

APPENDIX B – ANNULAR PRESSURE AND PULL FORCE ANALYSES

Project Name Middlesex Interceptor, Virginia
10" HDPE (DIPS/DR7)
 Location: (Urbanna River Crossing

Date 7/8/2020
 By D Sackett Checked By J Williams
 Revision 1

Drilling Parameters

Drill Bit Diameter	10	in.
Pilot Hole Diameter	12.0	in.
Drill Pipe Diameter	5	in.
Pumping Rate	200	gpm

Drilling Fluid Properties

Unit Weight	9.5	lbs./gal.
Viscosity	20	cP
Yield Point	28	lbs./100 ft ²
Velocity	0.69	fps

HDD Design Geometry

Horizontal Length	2,019	ft.
Entry Angle	12	°
Exit Angle	14	°
Entry Vertical Radius	1000	ft.
Exit Vertical Radius	1000	ft.

HDD Design Points and Elevations

		Station
Entry Point	5	10+00
PC-1	-20	11+09
PT-1	-40	13+17
PC-2	-40	14+25
PT-2	-40	22+68
PC-3	-40	26+01
PT-3	-10	28+43
Exit Point	30	30+19

Soil Characterization - Subaqueous Portion

Geologically Recent Alluvial Formation
 Silty Sand to Fine Sand with few clay layers
 Interpreted as LOOSE silty fine SAND **SM**

Unit Weight	107	pcf
Friction Angle	28	deg.
Cohesion	0	psf
Poissons Ratio	0.5	
Elastic Modulus	175,000	psf

Soil Characterization - Onshore Portion

Geologically Older Alluvial Formation - probable Tabb Fm - Sedgefield Member
 Silty Sand to Fine Sand with few clay layers
 Interpreted as LOOSE to MED DENSE silty fine SAND **SM**

Unit Weight	115	pcf
Friction Angle	30	deg.
Cohesion	0	psf
Poissons Ratio	0.5	
Elastic Modulus	250,000	psf

From: Soil Design Parameters for Sound Barrier Walls, Retaining Walls and Non-Critical Slopes, Virginia Department of Transportation, April 14, 2011

3. Coastal Plain Physiographic Province

The Coastal Plain comprises a "wedge" of non-consolidated soils which have been deposited east of the Fall Line (roughly east of I-95). This wedge of soils consists of interbedded sand, silt, and clay that gradually thickens towards the east and is underlain by crystalline rocks of the Piedmont Province at depths of 300 to 500 feet near the Potomac River. Terraces of sand and gravel (up to 60 feet thick) are often encountered over Cretaceous Age ("marine") clays just east of the Fall Line. "Marine" clays are classified as Problem Soils by Fairfax County due to their potential for slope instability and shrink-swell characteristics.

Stratum A - Alluvial - Alluvial deposits can be either fine- or coarse-grained near surface soils that have been deposited by streams, rivers or in a depositional manner from higher elevations with homogeneous structures. These soils are generally non-plastic to medium plasticity and are classified as CL, ML, SP, SM with minor amounts of CH, MH, SC and GP. Typical SPT N₆₀ values are less than 15 bpf. Typical thickness is 0 to 20 feet. This stratum may not be present in all areas.

From: geotechnicalinfo.com
 Young's modulus (Elastic Modulus)

Soil	E _s (tsf)
very soft clay	5 - 50
soft clay	50 - 200
medium clay	200 - 500
stiff clay, silty clay	500 - 1000
sandy clay	250 - 2000
clay shale	1000 - 2000
loose sand	100 - 250
dense sand	250 - 1000
dense sand and gravel	1000 - 2000
silty sand	250 - 2000

Table 1A: Typical Engineering Design Properties (Alluvial Soils)

Sub-Stratum	SPT N ₆₀ Value (bpf)	Cohesion ¹ , c (psf)	Friction Angle, φ (degrees)	Moist Unit Weight ² (pcf)	Saturated Unit Weight ^{3,4} (pcf)
A-I	≤2	Lab. test	Lab. test	Lab. test	Lab. test
A-I	≤5	50 (2.4 kPa)	28	100 (16 kN/m ³)	107 (17.1 kN/m ³)
A-II	>5≤20	50 (2.4 kPa)	30	108 (17.3 kN/m ³)	115 (18.4 kN/m ³)
A-III	>20	50 (2.4 kPa)	32	115 (18.4 kN/m ³)	122 (19.5 kN/m ³)

Notes:

- Cohesion to be neglected below the ground water table
- Natural condition, above the groundwater table
- Saturated condition, below the groundwater table
- Submerged (or buoyant) unit weight = Saturated unit weight - Unit weight of water

Urbanna Creek HDD Crossing
Annular Pressure Estimate



10" Drill Bit
5" Drill Pipe
9.5 ppg Drilling Fluid

Project Name Middlesex Interceptor, Virginia
8" FPVC (DIPS/DR18)
 Location: Piankatank River Crossing

Date 7/8/2020
 By D Sackett Checked By
 Revision 1

Drilling Parameters

Drill Bit Diameter	10	in.
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Yield Point	28	lbs./100 ft ²
Velocity	0.69	fps

HDD Design Geometry

Horizontal Length	2,901	ft.
Entry Angle	12	°
Exit Angle	16	°
Entry Vertical Radius	1000	ft.
Exit Vertical Radius	1000	ft.

HDD Design Points and Elevations

		Station
Entry Point	4	0+00
PC-1	-72	3+66
PT-1	-95	5+74
PC-2	-95	18+62
PT-2	-95	21+08
PC-3	-95	22+97
PT-3	-55	25+72
Exit Point	39	29+01

Soil Characterization

Geologically Recent Alluvial Formation
 Silty Sand to Fine Sand with few clay layers
 Interpreted as MEDIUM DENSE silty fine SAND

Unit Weight	115	pcf
Friction Angle	30	deg.
Cohesion	0	psf
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sandy clay	250 - 2000
clay shale	1000 - 2000
loose sand	100 - 250
dense sand	250 - 1000
dense sand and gravel	1000 - 2000
silty sand	250 - 2000

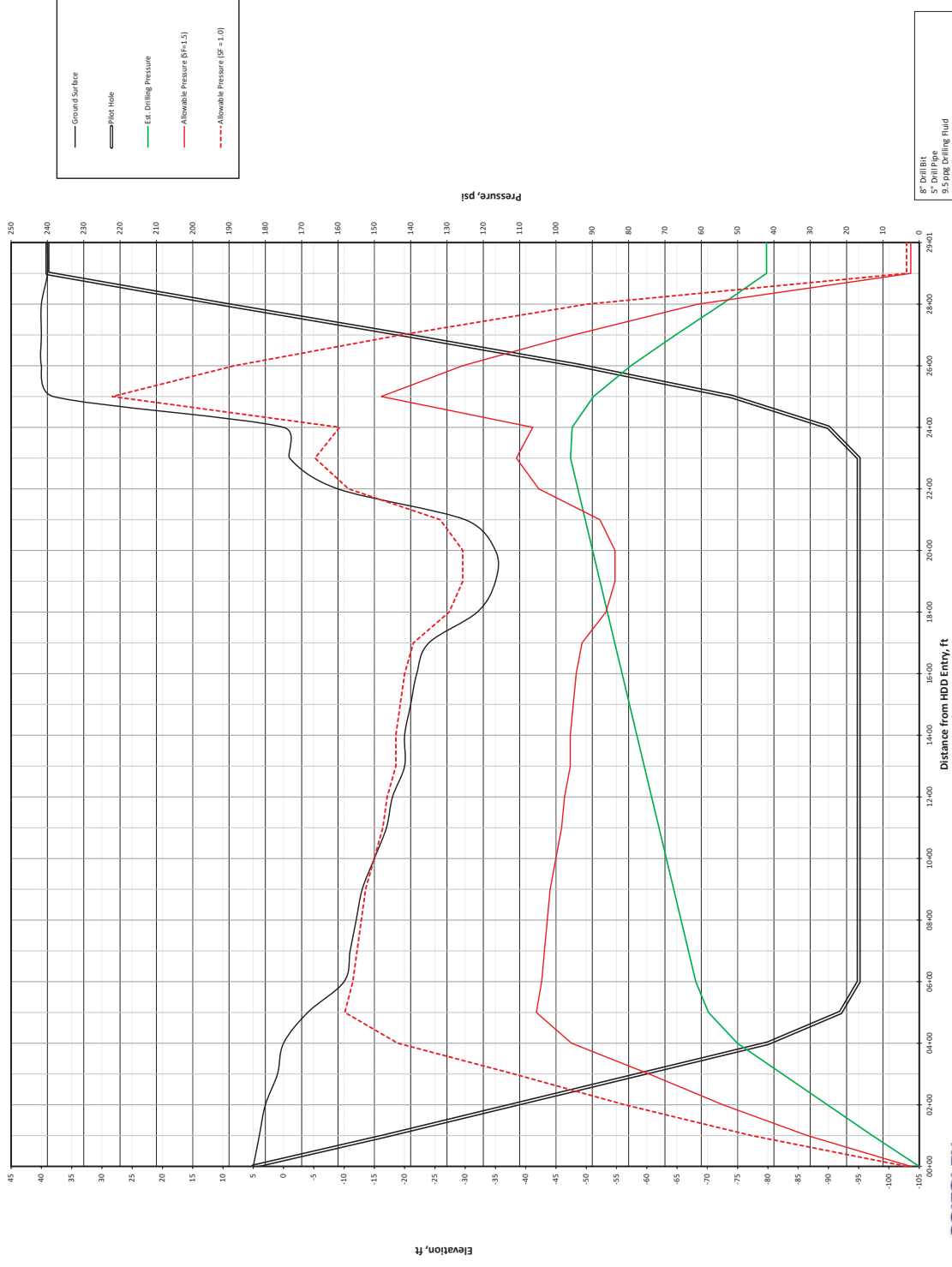
Station	00+00	01+00	02+00	03+00	04+00	05+00	06+00	07+00	08+00	09+00	10+00	11+00	12+00	13+00	14+00	15+00	16+00	17+00	18+00	19+00	20+00	21+00	22+00	23+00	24+00	25+00	26+00	27+00	28+00	29+00	29+01		
Length	0	100	100	200	300	400	500	600	700	800	900	1,000	1,100	1,200	1,300	1,400	1,500	1,600	1,700	1,800	1,900	2,000	2,100	2,200	2,300	2,400	2,500	2,600	2,700	2,800	2,900	2,901	
Ground El.	5	4	3	1	0	-4	-10	-11	-12	-13	-15	-17	-18	-20	-22	-22	-22	-24	-24	-32	-35	-35	-30	-9	-1	0	38	40	40	40	39	39	
GW El.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	5	7	7	7		
Pipe El.	5	-17	-38	-59	-80	-92	-95	-95	-95	-95	-95	-95	-95	-95	-95	-95	-95	-95	-95	-95	-95	-95	-95	-95	-95	-90	-74	-49	-20	30	39	39	
H _{base}	0	22	43	64	85	97	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	95	54	25	0	0	0	0	
H _{tot}	1	21	41	60	80	88	85	84	83	82	80	78	77	75	74	73	73	71	71	63	60	60	65	66	86	94	90	112	89	60	30	1	1
H _{rad}	0	17	38	59	80	92	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	90	77	54	27	0	0	0	0	
P_{min} - Calculated	0.0	12.9	25.3	37.7	50.1	58.0	61.5	63.5	65.6	67.6	69.6	71.7	73.7	75.7	77.7	79.8	81.8	83.8	85.9	87.9	89.9	91.9	94.0	96.0	98.6	89.7	79.4	67.1	54.3	42.0	42.1		

0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	
2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	
115.0	154.2	234.3	323.6	408.9	482.8	547.0	601.4	646.8	693.2	740.6	789.0	838.4	888.8	940.2	992.6	1046.0	1100.4	1155.8	1212.2	1269.6	1328.0	1387.4	1447.8	1509.2	1571.6	1635.0	1700.4	1767.8	1837.2	1908.6	1982.0	2058.4		
0.0	1060.8	2371.2	3811.6	4992.0	5740.8	5928.0	5928.0	5928.0	5928.0	5928.0	5928.0	5928.0	5928.0	5928.0	5928.0	5928.0	5928.0	5928.0	5928.0	5928.0	5928.0	5928.0	5928.0	5928.0	5928.0	5928.0	5928.0	5928.0	5928.0	5928.0	5928.0	5928.0		
115	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115		
52.6	52.6	52.6	52.6	52.6	52.6	52.6	52.6	52.6	52.6	52.6	52.6	52.6	52.6	52.6	52.6	52.6	52.6	52.6	52.6	52.6	52.6	52.6	52.6	52.6	52.6	52.6	52.6	52.6	52.6	52.6	52.6	52.6		
62.4	62.4	62.4	62.4	62.4	62.4	62.4	62.4	62.4	62.4	62.4	62.4	62.4	62.4	62.4	62.4	62.4	62.4	62.4	62.4	62.4	62.4	62.4	62.4	62.4	62.4	62.4	62.4	62.4	62.4	62.4	62.4	62.4		
0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50		
0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	
1.73	1.73	1.73	1.73	1.73	1.73	1.73	1.73	1.73	1.73	1.73	1.73	1.73	1.73	1.73	1.73	1.73	1.73	1.73	1.73	1.73	1.73	1.73	1.73	1.73	1.73	1.73	1.73	1.73	1.73	1.73	1.73	1.73	1.73	
SM	SM	SM	SM	SM	SM	SM	SM	SM	SM	SM	SM	SM	SM	SM	SM	SM	SM	SM	SM	SM	SM	SM	SM	SM	SM	SM	SM	SM	SM	SM	SM	SM	SM	
30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
250,000	250,000	250,000	250,000	250,000	250,000	250,000	250,000	250,000	250,000	250,000	250,000	250,000	250,000	250,000	250,000	250,000	250,000	250,000	250,000	250,000	250,000	250,000	250,000	250,000	250,000	250,000	250,000	250,000	250,000	250,000	250,000	250,000	250,000	
83,333	83,333	83,333	83,333	83,333	83,333	83,333	83,333	83,333	83,333	83,333	83,333	83,333	83,333	83,333	83,333	83,333	83,333	83,333	83,333	83,333	83,333	83,333	83,333	83,333	83,333	83,333	83,333	83,333	83,333	83,333	83,333	83,333	83,333	
3.5	46.1	81.0	111.5	143.5	158.1	159.9	154.8	153.6	152.4	150.0	147.7	146.5	144.1	141.7	139.2	137.4	135.6	133.9	132.3	130.7	129.1	127.5	125.9	124.3	122.7	121.1	119.5	117.9	116.3	114.7	113.1	111.5		
2.3	30.8	54.0	74.4	95.7	105.4	104.0	103.2	102.4	101.6	100.0	98.4	97.7	96.1	95.2	94.4	93.8	93.8	93.8	93.8	93.8	93.8	93.8	93.8	93.8	93.8	93.8	93.8	93.8	93.8	93.8	93.8	93.8		
1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5		

USCS Classification
 Soil Friction Angle, ϕ
 Cohesion Coefficient, c (lb/ft²)
 Poisson Ratio, ν
 Elastic Modulus, E (lb/ft²)
 Shear Modulus, G (lb/ft²)

P_{max} with Safety Factor
 Safety Factor
 Granular: 1.5
 Cohesive: 2.0

Plinkatank Creek HDD Crossing
 Annular Pressure Estimate



— Ground Surface
 - - - Pilot Hole
 — Est. Drilling Pressure
 — Allowable Pressure (SF=1.5)
 - - - Allowable Pressure (SF=1.0)

SR Drill Bit
 5" Drill Pipe
 9.5 ppg Drilling Fluid

HDPE PIPE PULL LOAD CALCULATION

Project: Middlesex Interceptor
Designed by: D Sackett
Reviewed by: J Williams

Crossing: Urbanna Creek
Pipe Specification: **10" HDPE (DIPS/DR7)**
Date: 8-Jul-20
Revision: 1

PIPE CHARACTERISTICS

Dimensional Ratio (DR)	7
Outside Diameter, D	11.100 in.
Wall Thickness, t	1.586 in.
Inside Diameter, ID	7.928 in.
Allowable Tensile Stress, σ_{st}	1,150 psi

Constants and Other Variables

Modulus of Elasticity, E	63,000 psi
Poisson's Ratio, ν	0.45
Unit Weight of Water, γ_w	62.4 lb/ft ³
Unit Weight of Drilling Fluid, γ_{df}	9.5 lb/gal
	71.06 lb/ft ³

Coefficient of Friction - Pipe on Rollers, μ_r	0.20
Coefficient of Friction - Pipe/Soil, μ_a	0.40
Fluid Drag Coefficient - Pipe/Bentonite, μ_b	0.0125

Buoyancy Control	
Pipe Filled or Empty	Filled with Water

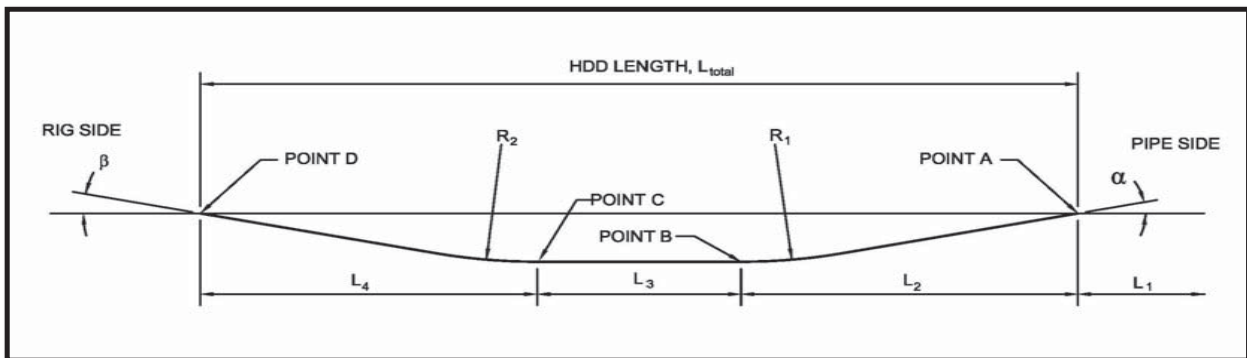
Pipe Unit Weight, W_{empty}	20.70 lb/ft
Pipe Weight Water Filled, W_{filled}	41.21 lb/ft
Buoyant Force, B	47.75 lb/ft

Net Buoyant Force on Pipe, $F_{net} = W - B$	
$F_{net\ empty} = W_{empty} - B$	-27.05 lb/ft
$F_{net\ filled} = W_{filled} - B$	-6.54 lb/ft

HDD PROFILE DATA

Total Horizontal Length, L_{total}	2,019 ft.
Depth at Point B	40 ft.
Depth at Point C	40 ft.
Entry Angle (Pipe), α	12 °
Exit Angle, β	14 °
Radius of Curvature, R_1	1,000 ft.
Radius of Curvature, R_2	1,000 ft.

