Pennsylvania Department of Environmental Protection

Southwest Regional Office
CLEAN WATER PROGRAM

Application Type	**New**	Application No.	**PA0253898**
Facility Type	**Industrial**	APS ID	**654315**
Major / Minor	**Minor**	Authorization ID	**738429**

NPDES PERMIT FACT SHEET INDIVIDUAL INDUSTRIAL WASTE (IW) AND IW STORMWATER

Applicant and Facility Information

Applicant Name	**Norfolk Southern Railway Co. (NSRC)**	Facility Name	**NSRC, Conway Railyard**
Applicant Address	650 W Peachtree Street NW	Facility Address	1101 1st Avenue
	Atlanta, GA 30308		Conway, PA 15027
Applicant Contact	Terri Allen	Facility Contact	Christopher Hunsicker
Applicant Phone	(404) 904-5122	Facility Phone	(412) 445-4456
Client ID	87064	Site ID	493055
SIC Code	4011	Municipality	Conway Borough
SIC Description	Railroads, Line-Haul Operating	County	Beaver
Date Application Received	August 13, 2008	EPA Waived?	Yes
Date Application Accepted	September 11, 2008	If No, Reason	

Purpose of Application: New NPDES coverage of stormwater discharges associated with industrial activities.

Summary of Review

The Norfolk Southern Railway Company (NSRC) operates the Conway Railyard (aka Conway Yard or Conway Terminal), a hump classification yard, bounded between the right descending bank of the Ohio River and PA Route 65 in Beaver County, Pennsylvania. The function of this yard is to sort rail cars and engines from incoming trains and reconfigure them into outgoing trains; as well as the refueling and maintenance of these railcars, engines and rail infrastructure. The Conway Yard traverses Conway Borough and touches portions of Freedom, Economy, and Baden Boroughs. NSRC commenced operations at the Conway Yard on June 1, 1999. Conway Yard has been in operation for over a century with initial construction circa 1884 by the Pennsylvania Railroad (PRR) Company.

After a major expansion starting in 1953 by the PRR, the hump classification yard was able to configure trains for both east and west bound traffic. Throughout the 1960s and 1970s, Conway was the largest hump classification yard and remains one of the largest in the northeastern US today, although much of the eastward hump equipment has since been removed. Since the mid-1970s, the Department has been in frequent contact with the owners of Conway Yard regarding this facility.

A Notice of Intent (NOI) to obtain coverage under the Department's PAG-03 NPDES general permit for discharges of stormwater associated with industrial activities was submitted by NSRC and received on March 27, 2000. A Storm Water Pollution Prevention Plan (SWPPP) was included with this submittal. However, this application (PAS806108) was not acted upon by the Department, but rather, was returned on April 19, 2000, with a letter noting that an individual NPDES permit for industrial stormwater was required for the Conway Yard. In response, NSRC submitted an individual NPDES Stormwater Discharge permit application, received on December 20, 2002. However, this was later withdrawn. A north-by-northwest facing satellite image shows most of the Conway Railyard (Conway) in Figure 1 below:

Approve	Deny	Signatures	Date
X		Angela Rohrer / Environmental Engineering Specialist	June 16, 2025
X		Michael E. Fifth, P.E. / Environmental Engineer Manager	June 24, 2025

Summary of Review

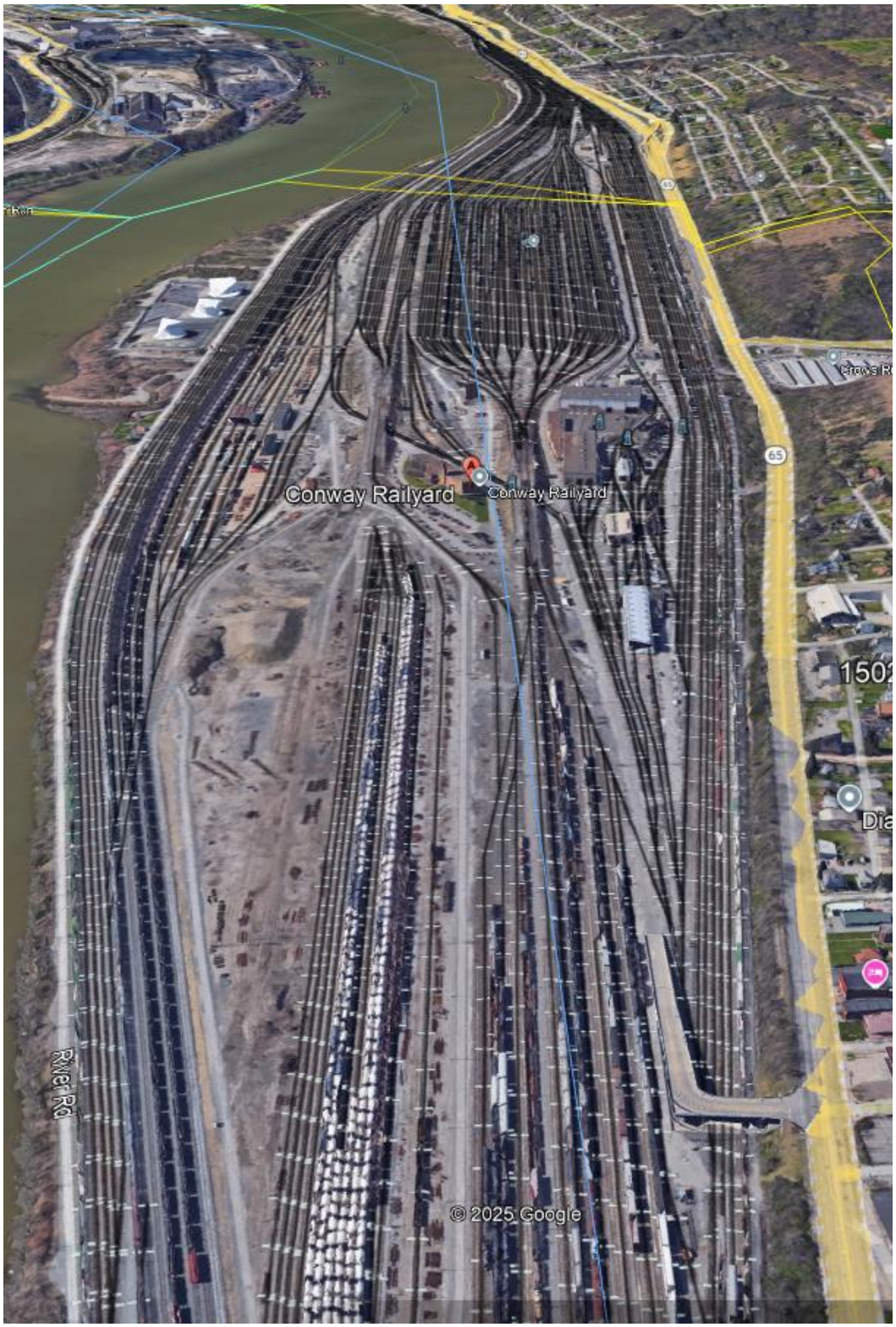


Figure 1: North-by-Northwest Facing Satellite Image of NSRC Conway Railyard

Figure 1 above gives a north-by-northwest facing satellite view of most of the current NSRC Conway Yard. Clearly visible is the more than 3.5 miles in length and today's 444 acres of railyard; as well as Pa. Route 65 on the right and the Ohio River on the left of the image. The railyard can be understood, in a simplified view, as being primarily focused on westward travel on the right and eastward on the left of the image. The main lines passing through on the extreme outer tracks and the

Summary of Review

classification yards towards the middle of the image. The very active westward hump being on the upper-middle portion of the image and, what remains of the eastward hump toward the lower-middle and somewhat left of the center of this image. The actual humps are close to the markers, titled “Conway Railyard” on the satellite image. The humps being elevated portions of track, used as a convenient spot to slow railcars travel and decouple sets of cars, allowing gravity to aid in their separation into new train sets being formed. Just to the right of the westward hump is a train table and various maintenance buildings. The Administration Building is almost under and slightly to the left of the “Conway Railyard” markers.

Pursuant to addressing oil sheens and other discharges reported or observed on or near the receiving surface waters, including Crows Run and the Ohio River, the Department, NSRC, Consolidated Rail Corporation, and Pennsylvania Lines LLC entered into a Consent Order and Agreement (COA), executed in September 2003. Subsequently, an application for an individual industrial stormwater permit was received on August 13, 2008. Later, an application update to this 2008 submittal was received on February 19, 2016.

As noted, this facility houses locomotive maintenance and fueling facilities, including a turntable for turning locomotives. The 2016 application update documents an NAICS code of 482 which covers railroad transport and terminal facilities. The 2016 submittal also supplied an SIC code of 4011 covering “Railroads, Line-Haul Operations”. Under the Department’s “NPDES General Permit for Discharges of Stormwater Associated with Industrial Activity, Notice of Intent Instructions,” this SIC code corresponds to coverage under PAG-03 Appendix L. The applicant is therefore subject to **Appendix L** of the general permit which will be applied as a reference baseline for this individual NPDES stormwater permit.

Today’s diesel-powered engines mean that this yard houses a variety of fuels, lubricants, etc. Leakage of these and other pollutants occurring since the 2003 COA have been reported by NSRC to the Department. Circa January 2021, NSRC disclosed that prior leakages have resulted in Light Non-Aqueous Phase Liquid (LNAPL) contamination of two aquifers located beneath the main operational area of the yard. An annotated satellite image of the extent of this LNAPL contamination is shown in Figure 2 below:

Figure 2: LNAPL Contaminated Aquifers Below Conway Railyard January 2025

Summary of Review

NSRC is working with several companies performing pilot studies and research into the best ways to address these aquifer contaminations. After a plan is finalized, a schedule of planned actions may be incorporated into a new COA between the Department and NSRC. However, for the moment, the September 2003 COA governs these actions, in principle.

