

May 20, 2019
Mr. Greg Fedner, P.E.
Section Manager, Private Development
1250 Fairwood Avenue
Columbus, OH 43206

Subject: Storm water Drainage manual (SWDM) Type II Variance Request
C11 Southwesterly Composting Facility – Odor Reduction Improvements Project
(CIP 650375-100002)

Mr. Fedner:

This letter is to request a variance for the subject project to SWDM Section 3.1, General Criteria Stormwater Quality Controls. More specifically, discharging stormwater generated on site to a stream. This letter outlines the development of three alternatives considered for the project: Full Compliance (no impact), Minimal Impact and the Preferred Alternative.

Section 1 – Introduction & Site Conditions

A brief explanation of the current and proposed use for the site is that municipal sludge from the City’s two wastewater treatment plants is processed at the 50-acre Southwesterly Composting Facility (Compost Facility). Stormwater that falls on the site is contaminated from the sludge. Contaminated stormwater along with process leachate is captured and directed to a leachate lagoon where it is then pumped to the sanitary sewer system for treatment at the Southerly Wastewater Treatment Plant. The Odor Control Improvements project pursuing this stormwater permit variance was initiated to reduce odors emitted at the Compost Facility to the surrounding community; replace equipment that has reached the end of its useful life; and improve the Columbus Division of Sewerage and Drainage (DOSD) biosolids beneficial use program due to the recent shut down of sludge incineration at Jackson Pike (JP) and the Southerly (SO) Wastewater Treatment Plants (WWTPs).



Compost Facility Leachate Lagoon is approximately 1.5 Million Gallons. The inlet channel is on the upper west (left) side. The outlets are intakes for two separate pump stations on the lower west side of the lagoon.

Composting Process Overview

The City of Columbus has owned and operated a compost facility at the current site since 1980. The operations start with wastewater sludge being trucked in covered containers from Jackson Pike Wastewater Treatment Plant and Southerly Wastewater Treatment Plant to the Compost Facility. The sludge is then mixed with wood chips to create air pockets and add carbon. The air that is pulled through the passages in the compost pile begins the decomposition process and reducing pathogens. Foul air that is drawn through the compost pile is discharged through biofilters for odor control. After a 28-day composting cycle, the material is allowed to stabilize for 30-45 days during the curing process. In the next stage of the process, mechanical heavy screens are used to separate the wood chips from the compost material.



Leachate is very turbid and generally similar to raw sewage except higher in ammonia and nitrogen.

Water is removed from the composting material through multiple paths. The first pathway is water vapor removed with the foul air directed through the odor control system. Water vapor is also emitted from the compost pile via convection to the atmosphere. Lastly, free water leaches onto the surrounding surface. The liquid leachate resulting from the compost piles, curing piles and biofilters runs over land to a surface drainage collection network and is contained in a leachate lagoon. Due to the fecal material in the wastewater sludge process, leachate is then conveyed into the sanitary sewer system. During wet weather events, contaminated stormwater captured on the paved surfaces are conveyed to the same leachate collection and sanitary system to avoid potential contamination from leachate being discharged to the storm water system.

The next stage of the process after curing is mechanical screening where oversized wood chips are separated from the composted material. The resulting product is then tested so that it meets regulatory requirements. Once material has met applicable regulatory requirement it is sold as Class A Exceptional Quality Compost under the trade name Com-Til. Com-Til is used as a soil amendment intended to augment the typical Ohio clay soils and future growing conditions. It is also used by landscapers, agriculture and top soil manufacturers to add valuable organic matter, provide nutrients and help retain moisture.

Site Conditions

The total City owned property around the facility totals 148 acres. The site is generally flat with several adjacent city-owned acres being utilized by local farmers to produce crops. Access to the Compost Facility is an asphalt driveway originating from Jackson Pike (State Route 104). The City of Columbus Compost Facility currently consists of several existing buildings [Vehicle Service, Administration, Composting Dispensing Shelter, Compost Storage, Screening Area, Equipment Storage, Unutilized Solar Drying Building, Unutilized Mixing Building, Maintenance Building] with 45-acres of adjacent pavement. After demolition of two buildings and expansion of the Facility site, this proposed project will add additional paved area for a total of 50-acres of pavement. A portion of the overall site includes a large ravine which includes several oxbows of Plum Run that drains into the Scioto River and its 100-year flood plain. A forested area has several mature trees of mixed species with healthy undergrowth.

The compost site has undergone a number of modifications since its original construction in 1980. The current configuration has been in place since 2001 and consists of two compost pads, each with a dedicated biofilter. The proposed City of Columbus Capital Improvement C11 project intends to demolish these compost pads and associated biofilters and replace them with three new compost pads and twelve total biofilter cells.

A number of storm water best management practices have been implemented over the last 40 years as the facility has been adapted. These include:

- Leachate Lagoon Overflow Mitigation –

The compost facility was original constructed on the side of a hill that drains into Plum Run and the Scioto River. This resulted in surface drainage and ground water from adjacent areas draining into the compost facility drainage system.

- During wet weather events, this excess storm water directly contributed to frequent sanitary sewer overflows of the leachate lagoon.
- Although the lagoon has been expanded a number of times, in 2011 a Storm water Diversion Swale was constructed to intercept surface and subsurface water before it drained to the Compost site. The swale reduced the frequency of lagoon overflows from approximately once per year to once every 5 years.

The outer swale around West, South and East sides of Compost Facility intercepts flow from surrounding fields.