L_1 = Length of Additional Pipe	75 ft.
L_2 = Length to Reach Depth	317 ft.
L_3 = Length of Straight Tangent	1,284 ft.
L_4 = Length to Reach Surface	418 ft.
Angle of Curved Section, θ_1	12 °
Angle of Curved Section, θ_2	14 °
Angle of Straight Section, θ_s	0 °



Estimated Pull Force and Pipe Stresses						
	Fluid Drag - Pipe in Bentonite	HDD Pull Load	Total Pull Force, lbs.	Average Tensile Stress, psi	Bending Stress, psi	Peak Tensile Stress, psi
POINT A	0	9,040	9,040	191	0	191
POINT B	1,657	8,959	10,617	224	29	253
POINT C	8,370	6,293	14,663	309	29	338
POINT D	10,556	6,345	16,900	357	0	357

Allowable Tensile Load, ATL = **54,507**

$ATL = \sigma_{st} \pi D^2 (1/DR - 1/DR^2)$

HDPE PIPE PULL LOAD CALCULATION

Project: Middlesex Interceptor
Designed by: D Sackett
Reviewed by: J Williams

Crossing: Piankatank River
Pipe Specification: **8" FPVC (DIPS/DR18)**
Date: 8-Jul-20
Revision: 1

PIPE CHARACTERISTICS

Dimensional Ratio (DR)	18		Modulus of Elasticity, E	400,000 psi
Outside Diameter, D	9.050 in.		Poisson's Ratio, ν	0.38
Wall Thickness, t	0.500 in.		Unit Weight of Water, γ_w	62.4 lb/ft ³
Inside Diameter, ID	7.980 in.		Unit Weight of Drilling Fluid, γ_{df}	9.5 lb/gal
Allowable Tensile Stress, σ_{st}	2,800 psi			71.06 lb/ft ³

Constants and Other Variables

Coefficient of Friction - Pipe on Rollers, μ_r	0.20
Coefficient of Friction - Pipe/Soil, μ_a	0.40
Fluid Drag Coefficient - Pipe/Bentonite, μ_b	0.0125

Buoyancy Control	
Pipe Filled or Empty	Filled with Water

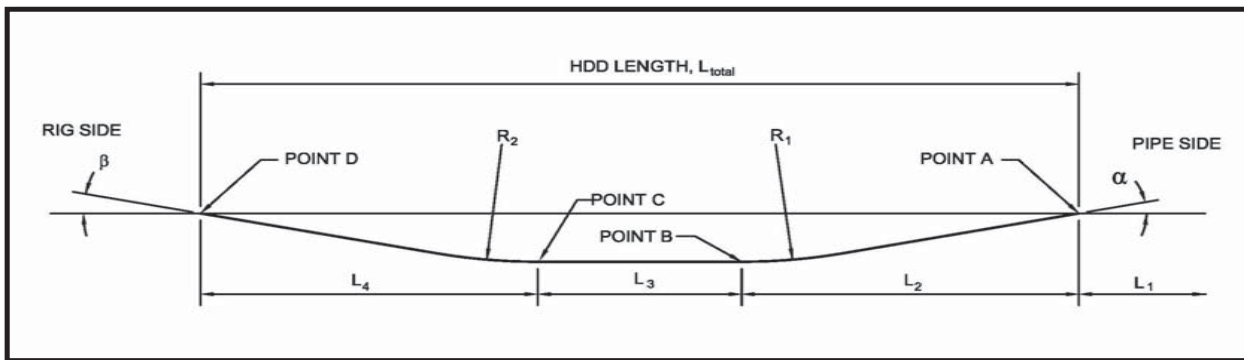
Pipe Unit Weight, W_{empty}	8.75 lb/ft
Pipe Weight Water Filled, W_{filled}	27.66 lb/ft
Buoyant Force, B	31.74 lb/ft

Net Buoyant Force on Pipe, $F_{net} = W - B$	
$F_{net\ empty} = W_{empty} - B$	-22.99 lb/ft
$F_{net\ filled} = W_{filled} - B$	-4.09 lb/ft

HDD PROFILE DATA

Total Horizontal Length, L_{total}	2,901 ft.
Depth at Point B	100 ft.
Depth at Point C	100 ft.
Entry Angle (Pipe), α	12 °
Exit Angle, β	16 °
Radius of Curvature, R_1	1,000 ft.
Radius of Curvature, R_2	1,000 ft.

L_1 = Length of Additional Pipe	100 ft.
L_2 = Length to Reach Depth	574 ft.
L_3 = Length of Straight Tangent	1,723 ft.
L_4 = Length to Reach Surface	604 ft.
Angle of Curved Section, θ_1	12 °
Angle of Curved Section, θ_2	16 °
Angle of Straight Section, θ_s	0 °



Estimated Pull Force and Pipe Stresses						
	Fluid Drag - Pipe in Bentonite	HDD Pull Load	Total Pull Force, lbs.	Average Tensile Stress, psi	Bending Stress, psi	Peak Tensile Stress, psi
POINT A	0	5,476	5,476	383	0	383
POINT B	2,447	5,392	7,839	548	151	699
POINT C	9,791	4,790	14,581	1,019	151	1,170
POINT D	12,366	5,614	17,979	1,256	0	1,256

Allowable Tensile Load, $ATL = 37,801$
 $ATL = \sigma_{st} \pi D^2 (1/DR - 1/DR^2)$

Appendix E: Cyclical Loading Analysis of PVC Pipeline

FPVC Cyclical Loading Analysis

An analysis of cyclical loading on the proposed 8-inch FPVC (DIPS/DR14) pipe proposed for the HDD installation across the Piankatank River was performed to verify DR 14 FPVC pipe was sufficient to withstand the cyclical loading anticipated through the lifetime of the pipeline. Cyclical loading analysis was performed in accordance with the methodology presented in the UniBell Handbook of PVC Pipe, and is presented below.

Short Term Design Pressure:

Maximum short term design pressure was calculated as indicated below.

$$P_{max} = P_{operating\ pressure} + \Delta V(P'_s)$$

Where:

$$P_{max} = \text{Maximum Design Pressure (psi)}$$

$$P_{operating\ pressure} = \text{Operating Pressure (psi)} = 195\ psi$$

$$\Delta V = \text{Maximum Velocity Change } \left(\frac{ft}{s}\right) = (300\text{gpm}/448.83\text{ft/s})/(\pi(7.7''/2 * 12'')^2) = 2.07\ ft/s$$

$$P'_s = \text{Surge for } 1\frac{ft}{s}\ \text{Velocity Change } \left(\frac{ft}{s}\right) = 19.8\ \text{for DR 14 pipe}$$

$$P_{max} = 195\ psi + 2.07(19.8) = 236\ psi$$

*Note based on modeling results maximum operating pressure at 300 gpm is 195 psi at the HDD crossing.

DR 14 PVC has a short term pressure rating of 395 psi per Uni-Bell Handbook of PVC. Short term design pressure is below the short term pressure rating of DR 14 PVC, so DR 14 is sufficient to withstand maximum anticipated short term pressures.

Cyclical Loading Analysis:

The required average hoop stress was calculated as indicated below.

$$\sigma_{avg} = \frac{(P_{max} + P_{min})(DR - 1)}{4}$$

Where:

$$\sigma_{avg} = \text{required average hoop stress (psi)}$$

$$P_{max} = \text{maximum recurring pressure (psi)} = 195\ psi$$

$$P_{min} = \text{minmum recurring pressure (psi)} = 72\ psi$$

Middlesex Interceptor System Program Phase II (MP013700)

$$DR = \text{Dimension Ratio of Pipe} = 14$$

$$\sigma_{avg} = \frac{(195 \text{ psi} + 72 \text{ psi})(14 - 1)}{4} = 868 \text{ psi}$$

*Note static pressure in force main at crossing is 72 PSI, modeling results indicate maximum operating pressure at 300 gpm is 195 psi at the HDD crossing.

The required design stress amplitude was calculated as indicated below.

$$\sigma_{amp} = \frac{(P_{max} - P_{min})(DR - 1)}{4}$$

Where:

$$\sigma_{amp} = \text{required design stress amplitude (psi)}$$

$$P_{max} = \text{maximum recurring pressure (psi)} = 195 \text{ psi}$$

$$P_{min} = \text{minmum recurring pressure (psi)} = 72 \text{ psi}$$

$$DR = \text{Dimension Ratio of Pipe} = 14$$

$$\sigma_{amp} = \frac{(195 \text{ psi} - 72 \text{ psi})(14 - 1)}{4} = 400 \text{ psi}$$

*Note static pressure in force main at crossing is 72 PSI, modeling results indicate maximum operating pressure at 300 gpm is 195 psi at the HDD crossing.

The total number of anticipated cycles (C') was caculated as indicated below assuming a 50 year design life and a 75 year design life, with 6 pump starts and stops per hour at each of the two pump stations influencing pressures in the HDD crossing.

$$C' = \left(\left(\frac{\text{starts}}{\text{hour}} + \frac{\text{stops}}{\text{hour}} \right) \right) * \frac{24 \text{ hrs}}{\text{day}} * 365 \frac{\text{Days}}{\text{year}} * 50 \text{ years}$$

$$C' = \left(\left(\frac{6}{\text{hour}} + \frac{6}{\text{hour}} \right) \right) * \frac{24 \text{ hrs}}{\text{day}} * 365 \frac{\text{Days}}{\text{year}} * 50 \text{ years} = 5,256,000 \text{ cycles}$$

$$C' = \left(\left(\frac{6}{\text{hour}} + \frac{6}{\text{hour}} \right) \right) * \frac{24 \text{ hrs}}{\text{day}} * 365 \frac{\text{Days}}{\text{year}} * 75 \text{ years} = 7,884,000 \text{ cycles}$$

The predicted cycles to failure of the DR 14 PVC pipe was determined using the UniBell Design Chart for the Cyclical Strength of PVC Pressure Pipe and the calculated required average hoop stress (1027 psi) and the calculated required design stress amplitude (426 psi). The predicted cycles to failure for the

Middlesex Interceptor System Program Phase II (MP013700)

proposed installation was determined to be approximately 8,500,000 cycles as shown in Figure E-1. Since the predicted cycles to failure exceeds the total number of anticipated cycles during the life cycle of the pipeline at both 50 and 75 year design life cycle, DR 14 PVC is sufficient.

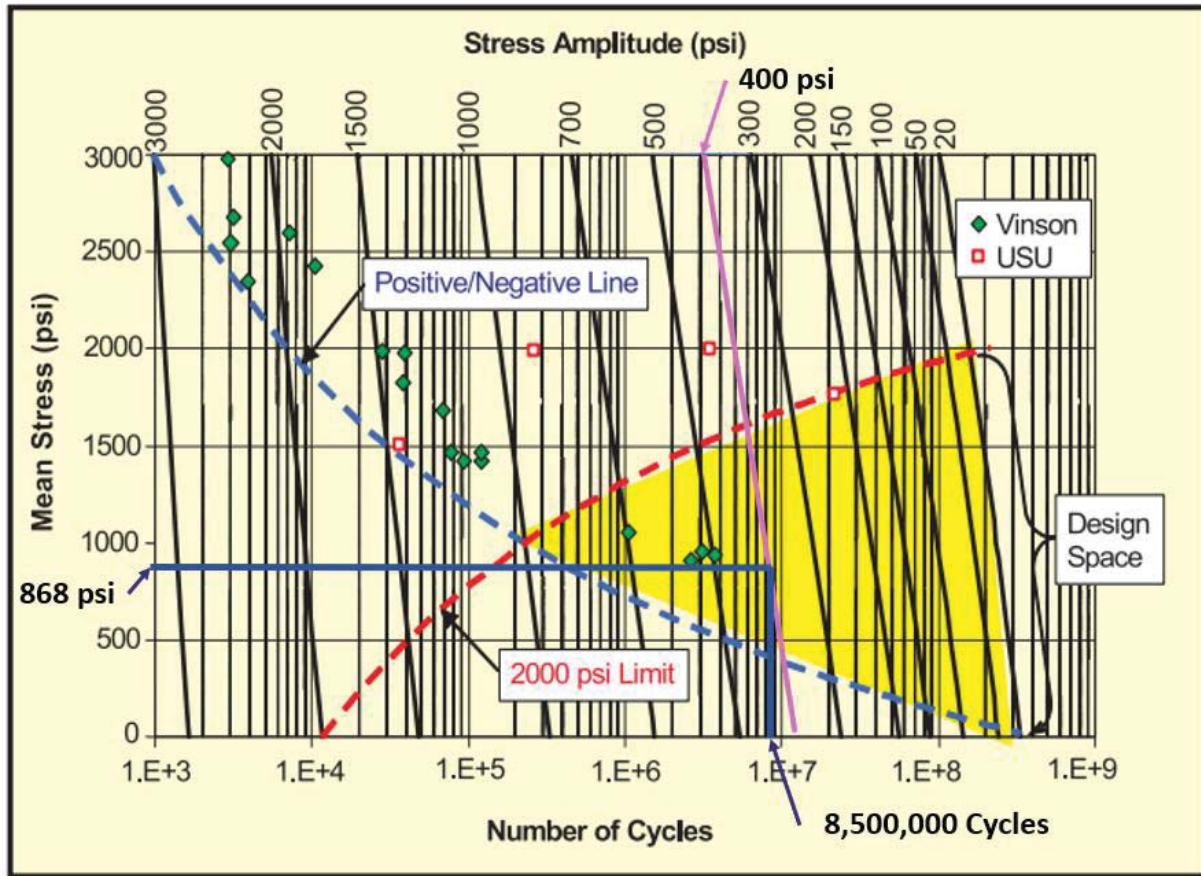


Figure E-1: Design Chart for Cyclic Strength of PVC Pressure Pipe

Appendix F: Flow Projections

2030 Flow Projections						
Development Name	Flow Factor	Unit Type	No. of Units	ADF (gpd)	PF	Peak Flow (gpd)
Urbanna TP (metered)						
Bonner Road PS (Town of Urbanna)		SRU	175	38,786	1.8	69,570
Bethpage Campground		RV	400	7,705	3.3	25,722
sub-total:				46,491		95,293
Central Middlesex TP (Saluda)						
Metered CM Plant Flow				13,968		36,000
Future				-	3.0	-
sub-total:				13,968		36,000
Bethpage Campground						
Existing RV Units	60	RV	570	34,200	2.5	85,500
Phase I	60	RV	200	12,000	2.5	30,000
Phase II	60	RV	0	-	2.5	-
Phase I	100	MH	175	17,500	2.5	43,750
Phase II	100	MH	0	-	2.5	-
Retail	0.2	SF	-	-	3.0	-
sub-totals:				63,700		159,250
Kilmer Peninsula						
Existing Development (Residential)	150	SRU	183	27,450	2.5	68,625
Future (Residential)	150	SRU	-	-	2.5	-
sub-total:				27,450		68,625
Cook's Corner						
Phase 1: Residential	150	SRU	24	3,600	2.5	9,000
Phase 1: Microbrewery	1	Effluent	7000	7,000	3.0	21,000
sub-total:				10,600		30,000
Phase 2: Residential	150	SRU	7	1,050	2.5	2,625
Phase 2: Light Commercial	150	SF	9	1,350	3.0	4,050
Phase 2: Municipal	250	SF	5	1,250	3.0	3,750
sub-total:				3,650		10,425
Phase 3: Ex. Residential	150	SRU	0	-	2.5	-
Phase 3: Ex. Light Commercial	300	SF	0	-	3.0	-
Phase 3: Future Mix Use	150	SF	0	-	3.0	-
sub-total:				-		-
SA total:				14,250		40,425
Christ's Church						
Existing Development Residential	150	SFH	5	750	2.5	1,875
Existing School - Educational	10	Students/Faculty	1000	10,000	3.0	30,000
Existing Church/Religious Assembly	10	Seat	100	1,000	3.0	3,000
sub-totals:				11,750		34,875
Topping						
Existing for Pump Station #1						
Residential	150	SRU	50	7,500	2.5	18,750
Commercial	300	SF	15	4,500	3	13,500
Grey's Point Camp Sites *	60	camp site	772	46,320	2.5	115,800
Municipal	125	Units	2	250	3	750
sub-total:				58,570		148,800
Existing for Pump Station #2						
Residential	150	SRU	10	1,500	2.5	3,750
Restaurants	10	Seat	110	1,100	3.0	3,300
Marina	10	Boat Slips	200	2,000	2.5	5,000
sub-total:				4,600		12,050
Existing for Pump Station #3						
Residential	150	SRU	15	2,250	2.5	5,625
sub-total:				2,250		5,625
Future						
Residential	150	SRU	0	-	2.5	-
Grey's Point Camp Sites	60	Camp sites	0	-	2.5	-
sub-total:				-		-
SA Total:				65,420		166,475
Locust Hill						
Pump Station #1						
Ex. Elementary School	10	Student/Faculty	400	4,000	2.5	10,000
Ex. Middle School	10	Student/Faculty	500	5,000	2.5	12,500
sub-total:				9,000		22,500
Pump Station #2						
Commercial	300	SF	10	3,000	3.0	9,000
Pump Station #3						
Commercial	300	SF	0	-	3.0	-
SA Total flow:				12,000		31,500
Deltaville						
Stingray SA Existing Residential	150	SRU	199	29,850	2.5	74,625
Stingray SA Future Residential	150	SRU	0	-	2.5	-
sub-total:				29,850		74,625
Fishing Bay Existing Residential	150	SRU	85	12,750	2.5	31,875
Fishing Bay Future Residential	150	SRU	0	-	2.5	-
sub-total:				12,750		31,875
Timberneck Existing Residential	150	SRU	165	24,750	2.5	61,875
Timberneck Future Residential	150	SRU	0	-	2.5	-
sub-total:				24,750		61,875
General Puller Existing Residential	150	SRU	28	4,200	2.5	10,500
General Puller Future Residential	150	SRU	0	-	2.5	-
sub-total:				4,200		10,500
Deltaville total flow:				71,050		182,625
Hartfield						
Pump Station #1						
Commercial	300	SF	15	4,500	3.0	14,400
Residential	150	SRU	2	300	2.5	750
sub-total:				5,100		15,150
Pump station #2						
Commercial	300	SF	8	2,400	3.0	7,200
Residential	150	SRU	2	300	2.5	750
sub-total:				2,700		7,950
Pump station #3						
Commercial	300	SF	0	-	3.0	-
Residential	150	SRU	0	-	2.5	-
sub-total:				-		-
Hartfield total flow:				7,800		23,100
Middlesex County Total Flow (gpd):						
				335,879		838,168
Mathews County						
Existing (pumping Rate)				100,000	2.5	250,000
Future				-	-	-
sub-total:				100,000		250,000
Gloucester Co						
Existing				-	-	-
Future				-	2.5	-
sub-total:				-		-
Potential Total Flow in the Mathews 6" FM						
				435,879		1,088,168