NSRC has, over the years, supplied numerous sets of drawings of this site, detailing the extensive stormwater conveyance infrastructure, mostly buried under the surface. A typical construct may (or may not) entail conveyance of municipal stormwater which sometimes terminates into a retention or detention area near Route 65. In most cases a Conway pipe running from the area near Route 65, sometimes on the near side of a retention or detention area traverses the railyard with an outlet into or near the Ohio River or riverbank.

Typically, lower lying areas of the railyard will have drainage lines, catch basins, manholes or even a network of interconnected piping draining into these same underground conveyance pipes, adding to the stormwater runoff flow. Although many of these drainage areas would not normally be contaminated with pollutants, numerous instances of leakage or spills, especially of fuel or lubricants from railcars, tanks or engines have occurred and been reported. In one case, a repetitively contaminated stormwater pipe has been closed off to isolate affected areas. In a few other cases, abatement systems have been installed in various places to recapture leaked materials. Examples include the Tank Car Loading area and the River Road area. Former abatement systems. In accordance with the 2003 COA, the Tank Car Loading area abatement system operation was discontinued in April 2009 and the River Road area abatement system operation was discontinued in May 2012. These areas are shown in the topographic map below, as Figure 3:

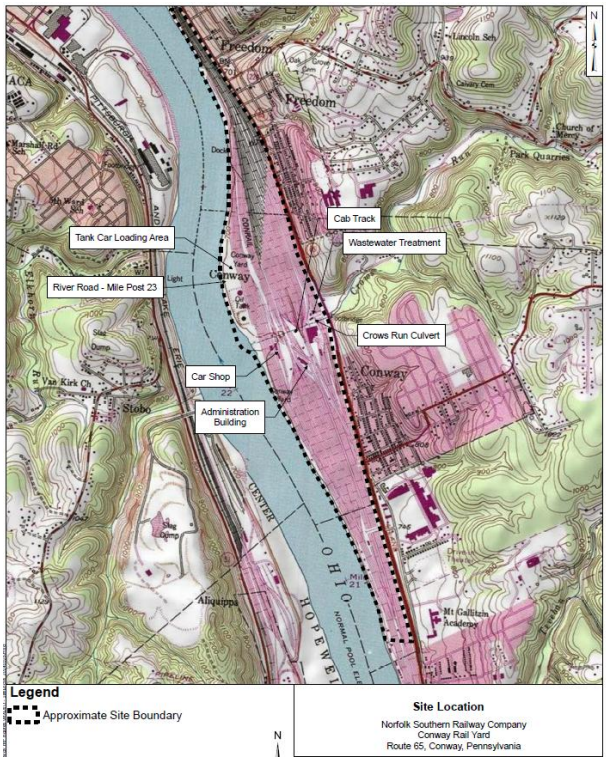


Figure 3: Topographic Map of the NSRC Conway Railyard with Labels Showing Point of Interest

In areas of investigation and abatement, monitoring and recovery wells or manholes may have been installed to aid in investigation and/or pollutant recovery; as well as the addition of instrumentation and other interim measures. There have been no such provisions or measures added to this stormwater permit. Any future cases will need to be handled apart from this permit, as well.

Stormwater sample analysis results were submitted with the various permit application submittals. A cursory review of this data indicates that NSRC may be challenged in some cases to meet PAG-03 benchmark values; however, future monitoring will be used to confirm compliance or to inform alternate regulatory actions.

Summary of Review

A detailed Preparedness, Prevention and Contingency (PPC) plan was included with the December 2002 individual permit application for industrial stormwater submitted by ENSR Corporation, dated December 2002. An updated PPC plan prepared by AECOM Technical Services, Inc. was submitted to the Department in April 2014 and is also on file. This later version incorporates a Spill Prevention Response (SPR) Plan. Finally, on April 25, 2025, NSRC supplied their most recent version of their PPC/SPR plan prepared by Geosyntec Consultants and dated May 2024. These PPC plans provide more detailed descriptions of the site. The 2014 plan included tables of material inventory and waste products, as well. As an example, the inventories from the 2014 PPC/SPR plan are included in Table 1 below. The 2024 PPC/SPR provided more detailed site drawings which are included in Attachment A.

Trade/Chemical Name	Hazard	Location	Approximate Quantity
Fuel Additives (Marvel Diesel Fuel Conditioner Nalco VX-3662, Cold Flow F100)	Flammable, Skin and Eye Irritant, Carcinogen, Target Organ Toxicity, Aspirant	River Road	10,000 gal
Diesel Fuel	Flammable, Aspirant, Carcinogen, Skin Irritant, Inhalation Hazard, Target Organ Hazard, Aquatic Toxicant	Barge Transfer Area, LMB, River Road, Engine Shop, Behind T4 Building, Car Shop, East Park Pump House, Various Generator Locations	7,500,000 gal
Lube and Hydraulic Oils (Texaco Regal R & O 150, Mobilgear SHC 6800, Mobil SCH 634 Synthetic Bearing & Gear Oil, Journaltex HD 57 Lubricating Oil)	Aquatic Toxicant, Eye, Skin, Respiratory Irritant	EMF Building, LMB, C1 Building, Wheel True, East Park, Back Shop, South of M4 Building	27,000 gal
Sagar High Flash Cleaner/Degreaser	Eye and Skin Irritant	Locomotive Shop	Varies
Sulfuric Acid (in lead acid batteries)	Skin and Eye Irritant, Target Organ Toxicity	Locomotive Shop	Varies
14-002 Locomotive Wash	Skin, Eye and Oral Toxicity	Locomotive Shop	Varies
Gasoline (unleaded)	Skin Irritant, Carcinogen, Germ Cell Mutagent, Reproductive Toxicity,	East of Car Shop	1,000 gal
Waste Oil	Skin and Eye Irritant, Aspirant, Respiratory Sensitizer,	River Road, C1 Building, Compressor Building, Car Shop (including recovery system containers), East Park, EMF Building, Administration Building, LMB, No.5 Yard Office, Engine House, WWTP	47,000 gal
Silica Sand	Respiratory Hazard, Carcinogen	East Park	90,000 lbs
Road Salt	None	Car Shop	150,000 lbs
Rail Curve Lubricant (RailArmor Winter and Summer)	Eye Irritation	MW Yard	47,000 lbs
Propane	Flammable, Aspirant	Maintenance Yard	55,000 lbs

Table 1 contains a summary of the types and amounts of materials that may be on-site, the bulk of which is stored in three aboveground storage tanks (AST) located near the Ohio River, as shown in Figure 1.

The site contains numerous buildings, sheds, and trailers. The most significant buildings include the Administration Building, Engine House, Backshop, and Car Repair Shop. The culvert containing Crows Run runs under the busiest part of the yard, including the humps. Besides Crows Run and the Ohio River, two other streams transverse the outer extremes of the Conway Yard, including Dutchman Run in the north and Tevebau Run in the south.

Summary of Review

The topography and hydrology of the site has been altered with some of the site having been built on fill material. Numerous storm sewer pipes cross under the site, some feeding and being commingled with on-site stormwater infrastructure. Stream culverts convey their flows under the site to the Ohio River. 25 Pa. Code Chapter 93 designates all of these receiving waters as warm water fisheries (WWF).

No process water is proposed for discharge. Stormwater from the many engine house and maintenance areas is collected and processed through the Conway Yard's on-site treatment plant. Treatment technologies include dissolved air floatation (DAF), an oil-water separator (OWS), and numerous associated tanks and pumps. Wastewater from this process is discharged to a Publicly Owned Treatment Works (POTW), the Conway Borough sewage treatment plant (STP) which is located effectively on-site, very near to, but upstream of the confluence of Crows Run with the Ohio River. NSRC has a pretreatment permit from Conway Borough.

Numerous inspections have been conducted onsite since the 1970s. The most recent site inspection was conducted by the Department on March 20, 2025. Although no violations were noted in this inspection, booms were in use, as required by the September 2003 COA, to collect any oily sheen from Crows Run.

NSRC informed the Department that safety concerns prevented sampling at the outfalls discharging to Crows Run. They proposed a combined sampling location at the mouth of Crows Run, representative of the 008 series outfalls. The Department can agree to select representative outfalls, but samples must be collected from the actual discharge of the facility's industrial activities. Alternatively, samples can be taken from catch basins in the yard before discharge to the outfall. Some facilities also establish procedures to sample sheet flow. However, samples cannot be taken directly from the Crows Run surface. Therefore, during the public comment period, NSRC will need to provide the new sampling locations for the discharges to Crows Run.

The applicant has complied with Act 14 required notifications.

Issuance of a permit draft for comment is recommended.

Public Participation

DEP will publish notice of the receipt of the NPDES permit application and a tentative decision to issue the individual NPDES permit in the *Pennsylvania Bulletin* in accordance with 25 Pa. Code § 92a.82. Upon publication in the *Pennsylvania Bulletin*, DEP will accept written comments from interested persons for a 30-day period (which may be extended for one additional 15-day period at DEP's discretion), which will be considered in making a final decision on the application. Any person may request or petition for a public hearing with respect to the application. A public hearing may be held if DEP determines that there is significant public interest in holding a hearing. If a hearing is held, notice of the hearing will be published in the *Pennsylvania Bulletin* at least 30 days prior to the hearing and in at least one newspaper of general circulation within the geographical area of the discharge.