- Temporary Wet Weather Lagoon Berm –

During rain events that threaten to overtop the banks of the leachate lagoon, facility staff installs a wood chip dike at the perimeter of the lagoon berm. This provides an additional 12” detention capacity.



Partial view of the woodchip berm used to retain additional leachate during wet weather events.

Leachate settling –

The influent storm channel into the lagoon has been modified to provide additional distance from inlet to outlet of the system. This promotes settling of debris in the lagoon to minimize solids sent to the sanitary sewer. Facility staff then clean settled debris from the lagoon after rain events. Once removed the settled material is allowed to dry and is then recycled into the compost operations.

Right: Traffic barriers are used to make the flow path from inlet to outlet longer and slower. This allows debris to settle in the lagoon instead of being carried to the sanitary sewer.



- **Leachate floatables capture –**

A floating boom is used to capture floating material and prevent it from entering the pump stations. Additionally, the sloped sides of the lagoon naturally promote settling of floating material as the water level drops after an event. This material is then collected with the settled solids for recycling into the process.

Right: A floating boom is used to prevent floatables from entering the sanitary sewer



- **Roof Drain Diversion –**

Storm water from most of the roof drains are directed to a storm water outfall draining to Plum Run. This is currently covered by an Industrial Activity Multi-Sector General Storm Water Permit held by the City of Columbus.

Right: Headwall for roof drains that discharge to Plum Run



Around 1982, a solar field approximately 450 feet by 150 feet was constructed at the Compost Facility to generate hot water for drying compost. The solar field was constructed on vacant land within the footprint of the facility. The field consisted of 180 solar collector banks mounted on concrete footings. An underground pump house circulated water through an underground piping system. Two 25,000-gallon underground tanks located east and west of the pump house were used for water storage. The solar collector field is now abandoned and overgrown with vegetation. Random piles of concrete debris are on the ground surface in the area. These are reportedly the result of the facility attempting to clear the concrete supports/footers for the solar banks; however, the equipment used was not suitable to penetrate the reinforced concrete and the clearing project was abandoned. A concrete, underground pump house is located within the area. It was filled with water to within a few feet of the surface and could not be safely entered for inspection. The remnants of the abandoned solar collector field and electrical vault will be properly demolished and disposed of as part of this project.

Section 2 – Site Development Alternatives

2.1 Alternative 1 – No impact/degradation development Alternative that complies fully with SWDM

Two options were identified that would allow full SWDM compliance by directing the storm water to a stream outlet:

1. Treat the contaminated storm water on site

Since domestic sewage is not covered by the industrial storm water permit, a surface water NPDES discharge permit would be required for treatment and discharge of the leachate to the Scioto River. Based on the leachate characteristics (See Attachment A) the level of treatment required could only be met with full wastewater treatment which would include preliminary treatment, secondary biological treatment, disinfection and post aeration of approximately five million gallons per day capacity. The Ohio Environmental Protection Agency practices suggest that a permit would not be issued because of the current cooperative efforts and the ongoing operations of the Southerly Waste Water Treatment Plant, which already serves the area. Therefore, this option is not feasible.

2. Prevent contamination of storm water

To prevent storm water contamination would be to construct a building over the entire composting operation. To cover the process, a building on the order of 1,742,400 square feet (40 acres) would be required to accommodate truck unloading, mixing, composting, curing, filtration, storage and the other activities that are subject to contaminating storm water. An average square foot cost for comparable building would be \$250.00; the resulting rough cost estimate suggests a cost close to a half-billion dollars for the building alone in addition to site modifications and process equipment. In addition to the large capital cost, employee safety, sustainability of the site and DOSD's reasonable use of site and fiduciary responsibility to rate payers make this option unfeasible;

- a. **Employee safety** – In an enclosed environment, air emissions from compost and biofilters would exceed the Occupational Safety and Health Administration (OSHA) approved levels.
- b. **Sustainability** - Currently there is an adequate buffer from the stream protection corridor zone of Plum Run. A significantly larger building and site may result in significant impact to existing stream slopes and the Scioto River floodplain.
- c. **Biosolids Reuse Portfolio** - The City of Columbus Department of Public Utilities and the Division of Sewerage and Drainage in particular recognize the fiduciary responsibility to its utility rate payers to beneficially reuse biosolids in the safest and most economical way possible. Capital costs greater than \$500M would make this option financially unfeasible within the current portfolio of biosolids beneficial use outlets and requiring construction of alternative biosolids processing facilities at Jackson Pike and Southerly WWTP's.
- d. **Operational Difficulty:** The compost operation requires significant space for maneuvering of large-scale equipment such as front-end loaders and mechanical screens. Structural supports, ventilation equipment and electrical lighting would be in the way of the workers and equipment causing safety concerns and operational slow-down of a time critical process which would deprive the owner of reasonable use of the facility. Re-schedule or shut down operations would be common because of all the obstructions thus additionally depriving the Owner of reasonable use of the facility
- e. **Increase of footprint:** Providing structural support columns away from moving equipment would require expanding the footprint of the facility which would further increase the storm water requirements while developing the land. The existing Scioto River floodway and floodplain areas could be further impacted.

2.2 Alternative 2 – Minimal Impact/Degradation Development Alternative Plan

This alternative evaluates techniques that would minimize the impact consisting of:

1. Evaluate if portions of the site can be considered not subject to wastewater contamination.
2. Evaluate measures to reduce stormwater volume sent to sanitary.
3. Evaluate recycling of Leachate

2.2.1 – Use of Site Evaluation: The Compost Facility has several multi-use areas for stockpiling various materials used in the composting process. These areas and materials were reviewed to determine if any portion of the proposed site could be considered free from contamination and therefore have the surface storm water directed to a storm water outlet.