2040 Projected Flows (Full Build Out)						
Development Name	Flow Factor	Unit Type	No. of Units	ADF (gpd)	PF	Peak Flow (gpd)
Urbanna TP (metered)						
Bonner Road PS (Town of Urbanna)		SRU	175	38,786	1.8	69,570
Bethpage Campground		RV	400	7,705	3.3	25,722
sub-total:				46,491		95,293
Central Middlesex TP (Saluda)						
Metered CM Plant Flow				13,968		36,000
Future				11,620	3.0	34,860
sub-total:				25,588		70,860
Bethpage Campground						
Existing RV Units	60	RV	570	34,200	2.5	85,500
Phase I	60	RV	200	12,000	2.5	30,000
Phase II	60	RV	275	16,500	2.5	41,250
Phase I	100	MH	175	17,500	2.5	43,750
Phase II	100	MH	165	16,500	2.5	41,250
Retail	0.2	SF	75,000	15,000	3.0	45,000
sub-totals:				111,700		286,750
Kilmer Peninsula						
Existing Development (Residential)	150	SRU	183	27,450	2.5	68,625
Future (Residential)	150	SRU	50	7,500	2.5	18,750
sub-total:				34,950		87,375
Cook's Corner						
Phase 1: Residential	150	SRU	24	3,600	2.5	9,000
Phase 1: Microbrewery	1	Effluent	7000	7,000	3.0	21,000
sub-total:				10,600		30,000
Phase 2: Residential	150	SRU	7	1,050	2.5	2,625
Phase 2: Light Commercial	150	SF	9	1,350	3.0	4,050
Phase 2: Municipal	250	SF	5	1,250	3.0	3,750
sub-total:				3,650		10,425
Phase 3: Ex. Residential	150	SRU	4	600	2.5	1,500
Phase 3: Ex. Light Commercial	300	SF	3	900	3.0	2,700
Phase 3: Future Mix Use	150	SF	27	4,050	3.0	12,150
sub-total:				5,550		16,350
SA total:				19,800		56,775
Christ's Church						
Existing Development Residential	150	SFH	5	750	2.5	1,875
Existing School - Educational	10	Students/Faculty	1000	10,000	3.0	30,000
Existing Church/Religious Assembly	10	Seat	100	1,000	3.0	3,000
sub-totals:				11,750		34,875
Topping						
Existing for Pump Station #1						
Residential	150	SRU	50	7,500	2.5	18,750
Commercial	300	SF	15	4,500	3	13,500
Grey's Point Camp Sites *	60	camp site	772	46,320	2.5	115,800
Municipal	125	Units	2	250	3	750
sub-total:				58,570		148,800
Existing for Pump Station #2						
Residential	150	SRU	10	1,500	2.5	3,750
Restaurants	10	Seat	110	1,100	3.0	3,300
Marina	10	Boat Slips	200	2,000	2.5	5,000
sub-total:				4,600		12,050
Existing for Pump Station #3						
Residential	150	SRU	15	2,250	2.5	5,625
sub-total:				2,250		5,625
Future						
Residential	150	SRU	30	4,500	2.5	11,250
Grey's Point Camp Sites	60	Camp sites	200	12,000	2.5	30,000
sub-total:				15,000		37,500
SA Total:				95,420		203,975
Locust Hill						
Pump Station #1						
Ex. Elementary School	10	Student/Faculty	400	4,000	2.5	10,000
Ex. Middle School	10	Student/Faculty	500	5,000	2.5	12,500
sub-total:				9,000		22,500
Pump Station #2						
Commercial	300	SF	10	3,000	3.0	9,000
Pump Station #3						
Commercial	300	SF	6	1,800	3.0	5,400
SA Total flow:				13,800		36,900
Deltaville						
Stingray SA Existing Residential	150	SRU	199	29,850	2.5	74,625
Stingray SA Future Residential	150	SRU	220	34,500	2.5	85,875
sub-total:				64,200		160,500
Fishing Bay Existing Residential	150	SRU	95	14,250	2.5	36,625
Fishing Bay Future Residential	150	SRU	123	18,450	2.5	46,125
sub-total:				32,700		82,750
Timberneck Existing Residential	150	SRU	165	24,750	2.5	61,875
Timberneck Future Residential	150	SRU	190	28,500	2.5	71,250
sub-total:				53,250		133,125
General Puller Existing Residential	150	SRU	28	4,200	2.5	10,500
General Puller Future Residential	150	SRU	39	5,700	2.5	14,250
sub-total:				9,900		24,750
Deltaville total flow:				160,050		400,125
Hartfield						
Pump Station #1						
Commercial	300	SF	15	4,500	3.0	14,400
Residential	150	SRU	2	300	2.5	750
sub-total:				5,100		15,150
Pump station #2						
Commercial	300	SF	8	2,400	3.0	7,200
Residential	150	SRU	2	300	2.5	750
sub-total:				2,700		7,950
Pump station #3						
Commercial	300	SF	1	300	3.0	900
Residential	150	SRU	6	900	2.5	2,250
sub-total:				1,200		3,150
Hartfield total flow:				9,000		26,250
Middlesex County Total Flow (gpd):						
				528,549		1,299,178
Mathews County						
Existing (pumping Rate)				100,000	2.5	250,000
Future				-		-
sub-total:				100,000		250,000
Gloucester Co						
Existing				-		-
Future				62,000	2.5	155,000
sub-total:				62,000		155,000
Potential Total Flow in the Mathews 6" FM						
				690,549		1,704,178

Appendix G: HRSD-Urbanna to Mathews Transmission Force Main Preliminary Flow Projections and Mathews Capacity Analysis Memorandum



Technical Memorandum

To:

Bambos Charalambous, PE, HRSD

Issued By:

Kimley- Horn

Date:

June 4, 2020

Revised:

December 16, 2020

Project Name.:

Middlesex Interceptor System Program
Phase II – Urbanna to Mathews
Transmission Force Main
(MP013700)

Subject:

Hampton Roads Sanitation District
Urbanna to Mathews Transmission Force Main
Preliminary Flow Projections and Mathews Capacity Analysis

Introduction

The purpose of this memo is to summarize the flow projections, model calibration approach, and preliminary Mathews capacity analysis for the Urbanna to Mathews Transmission Force Main project. This technical memo and subsequent discussions will serve as the basis of design for moving forward with the preparation of the Preliminary Engineering Report.

Flow Projections

HRSD projections for the Mathews system indicate that the system is designed for an average daily flow of 100,000 gpd (69 gpm) and a peak flow of 250,000 gpd (174 gpm). Data from the Mathews system indicates that current average daily flows are approximately 55,000 gpd (38 gpm).

Flow projections for the Middlesex corridor are based on contributing flows for each sewershed provided by HRSD. Contributing flows for each sewershed were identified by phase but not necessarily by time period, so our flow projections attempted to capture those flows in three time increments. We have identified existing (2020), interim (2030) and full build out flows. The following table summarizes the flow projections that will be used in development of the PER. Additional detailed calculations and notes are provided as an attachment to this memo, as well as graphics showing the location of the flows on an aerial image.



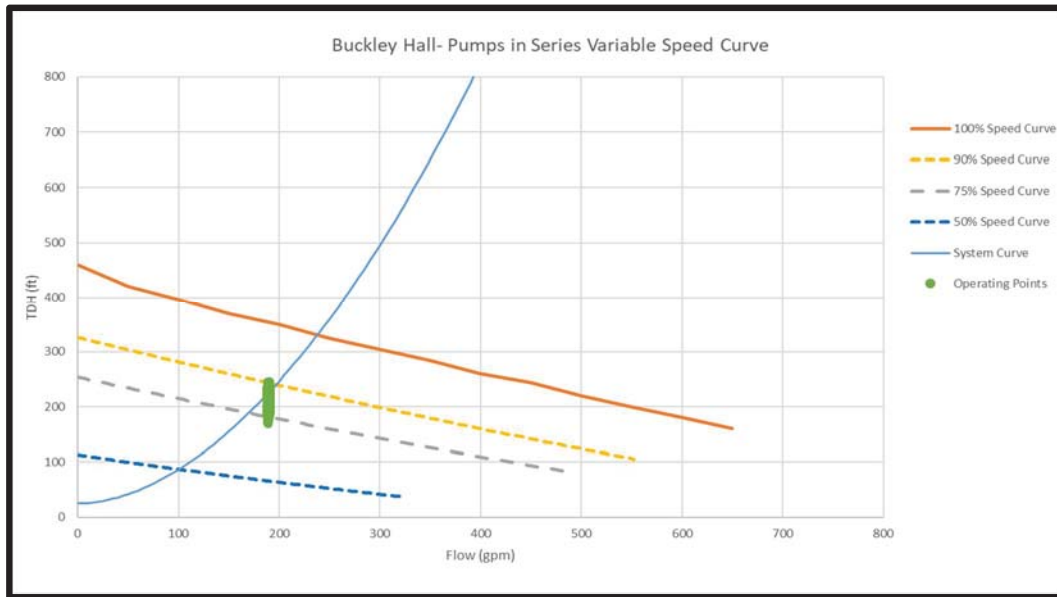
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	2020 – Existing Flows	2030 – Interim Flows	Full Build Out Flows
<i>Mathews Flows</i>			
Average Daily Flows (gpd)	55,000	100,000	100,000
Average Daily Flows (gpm)	38	69	69
Peak Flows (gpm)	95	173	173
<i>Middlesex Flows</i>			
Average Daily Flows (gpd)	71,059	335,879	528,549
Average Daily Flows (gpm)	49	233	367
Peak Flows (gpm)	112	582	902
<i>Total Combined Flows</i>			
Average Daily Flows (gpd)	126,059	505,000	628,549
Average Daily Flows (gpm)	87	302	436
Peak Flows (gpm)	207	755	1,075

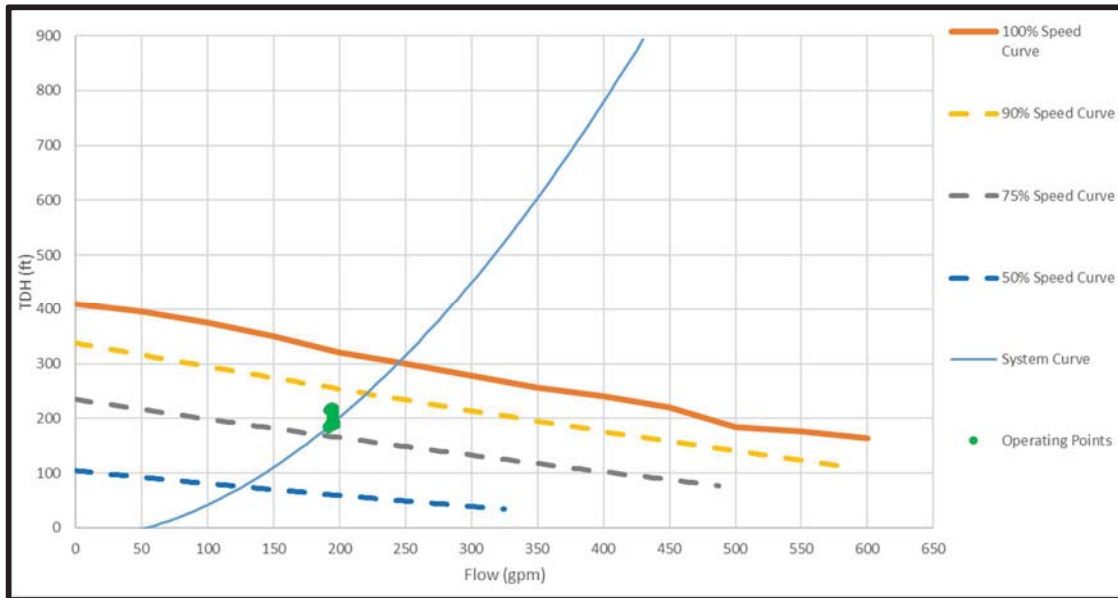
Pump Station Data and Model Calibration

Pump station discharge flows and pressures were analyzed in order to develop system curves for the pump stations based on current operating conditions in the system. Data was analyzed from HRSD Telog data as well as field data collected during a site visit on May 7, 2020. The majority of the Buckley Hall data indicates that the pumps are operating at the VFD controlled flow rate of 190 gpm with TDH ranging from 200' to 250'. From this data, and the discharge force main design drawings, a system curve was generated and plotted against the pump curve for two pumps in series. The expected operating point of the Buckley Hall Pump Station at full speed is approximately 240 gpm at 330' TDH. The curve is provided below.

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The County Line pump station data indicates that the pumps are operating at the 200 gpm set point with TDH ranging from 180' to 250'. The expected operating point of the County Line Pump Station at full speed is approximately 245 gpm at 300' TDH. The curve is provided below.

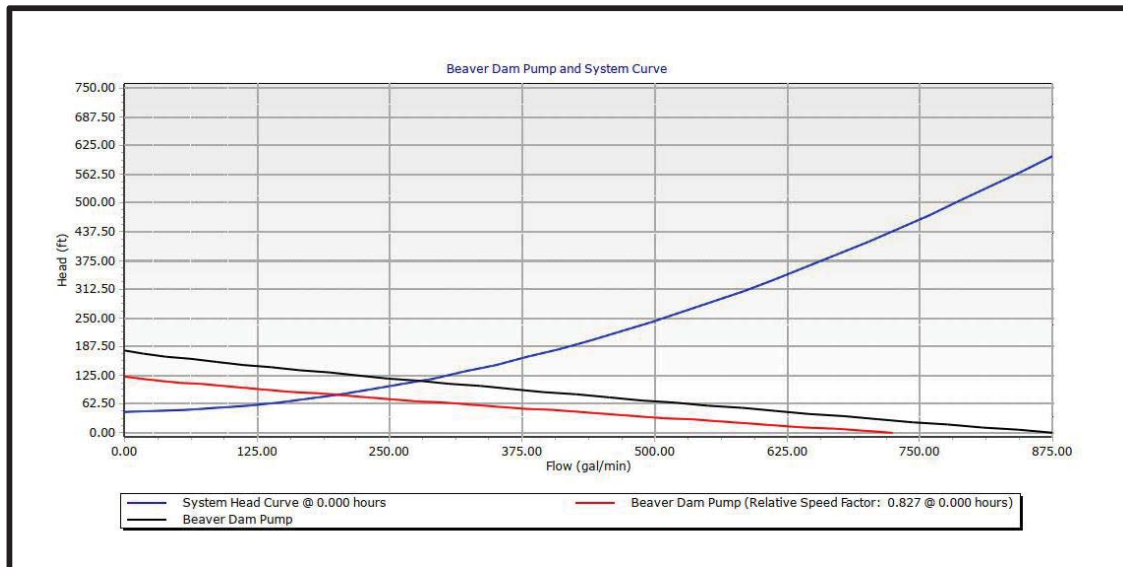
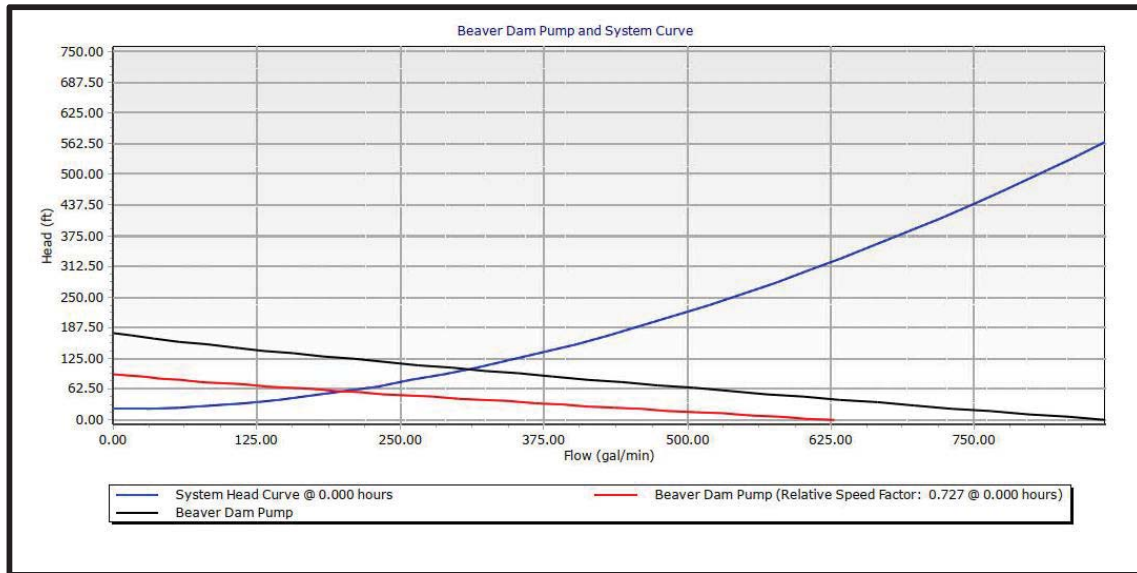


The Beaver Dam pump station is controlled by the VFDs to operate at 200 gpm, with typical dry weather pressures ranging from 58' TDH to 80' TDH, depending on the conditions in the Gloucester system. During peak wet weather events, pressure heads up to 155' TDH have been observed.



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The sewer model was first calibrated to the dry weather minimum operating point of 200 gpm at 58' TDH by adjusting the pressure head at the connection point to the Gloucester system. Utilizing this operating point, the model generated a system curve plotted against the pump curve. This process was then repeated with the max day dry weather flow operating point of 200 gpm at 80' TDH. The two curves below represent the system curves for these varying dry weather conditions in the Gloucester system. Based on the full speed operating points below, the model was calibrated to an operating point (without VFD control) of 325 gpm at 100' TDH under minimum dry weather head conditions and 273 gpm at 111' TDH under maximum dry weather head conditions.





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The sewer model was calibrated to the above flows and pressures and has the following maximum pump operating points for the Mathews system without any speed control. The calibrated model has Hazen Williams friction coefficients for the Mathews system of 130.

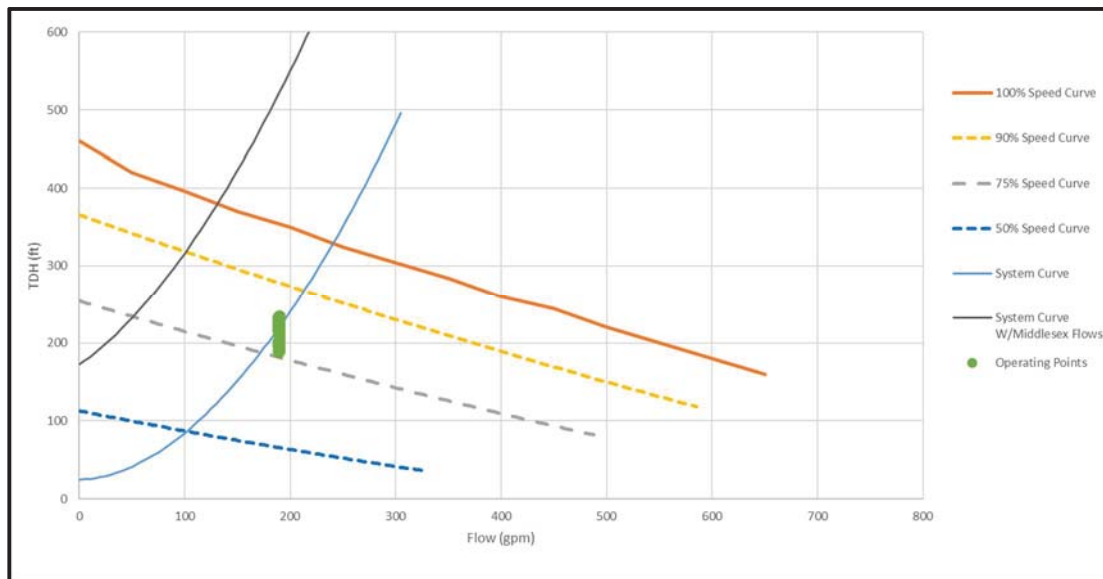
Buckley Hall: 242 gpm @ 336' TDH

County Line: 237 gpm @ 305' TDH

Beaver Dam: 273 gpm @ 111' TDH

Preliminary Mathews Capacity Evaluation

It is anticipated a flow rate of 300 gpm from Middlesex will be required to maintain scouring velocity in the Middlesex Interceptor Program Phase II force main. With an additional 300 gpm coming from Middlesex, tied directly into the Mathews forcemain, the Buckley Hall full speed operating point was reduced to 131 gpm at 380' TDH, as shown in the curve below. While this represents a reduction in pump capacity, the pump rate is still above the projected Mathews system average daily flows of 69 gpm. The reduction in pump rate at Buckley Hall to 131 gpm would reduce the velocity in the force main to 1.72 ft/s. In addition, the equalization storage at Buckley Hall will require evaluation.