Discharge, Receiving Waters and Water Supply Information

Outfall No.	See Table 3	Design Flow (MGD)	0
Latitude	See Table 3	Longitude	See Table 3
Quad Name	Beaver	Quad Code	1303
Wastewater Description:	Stormwater		
Receiving Waters	Ohio River (WWF)	Stream Code	32317
NHD Com ID	99679124	RMI	See Table 3
Drainage Area	19,600 mi^2	Yield (cfs/mi^2)	0.241
Q_{7-10} Flow (cfs)	4,730	Q_{7-10} Basis	US Army Corp of Engineers
Elevation (ft)	683	Slope (ft/ft)	
Watershed No.	20-G	Chapter 93 Class.	WWF
Existing Use		Existing Use Qualifier	
Exceptions to Use		Exceptions to Criteria	
Assessment Status	Impaired		
Cause(s) of Impairment	Dioxin, Pathogens, Polychlorinated Biphenyls (PCBs)		
Source(s) of Impairment	Source Unknown		
TMDL Status	Final	Name	Ohio River
Nearest Downstream Public Water Supply Intake	Center Township Water Authority		
PWS Waters	Ohio River	Flow at Intake (cfs)	5,880
PWS RMI	952.46	Distance from Outfall (mi)	3.95

Other Comments: Site Drawings showing all outfalls are included as Attachment A.

Table 3: Coordinates for NSRC Conway Outfalls Discharging to the Ohio River Downriver from Crows Run

Outfall ID	Latitude	Longitude	RMI
001	40° 41' 02.2114"	-80° 15' 18.3212"	957.5
001A (101)	40° 40' 59.9117"	-80° 15' 15.9986"	957.5
002	40° 40' 48.3323"	-80° 15' 12.3975"	957.78
003	40° 40' 41.2104"	-80° 15' 11.1729"	957.92
004	40° 40' 34.6472"	-80° 15' 10.9507"	958.03
005	40° 40' 29.3015"	-80° 15' 11.1529"	958.16
006	40° 40' 20.4459"	-80° 15' 11.2608"	958.32
007	40° 40' 16.5696"	-80° 15' 06.2119"	958.48

Discharge, Receiving Waters and Water Supply Information

Outfall No.	See Table 4	Design Flow (MGD)	0
Latitude	See Table 4	Longitude	See Table 4
Quad Name	Beaver	Quad Code	1303
Wastewater Description:	Stormwater		
Receiving Waters	Crows Run (WWF)	Stream Code	36558
NHD Com ID	99679366	RMI	See Table 4
Drainage Area	13.8 mi^2	Yield (cfs/mi^2)	0.0141
Q_{7-10} Flow (cfs)	0.195	Q_{7-10} Basis	USGS StreamStats
Elevation (ft)	691 - 683	Slope (ft/ft)	
Watershed No.	20-G	Chapter 93 Class.	WWF
Existing Use	Aquatic Life	Existing Use Qualifier	
Exceptions to Use		Exceptions to Criteria	
Assessment Status	Attaining Use(s) Aquatic Life		
Cause(s) of Impairment			
Source(s) of Impairment			
TMDL Status	Final	Name	Ohio River
Nearest Downstream Public Water Supply Intake	Center Township Water Authority		
PWS Waters	Ohio River	Flow at Intake (cfs)	5,880
PWS RMI	952.46	Distance from Outfall (mi)	5.69

Other Comments: Site Drawings showing all outfalls are included as Attachment A.

Table 4: Coordinates for NSRC Conway Outfalls Discharging to Crows Run

Outfall ID	Latitude	Longitude	RMI
008-01 (801)	40° 40' 08.1207"	-80° 14' 41.1811"	0.55
008-03 (803)	40° 40' 07.7696"	-80° 14' 42.1212"	0.53
008-11 (811)	40° 40' 06.8831"	-80° 14' 44.1242"	0.5
008-15 (815)	40° 40' 06.3292"	-80° 14' 46.4279"	0.47
008-16 (816)	40° 40' 05.9389"	-80° 14' 46.8386"	0.46
008-19 (819)	40° 40' 05.6682"	-80° 14' 47.5966"	0.44
008-20 (820)	40° 40' 05.8598"	-80° 14' 47.7228"	0.44
008-25 (825)	40° 40' 04.1734"	-80° 14' 52.5060"	0.36
008-26 (826)	40° 40' 03.9626"	-80° 14' 52.3880"	0.36
008-28 (828)	40° 40' 03.9261"	-80° 14' 53.2055"	0.36
008-29 (829)	40° 40' 03.2483"	-80° 14' 54.3860"	0.33
008-30 (830)	40° 40' 03.4227"	-80° 14' 54.5028"	0.33
008-32 (832)	40° 40 '02.7198"	-80° 14' 55.8783"	0.31
008-33 (833)	40° 40' 02.9397"	-80° 14' 55.9759"	0.31

Discharge, Receiving Waters and Water Supply Information

Outfall No.	See Table 5	Design Flow (MGD)	0
Latitude	See Table 5	Longitude	See Table 5
Quad Name	Beaver	Quad Code	1303
Wastewater Description:	Stormwater		
Receiving Waters	Ohio River (WWF)	Stream Code	32317
NHD Com ID	99680246	RMI	See Table 5
Drainage Area	19,600 mi^2	Yield (cfs/mi^2)	0.0141
Q_{7-10} Flow (cfs)	4,730	Q_{7-10} Basis	US Army Corp of Engineers
Elevation (ft)	684	Slope (ft/ft)	
Watershed No.	20-G	Chapter 93 Class.	WWF
Existing Use		Existing Use Qualifier	
Exceptions to Use		Exceptions to Criteria	
Assessment Status	Impaired		
Cause(s) of Impairment	Dioxin, Pathogens, Polychlorinated Biphenyls (PCBS)		
Source(s) of Impairment	Source Unknown		
TMDL Status	Final	Name	Ohio River
Nearest Downstream Public Water Supply Intake	Center Township Water Authority		
PWS Waters	Ohio River	Flow at Intake (cfs)	5,880
PWS RMI	952.46	Distance from Outfall (mi)	3.23

Other Comments: Site Drawings showing all outfalls are included as Attachment A.

Table 5: Coordinates for NSRC Conway Outfalls Discharging to the Ohio River Upriver from Crows Run

Outfall ID	Latitude	Longitude	RMI
009	40° 39' 52.4161"	-80° 14' 54.5781"	958.96
010	40° 39' 49.3731"	-80° 14' 52.6984"	959.10
011	40° 39' 43.9465"	-80° 14' 48.4713"	959.18
012	40° 39' 41.1913"	-80° 14' 45.9105"	959.27
013	40° 39' 38.1008"	-80° 14' 42.9657"	959.32
015	40° 39' 28.1303"	-80° 14' 34.2002"	959.61
016	40° 39' 23.5521"	-80° 14' 30.6389"	959.76
017	40° 39' 23.2492"	-80° 14' 29.6681"	959.71
018	40° 39' 16.5446"	-80° 14' 25.1791"	959.87
019	40° 39' 13.8789"	-80° 14' 23.5993"	959.93
020	40° 39' 08.6047"	-80° 14' 20.2600"	960.04
021	40° 39' 03.5807"	-80° 14' 17.0906"	960.10
022	40° 39' 01.7726"	-80° 14' 15.9538"	960.10
023	40° 38' 55.4344"	-80° 14' 12.7954"	960.32
024	40° 38' 53.7969"	-80° 14' 12.5080"	960.32
025	40° 38' 50.5745"	-80° 14' 11.4132"	960.39
026	40° 38' 47.9636"	-80° 14' 09.8434"	960.49
027	40° 38' 43.4434"	-80° 14' 06.3089"	960.52
028	40° 38' 39.2191"	-80° 14' 04.1537"	960.63

Treatment Facility Summary

Treatment Facility Name: Conway Railyard

WQM Permit No.	Issuance Date
N/A	N/A

Waste Type	Degree of Treatment	Process Type	Disinfection	Avg Annual Flow (MGD)
Industrial	Advanced	DAF OWS	N/A	0.0273

Hydraulic Capacity (MGD)	Organic Capacity (lbs/day)	Load Status	Biosolids Treatment	Biosolids Use/Disposal
0.36	N/A	Not Overloaded	N/A	N/A

Other Comments: This system is not designed to discharge to any receiving surface waters. Effluent is piped to the Conway Sewage Treatment Plant under their industrial permit. More detail is shown in Figure 4, below.