The Yard Waste Drop Off (YWDO) area was investigated. Under an agreement with SWACO, residents of Franklin County can drop off yard waste at the City of Columbus Compost Facility at no cost. This material is shredded by an outside contractor approximately twice per year. The YWDO area will be located at the north end of the proposed facility and consist of logs from commercial drop offs, yard waste from residential drop offs and woodchip piles after the material is shredded.

Due to expected increase of sludge loading to 300 wet tons per day coming into the Compost Facility, the area where yard waste will be dropped off must also accommodate additional storage requirements for recycled woodchips, composting mix or curing composting materials. Accordingly, although the YWDO area will be used for yard waste drop-off, it will also be utilized to store contaminated materials. In other words, the YWDO is a multi-use area inside the facility used for yard waste drop off, but not exclusively. Therefore, conveyor belts or separate loaders would not address the challenge of this area being a multi-use area where contaminated materials will be present.

Additionally, the Compost Facility equipment (primarily front-end loaders) must travel between the composting area and YWDO area routinely to support compost operations. Specifically, the composting loaders enter this area daily to clean up drop off piles, assist the contractor during yard waste grinding and retrieve woodchips from stockpile to the active composting process area. Due to the loader traveling between active composting area and yard waste drop off area, the potential for tracking contaminated material is present. Subsequently the feasibility of using a wash system to clean and disinfect loaders was discussed with the Compost Facility. Due to freezing weather that the facility must operate in and the geometry of the loaders it is not possible to remove contamination using a drive through tire wash system. Therefore, it is unfeasible.

2.2.2 - Measures to reduce stormwater volume sent to sanitary: Roof drains from majority of the buildings at the Compost Facility are directed to a stormwater outlet on Plum Run. This includes the Vehicle Service Building (except new semi bay), Administration Building, Compost Storage Building, Equipment Garage and Half of the Solar Drying Building A review of the past 5 years Ohio EPA Industrial Stormwater Permit quarterly sampling indicates only one occurrence of settleable solids present. Based on review of sampling data, the risk of sludge contaminating storm water on roofs of facility buildings is negligible.

There are some roof areas from which storm water is directed to the leachate lagoon. These include the Vehicle Service Building semi bay, Composting Dispensing Shelter, Screening Area and half the Solar Drying Building. Therefore, stormwater from the roof drains of these areas can be redirected to existing storm sewers and subsequently to an existing outfall into Plum Run. The impact of this change will be less stormwater directed to the leachate lagoon and sanitary sewer system.

2.2.3 - Recycling of Leachate: In discussions with DOSD Pretreatment, it was identified that composting facilities in Central Ohio practice recycling of the leachate to reduce the amount directed to the sanitary sewer. One very key difference between these private composting facilities and the City of Columbus Composting Facility, is that they process wood-based material only whereas the City facility processes wastewater sludge. The technique of recycling leachate would not be feasible at the City Facility because it would recycle contaminated water onto completed compost piles. Another key difference is that the City facility starts with a much wetter product (wastewater sludge @ 18% solids) rather than wood products (~50% solids) and additional moisture would have a detrimental effect to the process.

Section 2.3 – Alternative 3 – Preferred Development Plan

The preferred alternative consists of continuing to collect contaminated stormwater along with compost leachate in a leachate lagoon which discharges to the sanitary system. In addition to continuing several of the existing BMP's, additional improvements will be provided as follows:

- As described under 2.2.2 above, there are some roof areas from which storm water is directed to the leachate lagoon. These include the Vehicle Service Building semi bay, Composting Dispensing Shelter, Screening Area and half the Solar Drying Building. Therefore, stormwater from the roof drains of these areas can be redirected to existing industrial storm water outlets. The impact of this change will be less stormwater directed to the leachate lagoon and sanitary sewer system.
- The existing leachate lagoon is approximately 1.5 million gallons and has a 2-year event level of service. Under proposed improvements it will be expanded to 4.9 million gallons and will have a 100-year event level of service to significantly mitigate sanitary sewer overflows.

Attachment B to this letter includes the following:

- Existing site plan showing existing contours and abandoned solar field
- Proposed site plan showing Scioto River east of site, stream corridor protection zone (SCPZ), Floodway, and 100 year flood plain for Plum Run and Scioto River
- Proposed tributary area to the proposed expanded leachate lagoon
- Roof drains downspouts redirection plan

Section 3 - Conclusion

Due to the fecal content of the contaminated stormwater, the only option for this site is to continue capturing and treating runoff at the properly equipped Southerly Wastewater Treatment Plant. Alternative 3 above, Preferred Development Plan, demonstrates number of BMP's being incorporated into the project to reduce the amount of contaminated stormwater generated, reduce the pollutants being transmitted to the WWTP and continue good environmental stewardship of the facility. The Owner will be investing substantial resources into this project and desires to further improve the site for its continued operation as a compost facility and as an asset to the rate payers of Columbus Department of Public Utilities.

The Division of Sewerage and Drainage respectfully seeks approval of the Type II variance for the Preferred Development Plan for the Southwesterly Composting Facility Odor Improvements project in order to discharge contaminated stormwater generated on site to a sanitary sewer. The need for this variance is driven by the product processed on site and the vast space required for composting operations. Full compliance with the Stormwater Drainage Manual would result in substantial hardship to the City and would deprive the City of continued use of the property.

