (717) 664-0600 FAX 664-0617

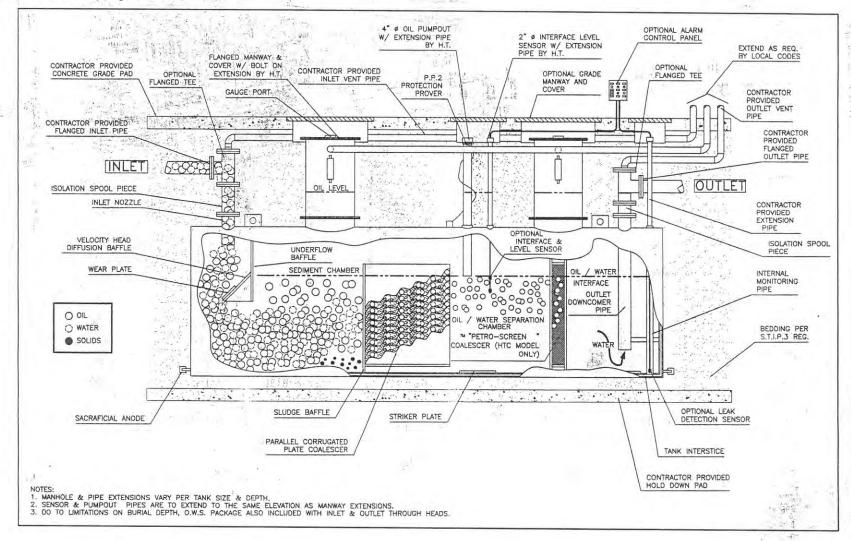
958 19th Street Watervliet, NY 12189 (518) 273-0801 FAX 273-1365 2225 Chestnut Street Lebanon, PA 17042 (717) 664-0602 FAX 664-0631

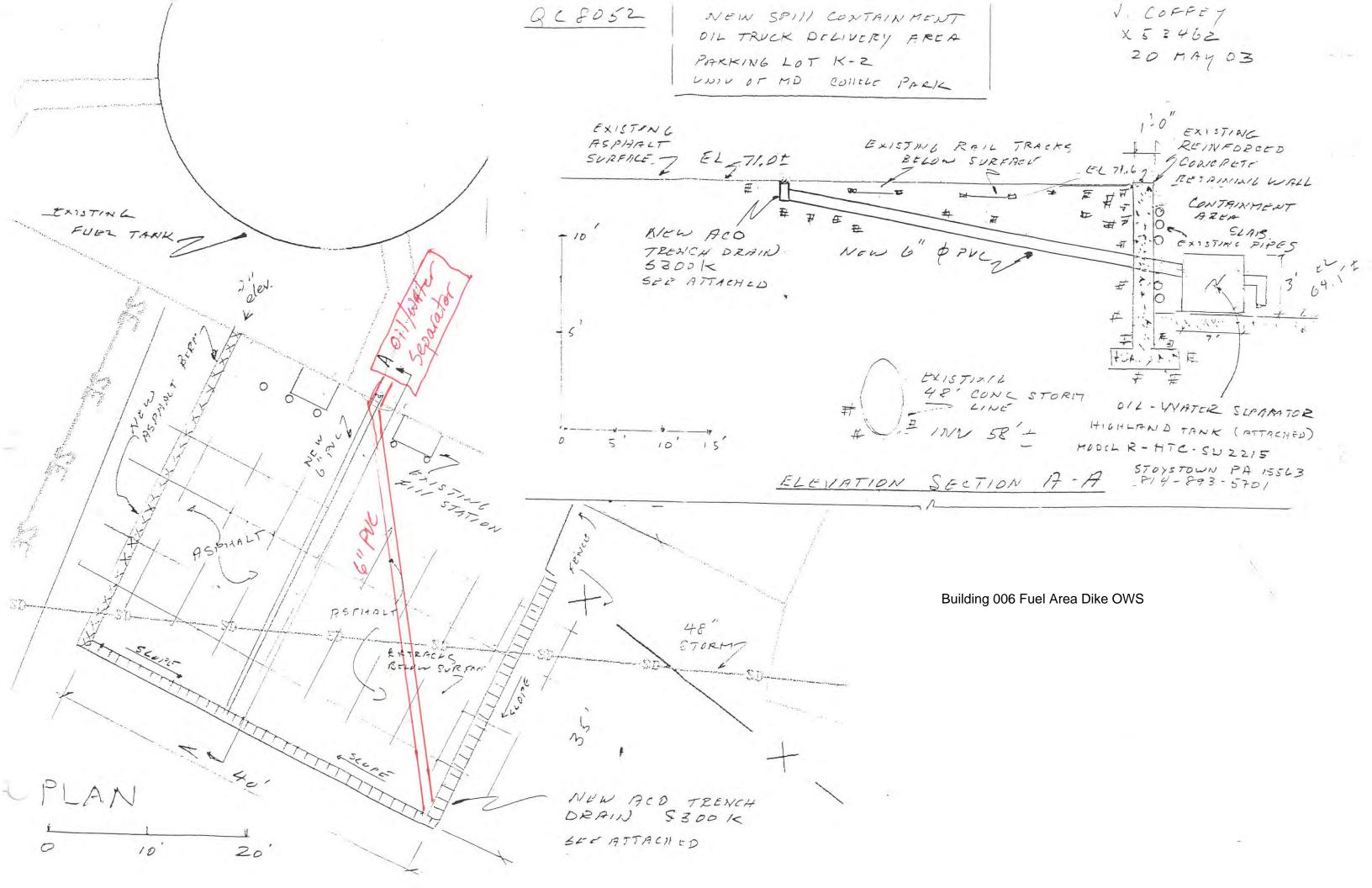
2700 Petterson Street Greensboro, NC 27407 (336) 218-0801 FAX 218-1292

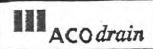
354 Route 108 Somersworth, NH 03878 (603) 692-2012 FAX 692-2014

Please visit us at www.highlandtank.com

#### **OWS Reference Drawing**







#### INSTALLATION DRAWING

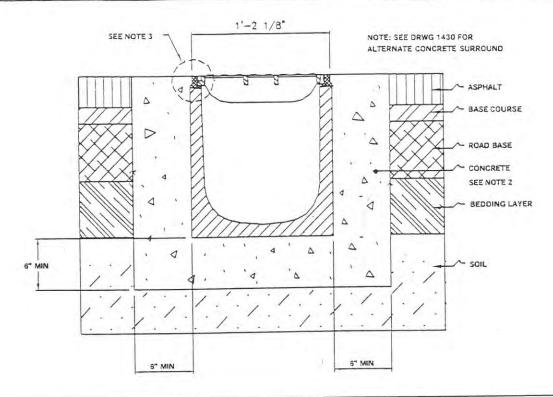
ACO Polymer Products Inc. P.O. Box 245 Chardon, OH 44024

PH: 440-285-7000 FX: 440-285-8517 e-mail: sales@acousa.com

DRWG# 1514 Date: 02.25.02

WWW.ACOUSA.COM

S300K: Load Class E: Asphalt



#### MOTES

DRWG# 1514

- 1. It is necessary to ensure the minimum dimensions shown are suitable for the existing ground conditions.
- Engineering advice may be required.
- 2. A minimum concrete strength of 3000 PSI is recommended. The concrete should be vibrated to eliminate air pockets.
- 3. The finished level of the concrete surround must be approx. 1/8" above the top of the channel edge.
- 4. Refer to ACO'S latest installation instructions for complete details.



WWW.ACOUSA.COM

Date: 02.25.02

#### SPECIFICATION CLAUSE

S300K Trench Drain System

ACO Polymer Products Inc. P.O. 8ox 245 Chardon, OH 44024 PH: 440-285-7000 FX: 440-285-8517 a-mail: sales@acousa.com

The surface drainage system shall be polymer concrete \$300K channel system with ductile iron rail and grate as manufactured by ACO Polymer Products, Inc., Chardon, Oh.

Channels will be manufactured from polyester resin polymer concrete with an integrally cast in ductile iron rail and supplied with ductile iron grates.