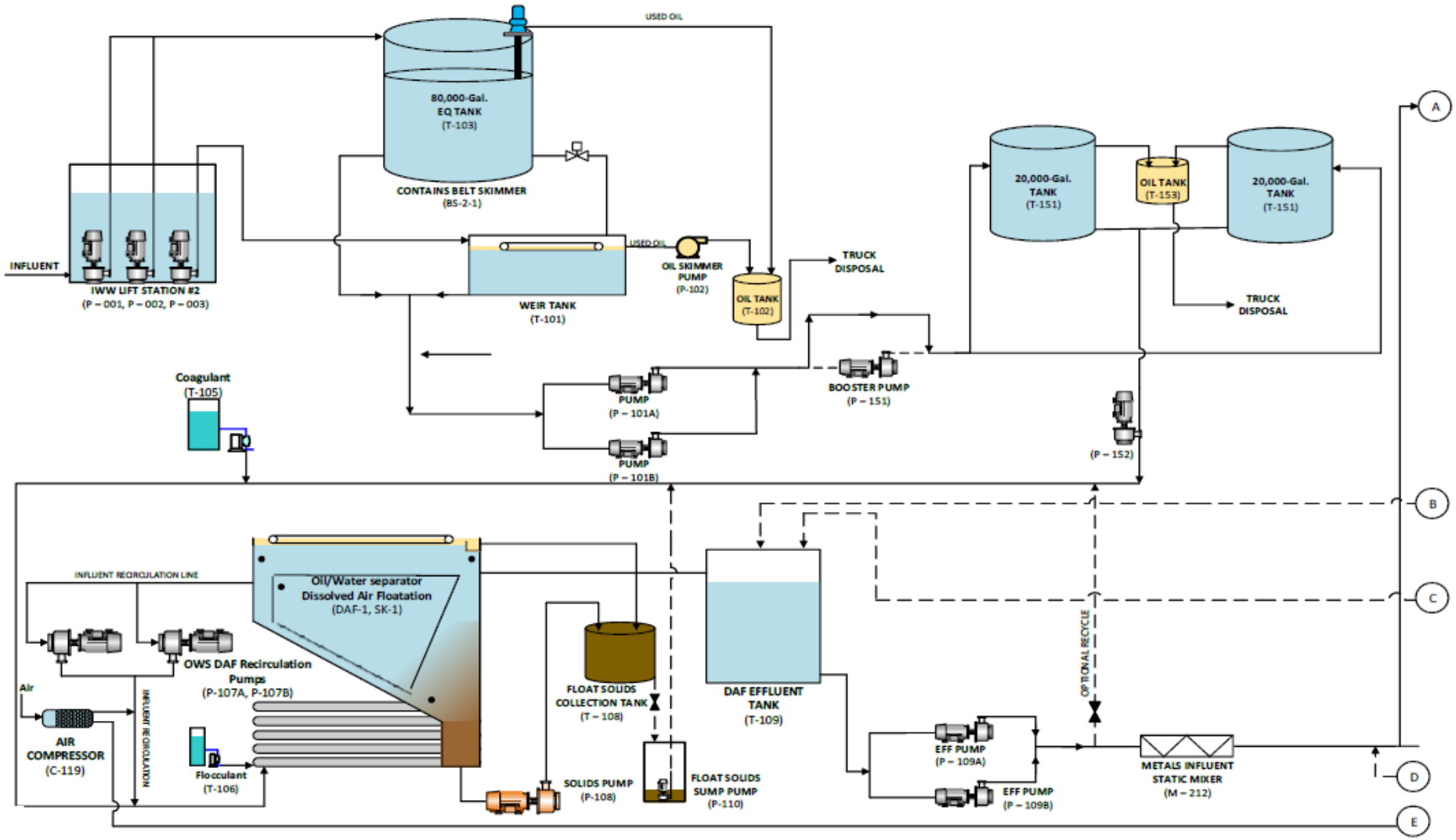


Figure 4: Conway Wastewater Treatment Plant Process Flow Diagram – Part a

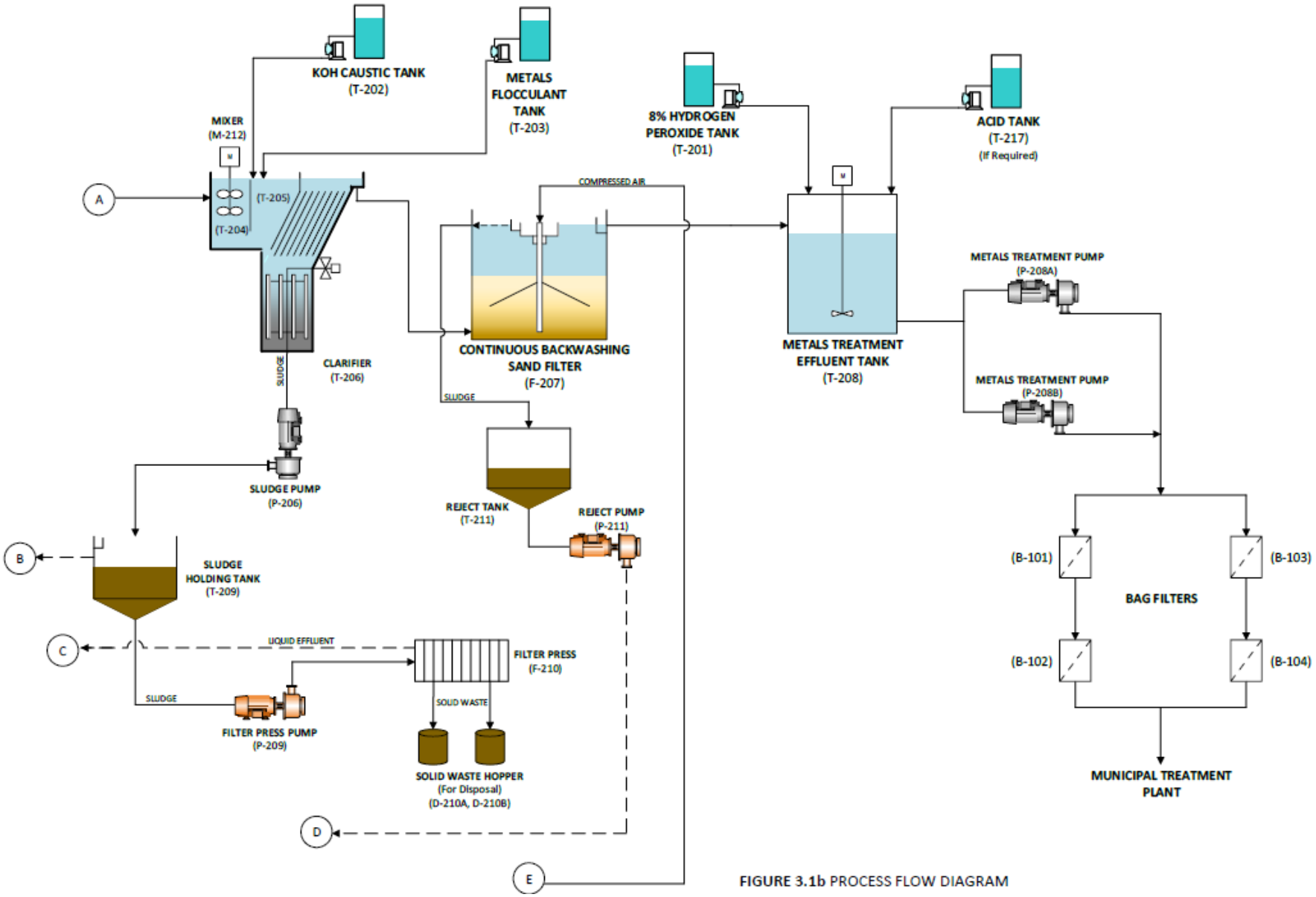


Figure 4: Conway Wastewater Treatment Plant Process Flow Diagram – Part b

Development of Effluent Limitations

Outfall No. See Table 6 **Design Flow (MGD)** 0
Latitude See Table 6 **Longitude** See Table 6
Wastewater Description: Stormwater

Technology-Based Limitations

Stormwater Technology Limits

The outfalls listed in Table 6 below were included in the 2016 updated NPDES permit application for industrial stormwater discharge as the stormwater outfalls exposed to industrial activities. These will therefore be subject to monitoring in accordance with PAG-03 General Stormwater Permit conditions as a minimum requirement for stormwater outfalls to confirm that Conway Yard discharges are within established benchmarks. The other stormwater outfalls listed in Tables 3 – 5 but excluded from Table 6 will be subject to annual stormwater inspections.

Table 6: Coordinates for NSRC Conway Outfalls Associated with Industrial Activities

	Latitude and Longitude
Outfall ID	**Degrees Minutes Seconds**
003	40°40'41.2104", -80°15'11.1729"
008-01 (801)	40°40'08.1207", -80°14'41.1811"
008-03 (803)	40°40'07.7696", -80°14'42.1212"
008-11 (811)	40°40'06.8831", -80°14'44.1242"
008-20 (820)	40°40'05.8598", -80°14'47.7228"
008-26 (826)	40°40'03.9626", -80°14'52.3880"
008-29 (829)	40°40'03.2483", -80°14'54.3860"
008-30 (830)	40°40'03.4227", -80°14'54.5028"
008-32 (832)	40°40'02.7198", -80°14'55.8783"
008-33 (833)	40°40'02.9397", -80°14'55.9759"
009	40°39'52.4161", -80°14'54.5781"
010	40°39'49.3731", -80°14'52.6984"
018	40°39'16.5446", -80°14'25.1791"
019	40°39'13.8789", -80°14'23.5993"

Outfall 003 consistently discharges below the surface of the Ohio River; depending on river levels and weather conditions sample collection may not be feasible. Therefore, the facility should define another representative location of this outfall.

One of the applicable SIC codes for the site is 4011 and the corresponding appendix of the PAG-03 that would apply to the facility is **Appendix L**. The reporting requirements applicable to stormwater discharges are shown in Table 7 below. Along with the monitoring requirements, sector specific BMPs that are included in **Appendix L** of the PAG-03 will also be included in Part C of the Draft Permit.