Respectfully,



HATCH

Hasan Alkhayri
Sr. Vice President

Attachments:

Attachment A: Leachate Characteristics
Attachment B: Site Plans

cc: Patrick Eiden

Attachment A: Leachate Characteristics

TABLE : Southwesterly Compost Leachate Lagoon Comparable Samples.

PARAMETER	Method	Compost lagoon 6/12/96	Compost lagoon 1/16/07	Southerly Influent 1/03/07	Compost lagoon 4/20/11	Compost lagoon 5/4/11	NPDES Effluent Limits (So)
Dissolved Oxygen	-	2.1 mg/L	6.3 mg/L	-	-	-	7.0 minimum
pH	-	7.3 S.U.	7.5 S.U.	7.8	7.32	7.47	9.0 max 7.0 min
NH3	-	42.6 mg/L	100 mg/L	5.28	85 mg/L	37.3	1.0 Jun-Oct 2.0 May 3.4 Nov-Apr
TNFR	160.2	>120,000 / 100ml	76.0 mg/L	-	-	-	-
Fecal Coliform	-	-	-	-	-	-	1000 monthly
Suspended Solids	-	54 mg/L	-	120	43 mg/L	122 mg/l	30 mg/l Nov-Apr 16 mg/l Jun-Oct 26 mg/l May
Total Solids	-	1280 mg/L	-	-	-	-	-
Total Volatile Solids	-	0.568	-	-	-	-	-
CBODs	-	< 54 mg/L	<24 mg/L	55	48 mg/L	60 mg/l	8.0 mg/l Jun-Oct 25 mg/l Nov-Apr 13 mg/l May
TKN	625	120 mg/L	-	-	-	-	Test only; no limit
COD	335	790 mg/L	-	-	-	-	-
NH3	610	48.0 mg/L	100 mg/L	-	-	-	-
NO2 & NO3	630	<0.2 mg/L	-	-	-	-	-
Cyanide, free	9995	0.12 mg/L	0.12 mg/L	<0.0031	-	-	Test only; no limit
Nickel	1074	28.6 ug/L	6.08 ug/L	5.92	-	-	Test only; no limit
Zinc	1094	553 ug/L	284 ug/L	164	-	-	Test only; no limit
Cadmium	1113	1.9 ug/L	0.505 ug/L	0.163	-	-	Test only; no limit
Lead	1114	16.8 ug/L	8.17 ug/L	1.2	-	-	Test only; no limit
Chromium	1118	19.9 ug/L	2.88 ug/L	1.5	-	-	Test only; no limit
Copper	1119	70.4 ug/L	40.8 ug/L	18.8	-	-	Test only; no limit
Hg 50092	245.1	-	100 ng/L	-	-	-	Test only; no limit
Mercury	1220	0.23 ug/L	-	< 4.0 ng/L	-	-	-
Silver	ICP200.8	-	1.11 ug/L	-	-	-	-



ADVANCED ANALYTICS LABORATORIES, INC.
 1025 CONCORD AVENUE
 COLUMBUS, OHIO 43212
 (614) 299-9922 FAX (614) 299-4002
Analysis & Testing - Quality Control Programs - Research & Development

Resource International
 6350 Presidential Gateway
 Columbus, OH 43231

Date Reported: 2/1/12

Project: W-11-120
 P.O. Number: [none]
 Project Manager: Kristy Engel

ANALYTICAL RESULTS

Client Sample I.D.: CF-001, Sludge overflow
 AALI Sample I.D.: 1201091-01 (Water)

Date Collected: 1/27/12
 Date Received: 1/27/12

Analyte	Result	Units	Reporting	Prepared	Analyzed	Method	Notes
			Limit				
Metals by EPA 6000/7000 Series Methods							
Lead	ND	mg/L	0.100	1/31/12	1/31/12	EPA 6010C	
Zinc	0.747	mg/L	0.025	1/31/12	1/31/12	EPA 6010C	
Conventional Chemistry Parameters by Standard/EPA Methods							
Ammonia as N	45.0	mg/L	1.00	1/31/12	1/31/12	EPA 350.3	
Carbonaceous BOD	22.0	mg/L	2.00	1/27/12	2/1/12	EPA 405.1	
Dissolved Oxygen	6.56	mg/L	0.10	1/27/12	1/27/12	EPA 360.1	
Nitrate/Nitrite as N	256	mg/L	50.0	1/27/12	1/27/12	EPA 353.3	
Oil & Grease	ND	mg/L	5.0	1/27/12	1/30/12	EPA 1664	
pH	7.16	pH Units	0.50	1/27/12	1/27/12	EPA 150.1	
Phosphorus	8.35	mg/L	1.00	1/31/12	1/31/12	EPA 365.2	
Total Suspended Solids	104	mg/L	3	1/30/12	1/30/12	EPA 160.2	
Microbiological Parameters by APHA Standard Methods							
E. Coli	4800	CFU/100 ml	1.0	1/27/12	1/28/12	SM 9221	
Fecal Coliforms	16000	CFU/100 ml	1.0	1/27/12	1/28/12	MF	