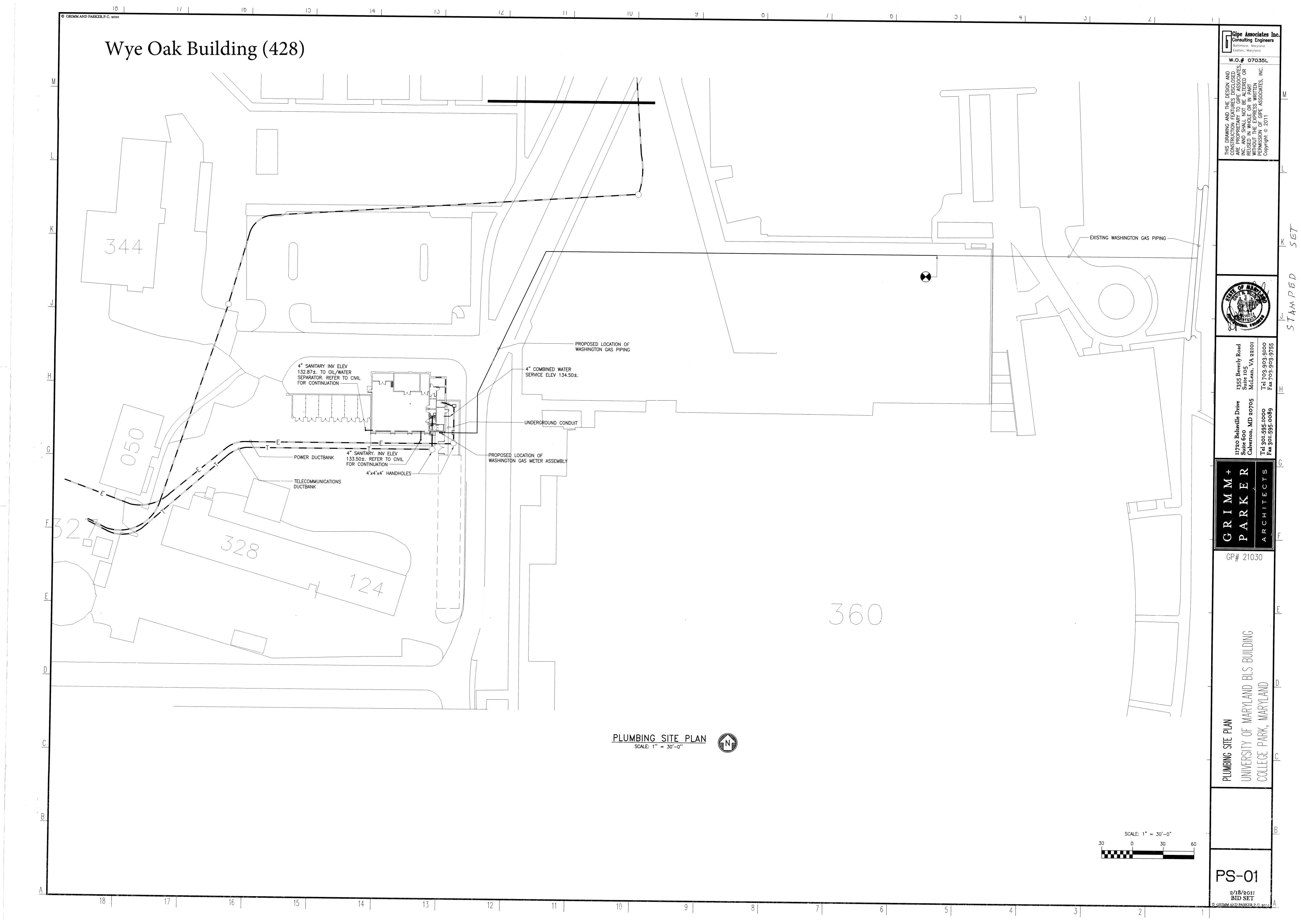
The system shall be 12 inches (300mm) nominal inside width with a 14.1 in. (360mm) overall width and a built-in slope of 0.6 %. All channels shall be interlocking with a male/female join. Each channel shall have preformed 6 in. (171mm) and 8 in. (218mm) schedule 40 drill-out on the bottom for vertical connection with underground piping.

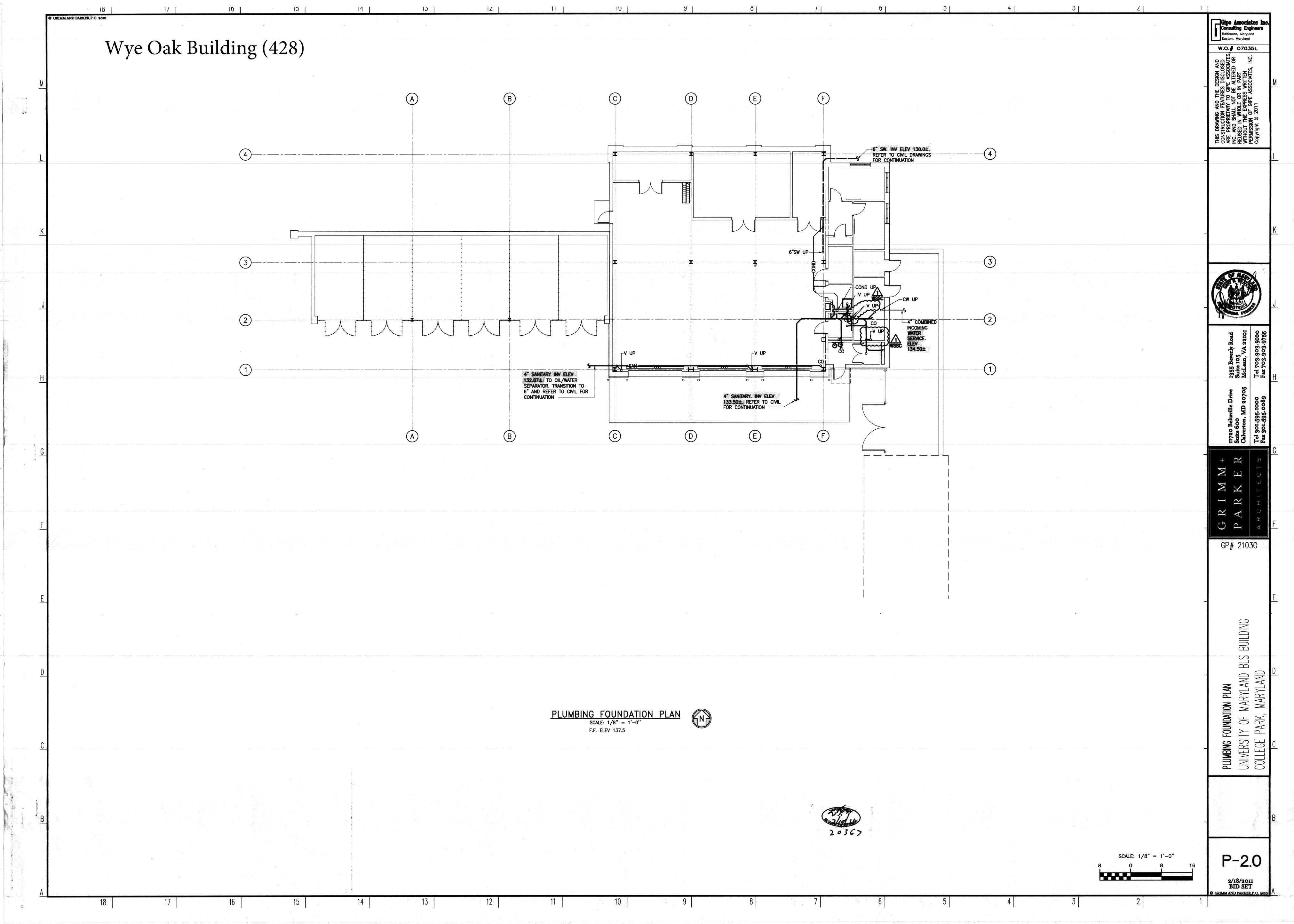
The complete drainage system shall be by ACO Polymer Products, Inc. Any deviation or partial system design and/or improper installation will void any and all warranties provided by ACO Polymer Products, Inc.

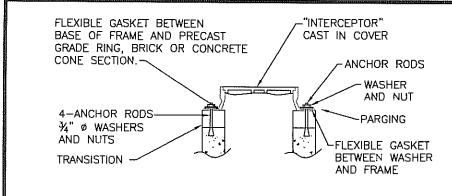
The channel sytem shall be independently certified to withstand loadings to load class F (DIN19580). Grates shall be secured using 'Powerlok' Boltless locking system. Grate and Locking system shall be fully removable from channel.

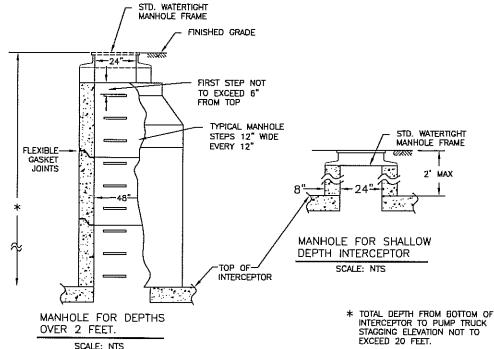
Polymer Concrete shall have material properties of: compressive strength range between 14,000-14,500 psi; flexural strength between 3600-4500 psi; tensile strength of 1500 psi. The material water absorption rate shall not exceed 0.1 % by weight and shall be resistant to prolonged salt exposure, repetitive frost cycles and chemically resistant to dilute acids and alkalls.

The system shall be installed in accordance with the manufacturer's instructions and recommendations.









#### GREASE OR SAND/OIL INTERCEPTOR

- TANKS AND MANHOLES IN TRAFFIC-BEARING LOCATIONS SHALL MEET OR EXCEED H20 (SHA) LOADING DESIGN.
- 6" INCHES OF BEDDING AND THE BACKFILL ALL SIDES (UP TO TOP OF TANK), SHALL BE MD#6 OR SMALLER AGGREGATE.
- BAFFLES SHALL BE 16 GAUGE (.059 INCH) OR HEAVIER, TYPE 302 OR 304 STAINLESS STEEL.
- BAFFLE TRACKS SHALL BE ¼" OR I" STAINLESS STEAL OR ALUMINUM, TRACK ANCHORS SHALL BE WELDED TO BACK OF TRACK ANCHOR IN THE WALL CASING.
- MANHOLE COVERS SHALL HAVE THE WORD "INTERCEPTOR" CAST IN

#### MODIFICATIONS FOR UNTRAPPED GARAGE DRAINS

- MANUFACTURER SHALL NOT INSTALL AN INLET BAFFLE.
- PLUMBER SHALL INSTALL INLET PIPE AS SHOWN ON DETAIL.
- THE TANK MUST BE VENTED AS SHOWN ON DETAIL.