Table 7: PAG-03 Appendix (L) Monitoring Requirements

Parameter	Max Daily Concentration	Measurement Frequency	Sample Type
Total Suspended Solids (TSS)	Monitor and Report	1/6 Months	Grab
Oil and Grease	Monitor and Report	1/6 Months	Grab
Total Nitrogen (1)	Monitor and Report	1/6 Months	Calculation
Total Phosphorus	Monitor and Report	1/6 Months	Grab

(1) Total Nitrogen is the sum of Total Kjeldahl-N (TKN) plus Nitrite-Nitrate as N (NO_2+NO_3-N), where TKN and NO_2+NO_3-N are measured in the same sample.

Water Quality-Based Limitations

Stormwater WQBELs

Water quality analyses are typically performed under low-flow (Q7-10) conditions. Stormwater discharges occur at variable rates and frequencies but not however during Q7-10 conditions. Since the discharges from these outfalls are composed entirely of stormwater, a formal water quality analysis cannot be accurately conducted. Accordingly, water quality-based effluent limitations based on water quality analyses are not proposed.

Total Maximum Daily Loads (TMDL)

Section 303(d) of the Clean Water Act and EPA's Water Quality Planning and Management Regulations (codified at Title 40 of the *Code of Federal Regulations* Part 130) require states to develop a TMDL for impaired water bodies. A TMDL establishes the amount of a pollutant that a water body can assimilate without exceeding the water quality criteria for that pollutant. TMDLs provide the scientific basis for a state to establish water quality-based controls to reduce pollution from both point and non-point sources in order to restore and maintain the quality of the state's water resources (USEPA 1991a).

Wastewater discharges from NSRC's Conway facility are located within the Ohio River Watershed (stream code 32317) for which the Department has developed a TMDL. Originally listed on the 1996 Pennsylvania Section 303(d) as impaired waters, the receiving section of the Ohio River was included in a Department TMDL, finalized on April 9, 2001, covering Polychlorinated Biphenyls (PCBs) and Chlordane. Since there is no evidence that this facility discharging these pollutants, no effluent monitoring or limitations will be established for these.

Anti-Backsliding

As this permit is new, anti-backsliding provisions do not strictly apply.

Proposed Effluent Limitations and Monitoring Requirements

The proposed effluent monitoring requirements for the outfalls listed in Table 6 are displayed in Table 8 below, these include benchmark values documented in the above effluent limitation development. A Part C condition is included in the Draft Permit requiring a Corrective Action Plan (CAP) when there are any repetitive exceedances of the benchmark values, which are also documented in the Part C condition. The benchmark values are also displayed below in Table 8. These values are not effluent limitations, an exceedance of the benchmark value is not a violation. If there are two consecutive exceedances of benchmark values at an outfall, a CAP must be created to evaluate site stormwater controls and BMPs. Benchmark monitoring is a feedback tool, along with routine inspections and visual assessments, for assessing the effectiveness of stormwater controls and BMPs. An exceedance of the benchmark provides permittees with an indication that the facility's controls may not be sufficiently controlling pollutants in stormwater.

Table 8: Proposed Effluent Monitoring Requirements for Outfalls Listed in Table 6

Parameter	Max Daily Concentration	Benchmark Values (mg/L)	Measurement Frequency	Sample Type
Total Suspended Solids (TSS)	Monitor and Report	100.0	1/6 Months	Grab
Oil and Grease	Monitor and Report	30.0	1/6 Months	Grab
Total Nitrogen[1]	Monitor and Report	2.0	1/6 Months	Grab
Total Phosphorus	Monitor and Report	1.0	1/6 Months	Grab

(1) Total Nitrogen is the sum of Total Kjeldahl-N (TKN) plus Nitrite-Nitrate as N (NO_2+NO_3-N), where TKN and NO_2+NO_3-N are measured in the same sample.

Tools and References Used to Develop Permit	
☐	WQM for Windows Model
☐	Toxics Management Spreadsheet
☐	TRC Model Spreadsheet
☐	Temperature Model Spreadsheet
☐	Water Quality Toxics Management Strategy, 361-0100-003, 4/06.
☒	Technical Guidance for the Development and Specification of Effluent Limitations, 386-0400-001, 10/97.
☐	Policy for Permitting Surface Water Diversions, 386-2000-019, 3/98.
☒	Policy for Conducting Technical Reviews of Minor NPDES Renewal Applications, 386-2000-018, 11/96.
☐	Technology-Based Control Requirements for Water Treatment Plant Wastes, 386-2183-001, 10/97.
☐	Technical Guidance for Development of NPDES Permit Requirements Steam Electric Industry, 386-2183-002, 12/97.
☐	Pennsylvania CSO Policy, 386-2000-002, 9/08.
☐	Water Quality Antidegradation Implementation Guidance, 391-0300-002, 11/03.
☐	Implementation Guidance Evaluation & Process Thermal Discharge (316(a)) Federal Water Pollution Act, 386-2000-008, 4/97.
☐	Determining Water Quality-Based Effluent Limits, 386-2000-004, 12/97.
☐	Implementation Guidance Design Conditions, 386-2000-007, 9/97.
☐	Technical Reference Guide (TRG) WQM 7.0 for Windows, Wasteload Allocation Program for Dissolved Oxygen and Ammonia Nitrogen, Version 1.0, 386-2000-016, 6/2004.
☐	Interim Method for the Sampling and Analysis of Osmotic Pressure on Streams, Brines, and Industrial Discharges, 386-2000-012, 10/1997.
☐	Implementation Guidance for Section 95.6 Management of Point Source Phosphorus Discharges to Lakes, Ponds, and Impoundments, 386-2000-009, 3/99.
☐	Technical Reference Guide (TRG) PENTOXSD for Windows, PA Single Discharge Wasteload Allocation Program for Toxics, Version 2.0, 386-2000-015, 5/2004.
☐	Implementation Guidance for Section 93.7 Ammonia Criteria, 386-2000-022, 11/97.
☐	Policy and Procedure for Evaluating Wastewater Discharges to Intermittent and Ephemeral Streams, Drainage Channels and Swales, and Storm Sewers, 386-2000-013, 4/2008.
☐	Implementation Guidance Total Residual Chlorine (TRC) Regulation, 386-2000-011, 11/1994.
☐	Implementation Guidance for Temperature Criteria, 386-2000-001, 4/09.
☐	Implementation Guidance for Section 95.9 Phosphorus Discharges to Free Flowing Streams, 386-2000-021, 10/97.
☐	Implementation Guidance for Application of Section 93.5(e) for Potable Water Supply Protection Total Dissolved Solids, Nitrite-Nitrate, Non-Priority Pollutant Phenolics and Fluorides, 386-2000-020, 10/97.
☐	Field Data Collection and Evaluation Protocol for Determining Stream and Point Source Discharge Design Hardness, 386-2000-005, 3/99.
☐	Implementation Guidance for the Determination and Use of Background/Ambient Water Quality in the Determination of Wasteload Allocations and NPDES Effluent Limitations for Toxic Substances, 386-2000-010, 3/1999.
☐	Design Stream Flows, 386-2000-003, 9/98.
☐	Field Data Collection and Evaluation Protocol for Deriving Daily and Hourly Discharge Coefficients of Variation (CV) and Other Discharge Characteristics, 386-2000-006, 10/98.
☐	Evaluations of Phosphorus Discharges to Lakes, Ponds and Impoundments, 386-3200-001, 6/97.
☐	Pennsylvania's Chesapeake Bay Tributary Strategy Implementation Plan for NPDES Permitting, 4/07.
☒	SOP: SOP for Clean Water Program, New and Reissuance IW and Industrial Stormwater, Individual NPDES Permit Applications, BPNPSM-PMT-001
☐	Other:

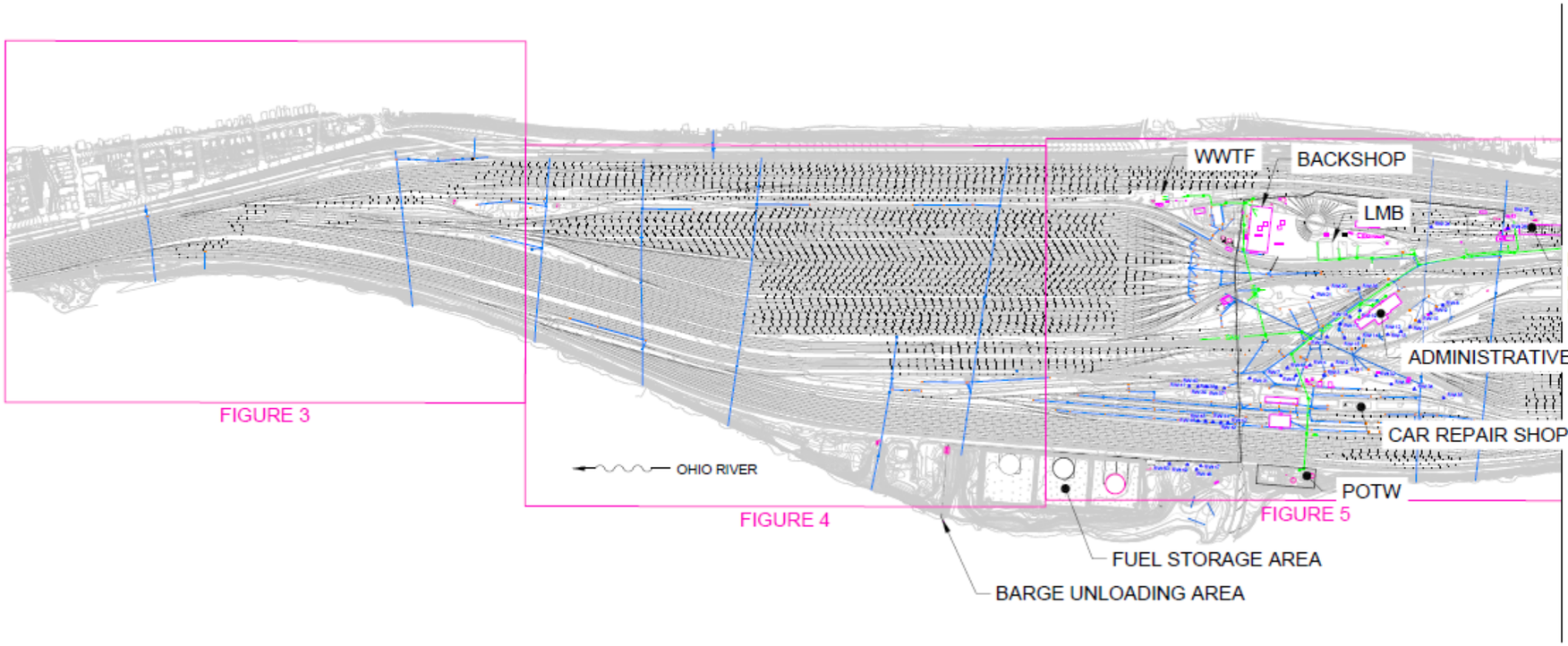
ATTACHMENT A

Drawing Excerpts from
Preparedness, Prevention and Contingency Plan &
Spill Prevention Response Plan
For