Notes and Definitions

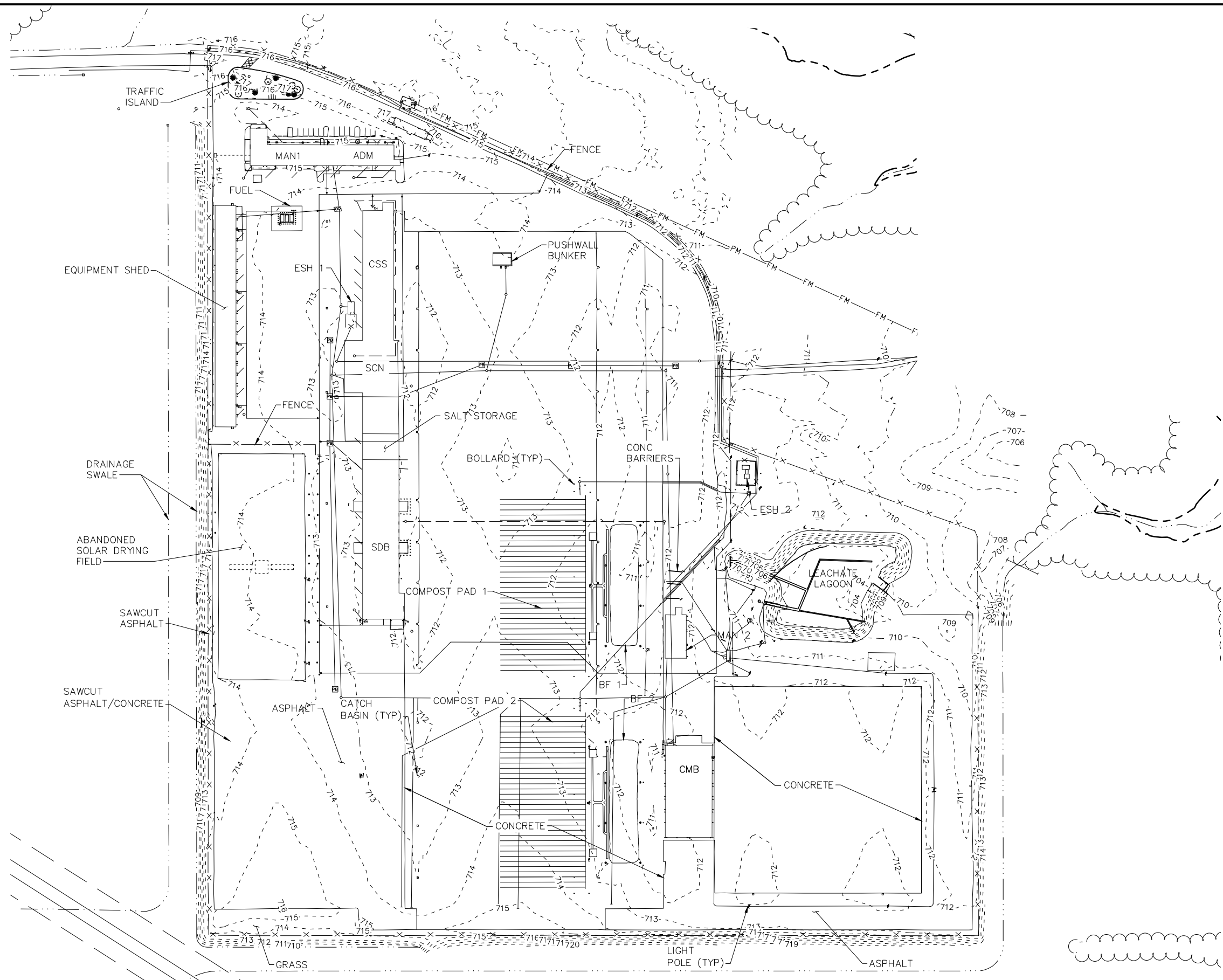
DET Analyte DETECTED
 ND Analyte NOT DETECTED at or above the reporting limit

Advanced Analytics Laboratories, Inc.

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Attachment B: Site Plans

- Existing site plan showing existing contours and abandoned solar field
- Proposed site plan showing Scioto River east of site, stream corridor protection zone (SCPZ), Floodway, and 100 year flood plain for Plum Run and Scioto River
- Proposed tributary area to the proposed expanded leachate lagoon
- Roof drains downspouts redirection plan



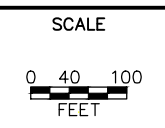
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No.	BY Int.	DATE Mo./Dy./Yr.	REVISIONS Remarks	PROJ. PERSONNEL Initials	DATE Mo./Dy./Yr.
				DES. MKL	08/13/18
				DWN. MKL	08/13/18
				CKD. aaa	03/29/19