With Buckley Hall operating at the reduced flow rate of 131 gpm and 300 gpm coming from Middlesex, there would be 431 gpm going to the County Line Pump Station. Since this pump station is expected to operate at approximately 240 gpm at full speed, the station would not be capable of pumping both the Mathews and Middlesex average flows in the 2030 scenario. Based on the system curve provided in the previous section of this memo, a pump rate of 431 gpm at the County Line pump station would translate to a TDH of over 875' exceeding the pressure rating of the 6" DR11 HDPE force main (200 psi).



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There is approximately 4,065 feet of piping downstream of the static head structure connecting to the above ground wet well at the Beaver Dam pump station. The static head structure is located at approximately elevation 77 and the high-water level (pump on) in the Beaver Dam pump station above ground wet wells is at approximately 25 feet of elevation. The 52 feet of elevation difference and a Hazen Williams roughness coefficient (C-factor) of 130 was utilized to calculate a theoretical maximum flow of 320 gpm through this section of pipeline. However, based on conversations with HRSD, the static head structure is currently being bypassed and has never been utilized to HRSD's knowledge. Though this section of piping theoretically has the capacity to support the 2030 Middlesex and Mathews average flows of 302 gpm, it would not have the capacity to support the 431 gpm generated by the Middlesex flow combined with Buckley Hall flows if it ever were to be utilized by HRSD.

Based on system curves generated by the model, the Beaver Dam pump station is capable of pumping approximately 273 gpm @ 111' TDH while operating at full speed during maximum dry weather conditions. Therefore, the Beaver dam pump station would not have the capacity to support the 2030 average Middlesex and Mathews flows even during dry weather flows. Based on the modeled system curves, a flow rate of 431 gpm would translate to a TDH of approximately 180' under maximum dry weather flow.

Capacity in the 6" force main was calculated by using the system curves to determine the flow in the force main as pressures approach the pressure rating of the pipe. DR11 HDPE is pressure rated to 200 psi. A 10 psi buffer was considered; therefore the capacity was determined by observing the flow rate as the pressure reached 440 feet. These flows don't reflect the capacity of all portions of the force mains since pressure will decrease due to friction losses, but it provides a general idea of the flows that can be supported by the pipes.

Summary

The following table summarizes the assumed Mathews and Middlesex average flows, which is the minimum pumping capacity needed for the Mathews system, assuming there is adequate equalization storage:

	2020 – Existing Flows (gpm)	2030 – Interim Flows (gpm)	Full Build Out Flows (gpm)
Mathews Average Daily Flows	38	69	69
Middlesex Average Daily Flows	49	233	367
Total Average Daily Flows	87	302	436

The following table summarizes the maximum capacity for each portion of the Mathews system based on data, field observations, and the calibrated model.



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	Maximum Capacity
Buckley Hall Pump Station	240 gpm @ 330' TDH
6" DR 11 HDPE FM From Buckley Hall to MISPPH tie-in with 300 gpm flowing into Mathews force main from MISPPH force main	180 gpm***
County Line Pump Station	245 gpm @ 300' TDH
6" DR 11 HDPE FM From County Line to Beaver Dam***	290 - 305 gpm
6" Gravity Piping from Static Head Structure to Beaver Dam	320 gpm
Beaver Dam	273 gpm @ 111' TDH* 325 gpm @ 100' TDH**
6" HDPE FM From Beaver Dam to Gloucester Tie In	720 gpm
*Maximum dry weather conditions at Gloucester IFM connection **Minimum dry weather conditions at Gloucester IFM connection ***Maximum capacity at C-factor of 125 = 290 gpm & at C-factor of 130= 305 gpm. HRSD telog data indicates the C-factor within the force main between County Line and Beaver Dam pump station was calibrated between 125 and 130.	

The preliminary data analysis and hydraulic modeling shows that the following impacts to the Buckley Hall pump station.

- Buckley Hall Pump Station
 - With Middlesex pumping into system, full speed pump capacity is reduced to 131 gpm
 - Buckley Hall pumps can still operate higher than the average projected Mathews flows of 69 gpm, however operational conditions such as velocity and equalization storage needs to be evaluated

The preliminary data analysis and hydraulic modeling shows portions of the Mathews system downstream of the connection point of the Middlesex and Mathews force mains will require capacity upgrades, and additional analysis, to support the 2030 average projected Middlesex flows and Mathews flows. Capacity upgrades and equalization will be required to convey wet weather flows.

- County Line
 - County line pumps operating at full speed cannot support 2030 Middlesex and Mathews flows



Technical Memorandum

- The force main (or portions of the force main) from the County Line pump station to the Beaver Dam pump station cannot convey projected 2030 Middlesex and Mathews average daily flows or wet weather flows at a C-factor of 125 and at a C-factor of 130 has no additional capacity to convey flows above the projected 2030 Middlesex and Mathews average daily flows.
- The 6" piping from the static head structure to the Beaver Dam pump station has the capacity to support the 2030 Middlesex and Mathews average flows. The section of pipe provides only approximately 20 gallons per minute of excess capacity to convey flows exceeding the projected 2030 Middlesex and Mathews average daily flow rate. The limited additional capacity downstream of the static head structure allows for only minor increases in future flows beyond 2030 and will limit the ability to discharge flows stored during wet weather events extending the retention time of wet weather flows equalized upstream if the static head structure were to be utilized by HRSD in the future
- Beaver Dam
 - The Beaver dam pumps operating at full speed cannot support the 2030 projected Middlesex and Mathews flows

Conclusions

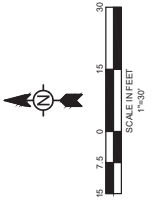
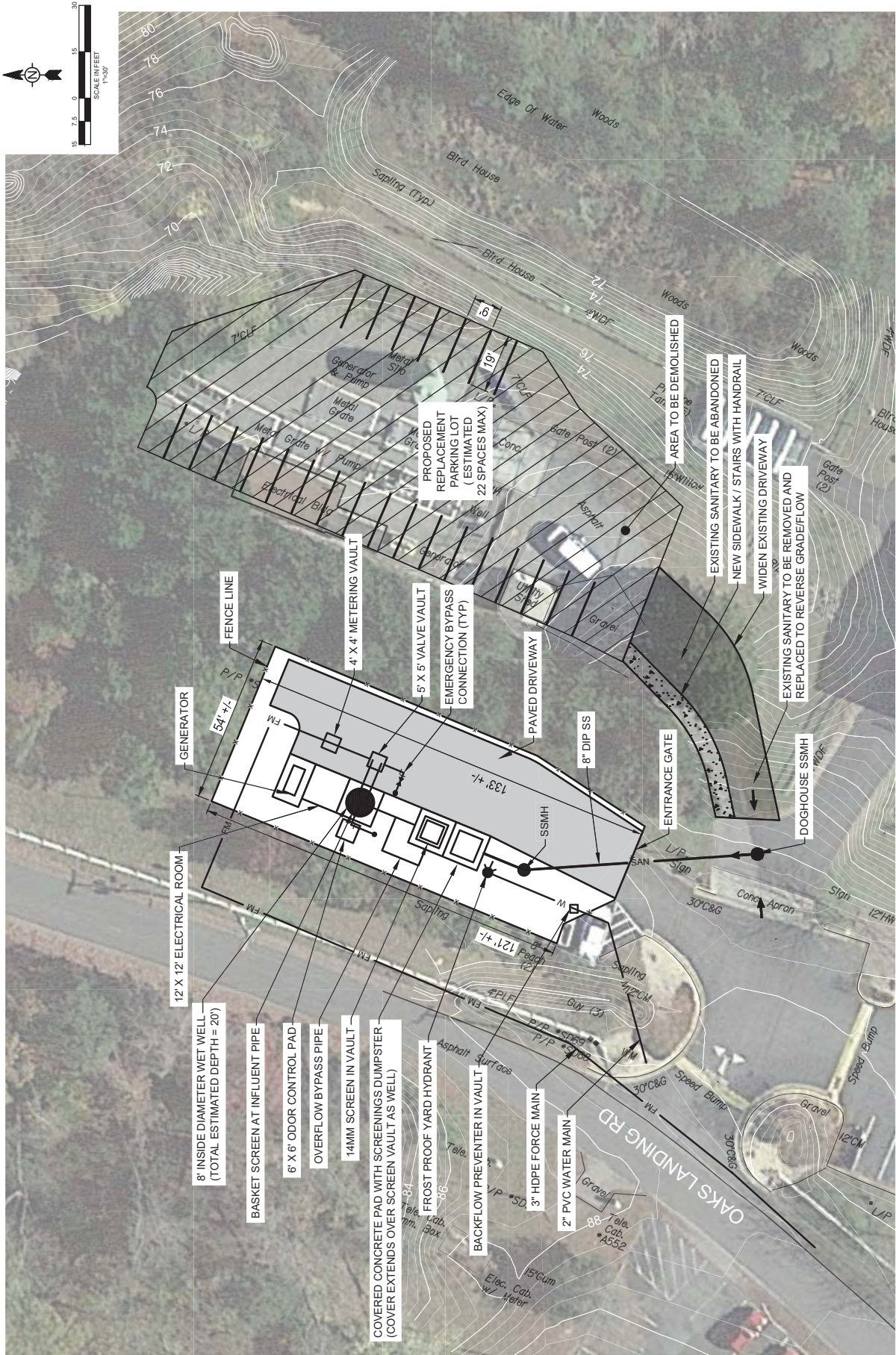
The existing capacity within the Mathews system is not sufficient to accommodate anticipated flow rates in 2030 and beyond. Pump upgrades will be required at both the County Line pump station and the Beaver Dam pump station to convey projected 2030 average daily flows.

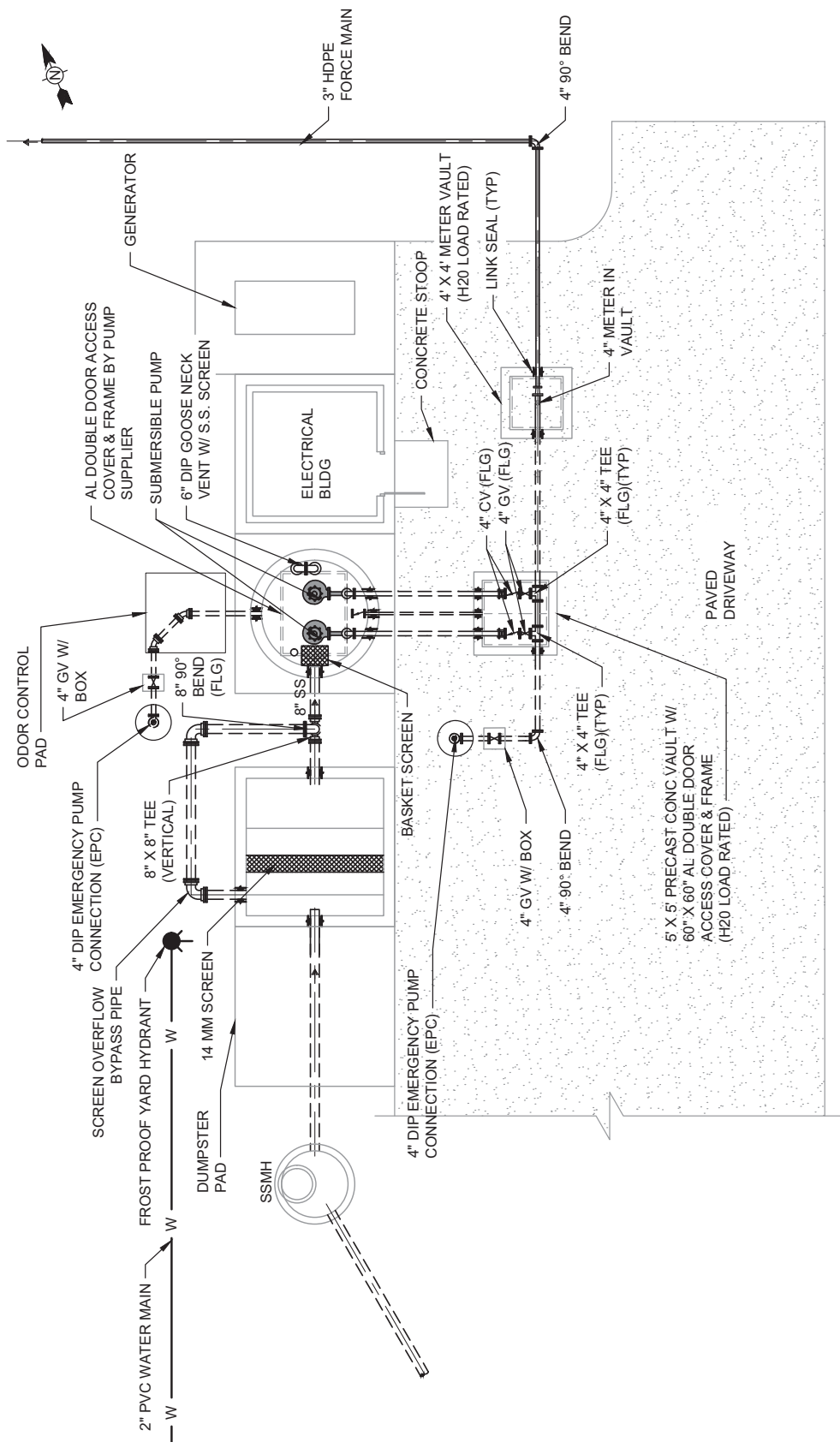
Furthermore, the capacity of the existing 6-inch DR-11 HDPE (DIPS/DR 11) force main downstream of County Line pump station is limited to approximately 290 gpm (C-factor of 125) to 305 gpm (C-factor of 130) without exceeding the pressure rating of the pipeline. As a result, the system cannot convey projected 2030 Middlesex and Mathews average daily flows or wet weather flows at a C-factor of 125 and at a C-factor of 130 has no additional capacity to convey flows above the projected 2030 Middlesex and Mathews average daily flows.

The existing 6-inch DR-11 HDPE (DIPS/DR 11) pipeline downstream of the static head structure has a maximum capacity calculated to be approximately 320 gpm. While this section of pipeline provides capacity to convey projected 2030 Middlesex and Mathews average daily flows, it only provides approximately 20 gallons per minute of excess capacity to convey flows exceeding the projected 2030 Middlesex and Mathews average daily flow rate. The limited additional capacity downstream of the static head structure allows for only minor increases in future flows beyond 2030 and will limit the ability to discharge flows stored during wet weather events extending the retention time of wet weather flows equalized upstream if the static head structure were to be utilized by HRSD in the future.

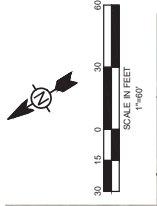
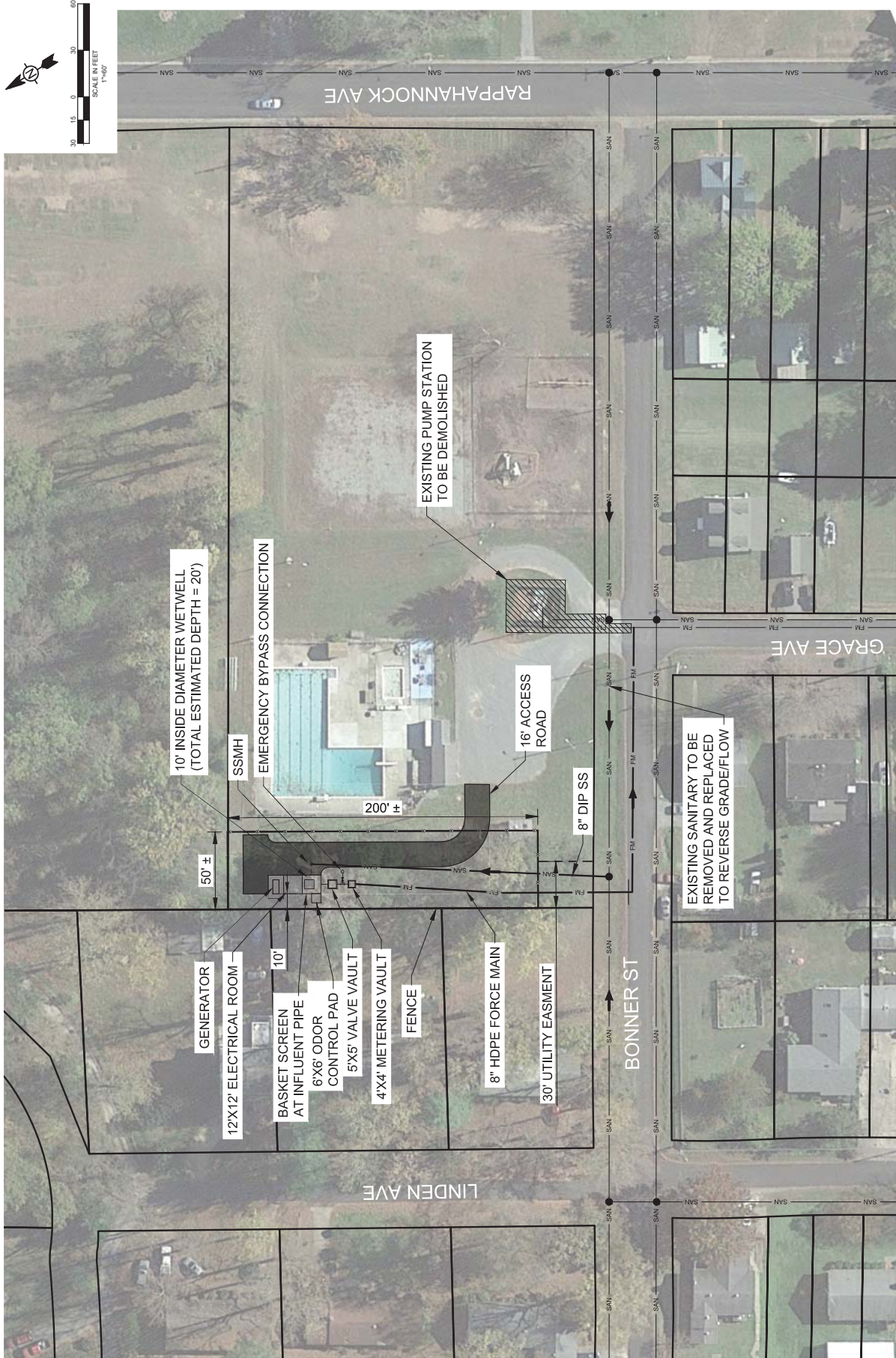
Further investigation is required to identify viable alternatives to increase capacity in the Mathews system to accommodate flows from the Middlesex system.