Norfolk Southern Railway Company

By
Geosyntec Consultants

dated May 2024



NOTES:

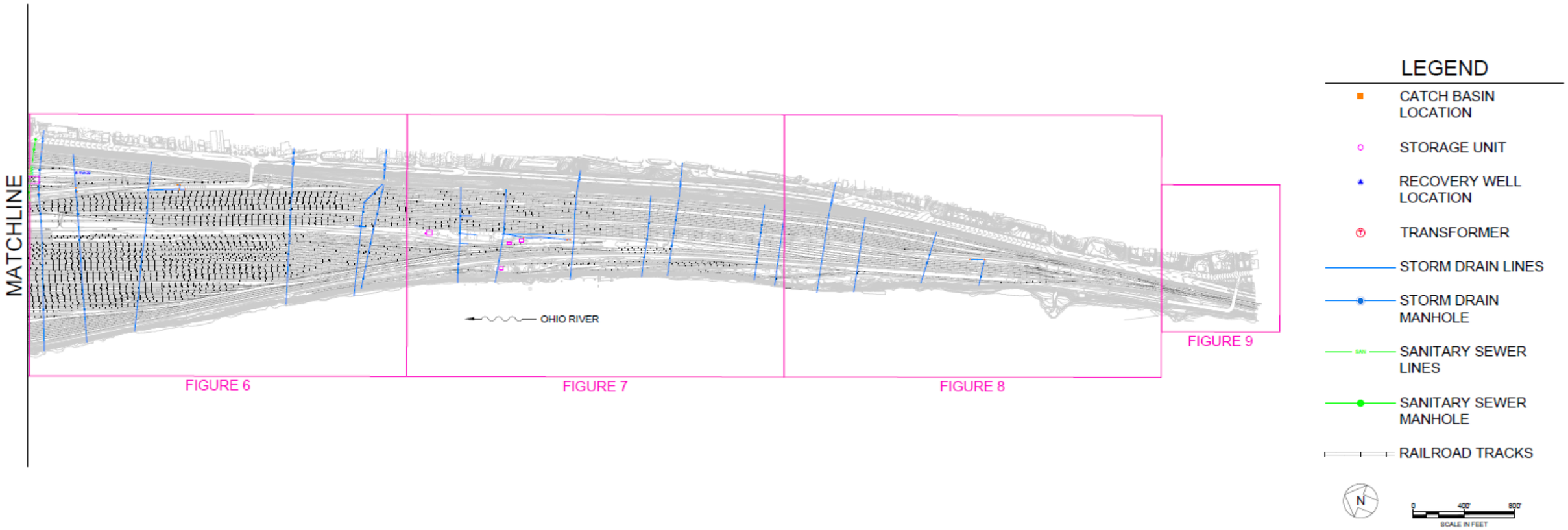
1. THESE DRAWINGS INCLUDING BASE INFORMATION WERE ADAPTED FROM THE PLAN SET ENTITLED "FACILITY OVERVIEW MAP, CONWAY RAIL YARDS, NORFOLK SOUTHERN, ROUTE 65, CONWAY PENNSYLVANIA" PREPARED BY ENSR/AECOM AND DATED MARCH 6, 2014.

2. ABOVE GROUND STORAGE TANK NUMBERS AND APPROXIMATE LOCATIONS WERE VERIFIED IN THE FIELD DURING FIELD RECONNAISSANCE CONDUCTED BY GEOSYNTEC CONSULTANTS, INC. ON 25 MARCH 2015 AND 18-19 SEPTEMBER 2017. SECONDARY CONTAINMENT FEATURES WERE MEASURED IN THE FIELD BY GEOSYNTEC CONSULTANTS, INC. ON 15 MAY 2015.

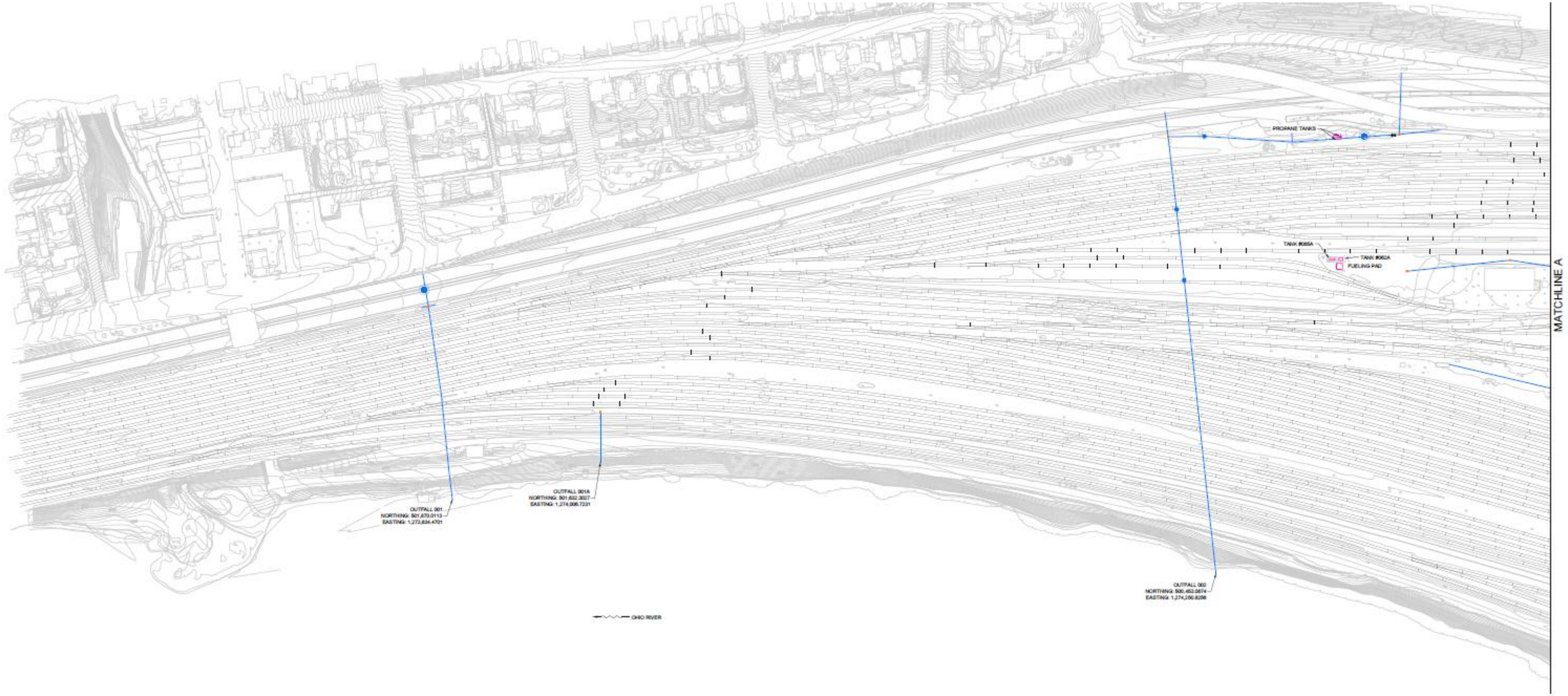
3. LOCATION OF EXISTING STORM DRAIN INFRASTRUCTURE SHOWN IS APPROXIMATE BASED ON INFORMATION IN THE PLAN REFERENCED IN NOTE 1.

4. THE DRAWINGS IN THIS SET HAVE BEEN ADAPTED FROM THE SITE STANDARD SET OF PLANS. AS A RESULT, THE DRAWING NUMBERING IS NOT SEQUENTIAL.