CITY OF COLUMBUS, OHIO
DEPARTMENT OF PUBLIC UTILITIES
DIVISION OF SEWERAGE AND DRAINAGE

SOUTHWESTERLY
COMPOSTING FACILITY
ODOR CONTROL IMPROVEMENTS

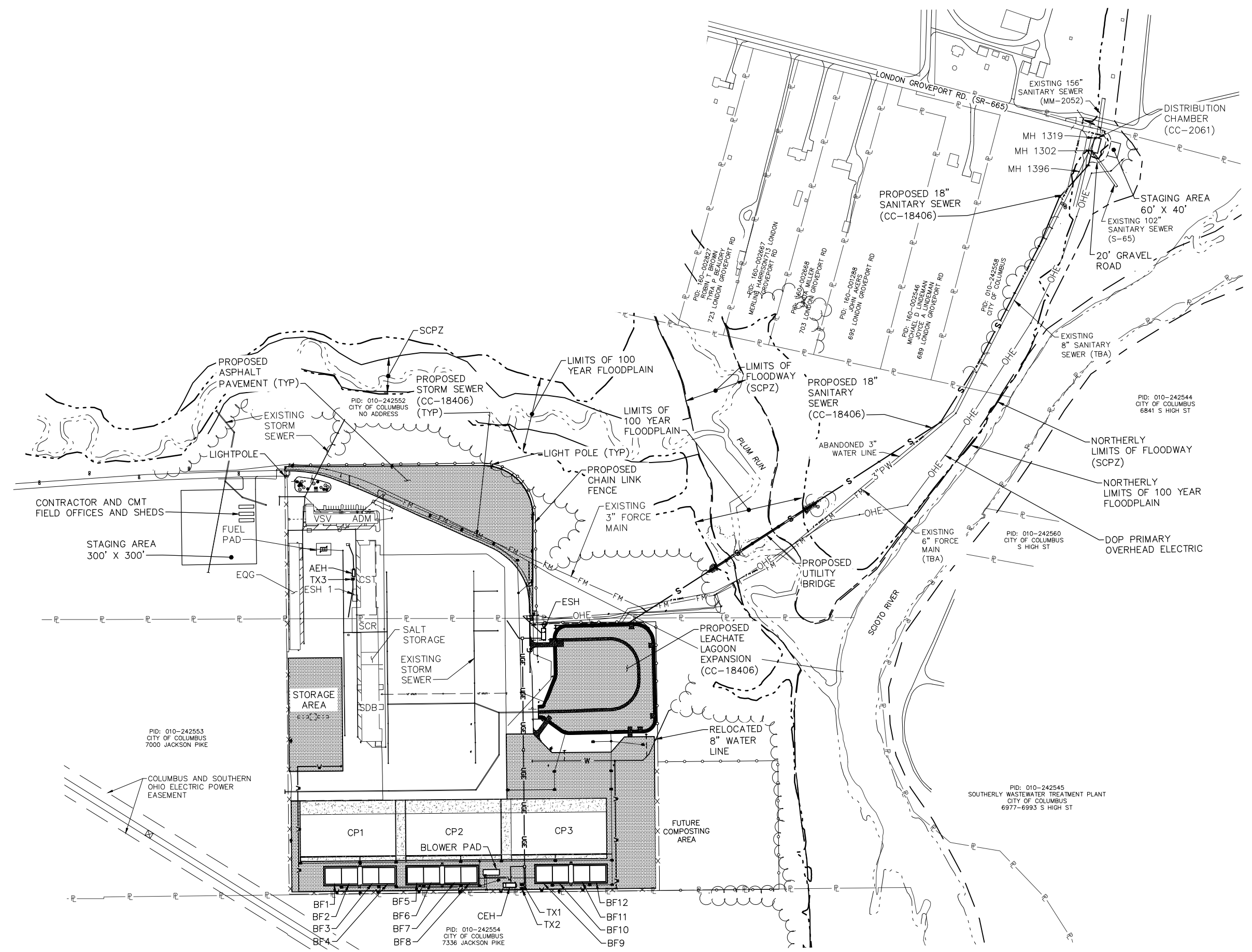


DEMOLITION
EXISTING SITE PLAN

ISSUED STATUS: PTI (See Legend Sheet for Explanation)
1
FIGURE
DATE ISSUED: 03/29/19 Mo./Dy./Yr.



- ADM ADMINISTRATION BUILDING
- AEH ADMINISTRATION AREA E-HOUSE
- BF1-BF12 BIOFILTERS 1-12
- CEH COMPOST/ODOR CONTROL AREA E-HOUSE
- CP1 COMPOSTING PAD 1
- CP2 COMPOSTING PAD 2
- CP3 COMPOSTING PAD 3
- CST COMPOST STORAGE
- EQG EQUIPMENT GARAGE
- ESH1 ELECTRIC SUBSTATION 1
- ESH INCOMING 15KV-E-HOUSE
- SCA SOLAR COLLECTOR AREA (ABANDONED)
- SCR SCREENING AREA
- SDB SOLAR DRYING BUILDING (ABANDONED)
- SPH SOLAR PUMP HOUSE
- TX1 COMPOST/ODOR CONTROL TRANSFORMER
- TX2 COMPOST/ODOR CONTROL TRANSFORMER
- TX3 ADMINISTRATION AREA TRANSFORMER
- VSV VEHICLE SERVICE



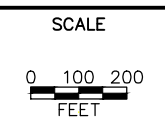
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No.	BY	DATE	REVISIONS	PROJ. PERSONNEL	DATE
	Int.	Mo./Dy./Yr.	Remarks	Initials	Mo./Dy./Yr.
				DES. MKL	08/13/18
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CITY OF COLUMBUS, OHIO
 DEPARTMENT OF PUBLIC UTILITIES
 DIVISION OF SEWERAGE AND DRAINAGE