DATE: 9-9-08 SHEET NO. 2 OF 2

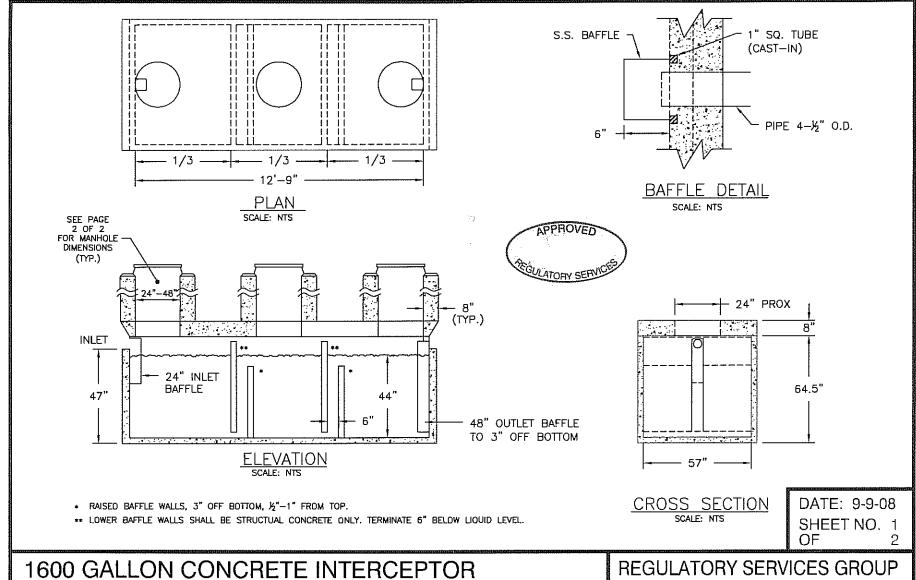
### CONCRETE INTERCEPTOR DETAILS AND SPECIFICATIONS

#### REGULATORY SERVICES GROUP

THESE DOCUMENTS CONTAIN PRIVILEGED AND CONFIDENTIAL INFORMATION WHICH SHALL NOT BE REDISTRIBUTED WITHOUT PRIOR WSSC APPROVAL

WASHINGTON SUBURBAN SANITARY COMMISSION



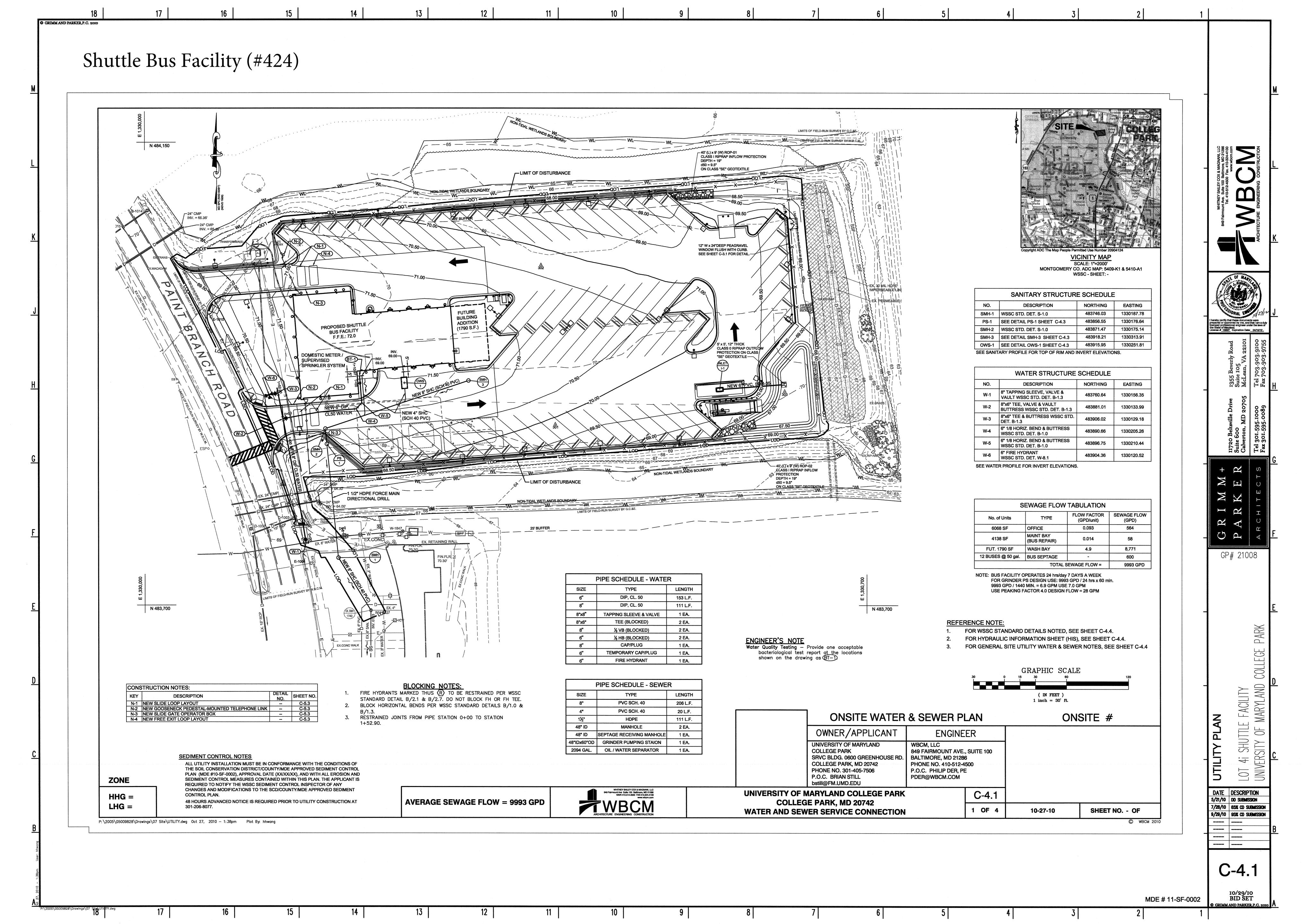


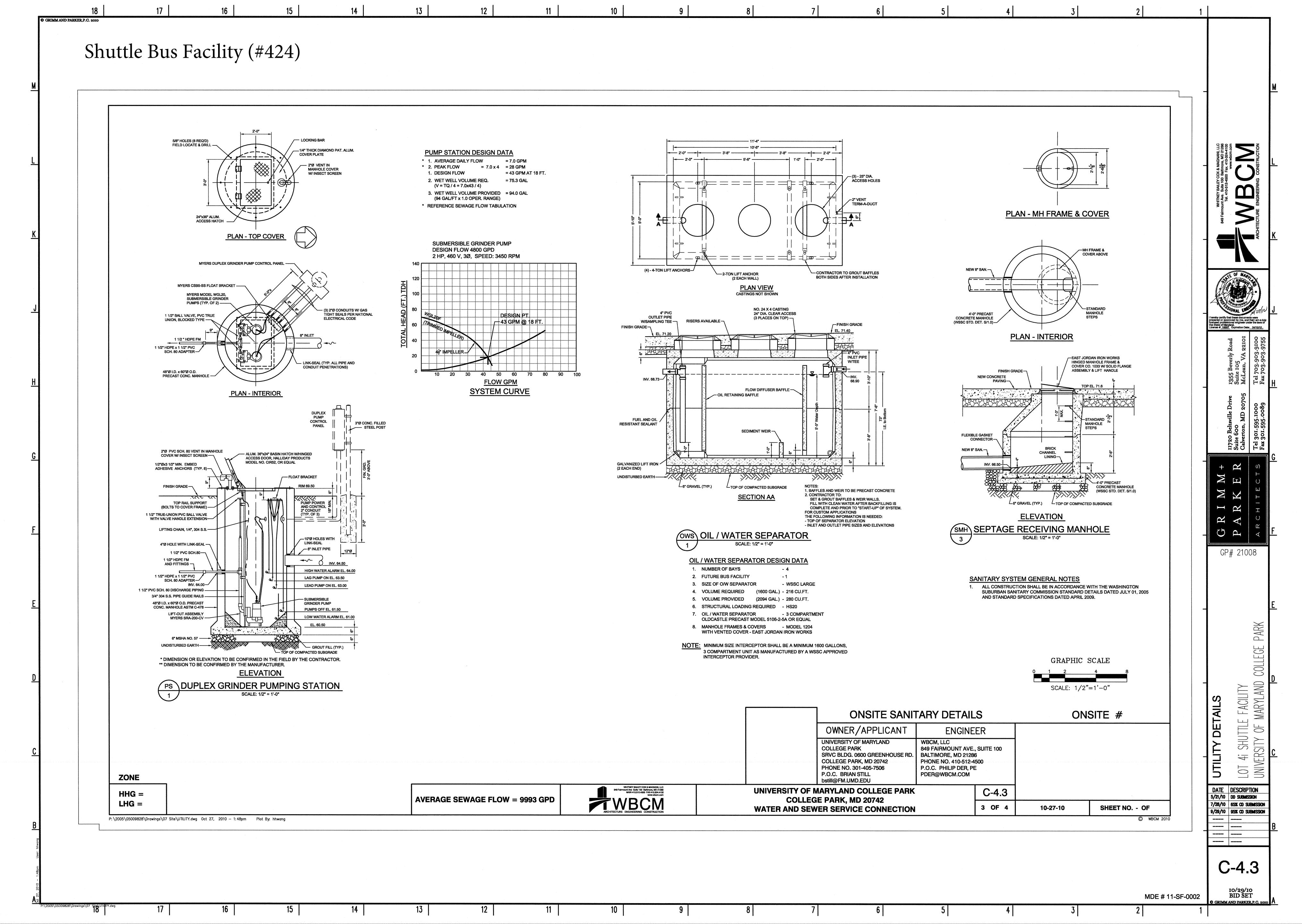
### 1600 GALLON CONCRETE INTERCEPTOR GREASE OR SAND/OIL