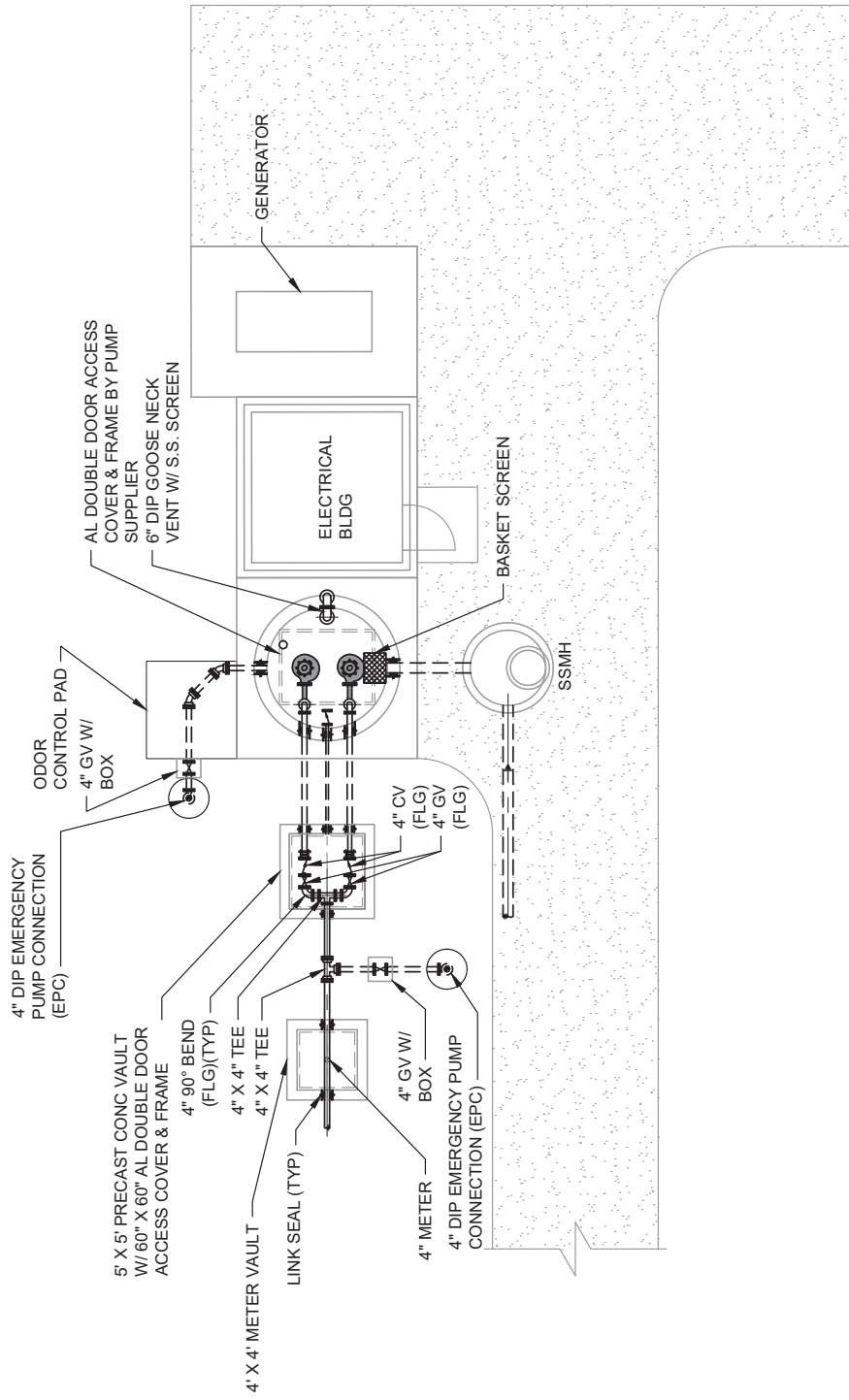
Appendix H: Preliminary Pump Station Layouts

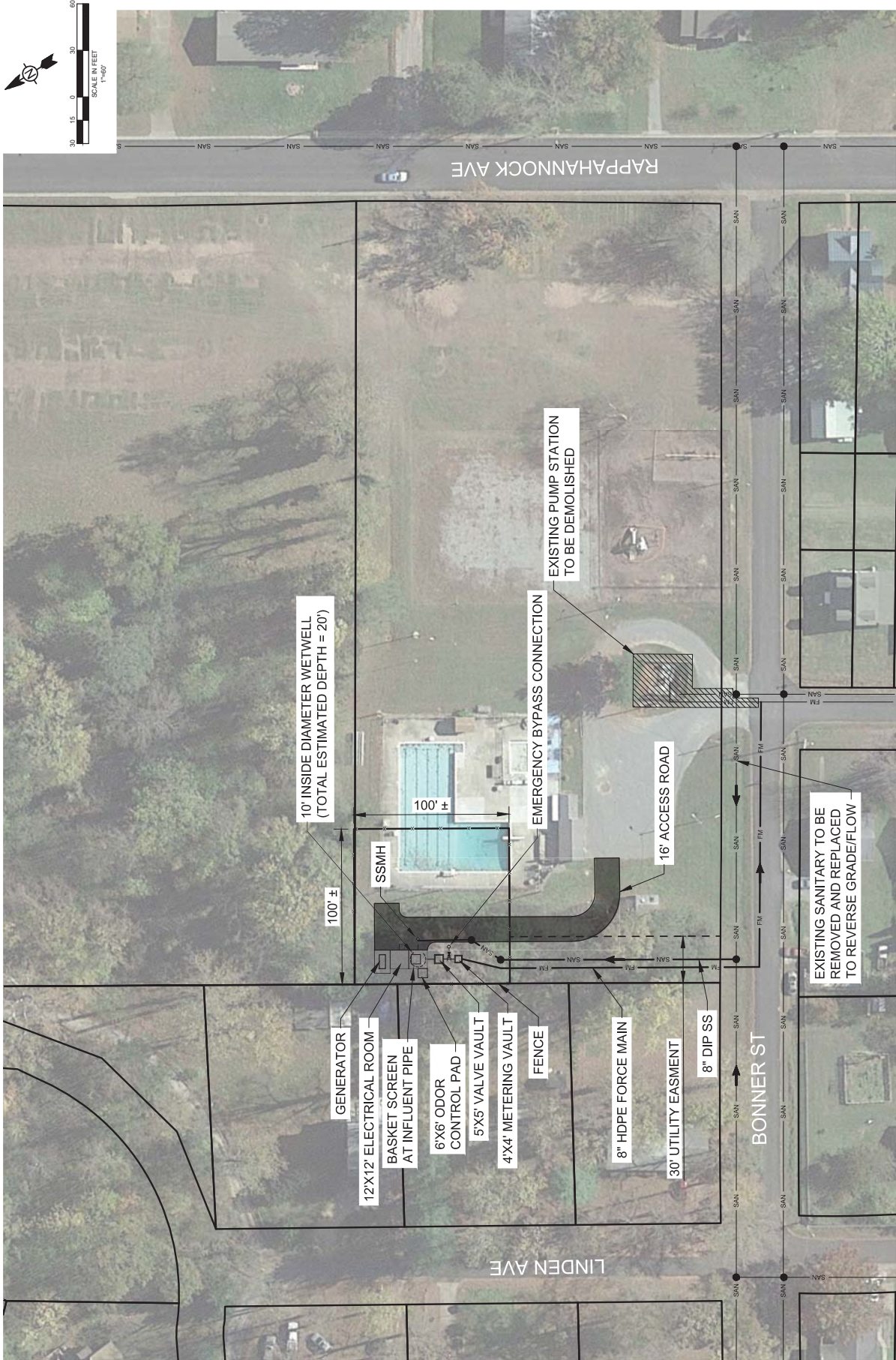


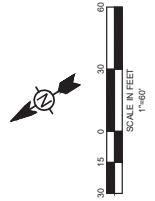
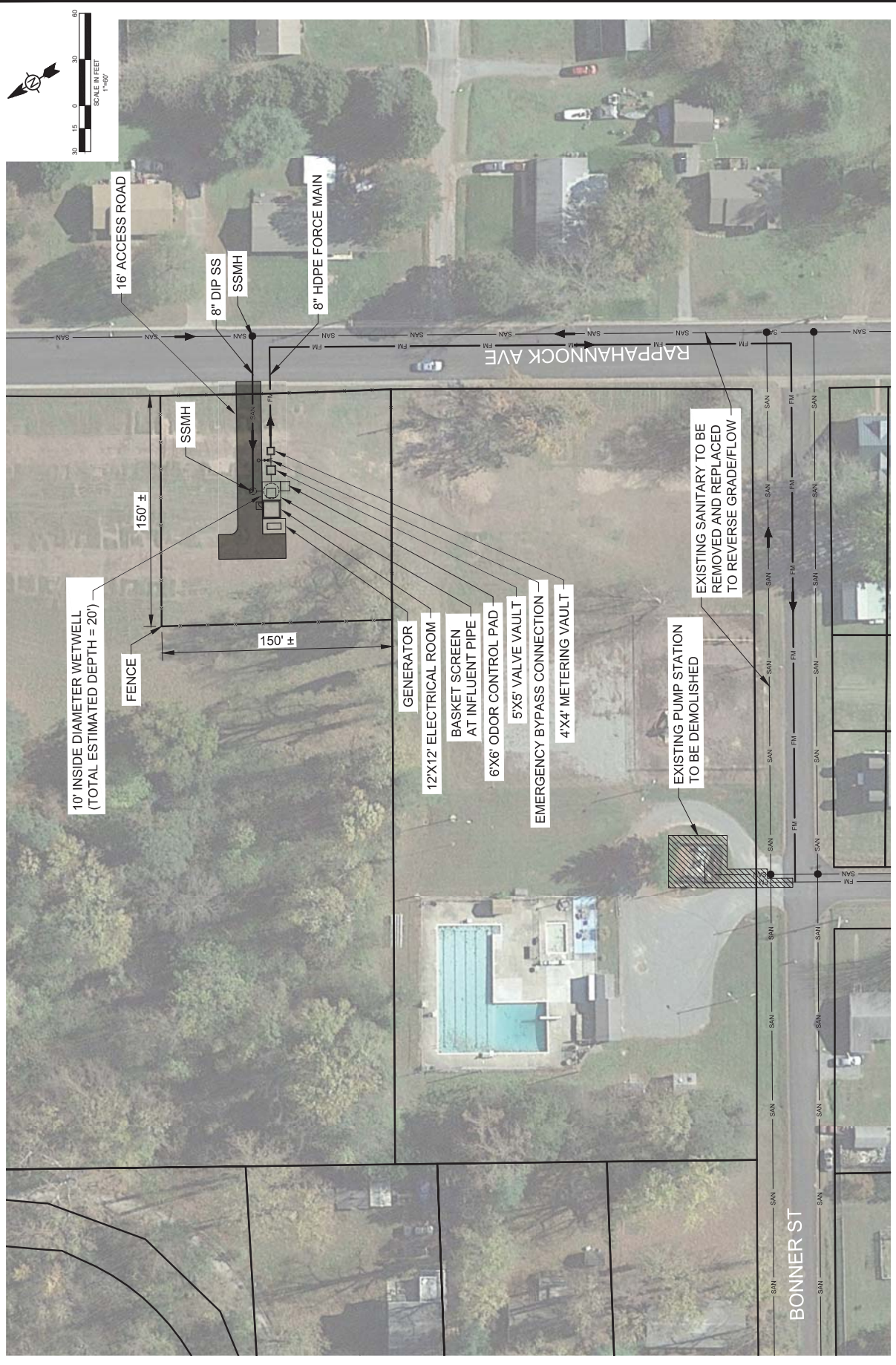


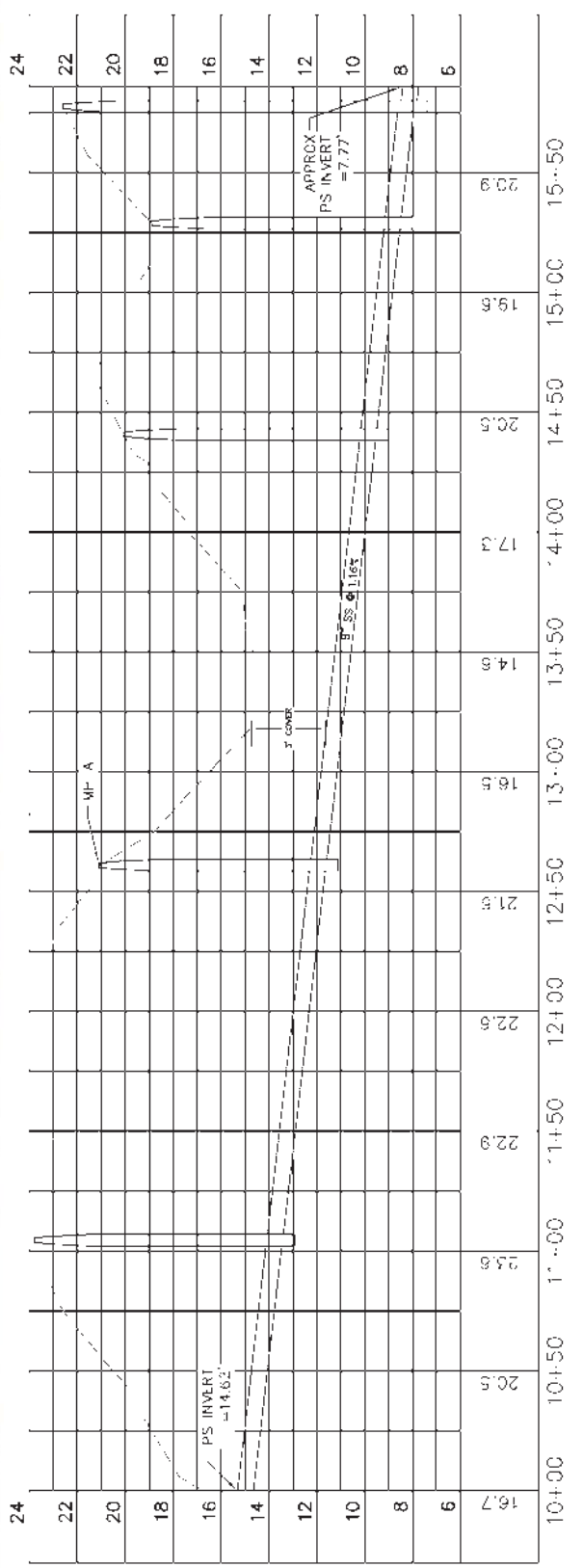
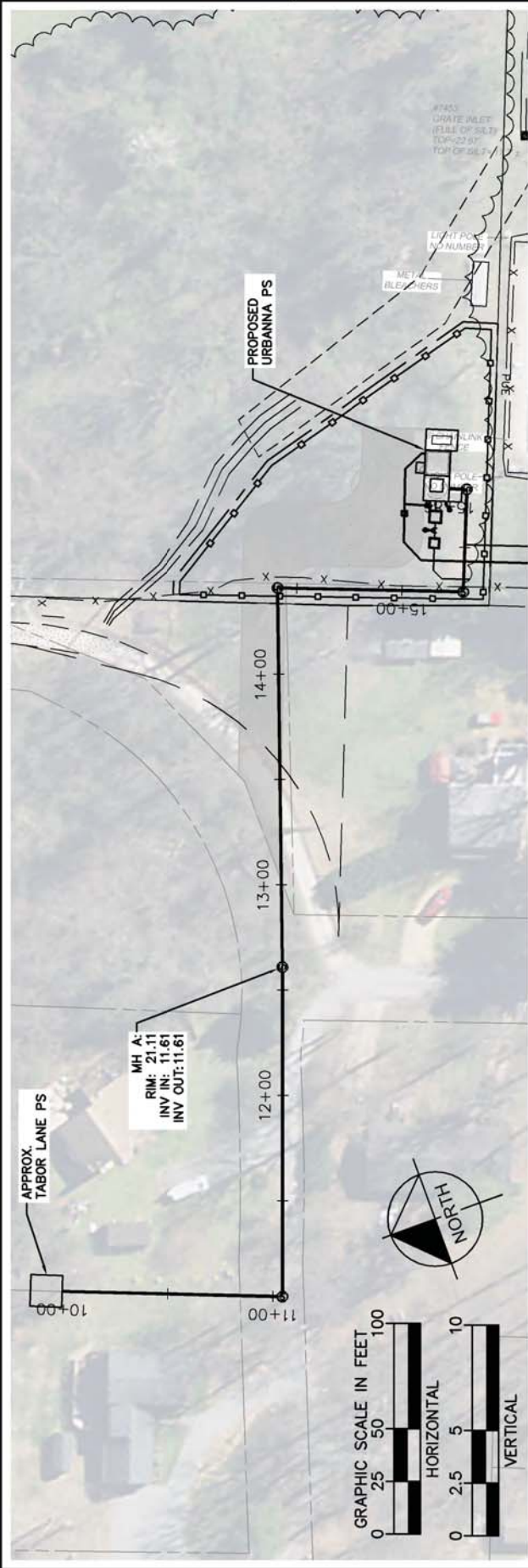
- NOTES:
1. DUMPSTER PAD AND SCREEN VAULT SHALL BE COVERED
 2. BASKET SCREEN SHALL SERVE AS BACKUP FOR THE 14MM SCREEN INCLUDING OVERFLOW THRU THE BYPASS PIPE