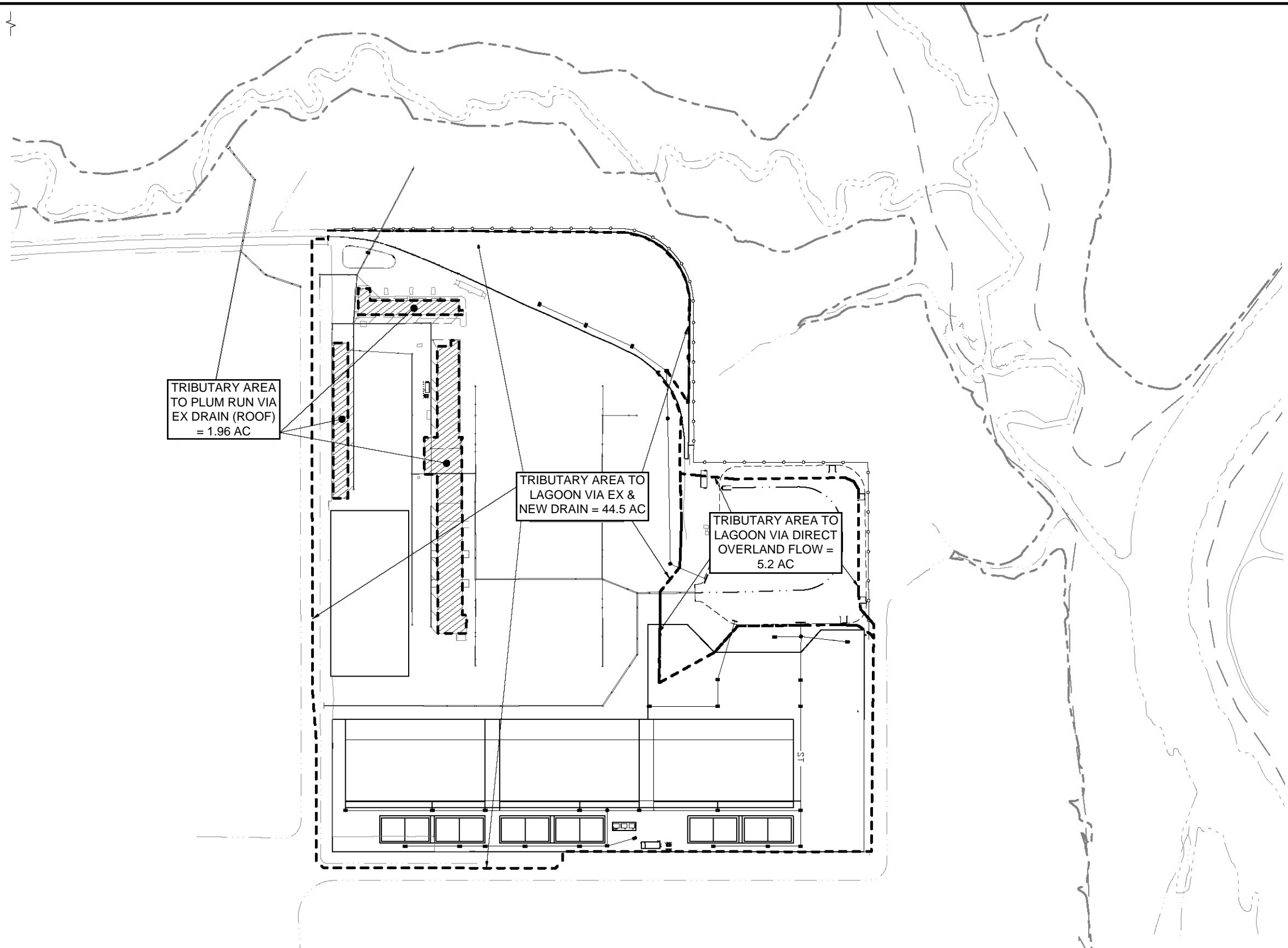
SOUTHWESTERLY COMPOSTING FACILITY
 ODOR CONTROL IMPROVEMENTS



GENERAL
PROPOSED SITE PLAN

ISSUED STATUS: PTI
 (See Legend Sheet for Explanation)
2
 FIGURE
 DATE ISSUED: 03/29/19
 Mo./Dy./Yr.

File Name: C:\pwworking\hatch\02\027\008\Drainage Area Map.dwg - 1 OF 1 Dwg MAP Modified / By: 5/14/2019 5:57 PM/AdamsE102 Plotted / By: 5/15/2019 11:59 AM/AdamsE102 Elizabeth



EASEMENT REFERENCE		
CITY NO.	COUNTY RECORDER	
	VOL.	PAGE
GRANTOR		

REVISIONS		
NO.	DESCRIPTION	APPROVAL/DATE

HATCH
 88 E BROAD ST. SUITE 1980
 COLUMBUS, OHIO 43215
 (614)224-4419 FAX(614)224-44921
 www.hatch.com

TRIBUTARY AREA MAP

PROJECT TITLE:		SOUTHWESTERLY COMPOSTING FACILITY CONTRACT NO. XXXX ODOR CONTROL IMPROVEMENTS			
DIVISION USE ONLY		OWNER			
		CONTRACTOR			
		INSPECTOR			
		AGREEMENT		COMPLETED	
		RPD	CKD	CLD	CON. DR.

CITY OF COLUMBUS
 DEPARTMENT OF PUBLIC UTILITIES
 DIVISION OF SEWERAGE AND DRAINAGE
DIVISION USE ONLY

3

SCALE: 1"=150'	SHEET: 1 OF 1
CONTRACT DRAWING NO. CC-XXXXX	RECORD PLAN NO.