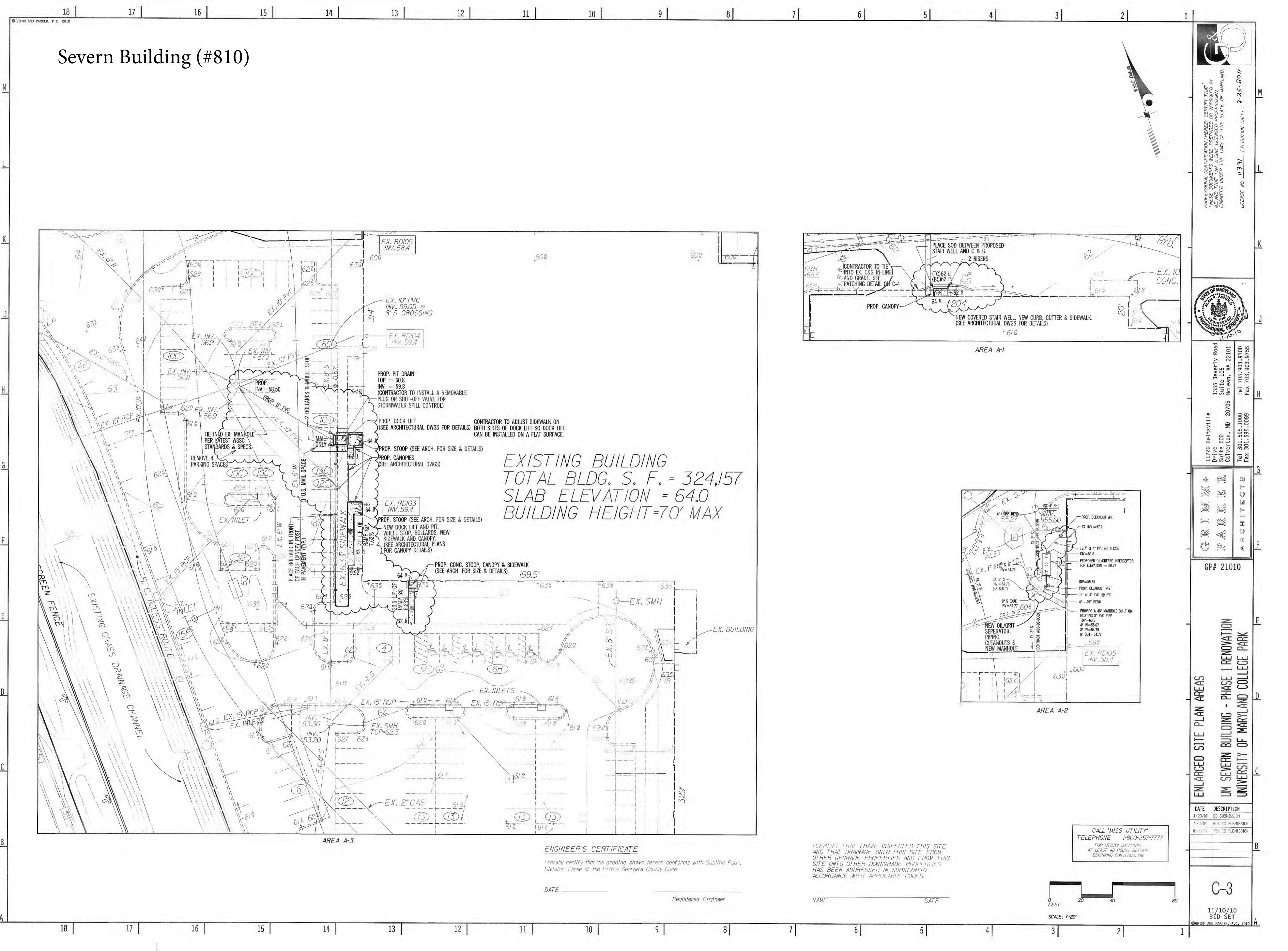
THESE DOCUMENTS CONTAIN PRIVILEGED AND CONFIDENTIAL INFORMATION WHICH SHALL NOT BE REDISTRIBUTED WITHOUT PRIOR WSSC APPROVAL