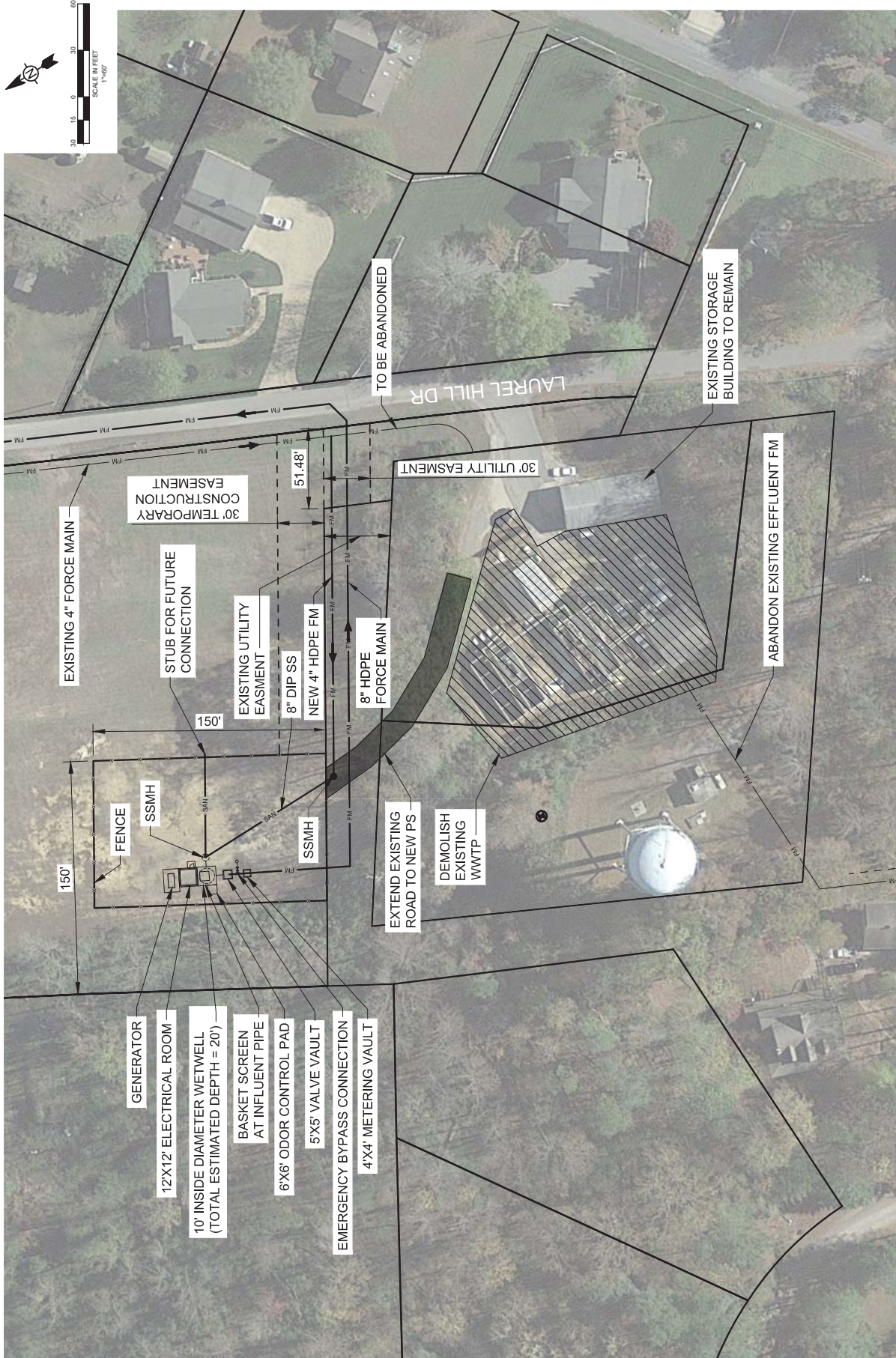


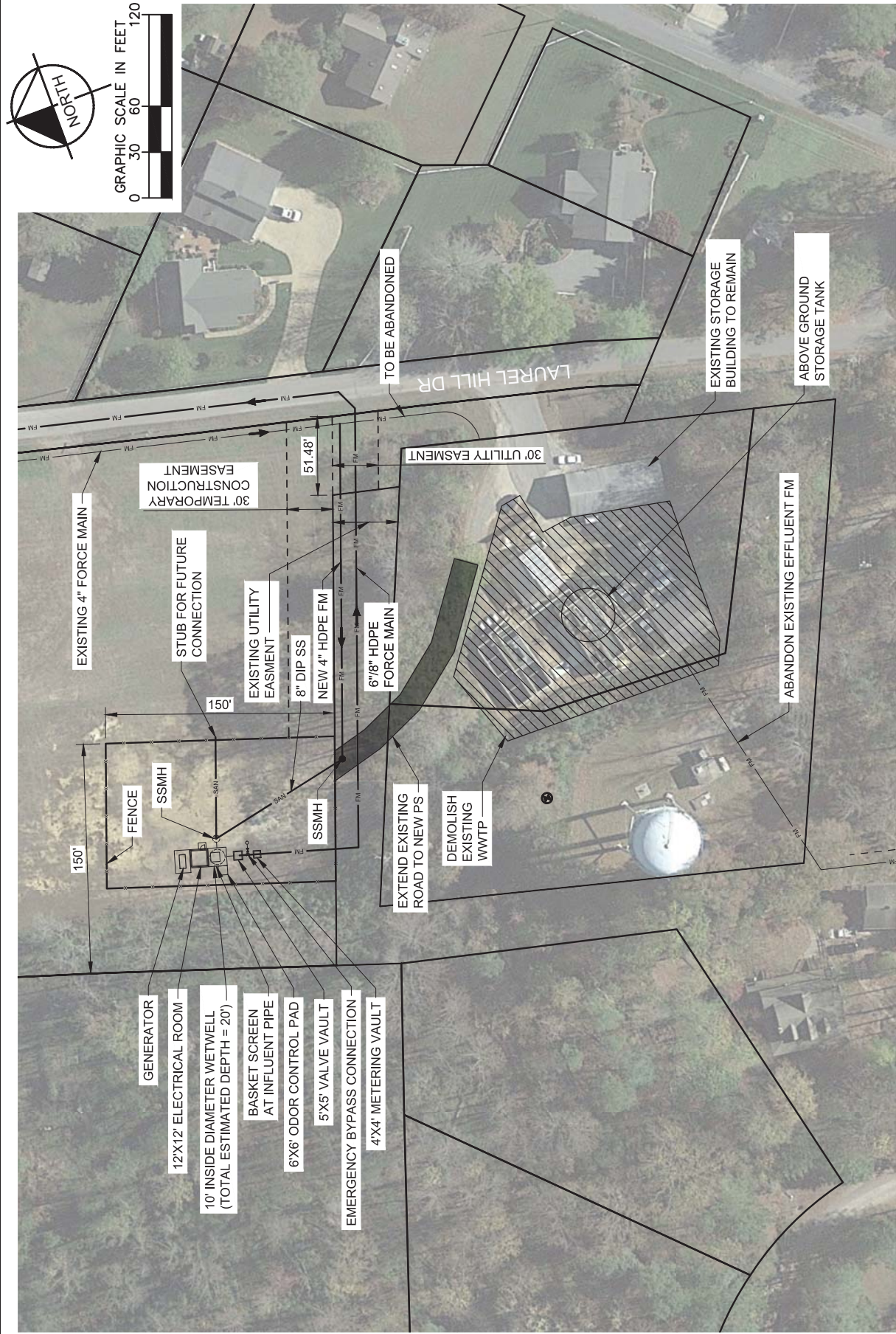




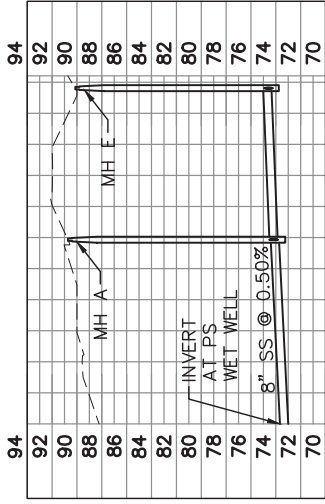




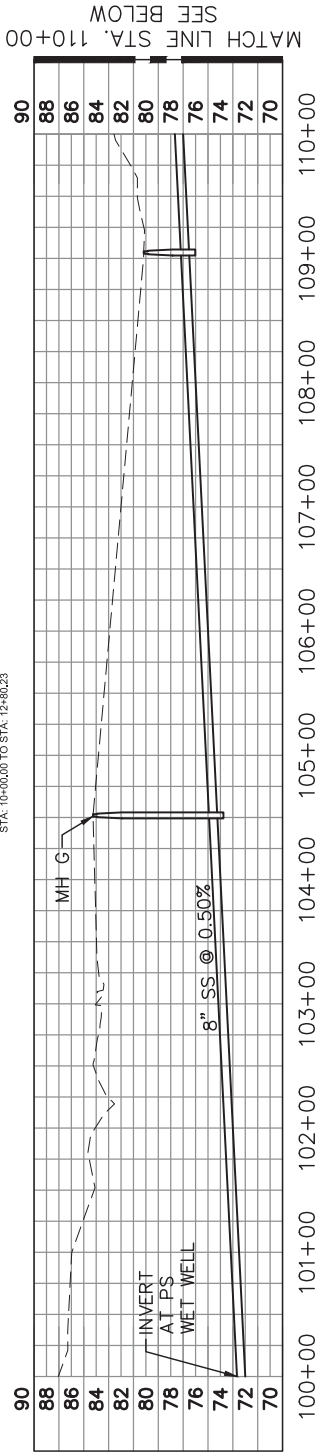




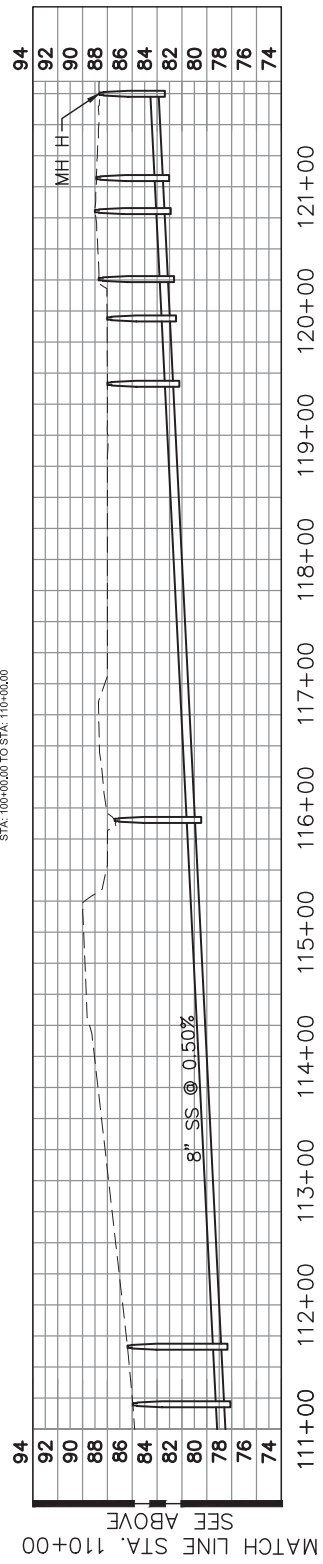




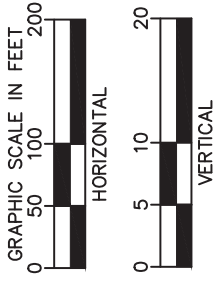
LOCUST HILL GRAVITY SEWER CONNECTION NORTH
STA: 10+00.00 TO STA: 12+86.23



LOCUST HILL GRAVITY SEWER CONNECTION SOUTH
STA: 100+00.00 TO STA: 110+00.00



LOCUST HILL GRAVITY SEWER CONNECTION SOUTH
STA: 111+00.00 TO STA: 121+86.82

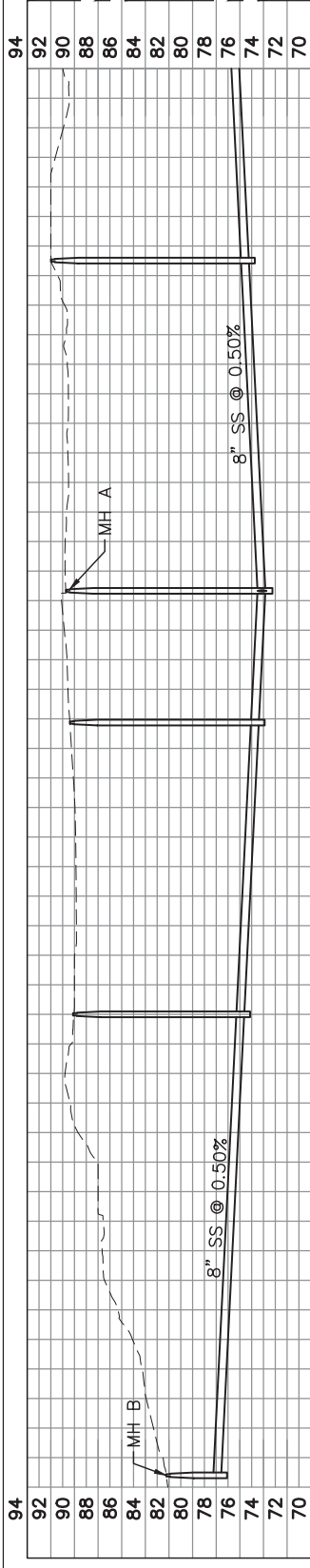


MATCH LINE STA. 110+00
SEE BELOW

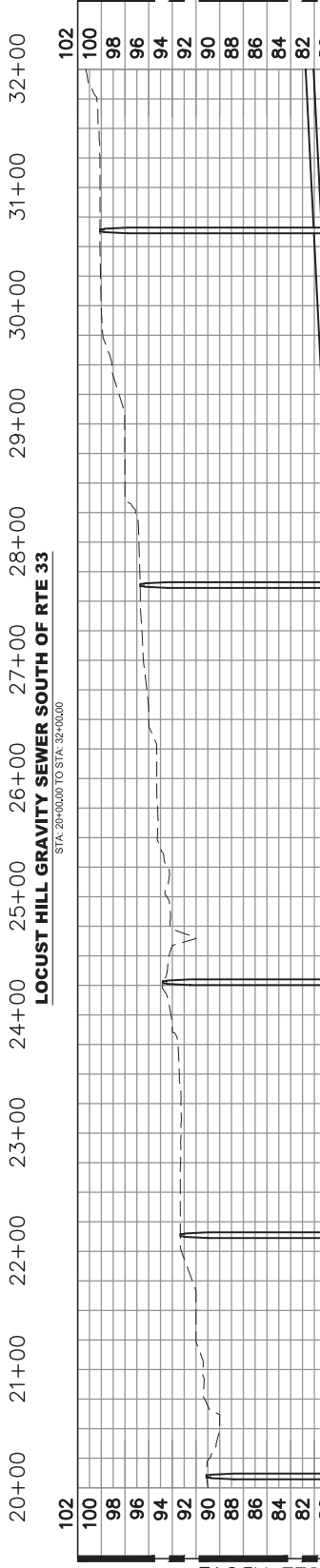
SEE ABOVE
MATCH LINE STA. 110+00



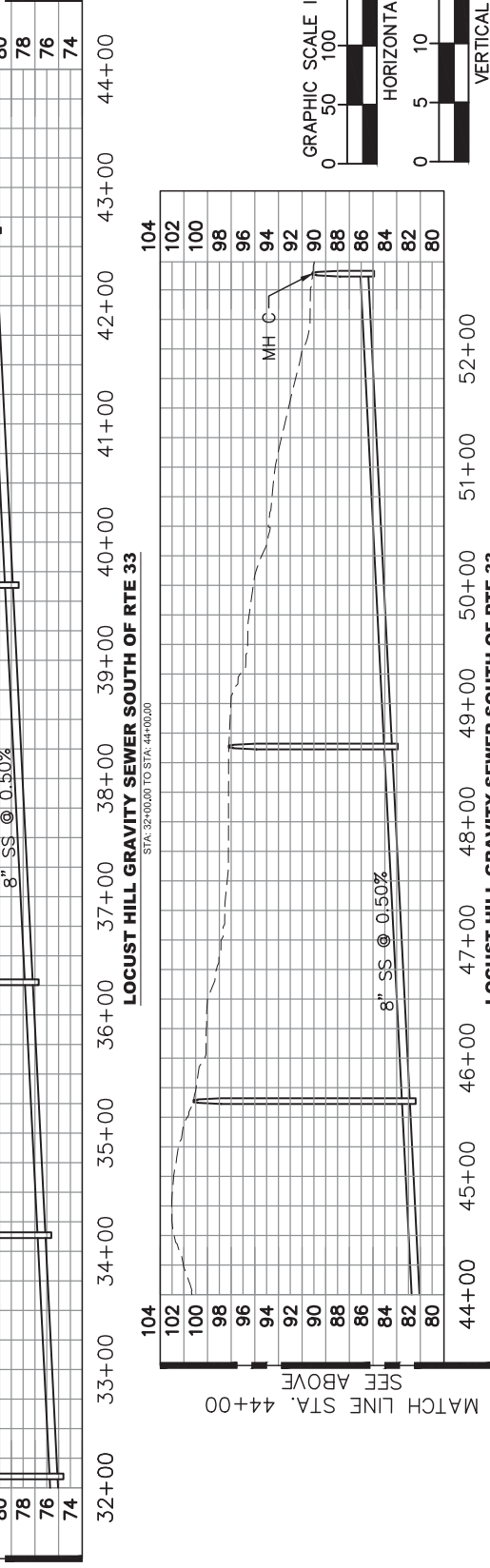
MATCH LINE STA. 32+00 SEE BELOW

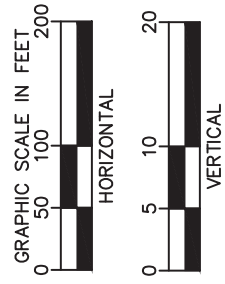
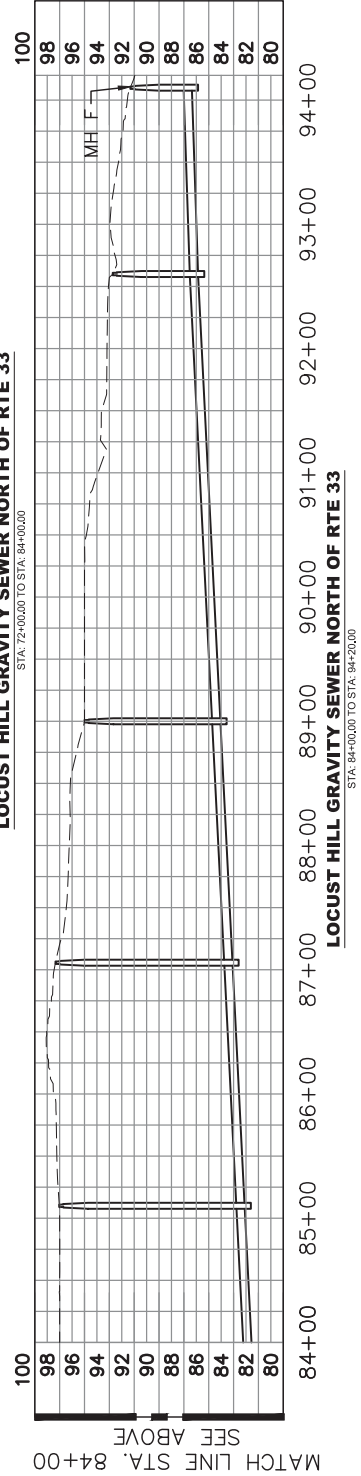
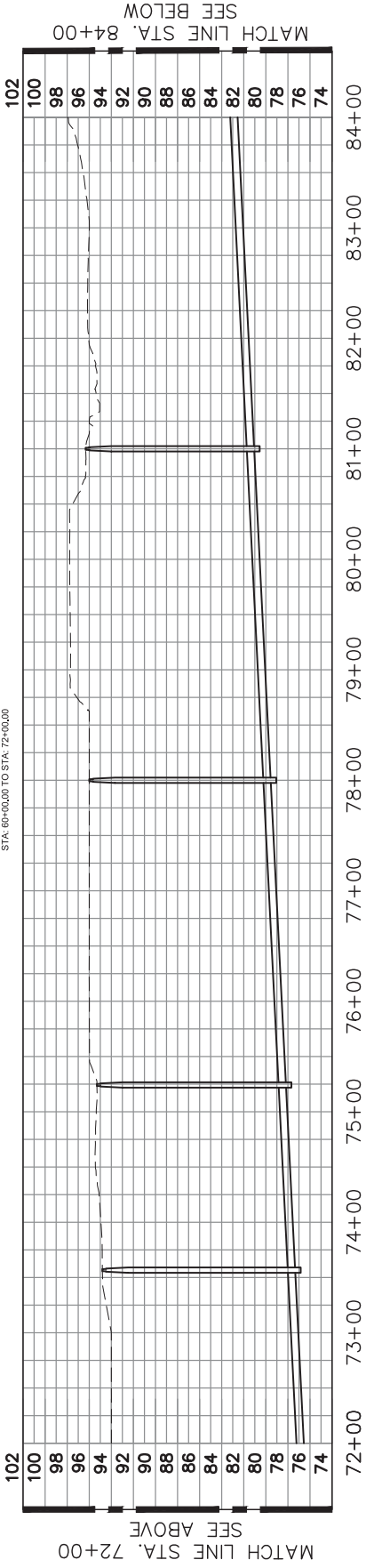
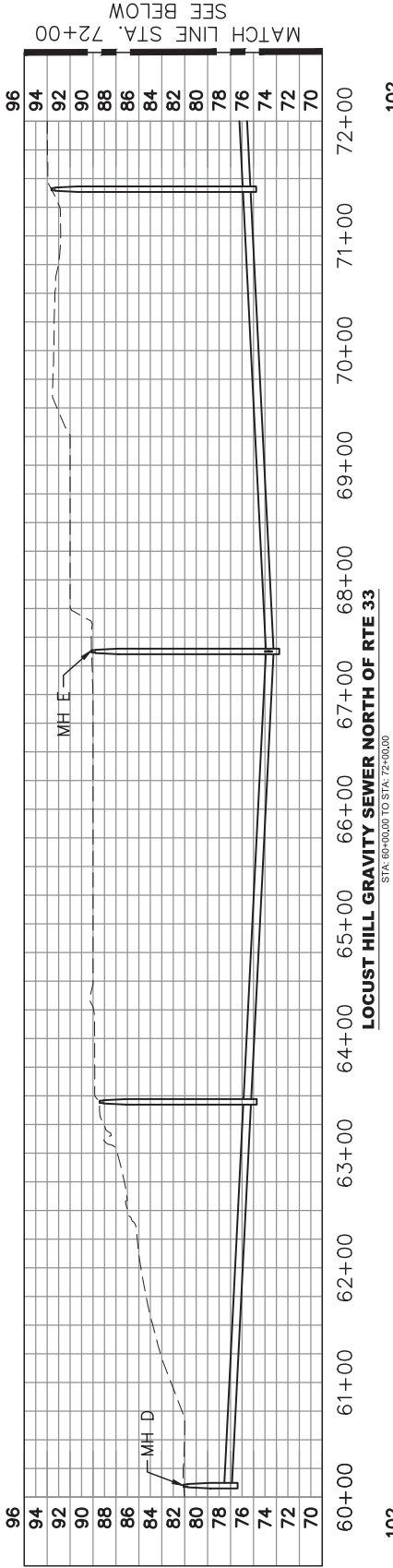