File Name: I:\Projects\17-6329-COMP-CMP_H358195\05_Design\5.7 Drawings\Drawings for Hasens Report\Modified Site Plan v2.dwg - layout Modified / By: 5/20/2019 11:41 AM / jacob5162
 Plotted / By: 5/20/2019 12:04 PM / jacob5162



LEGEND

- ADM ADMINISTRATION BUILDING
- AEH ADMINISTRATION AREA E-HOUSE

- CDS COMPOST DISPENSING SHELTER
- CST COMPOST STORAGE

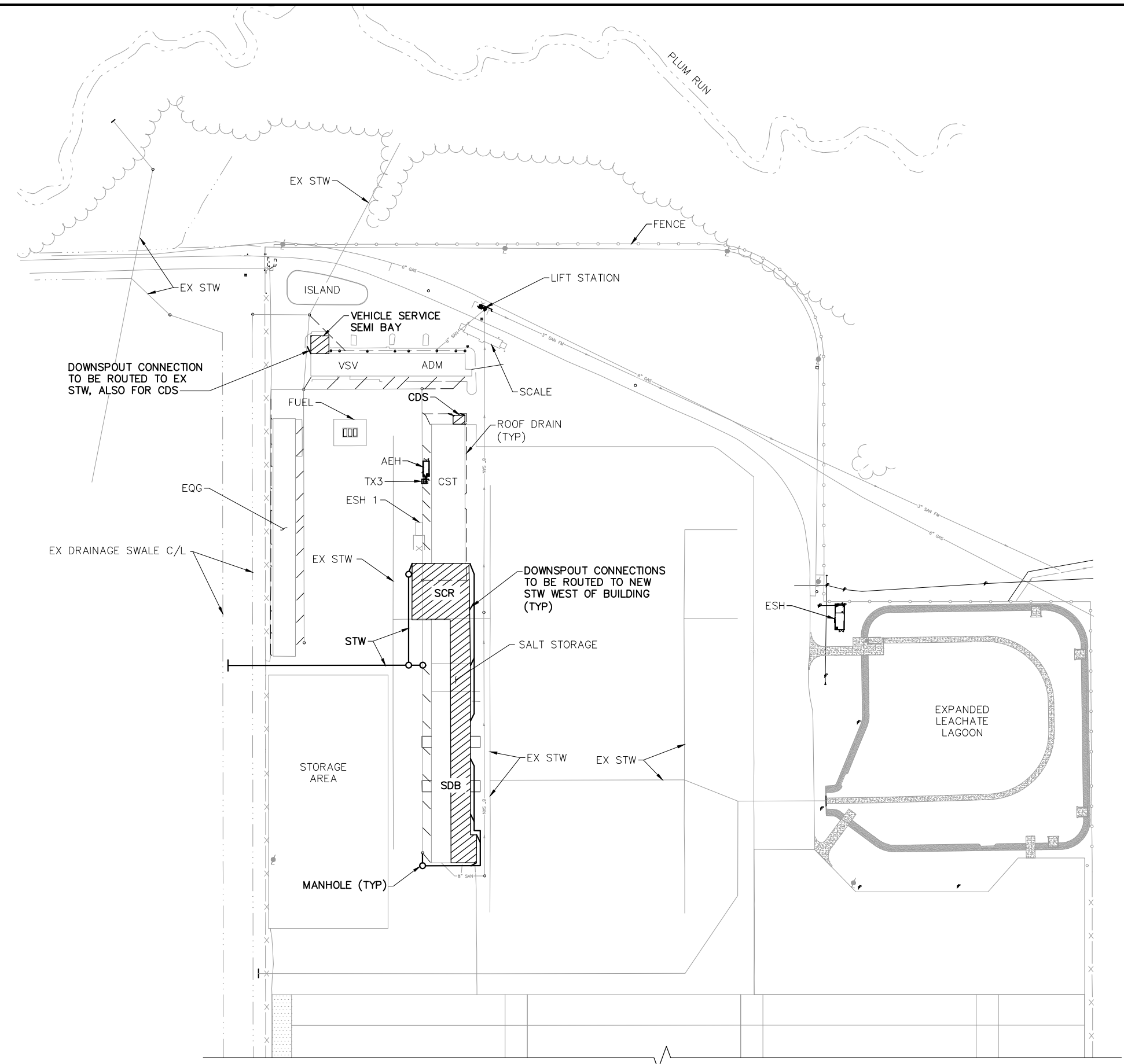
- EQG EQUIPMENT GARAGE
- ESH1 ELECTRIC SUBSTATION 1
- ESH INCOMING 15KV-E-HOUSE

- SCR SCREENING AREA
- SDB SOLAR DRYING BUILDING (ABANDONED)
- STW STORM SEWER

- TX3 ADMINISTRATION AREA TRANSFORMER

- VSV VEHICLE SERVICE

ROOF DRAIN AREA TO BE SEPARATED FROM SANITARY AND CONNECTED TO STORM SYSTEM.



No.	Int.	Mo./Dy./Yr.	BY	DATE	REVISIONS	PRJ. PERSONNEL	DATE
					Remarks		
					DES. MKL		08/13/18
					DWN. MKL		08/13/18
					CKD. aaa		03/29/19

CITY OF COLUMBUS, OHIO
 DEPARTMENT OF PUBLIC UTILITIES
 DIVISION OF SEWERAGE AND DRAINAGE

SOUTHWESTERLY
 COMPOSTING FACILITY
 ODOR CONTROL IMPROVEMENTS

SCALE

CIVIL
**ROOF DRAIN DOWNSPOUT
 REDIRECTION PLAN**

ISSUED STATUS: _____
 (See Legend Sheet for Explanation)
4
 FIGURE
 DATE ISSUED: 03/29/19
 Mo./Dy./Yr.