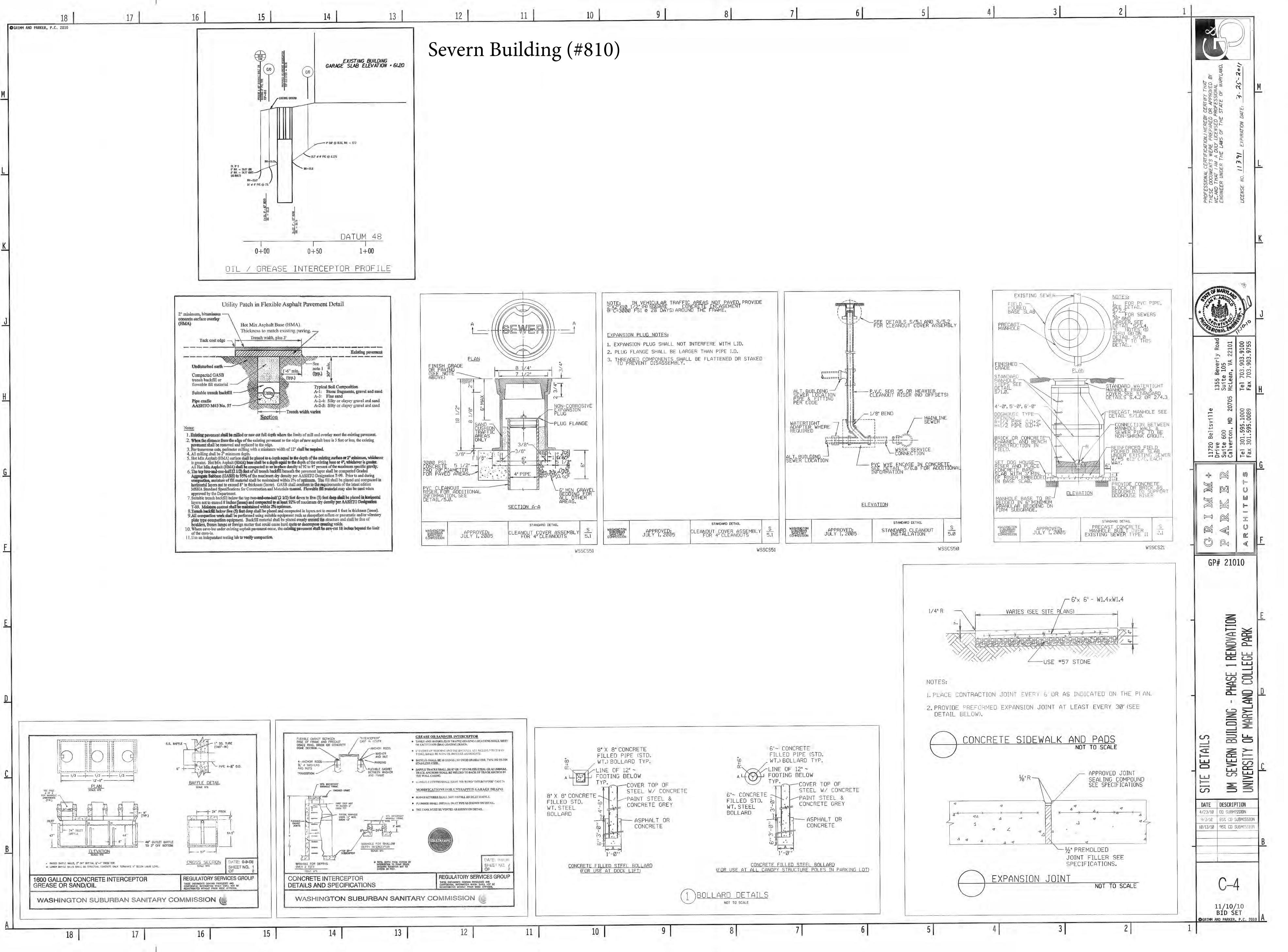
WASHINGTON SUBURBAN SANITARY COMMISSION



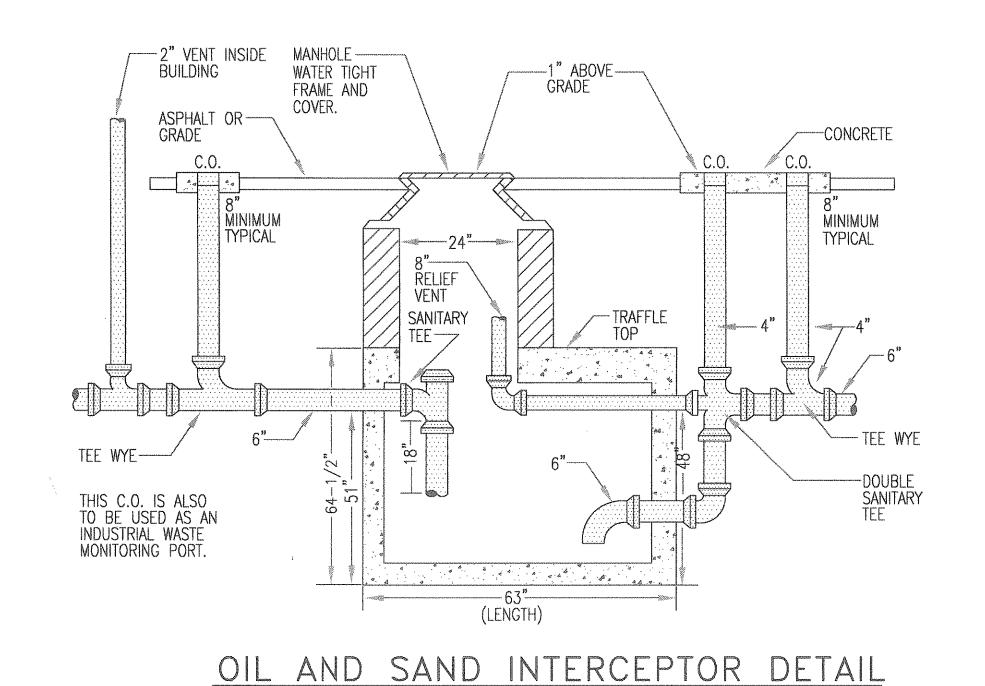








## Terrapin Trail Parking Garage (#403)



### GENERAL NOTES

- OBTAIN AND PAY FOR PERMITS, ARRANGE FOR INSPECTIONS BY LOCAL AUTHORITIES HAVING
- ALL WORK AND MATERIALS SHALL BE IN ACCORDANCE WITH LOCAL CODES AND PROJECT
- PLUMBING CONTRACTOR SHALL VERIFY ALL INVERTS PRIOR TO CONSTRUCTION. COORDINATE SANITARY AND STORM SEWER CONNECTIONS WITH APPROPRIATE AGENCY.
- PLUMBING CONTRACTOR SHALL COORDINATE PIPING WITH ALL TRADES PRIOR TO CONSTRUCTION TO AVOID INTERFERENCE.
- STORM PIPING SHALL BE INSTALLED AT 1/8" PER FOOT SLOPE.
- STORM PIPING ABOVE GRADE SHALL BE SERVICE WEIGHT SCHEDULE 40 NO-HUB CAST IRON OR HUB AND SPIGOT CAST IRON OR P.V.C.
- GARAGE DRAINS (G.D.-1) SHALL BE "ZURN" MODEL Z-534-C 12" DIAMETER PARKING DECK DRAIN WITH SUPPORT FLANGE. SEE DRAWINGS FOR SIZE. GARAGE DRAINS (G.D.-2) SHALL BE "ZURN" MODEL Z-521 FOR PAVING ON GRADE, CAST IRON BODY BOTTOM OUTLET WITH ADJUSTABLE EXTENSION FRAME. SEE DRAWINGS FOR SIZE.

# STORM SEWER PIPING

PIPE TURNING UP C.O. STORM RISER DESIGNATION SANITARY RISER DESIGNATION

GARAGE DRAIN - SANITARY

G.D.

D.D.

,G.P.M.

DECK DRAIN - STORM RAINLEADER GALLONS PER MINUTE

SANITARY PIPING 0.S.&Y. FIRE HOSE VALVE F.H.V.

### SYMBOLS AND ABBREVIATIONS

EQUIPMENT DESIGNATOR EF - EXHAUST FAN CU - CONDENSING UNIT UH - UNIT HEATER L – LOUVER SAC - SUPPLEMENTAL AIR CONDITIONING UNIT MOTORIZED DAMPER SUPPLY AIR REGISTER REFRIGERANT LIQUID LINE REFRIGERANT SUCTION LINE CONDENSATE DRAIN LINE 

\_\_\_\_\_

DUCTWORK W/ 1" S.L.

4" GOOSENECK — 4" GOOSENECK ---VENT BELOW LEVEL 6 DECK. VENT BELOW  $\frac{P}{3}$ S 5 (P)  $\frac{S}{3}$ LEVEL 6 DECK. LEVEL 6 DECK. 6" D.D. (4392 中) 6" D.D. 6" D.D. (4392 中) 6" D.D. (4392 中) 6" D.D. (4982 中) 6" D.D. (3924 中) 6" D.D. 6" D.D. (4982 中) (4982中) <sub>LEVEL</sub> 6 (4392 中) (4982 中)  $(5600 \oplus)$ (4392 中) LEVEL 6 <sup>L</sup> 6"(4982申) └6"(4392ф) (146 GPM) 一6"(4982申) —4" GOOSENECK VENT BELOW LEVEL 6 DECK. (130 GPM) —4" GOOSENECK VENT BELOW LEVEL 6 DECK. 8 -4" GOOSENECK VENT BELOW LEVEL 6 DECK. VENT BELOW ー6"(4392中) (146 GPM) — 6"(8784中) (292 GPM) LEVEL 6 DECK. — 6"(8784中) (292 GPM) — 6"(9964ф) (330 GPM) 6" G.D. 6" G.D. 6" G.D. (349 GPM) 6"(4392¢) (146 GPM) — 6"(3924ф) (130 GPM) 6"(9964中) (330 GPM) →8"(17565¢) (569 GPM) しー6"(8784中) (292 GPM) 6" G.D. LEVEL 4 LEVEL 4 →8"(17565¢) (569 GPM) ≻— 6"(4392ф) (146 GPM) 6" G.D. 6" G.D. 6" G.D. 6" G.D. 6" G.D. 6" G.D. LEVEL 3 LEVEL 3 ↓— 6"(4392ф) (146 GPM) ー6"(3924中) (1*3*0 GPM) ≻—8"(17565ф) (569 GPM) → 6"(9964中) (330 GPM) ← 6"(8784中) (292 GPM) 6" G.D. 6" G.D. | 6" G.D. LEVEL 2 LEVEL 2 ↓—6"(9964ф) (330 GPM) 〜6"(8784中) (292 GPM) ← 6"(8784ф) (292 GPM) ↓—6"(4392ф) (146 GPM) ー6"(3924中) (130 GPM) LEVEL 1 NO. DATE BY REVISIONS NOTES & <sup>L</sup>8"(9964中) (330 GPM) 10"(18748ф)— (622 GPM) 8"(8784中) (292 GPM) 8"(9964中) (330 GPM) 10"(17565中)<sup>-</sup> (569 GPM) 8"(8784中)-(292 GPM) 8"(9964中)<sup>-1</sup> (330 GPM) 12"(25532¢)<sup>–</sup> (914 GPM) SYMBOLS 6"(3924中) 15"(59013中) (130 GPM) (1945 GPM) 6"(4392¢)-(146 GPM) 8"(9992ф) (332 GPM) 6"(5600¢)-(186 GPM) TO INTERCEPTOR SEE DWG. MP-2 DRAWING NO. E. K. FOX & ASSOCIATES, LTD. CONSULTING ENGINEERS SANITARY/STORM RISER DIAGRAM
SCALE: NONE ARCHIVES Bidg # 403 1110 # 5-1