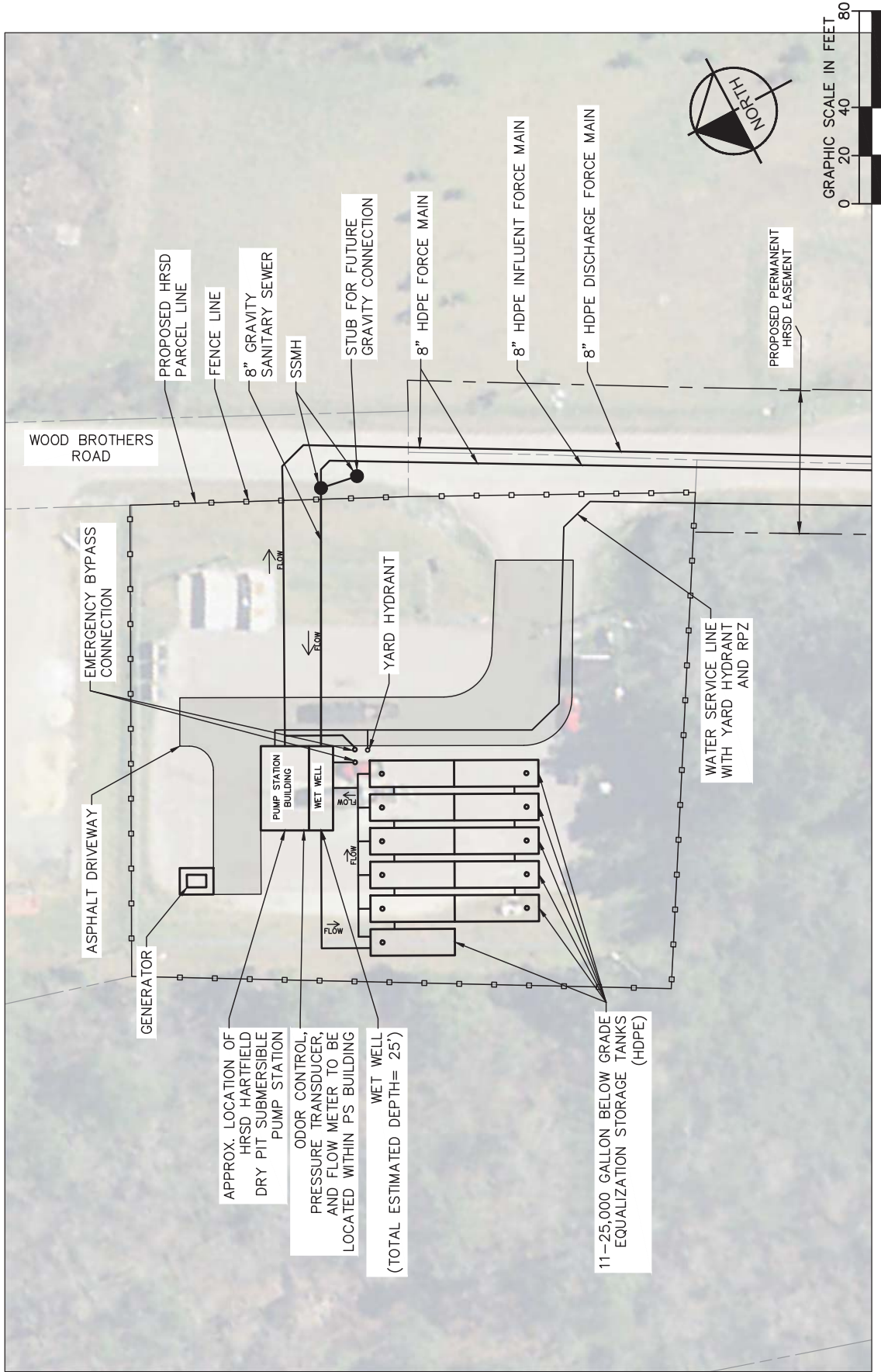
MATCH LINE STA. 44+00 SEE ABOVE

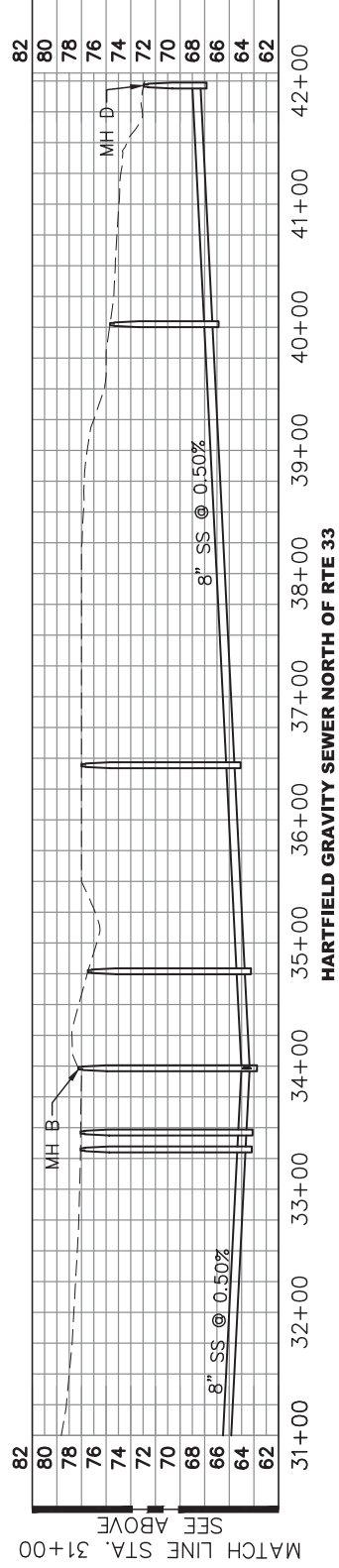
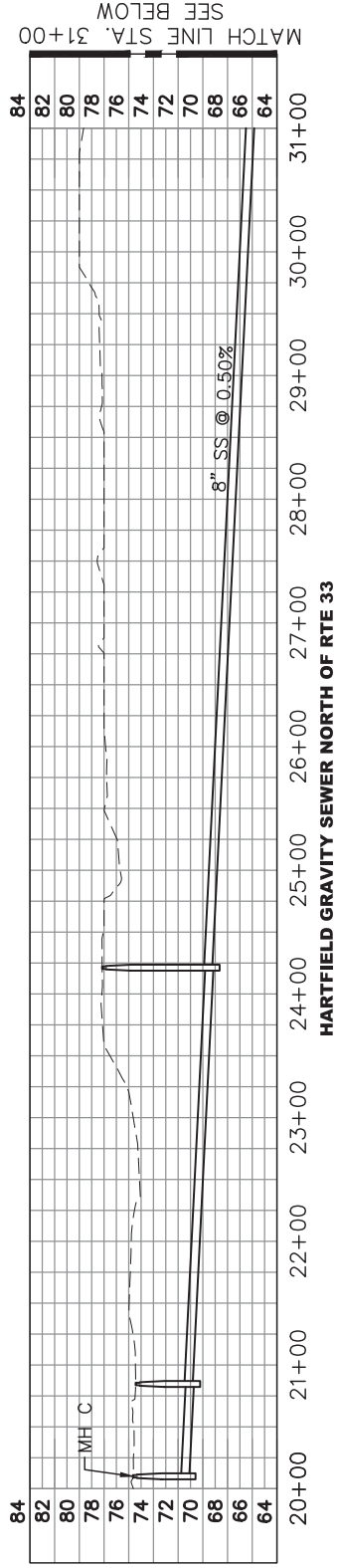
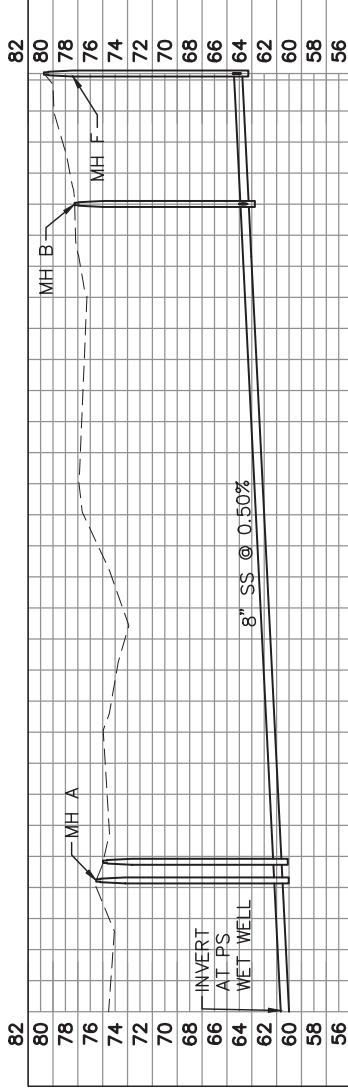
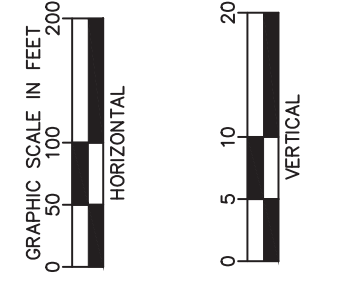


MATCH LINE STA. 44+00 SEE ABOVE



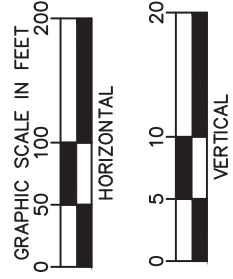
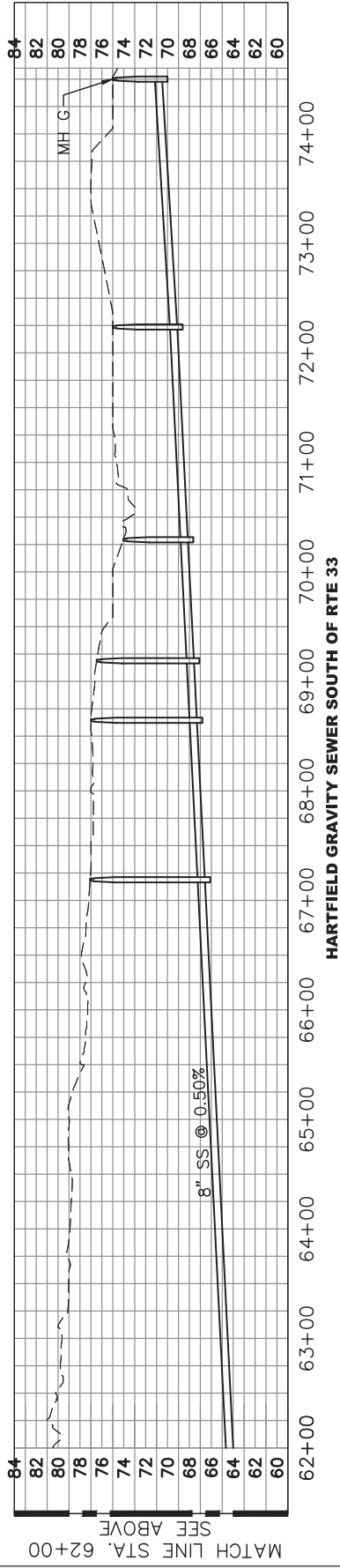
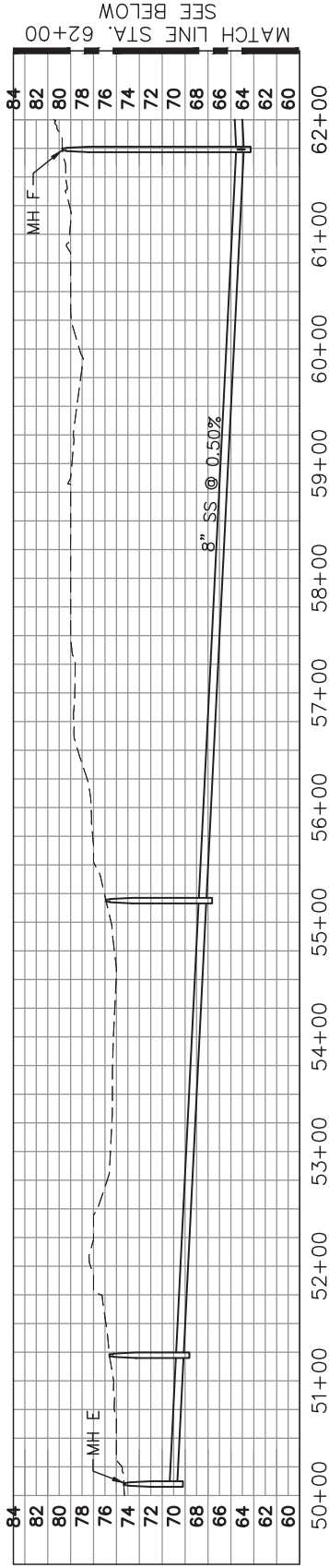






MATCH LINE STA. 31+00
SEE BELOW

MATCH LINE STA. 31+00
SEE ABOVE



Appendix I: Environmental Database Resource Report

MIDDLESEX INTERCEPTOR SYSTEM PROGRAM PHASE II
URBANNA TO MATHEWS TRANSMISSION FORCE MAIN
Urbanna, VA 23175

Inquiry Number: 6051134.2s
April 28, 2020

EDR Area / Corridor Report



6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

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Government Records Searched/Data Currency Tracking	GR-1

Thank you for your business.
 Please contact EDR at 1-800-352-0050
 with any questions or comments.

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EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E 1527-13), the ASTM Standard Practice for Environmental Site Assessments for Forestland or Rural Property (E 2247-16), the ASTM Standard Practice for Limited Environmental Due Diligence: Transaction Screen Process (E 1528-14) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

SUBJECT PROPERTY INFORMATION

ADDRESS

URBANNA TO MATHEWS TRANSMISSION FORCE MAIN
URBANNA, VA 23175

TARGET PROPERTY SEARCH RESULTS

The Target Property was identified in the following databases.

Page Numbers and Map Identifications refer to the EDR Area/Corridor Report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

STANDARD ENVIRONMENTAL RECORDS

State and tribal leaking storage tank lists

LUST: Leaking Underground Storage Tank Tracking Database

A review of the LUST list, as provided by EDR, has revealed that there is 1 LUST site within the requested target property.

<u>Site</u>	<u>Address</u>	<u>Map ID / Focus Map(s)</u>	<u>Page</u>
<i>7 ELEVEN INCORPORATE</i>	<i>11102 GENERAL PULLER</i>	<i>A5 / 6</i>	<i>36</i>
Database: LUST REG PD, Date of Government Version: 12/02/2014			
Facility Status: Closed			
Pollution Complaint #: 20114166			
Pollution Complaint #: 20114147			
Pollution Complaint #: 20084342			

LTANKS: Leaking Petroleum Storage Tanks

A review of the LTANKS list, as provided by EDR, and dated 11/04/2019 has revealed that there is 1 LTANKS site within the requested target property.

<u>Site</u>	<u>Address</u>	<u>Map ID / Focus Map(s)</u>	<u>Page</u>
<i>7 ELEVEN INCORPORATE</i>	<i>11102 GENERAL PULLER</i>	<i>A5 / 6</i>	<i>36</i>
Facility Status: Closed			
CEDS Facility Id: 200000165442			
Pollution Complaint #: 20114166			

EXECUTIVE SUMMARY

Pollution Complaint #: 20114147
Pollution Complaint #: 20084342

State and tribal registered storage tank lists

UST: Registered Petroleum Storage Tanks

A review of the UST list, as provided by EDR, and dated 11/01/2019 has revealed that there is 1 UST site within the requested target property.

<u>Site</u>	<u>Address</u>	<u>Map ID / Focus Map(s)</u>	<u>Page</u>
7 ELEVEN INCORPORATE Tank Status: CLS IN GRD Tank Status: REM FROM GRD Tank Status: CURR IN USE Facility Id: 4018362 CEDS Facility ID: 200000165442	11102 GENERAL PULLER	A4 / 6	25

ADDITIONAL ENVIRONMENTAL RECORDS

Other Ascertainable Records

ICIS: Integrated Compliance Information System

A review of the ICIS list, as provided by EDR, and dated 11/18/2016 has revealed that there is 1 ICIS site within the requested target property.

<u>Site</u>	<u>Address</u>	<u>Map ID / Focus Map(s)</u>	<u>Page</u>
XCELPLUS INTERNATION FRS ID:: 110024538598	5041 GENERAL PULLER	1 / 3	24

FINDS: Facility Index System/Facility Registry System

A review of the FINDS list, as provided by EDR, and dated 11/22/2019 has revealed that there are 2 FINDS sites within the requested target property.

<u>Site</u>	<u>Address</u>	<u>Map ID / Focus Map(s)</u>	<u>Page</u>
XCELPLUS INTERNATION Registry ID:: 110024538598	5041 GENERAL PULLER	1 / 3	24
VDACS PESTICIDE COLL Registry ID:: 110067265248	5730 GENERAL PULLER	2 / 4	24

EXECUTIVE SUMMARY

ECHO: Enforcement & Compliance History Information

A review of the ECHO list, as provided by EDR, and dated 01/05/2020 has revealed that there is 1 ECHO site within the requested target property.