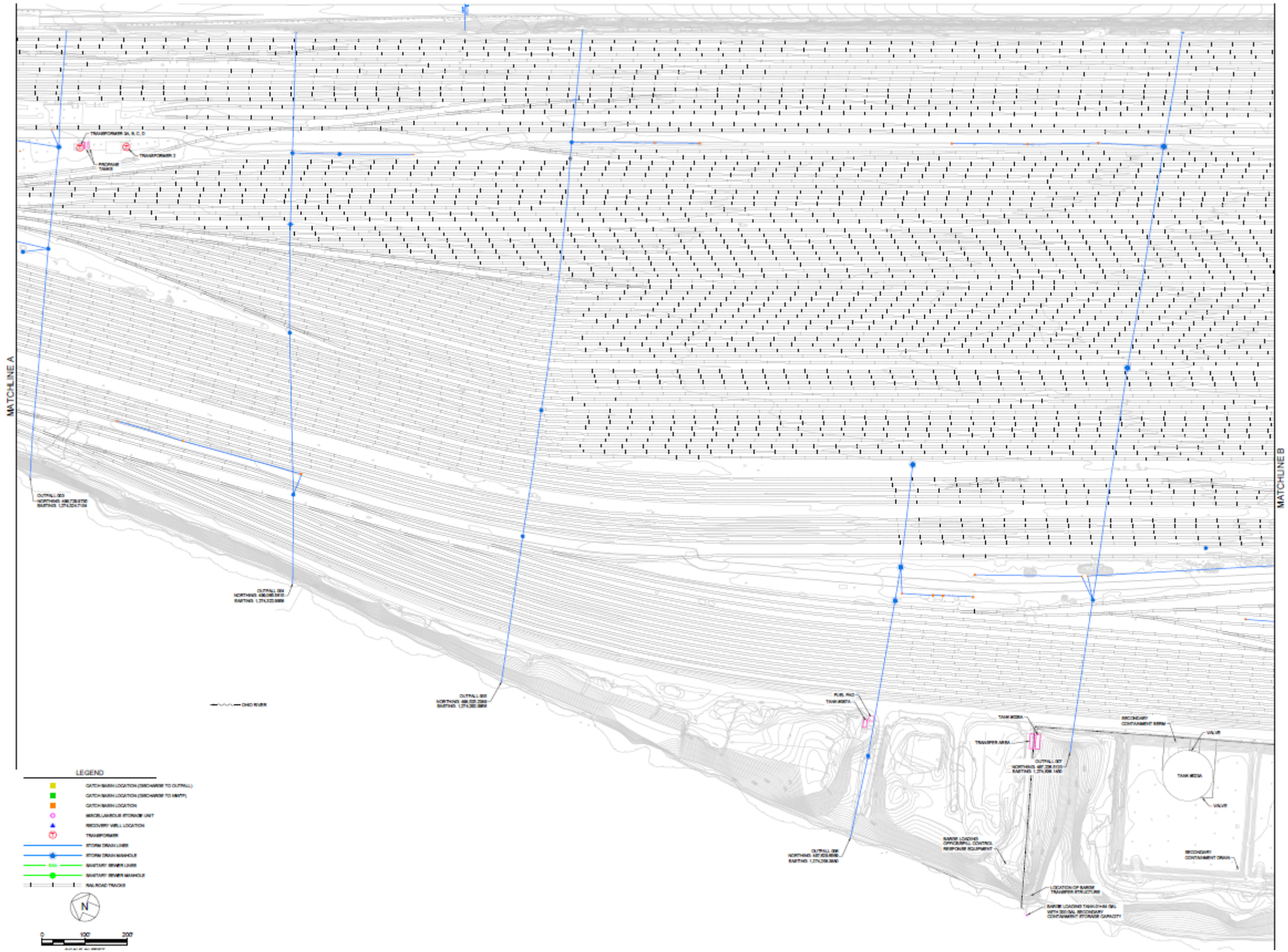
NSRC Conway Site Plan (Figure 2a)



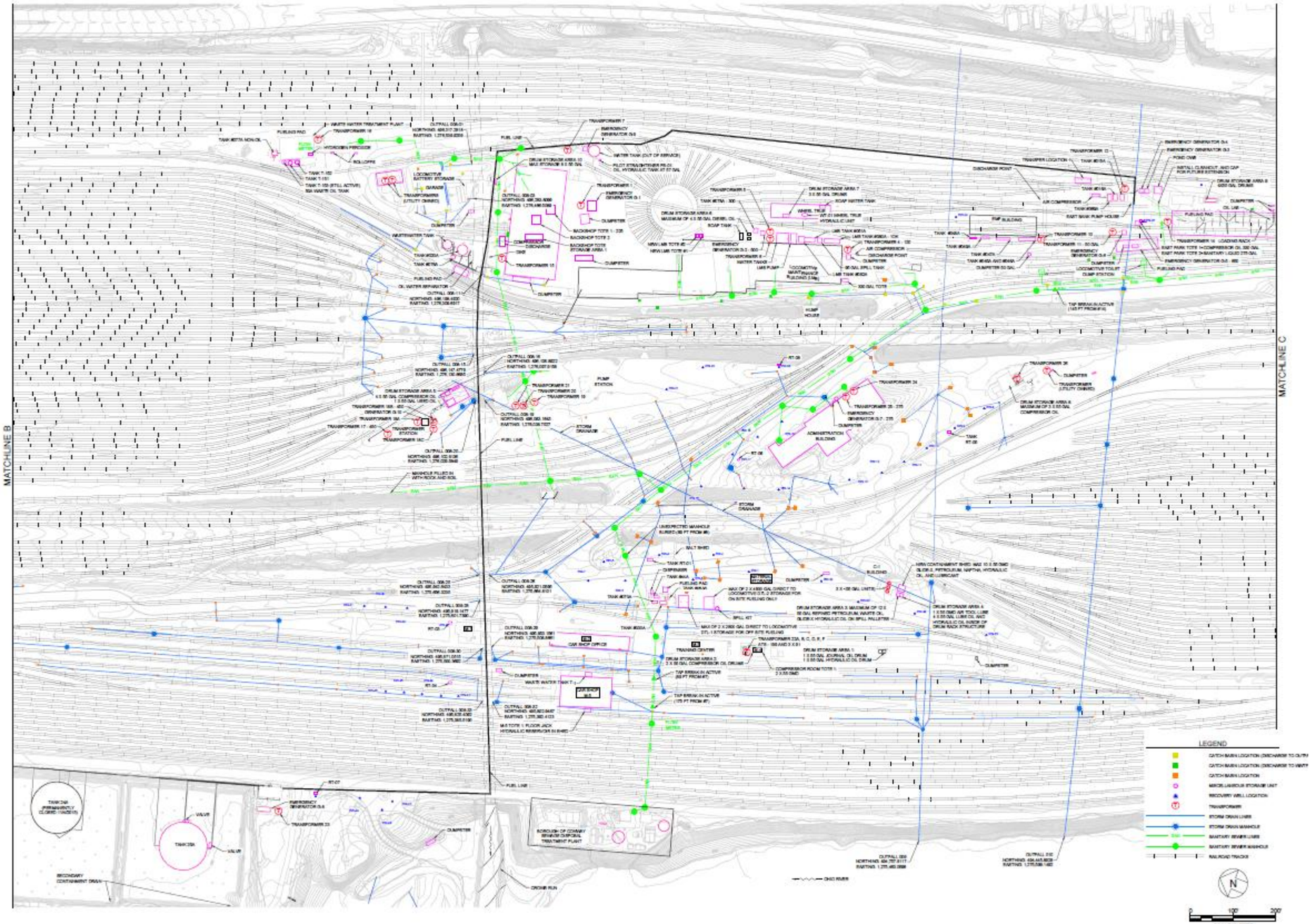
NSRC Conway Site Plan (Figure 2b)



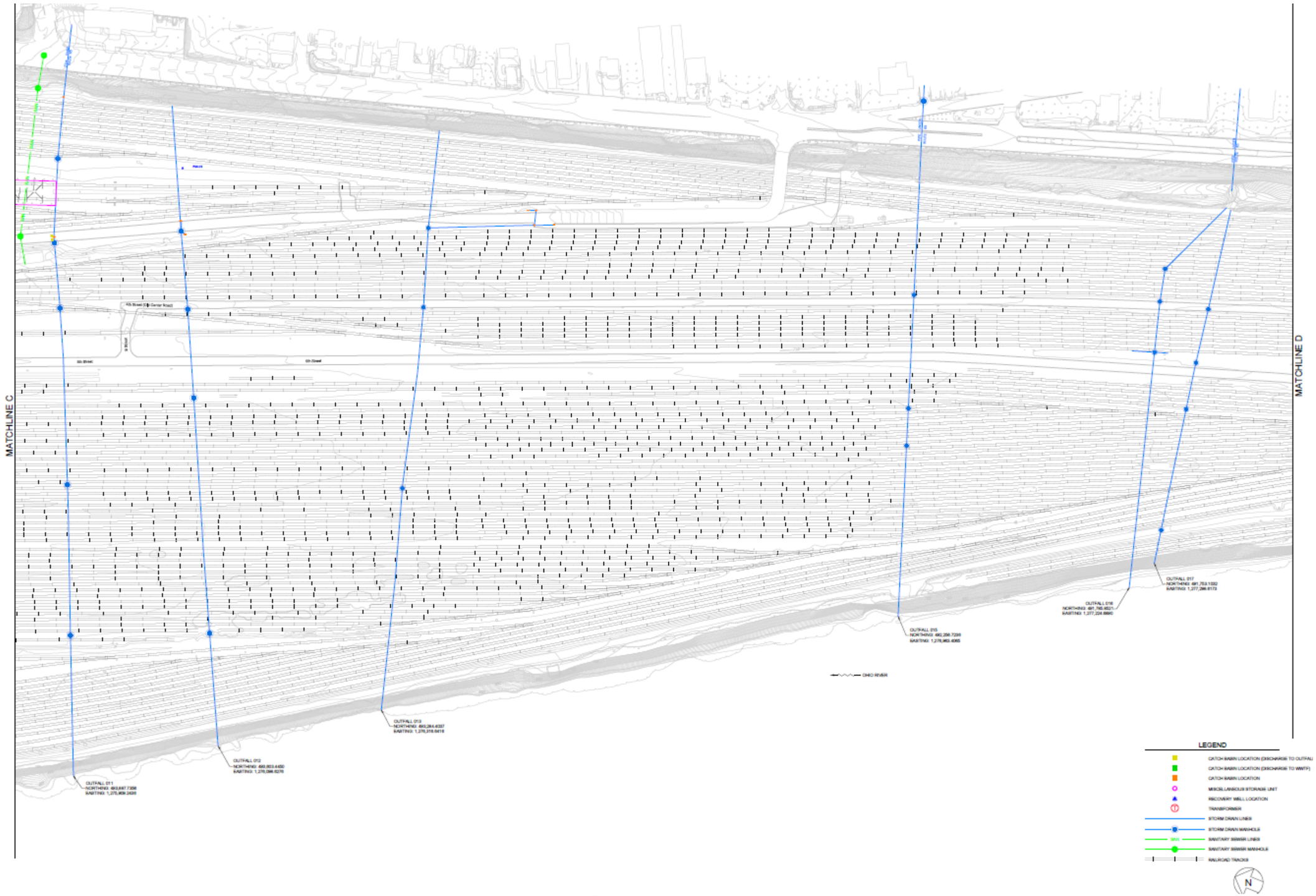
NSRC Conway Site Plan (Figure 3)