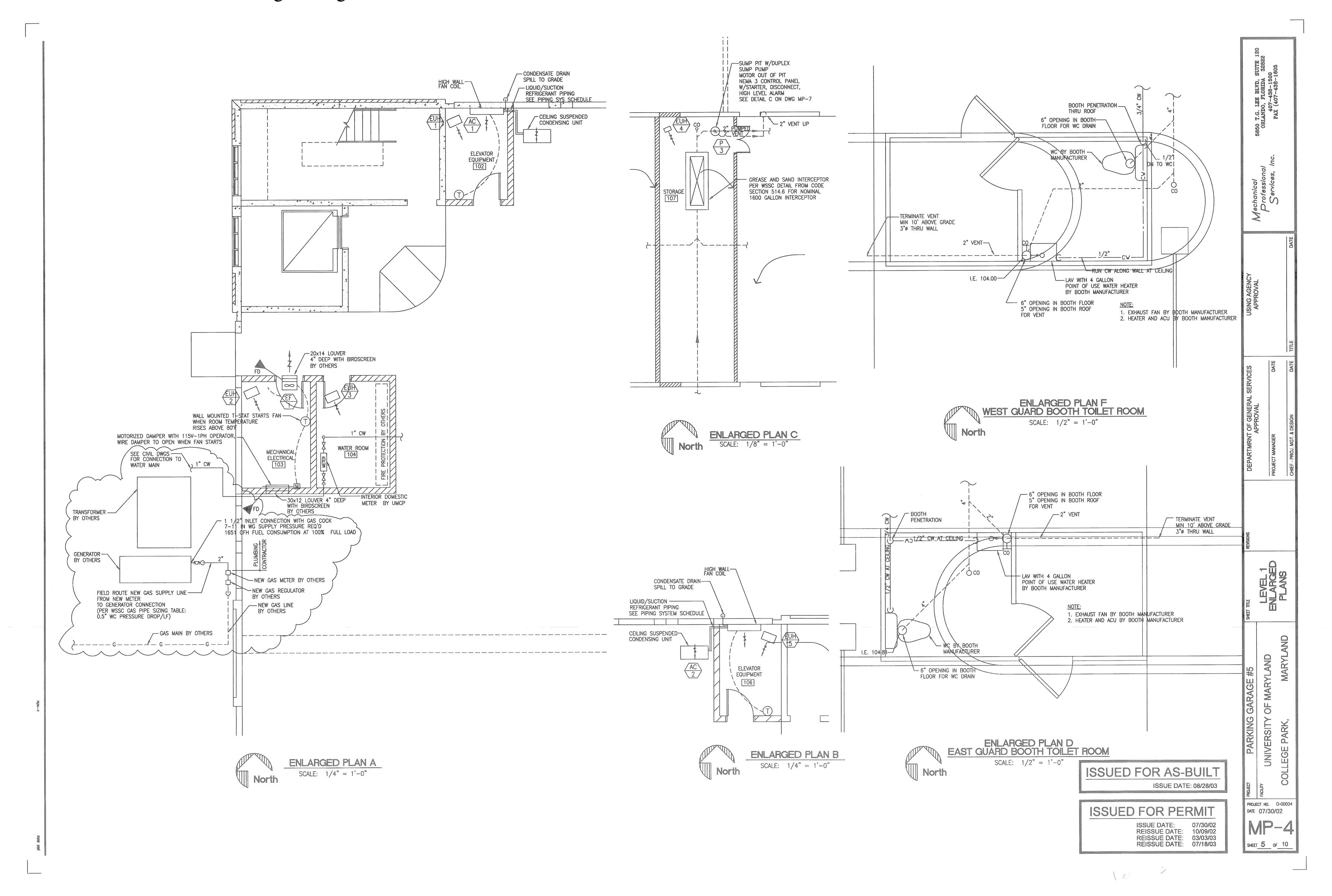
10304 Eaton Place, Suite 400 Fairfax, Virginia 22030 Tele.: (703) 273-1112 E-mail: ekfox@ekfox.com

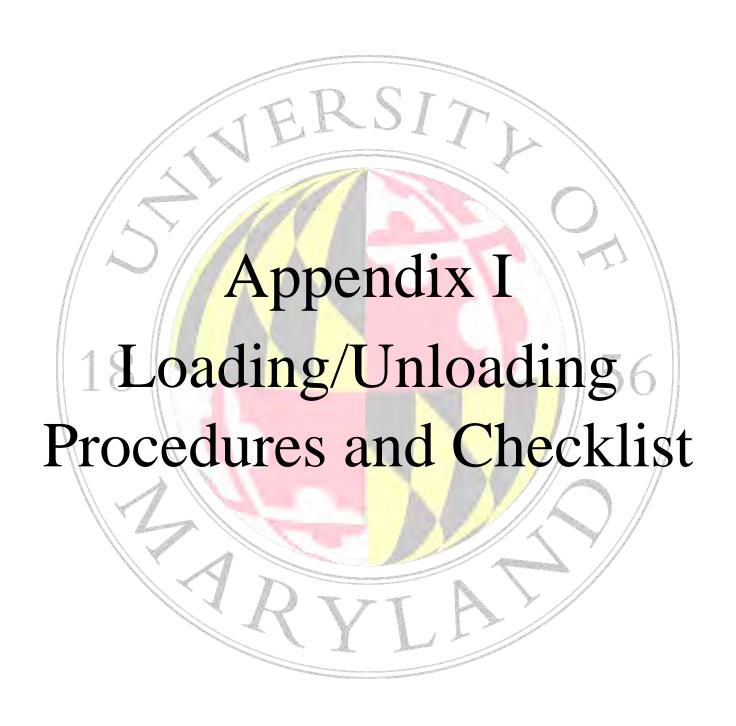
8-25-2000

PROJECT NO. J-588.1

DESIGN DRAWN CHKD JKS KAF JKS

# Mowatt Lane Parking Garage (#404)







### Oil Loading and Unloading Procedures:

Bulk Transfer Procedures Precautions are taken to ensure both personnel safety and prevention of spills or accidental releases during routine handling of oil. Visual checks for leaks before, during, and after material transfers provide operating personnel with the opportunity to contain releases due to faulty equipment, and to implement proper repair measures. UMD employs delivery procedures designed to prevent accidental spills and releases during the bulk transfer of oils and other materials.

#### • Bulk oil is delivered using the following procedures:

- o Loading and unloading is only performed under the supervision of campus personnel responsible for ensuring that proper procedures are followed.
- Oil absorbent and containment materials must be available and sufficient to prevent spills from reaching navigable waters.
- Wheel chocks or a vehicle break interlock system must be employed to prevent vehicles from departing before complete disconnection of flexible or fixed oil transfer lines or hoses.
- o Bonding and grounding devices must be connected before loading or unloading flammable oils from vehicle.
- Campus personnel and pump operator/driver must check all connections for tightness and that all fittings and hoses are in a safe and operable condition before beginning any pumping of oil.
- Where connections are not located within a secondary containment structure, a drip pan must be placed below the connection during the filling process.
- The operator of the pump shall not leave the pumping process unmanned for any reason during the filling process and shall remain within close proximity (five feet) of the shutoff valve at all times.
- o When a high-level alarm is not operational or available on the container being filled, an employee must gauge the container during filling operations and be in constant communication with the pump operator.
- o After pumping is complete, the pump operator must check that all shutoff valves are locked in the closed position and there is no leakage.
- Prior to filling and departure of any tank car or tank truck, the lowermost drain and all outlets of such vehicles must be closely inspected for discharges, and if necessary, ensure that they are tightened, adjusted, or replaced to prevent liquid discharge.
- o Connections of oil tank or campus piping must be securely capped, plugged, or sealed when not in service or when in standby service for an extended time.

#### Bulk Oil Collection/Pickup

O Used petroleum oils generated during maintenance activities transferred by UMD personnel to the used oil storage tanks. Collected used oil is periodically picked up via trucks that park adjacent the used oil tank. In general, the operator collects the used oils using a hand-held nozzle and flexible tubing from a vacuum tanker connected directly to the truck.

#### • Container Loading/Unloading Procedures

o Portable containers (drums, totes) of oils and oil-based products are generally delivered at the Severn Building (#810), the Central Heating Plant (#001), and the Shuttle Bus Facility (#424). The drums are then taken directly to the point of use by hand cart or fork lift. The delivery locations are strategically located that in the event of a release, response equipment would be employed, and the release would be contained as close to the source as possible.

#### • Portable containers are loaded and unloaded using the following procedures:

- o All containers must be closed and sealed prior to moving.
- o No obstacles should block the unloading area or delivery paths.
- o Safe lifting techniques must be used.
- o Loads must not be stacked on the transport mechanism or vehicle in a manner that blocks the operator's vision.
- Heavy objects should be loaded at the bottom of a forklift, hand truck, or pallet jack.
- o Bulky or awkward items should be secured while in transport.
- Only trained and authorized personnel are allowed to operate a forklift or use other powered material-handling equipment.
- Containerized materials are stacked and stored properly in a stable and secure manner.

#### • Elevator Hydraulic Oil Tanks:

Oil is rarely added to or removed from these small tanks. When required, addition of oil is performed manually using small containers by qualified elevator service technicians. Removal of oil would only be required in the event of tank repair or replacement. In this event, oil would be manually removed from the tank by portable pumps and placed in containers.

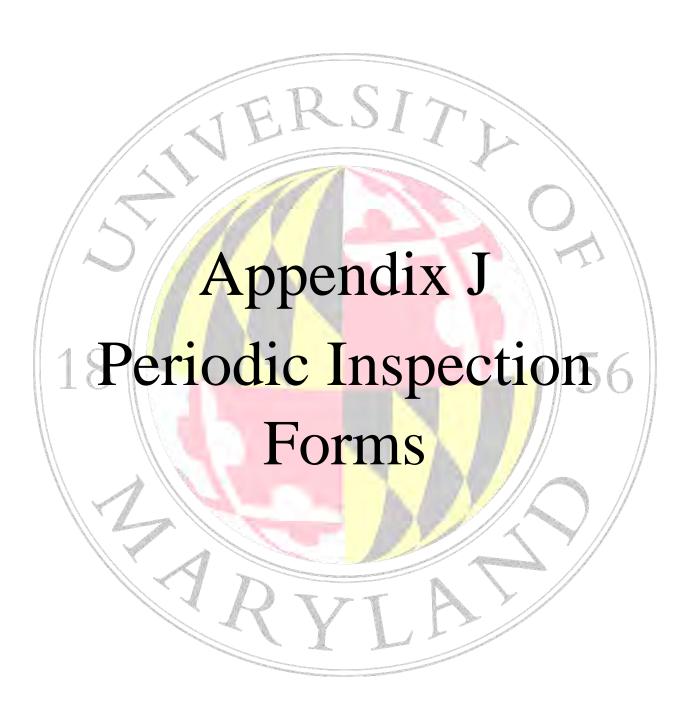
#### • Electrical Transformers

O Typically, oil is neither added to nor removed from transformers except in the event of repairs. Addition or removal of oil from transformers is only performed by trained and qualified electricians.

#### UNLOADING CHECKLIST

#### BULK AND SMALL TRUCK DELIVERIES

Indicate Delivery Type:									
Bulk Oil Delivery [ ] Small Truck Delivery [ ]									
Delivery Date:									
SDS available? yes no Tank to be loaded	:								
Tank level before unloading	(A)	-							
Tank level after unloading		gallons							
Total unloaded $[(C) = (B) - (A)]$	(C)	gallons							
1) Working radio readily available	yes	no							
2) SDS on-hand during unloading	yes	no							
3) Danger tape used to block off area	yes	no							
4) Storage tanks and related piping inspected	yes	no							
5) Drain blockage equipment deployed	yes	no							
6) Wheels Chocked	yes	no							
7) Grounded (flammable materials only)	yes	no	N/A						
8) 5-gallon drip bucket under discharge hose	yes	no							
9) Absorbent materials readily available	yes	no							
10) Valves closed when unloading is complete	yes	no							
11) Respirator nearby	yes	no							
12) Any leaks or spills	yes	no							
(if yes, provide details in comments)									
Comments:									
Signature	Printed Na	me/Date							
Acknowledgement of receipt of materials (UMI	Employee)								
Signature	Printed Na								
Acknowledgement of transfer of materials (Product Delivery Representative)									



#### **Aboveground Storage Tank (AST) Periodic Inspection Checklist**

Site:			Notes:				
Map Number:	Building:		Tank ID:				
Containment:	Type:		Contents: Capacity:				
Additional Inform							
(check all that app							
□ In Contactw							
□ Equipped wi	th Manway □ Not Equipp	ed with Mai	nway				
	Inspection Requirements						
Status	Item to check	Comments					
Month 1 - Month Inspector:	nly Inspection	D	ate:				
	Tank Condition						
	Secondary containment						
	Pipe/hose connections						
Month 2 - Montl Inspector:	nly Inspection	D	ate:				
11100000011	Tank Condition						
	Secondary containment						
	Pipe/hose connections						
Month 3 - Quart Inspector:		D	ate:				
	Tank Condition						
	Secondary containment						
	Pipe/hose connections						
	Exterior Coating						
	Primary and emergency vents						
Month 4 - Monthly Inspection Inspector:		D	ate:				
	Tank Condition						
	Secondary containment						
	Pipe/hose connections						
Month 5 - Montl Inspector:	nly Inspection	D	ate:				
	Tank Condition						
	Secondary containment						
	Pipe/hose connections						
Month 6 - Quart Inspector:	_	D	ate:				
	Tank Condition						
	Secondary containment						
	Pipe/hose connections						
	Exterior Coating						
	Primary and emergency vents						

#### Aboveground Storage Tank (AST) Periodic Inspection Checklist

Month 7 - Mont	hly Inspection	Date:
Inspector:	Condition	
Pino	ondary containment /hose connections	
ripe	/HOSE COMMECTIONS	
Month 8 - Monthly Inspection Inspector:		Date:
Tanl	c Condition	
Seco	ondary containment	
	/hose connections	
Month 9 - Quar Inspector:	terly Inspection	Date:
Tanl	Condition	
	ondary containment	
	/hose connections	
	rior Coating	
	nary and emergency vents	
	any and omorgoney vones	
Month 10 - Mon Inspector:		Date:
Tanl	c Condition	
	ondary containment	
Pipe	/hose connections	
Month 11 - Mon Inspector:	thly Inspection	Date:
Tanl	c Condition	
Seco	ondary containment	
Pipe	/hose connections	
Inspector:	ual Inspection/Annual Pho	oto Date:
	Condition	
	ondary containment	
	/hose connections	
	rior Coating	
	nary and emergency vents	
	Level Gauges	
gask		
	supports	
Tanl	c foundation	
Inspector:		Date:
Comments:		

#### Notes:

-Under Tank Conditions

Identify any signs of leakage, rust, damage, or deterioration on the outside of the tank;

Identify any signs of leakage, rust, damage, or deterioration on the bolts, rivets, and/or seams; Identify if vehicle protection is present;

Identify if level/gauges are working properly;

Identify if tank has proper signage;

-Under Secondary Containment

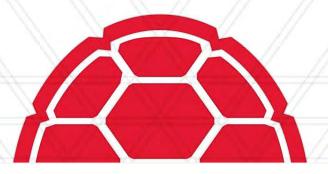
Identify if there is any water/product in interstice of double-walled tank Identify id there is any water/product/trash in secondary containment

### University of Maryland Quarterly SPCC Inspection Form-DRUMS

Drum Contents:	No. of 55+gal drums:	Date:					
	Containment:	Inspector:					
Location/Bldg. No.:	Map No.:		Yes	No	N/A		
Drum surfaces show signs or leakage or spillage							
Drum is damaged, rusted or deteriorated			1				
Drum is not located on spill pallet or in containme	ent						
Pumps, hoses, or valves are leaking							
Drum signage is missing, illegible or inaccurate							
Spill response kit inventory is incomplete							
Containment signage missing/damage							
Describe noted problems:							
Drum Contents:	No. of 55+gal drums:	Date:					
Location/Bldg. No.:	Containment:	Inspector:					
Location, Diag. Non	Map No.:		Yes	No	N/A		
Drum surfaces show signs or leakage or spillage							
Drum is damaged, rusted or deteriorated							
Drum is not located on spill pallet or in containme	ent						
Pumps, hoses, or valves are leaking							
Drum signage is missing, illegible or inaccurate							
Spill response kit inventory is incomplete							
Containment signage missing/damage							
Describe noted problems:							
Drum Contents:	No. of 55+gal drums:	Date:					
Location/Bldg. No.:	Containment:	Inspector:					
	Map No.:		Yes	No	N/A		
Drum surfaces show signs or leakage or spillage							
Drum is damaged, rusted or deteriorated							
Drum is not located on spill pallet or in containme							
Pumps, hoses, or valves are leaking							
Drum signage is missing, illegible or inaccurate							
Spill response kit inventory is incomplete							
Containment signage missing/damage							
Describe noted problems:							







### **Environmental Safety, Sustainability & Risk**

Spill Prevention, Control, and Countermeasures (SPCC)



### **Overview**

The Purpose of an SPCC Plan is to prevent the discharge of oil into navigable waters of the United States or adjoining shorelines as opposed to response and cleanup after a spill occurs.





### The Law

### Oil Pollution Prevention Rule

- Became effective January, 1974 (revised many time with the most recent in 2011).
- Authority Section 311 (j) (1) (c) of the Clean Water Act
- Promulgated under Title 40, CFR, Part 112



### Oil Definitions

# Oil means oil of any kind or in any form, including, but not limited to:

- fats, oils, or greases of animal, fish, or marine mammal origin
- vegetable oils, including oils from seeds, nuts, fruits, or kernels;
- other oils and greases, including petroleum, fuel oil, sludge, synthetic oils, mineral oils, oil refuse, or oil mixed with wastes other than dredged spoil.



### **Applicability: How Much Oil?**

#### SPCC rule applies to facilities with:

- >42,000 gallons buried
- >1,320 gallons aboveground

#### Containers to include:

- Bulk storage
- Oil-Filled Operational Equipment (OFOE)
- Mobile/Portable Containers
- 55 gallons or greater

#### Containers not included in capacity:

- Permanently Closed containers
- UST Subject to 40 CFR 280 & 281





### **UMD SPCC Details**

- Over 80 tanks\*
  - Generators, ASTs, Day Tanks
- Over 30 >55-gallon Drums\*
  - Cooking oil, food grease, used oil, hydraulic fluid
- Over 100 Hydraulic Elevators
- Over 140 Transformers

\*Current inventory is still growing due to finding new tanks/drums





### **Spill Reporting**

Facilities that discharge oil to navigable waters are subject to certain federal reporting requirements.

- 40 CFR 110, Discharge of Oil Regulation
- 40 CFR 112, Oil Pollution Prevention regulation
- State laws/regulations may differ or be more restrictive



### National Response Center (NRC)

- The Discharge of Oil regulation provides the framework for determining whether an oil discharge to inland and coastal waters or adjoining shorelines should be reported to the National Response Center at 1-800-424-8802
- Any person in charge of a vessel, onshore or offshore facility must notify NRC once there is knowledge of a discharge
- NRC will relay discharge information to EPA or USCG



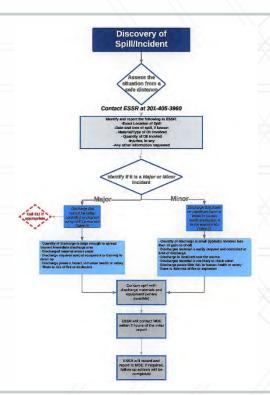


## **SPCC** Reporting Requirements

- Report to the EPA Regional Administrator (RA) when there is a discharge to navigable waters or adjoining shores of:
  - >1,000 Gal of oil in a single discharge
  - >42 Gal of oil in each of two discharges occurring within a 12 month period
- An owner / operator must report the discharge(s) to the EPA RA within 60 days
- All requirements found in 40 CFR112.4