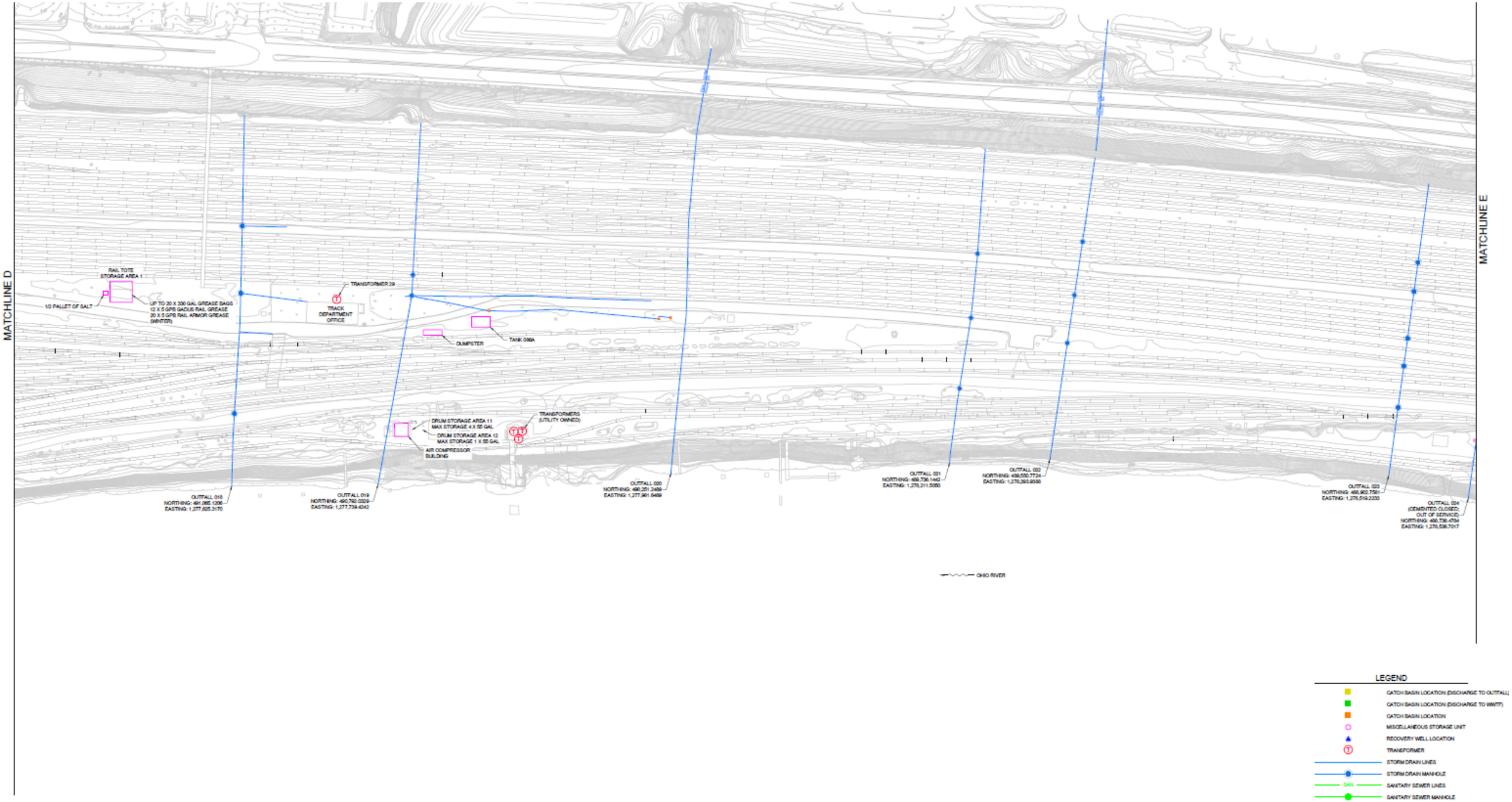
NSRC Conway Site Plan (Figure 4)



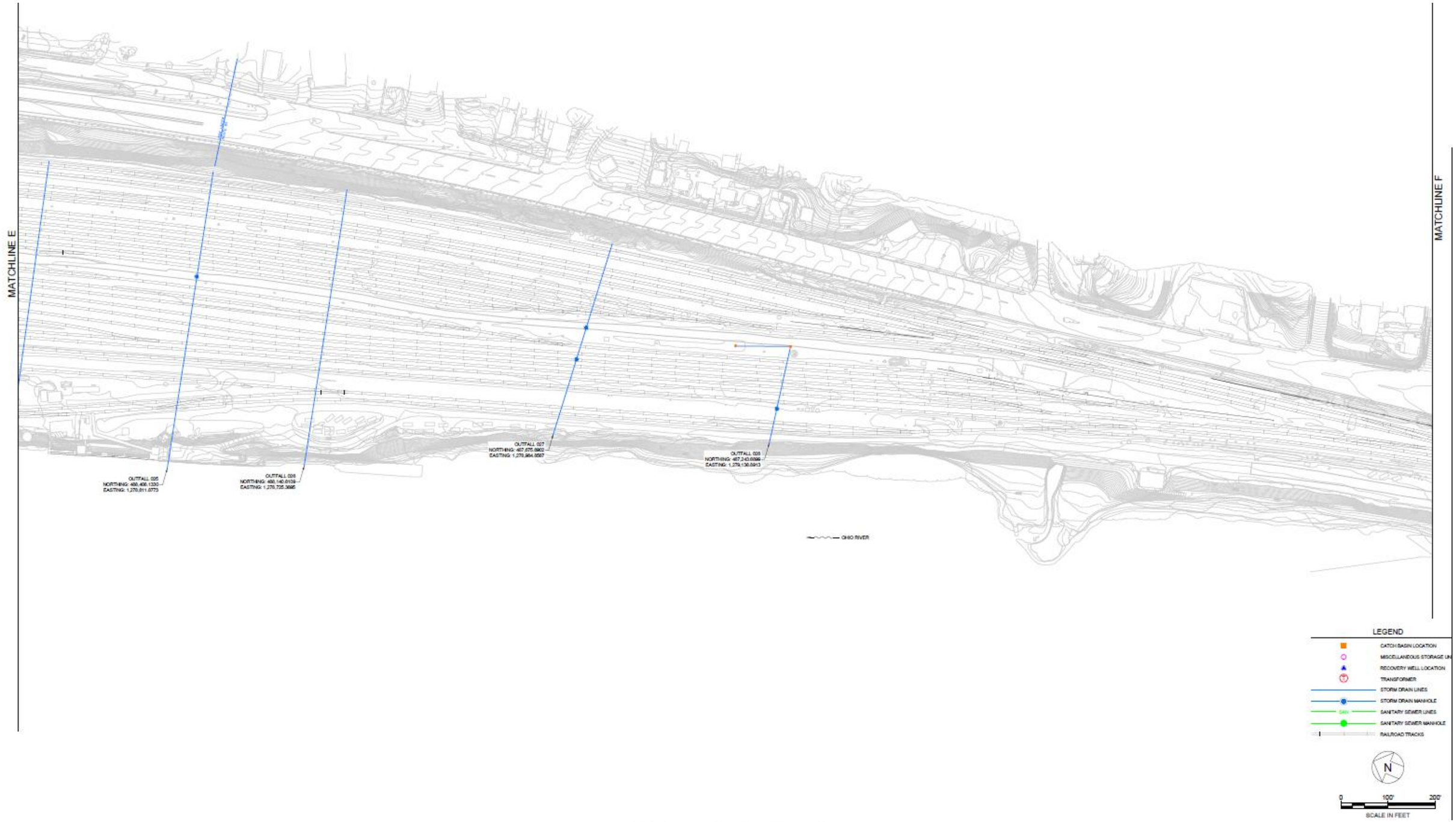
NSRC Conway Site Plan (Figure 5)



NSRC Conway Site Plan (Figure 6)



NSRC Conway Site Plan (Figure 7)



NSRC Conway Site Plan (Figure 8)

NSRC Conway Site Plan (Figure 9)