## **UMD Spill Reporting Procedure**

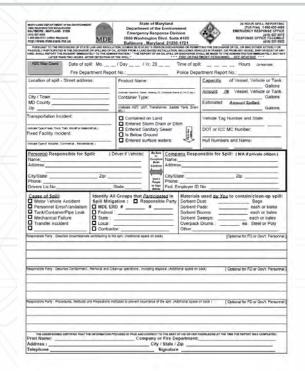


	Minor Discharge	Quantity of discharge is small (typically involves less than 10 gallons of oil)		
	Discharge that poses no significant harm or threat to human health and safety or to the environment.	<ul> <li>Discharged material is easily stopped and controlled at time of discharge</li> </ul>		
		Discharge is localized near the source		
		<ul> <li>Discharged material is not likely to reach water</li> </ul>		
		<ul> <li>Discharge poses little risk to human health or safety</li> </ul>		
		There is little risk of fire or explosion		
	Major Discharge	<ul> <li>Quantity of discharge is large enough to spread beyond immediate discharge area</li> </ul>		
	Discharge that cannot be safely controlled or cleaned up by UMD personnel.	<ul> <li>Discharged material enters water</li> </ul>		
		Discharge requires special equipment or training to clean up		
		<ul> <li>Discharge poses a hazard to human health or safety</li> </ul>		
		There is risk of fire or explosion		



### **MDE Reporting Requirements**

- Report to MDE Emergency Response Division (1-866-633-4686) if an oil spill or discharge of <u>ANY</u> quantity occurs
  - Within <u>two</u> hours after the detection of a spill
- Verbal report must include:
  - Time and location of discharge
  - Type of facility involved
  - Type and quantity of oil spilled
  - Assistance required
  - Name, address, telephone number of person making report
  - Other pertinent info as requested by MDE
- Within ten working days after completion of spill cleanup, a written report of the discharge must be submitted to MDE





## **Secondary Containment**

- All areas and equipment with the potential for a discharge are subject to general secondary containment provision, 112.7(c).
  - Oil-filled operational equipment
  - Loading/unloading areas
  - Piping
  - Mobile refuelers/ non-transportation related tank trucks
- Purpose is to contain or divert to prevent discharge: dikes, berms, retaining walls, curbing, drip pans, sumps, culverting, gutters, weirs, booms, spill diversion ponds, retention ponds, sorbent



#### **Secondary Containment**

Active secondary containment is when an employee personally contains a spill,

- Deploying drain covers before a spill happens.
- Deploying drain covers after a spill has occurred, but before the spill reaches a drain
- Using a spill kit in the event of an oil discharge
- Closing a gate valve prior to a discharge

Passive secondary containment does not require deployment or the action of an employee or employees to contain a spill.

- Placing containment pallets or decks under drums and other containers
- Surrounding machines and containers with berms
- Erecting retaining walls around machines and containers
- Placing drip trays under leaky machines and containers









## Specific (Sized) Provision

- To address the potential of oil discharges from areas of a facility where oil is stored or handled, containment specified by SPCC rule
- 40 CFR112.8, requirements are intended to address a major container failure
  - Bulk storage containers, mobile/portable containers, treatment
  - Minimum containment capacity
  - Largest single compartment
  - Sufficient freeboard for precipitation, if outdoors



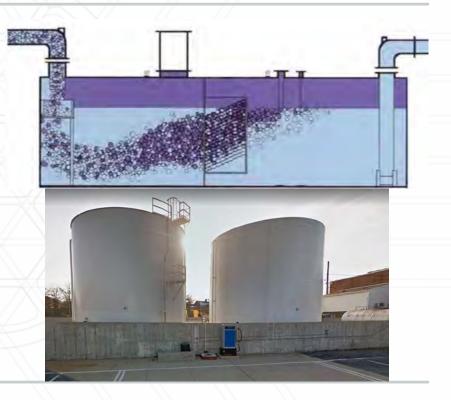
#### **Mobile/Portable Containers**

- Drums placed on spill pallets
- Mobile re-fuelers mounted in a truck with a spray liner
- Fuel trucks parked within bermed area



#### **Loading/Unloading Area Containment**

- Dikes, berms, or retaining walls sufficiently impervious to contain oil;
- Curbing or drip pans;
- Sumps and collection systems (OWS);
- Culverting, gutters, or other drainage systems;
- Weirs, booms, or other barriers;
- Spill diversion ponds;
- Retention ponds; or
- Sorbent materials.





## Oil – Filled Operational Equipment

- Equipment that includes an oil storage container (or multiple containers) in which the oil is present solely to support the function of the apparatus or the device.
  - Does not include oil-filled manufacturing equipment (flowthrough process)
  - Examples: lube oil reservoirs, hydraulic elevators, transformers
- Piping is considered a component if it is solely used to facilitate operation of the equipment device.



#### Inspection & Testing 112.8(c)(6)

- Prevent discharge of oil caused by leaks, corrosion, brittle fracture, overfill, other forms of container/equipment failure
- AST are tested or inspected in accordance with industry standards
  - Integrity tests include: visual inspection, hydrostatic testing, radiographic testing, ultrasonic testing, acoustic emissions testing, or other systems of nondestructive testing.



## Visual inspection:





Spillage

Poor housekeeping: Spillage, unlabeled contained with grease in it



## **Visual Inspection:**









#### Remember!

- All actions (visual inspection or testing) must be documented & maintained
  - Some standards require records to be maintained for over 3 years for comparison reasons
  - Records are kept on the shared U drive in addition to the hard copies maintained at Seneca.
- Know objective: the tank IS or IS NOT suitable for continued use



#### SPCC Plan Requirements

#### Each Plan Must Include:

- 1. Description of physical layout and a facility diagram.
- 2. Key personnel contact list and phone numbers for the facility response coordinator, cleanup contractors, all appropriate federal, state, local agencies to contact.
- 3. Prediction of direction, rate of flow, and total quantity of oil that COULD be discharged if the potential for equipment discharge exists.
- 4. Description of <u>containment and/or</u> <u>diversionary structures</u> to prevent discharge from reaching navigable waters.
- 5. Description of site specific spill prevention and control measures in place.



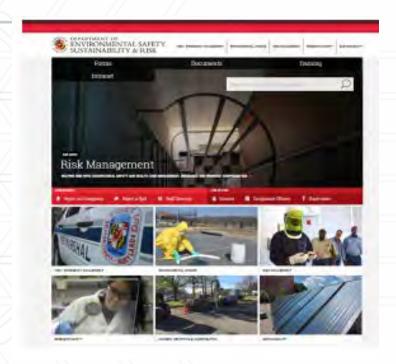
#### Additional Requirements

- Plan must have MANAGEMENT APPROVAL (signature)
- Plan must be prepared under the direct supervision of a P.E. (stamped)
- Plan must be maintained on-site <u>AVAILABLE AT ALL TIMES</u> for review by EPA/MDE.
  - Plan is maintained at the Seneca Building
- Key Facility Personnel must be trained annually. FOLLOW SOPs for any response actions!!!
- Plan must include periodic INSPECTIONS.
- Plan must be <u>revised/updated</u> to reflect facility changes.
- Plan required to be reviewed/revised at least every 5 YEARS.



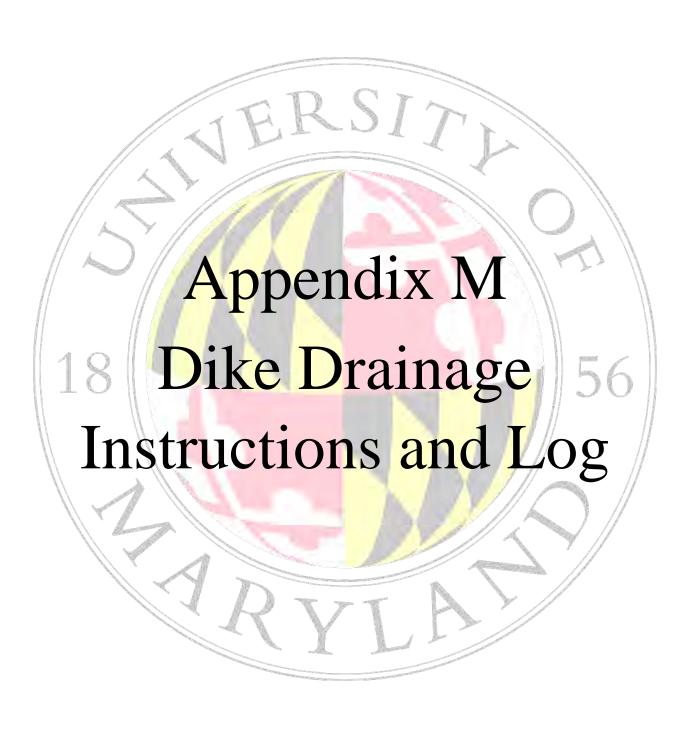
#### **How to Reach Us**

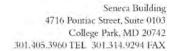
- www.essr.umd.edu
- Call 301-405-3960 during business hours
- Call UMPD Communications at 301-405-3555 to reach oncall ESSR staff after business hours.
- Email safety@umd.edu













# Secondary Containment Drainage Log

# Do NOT remove the drain plug

unless draining uncontaminated stormwater (no fuel or oil).

Fill out Secondary Containment Drainage Log every time water is drained (located inside spill kit container).



**<u>Instructions</u>**: The information required on this form should be recorded when water from secondary containment is drained into a storm drain or the environment. Any fuel or oil must be **cleaned up prior to discharging water.** Keep all records of drainage on file for at least 3 years.

<b>Facility Location:</b>	

Date of Drainage	Time	Oil or Fuel Present? (if yes, record amount removed)	Name