<u>Site</u>	<u>Address</u>	<u>Map ID / Focus Map(s)</u>	<u>Page</u>
<i>VDACS PESTICIDE COLL</i> Registry ID: 110067265248	<i>5730 GENERAL PULLER</i>	<i>2 / 4</i>	<i>24</i>

Financial Assurance: Financial Assurance Information Listing

A review of the Financial Assurance list, as provided by EDR, has revealed that there is 1 Financial Assurance site within the requested target property.

<u>Site</u>	<u>Address</u>	<u>Map ID / Focus Map(s)</u>	<u>Page</u>
<i>7 ELEVEN INCORPORATE</i> Database: Financial Assurance 1, Date of Government Version: 01/27/2020 Facility ID: 4018362 ROF Own Id: 38838	<i>11102 GENERAL PULLER</i>	<i>A4 / 6</i>	<i>25</i>

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA LUST: Recovered Government Archive Leaking Underground Storage Tank

A review of the RGA LUST list, as provided by EDR, has revealed that there are 2 RGA LUST sites within the requested target property.

<u>Site</u>	<u>Address</u>	<u>Map ID / Focus Map(s)</u>	<u>Page</u>
LITTLE SUE 136	11102 GENERAL PULLER	A3 / 6	25
7 ELEVEN INCORPORATE	11102 GENERAL PULLER	A6 / 6	38

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

Page Numbers and Map Identifications refer to the EDR Area/Corridor Report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

EXECUTIVE SUMMARY

STANDARD ENVIRONMENTAL RECORDS

State and tribal leaking storage tank lists

LUST: Leaking Underground Storage Tank Tracking Database

A review of the LUST list, as provided by EDR, has revealed that there is 1 LUST site within approximately 0.028 miles of the requested target property.

<u>Site</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID / Focus Map(s)</u>	<u>Page</u>
THRIFT OIL Database: LUST REG PD, Date of Government Version: 12/02/2014 Facility Status: Closed Pollution Complaint #: 19984155	2742 GENERAL PULLER	SSE 0 - 1/8 (0.014 mi.)	B10 / 2	77

LTANKS: Leaking Petroleum Storage Tanks

A review of the LTANKS list, as provided by EDR, and dated 11/04/2019 has revealed that there are 2 LTANKS sites within approximately 0.028 miles of the requested target property.

<u>Site</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID / Focus Map(s)</u>	<u>Page</u>
THRIFT OIL Facility Status: Closed CEDS Facility Id: 200000159612 Pollution Complaint #: 19984155	2742 GENERAL PULLER	SSE 0 - 1/8 (0.014 mi.)	B10 / 2	77
J. T. & C. A. THRIFT Facility Status: Open CEDS Facility Id: 200000159612 Pollution Complaint #: 20184442	2742 GENERAL PULLER	SSE 0 - 1/8 (0.014 mi.)	B12 / 2	81

State and tribal registered storage tank lists

UST: Registered Petroleum Storage Tanks

A review of the UST list, as provided by EDR, and dated 11/01/2019 has revealed that there are 2 UST sites within approximately 0.028 miles of the requested target property.

<u>Site</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID / Focus Map(s)</u>	<u>Page</u>
THRIFT OIL COMPANY Tank Status: REM FROM GRD Facility Id: 4012594 CEDS Facility ID: 200000159612	2742 GENERAL PULLER	SSE 0 - 1/8 (0.014 mi.)	B8 / 2	39
PARVINS SUPER MARKET Tank Status: REM FROM GRD Facility Id: 4002797 CEDS Facility ID: 200000168116	5041 GENERAL PULLER	NNE 0 - 1/8 (0.020 mi.)	C16 / 3	85

EXECUTIVE SUMMARY

AST: Registered Petroleum Storage Tanks

A review of the AST list, as provided by EDR, and dated 11/01/2019 has revealed that there is 1 AST site within approximately 0.028 miles of the requested target property.

<u>Site</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID / Focus Map(s)</u>	<u>Page</u>
THRIFT OIL COMPANY Facility ID: 4012594 CEDS Facility ID: 200000159612	2742 GENERAL PULLER	SSE 0 - 1/8 (0.014 mi.)	B8 / 2	39

ADDITIONAL ENVIRONMENTAL RECORDS

Records of Emergency Release Reports

SPILLS: Prep/Spills Database Listing

A review of the SPILLS list, as provided by EDR, has revealed that there is 1 SPILLS site within approximately 0.028 miles of the requested target property.

<u>Site</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID / Focus Map(s)</u>	<u>Page</u>
Not reported Database: SPILLS, Date of Government Version: 11/04/2019 Facility Status: Closed IR Number: 2015-P-2392	52 TWIGGS FERRY ROAD	ENE 0 - 1/8 (0.016 mi.)	14 / 9	83

Other Ascertainable Records

US AIRS: Aerometric Information Retrieval System Facility Subsystem

A review of the US AIRS list, as provided by EDR, has revealed that there is 1 US AIRS site within approximately 0.028 miles of the requested target property.

<u>Site</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID / Focus Map(s)</u>	<u>Page</u>
J T AND C A THRIFT I Database: US AIRS MINOR, Date of Government Version: 10/12/2016 EPA plant ID:: 110007319543	2742 GENERAL PULLER	SSE 0 - 1/8 (0.014 mi.)	B11 / 2	79

FINDS: Facility Index System/Facility Registry System

A review of the FINDS list, as provided by EDR, and dated 11/22/2019 has revealed that there are 3 FINDS sites within approximately 0.028 miles of the requested target property.

<u>Site</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID / Focus Map(s)</u>	<u>Page</u>
J T THRIFT OIL EXXON Registry ID:: 110020672388	2742 GENERAL PULLER	SSE 0 - 1/8 (0.014 mi.)	B9 / 2	77
J T AND C A THRIFT I Registry ID:: 110007319543	2742 GENERAL PULLER	SSE 0 - 1/8 (0.014 mi.)	B11 / 2	79
GOODGIRL INDUSTRIES	5041 GENERAL PULLER	NNE 0 - 1/8 (0.020 mi.)	C15 / 3	85

EXECUTIVE SUMMARY

Registry ID:: 110070334863

ECHO: Enforcement & Compliance History Information

A review of the ECHO list, as provided by EDR, and dated 01/05/2020 has revealed that there is 1 ECHO site within approximately 0.028 miles of the requested target property.

<u>Site</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID / Focus Map(s)</u>	<u>Page</u>
J T AND C A THRIFT I Registry ID: 110007319543	2742 GENERAL PULLER	SSE 0 - 1/8 (0.014 mi.)	B11 / 2	79

TIER 2: Tier 2 Information Listing

A review of the TIER 2 list, as provided by EDR, and dated 12/31/2014 has revealed that there are 5 TIER 2 sites within approximately 0.028 miles of the requested target property.

<u>Site</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID / Focus Map(s)</u>	<u>Page</u>
MEHERRIN AG & CHEMIC	5730 GENERAL PULLER	NE 0 - 1/8 (0.013 mi.)	7 / 4	38
THRIFT OIL	2742 GENERAL PULLER	SSE 0 - 1/8 (0.014 mi.)	B10 / 2	77
J. T. & C. A. THRIFT	2742 GENERAL PULLER	SSE 0 - 1/8 (0.014 mi.)	B12 / 2	81
REVERE GAS, INC.	11128 GENERAL PULLER	SSW 0 - 1/8 (0.027 mi.)	D17 / 6	92
REVERE GAS & APPLIAN	11128 GENERAL PULLER	SSW 0 - 1/8 (0.027 mi.)	D18 / 6	93

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA LUST: Recovered Government Archive Leaking Underground Storage Tank

A review of the RGA LUST list, as provided by EDR, has revealed that there is 1 RGA LUST site within approximately 0.028 miles of the requested target property.

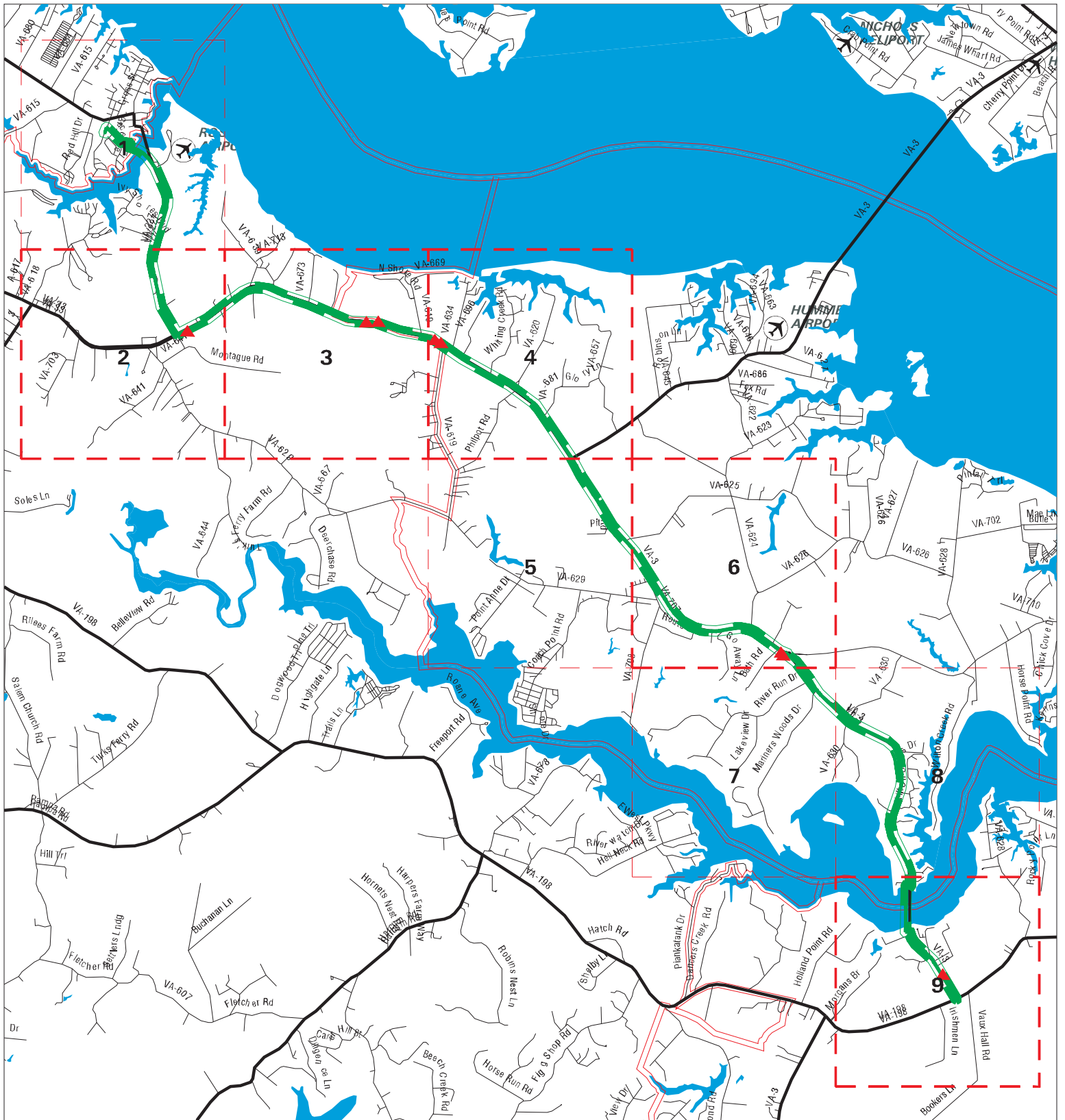
<u>Site</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID / Focus Map(s)</u>	<u>Page</u>
THRIFT OIL	2742 GENERAL PULLER	SSE 0 - 1/8 (0.014 mi.)	B13 / 2	83

MAPPED SITES SUMMARY

Target Property:
 URBANNA TO MATHEWS TRANSMISSION FORCE MAIN
 URBANNA, VA 23175

MAP ID / FOCUS MAP	SITE NAME	ADDRESS	DATABASE ACRONYMS	DIST (ft. & mi.) DIRECTION		
1 / 3	XCELPLUS INTERNATION	5041 GENERAL PULLER	ICIS, FINDS	TP		
2 / 4	VDACS PESTICIDE COLL	5730 GENERAL PULLER	FINDS, ECHO	TP		
A3 / 6	LITTLE SUE 136	11102 GENERAL PULLER	RGA LUST	TP		
A4 / 6	7 ELEVEN INCORPORATE	11102 GENERAL PULLER	UST, Financial Assurance	TP		
A5 / 6	7 ELEVEN INCORPORATE	11102 GENERAL PULLER	LUST, LTANKS	TP		
A6 / 6	7 ELEVEN INCORPORATE	11102 GENERAL PULLER	RGA LUST	TP		
7 / 4	MEHERRIN AG & CHEMIC	5730 GENERAL PULLER	TIER 2	67	0.013	NE
B8 / 2	THRIFT OIL COMPANY	2742 GENERAL PULLER	UST, AST	75	0.014	SSE
B9 / 2	J T THRIFT OIL EXXON	2742 GENERAL PULLER	FINDS	75	0.014	SSE
B10 / 2	THRIFT OIL	2742 GENERAL PULLER	LUST, LTANKS, TIER 2	75	0.014	SSE
B11 / 2	J T AND C A THRIFT I	2742 GENERAL PULLER	US AIRS, FINDS, ECHO	75	0.014	SSE
B12 / 2	J. T. & C. A. THRIFT	2742 GENERAL PULLER	LTANKS, TIER 2	75	0.014	SSE
B13 / 2	THRIFT OIL	2742 GENERAL PULLER	RGA LUST	75	0.014	SSE
14 / 9		52 TWIGGS FERRY ROAD	SPILLS	82	0.016	ENE
C15 / 3	GOODGIRL INDUSTRIES	5041 GENERAL PULLER	FINDS	107	0.020	NNE
C16 / 3	PARVINS SUPER MARKET	5041 GENERAL PULLER	UST	107	0.020	NNE
D17 / 6	REVERE GAS, INC.	11128 GENERAL PULLER	TIER 2	143	0.027	SSW
D18 / 6	REVERE GAS & APPLIAN	11128 GENERAL PULLER	TIER 2	143	0.027	SSW

Key Map - 6051134.2s



- ▲ Sites
- ↗ Target Property
- ↔ Search Buffer
- - - Focus Map - No Sites
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA



<p>SITE NAME: MIDDLESEX INTERCEPTOR SYSTEM PROGRAM PHASE I ADDRESS: URBANNA TO MATHEWS TRANSMISSION FORCE MAINLINE CITY/STATE: Urbanna VA ZIP: 23175</p>	<p>CLIENT: Tetra Tech CONTACT: Emily Foster INQUIRY #: 6051134.2s DATE: 04/28/20 2:09 PM</p>
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MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
<u>STANDARD ENVIRONMENTAL RECORDS</u>								
<i>Federal NPL site list</i>								
NPL	0.028		0	NR	NR	NR	NR	0
Proposed NPL	0.028		0	NR	NR	NR	NR	0
NPL LIENS	0.028		0	NR	NR	NR	NR	0
<i>Federal Delisted NPL site list</i>								
Delisted NPL	0.028		0	NR	NR	NR	NR	0
<i>Federal CERCLIS list</i>								
FEDERAL FACILITY	0.028		0	NR	NR	NR	NR	0
SEMS	0.028		0	NR	NR	NR	NR	0
<i>Federal CERCLIS NFRAP site list</i>								
SEMS-ARCHIVE	0.028		0	NR	NR	NR	NR	0
<i>Federal RCRA CORRACTS facilities list</i>								
CORRACTS	0.028		0	NR	NR	NR	NR	0
<i>Federal RCRA non-CORRACTS TSD facilities list</i>								
RCRA-TSDF	0.028		0	NR	NR	NR	NR	0
<i>Federal RCRA generators list</i>								
RCRA-LQG	0.028		0	NR	NR	NR	NR	0
RCRA-SQG	0.028		0	NR	NR	NR	NR	0
RCRA-VSQG	0.028		0	NR	NR	NR	NR	0
<i>Federal institutional controls / engineering controls registries</i>								
LUCIS	0.028		0	NR	NR	NR	NR	0
US ENG CONTROLS	0.028		0	NR	NR	NR	NR	0
US INST CONTROLS	0.028		0	NR	NR	NR	NR	0
<i>Federal ERNS list</i>								
ERNS	0.028		0	NR	NR	NR	NR	0
<i>State- and tribal - equivalent CERCLIS</i>								
SHWS	N/A		N/A	N/A	N/A	N/A	N/A	N/A
<i>State and tribal landfill and/or solid waste disposal site lists</i>								
SWF/LF	0.028		0	NR	NR	NR	NR	0
<i>State and tribal leaking storage tank lists</i>								
LUST	0.028	1	1	NR	NR	NR	NR	2
INDIAN LUST	0.028		0	NR	NR	NR	NR	0
LTANKS	0.028	1	2	NR	NR	NR	NR	3
<i>State and tribal registered storage tank lists</i>								
FEMA UST	0.028		0	NR	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
UST	0.028	1	2	NR	NR	NR	NR	3
AST	0.028		1	NR	NR	NR	NR	1
INDIAN UST	0.028		0	NR	NR	NR	NR	0
State and tribal institutional control / engineering control registries								
ENG CONTROLS	0.028		0	NR	NR	NR	NR	0
INST CONTROL	0.028		0	NR	NR	NR	NR	0
State and tribal voluntary cleanup sites								
INDIAN VCP	0.028		0	NR	NR	NR	NR	0
VCP	0.028		0	NR	NR	NR	NR	0
State and tribal Brownfields sites								
BROWNFIELDS	0.028		0	NR	NR	NR	NR	0
<u>ADDITIONAL ENVIRONMENTAL RECORDS</u>								
Local Brownfield lists								
US BROWNFIELDS	0.028		0	NR	NR	NR	NR	0
Local Lists of Landfill / Solid Waste Disposal Sites								
INDIAN ODI	0.028		0	NR	NR	NR	NR	0
ODI	0.028		0	NR	NR	NR	NR	0
DEBRIS REGION 9	0.028		0	NR	NR	NR	NR	0
IHS OPEN DUMPS	0.028		0	NR	NR	NR	NR	0
Local Lists of Hazardous waste / Contaminated Sites								
US HIST CDL	0.028		0	NR	NR	NR	NR	0
US CDL	0.028		0	NR	NR	NR	NR	0
Local Land Records								
LIENS 2	0.028		0	NR	NR	NR	NR	0
Records of Emergency Release Reports								
HMIRS	0.028		0	NR	NR	NR	NR	0
SPILLS	0.028		1	NR	NR	NR	NR	1
SPILLS 90	0.028		0	NR	NR	NR	NR	0
Other Ascertainable Records								
RCRA NonGen / NLR	0.028		0	NR	NR	NR	NR	0
FUDS	0.028		0	NR	NR	NR	NR	0
DOD	0.028		0	NR	NR	NR	NR	0
SCRD DRYCLEANERS	0.028		0	NR	NR	NR	NR	0
US FIN ASSUR	0.028		0	NR	NR	NR	NR	0
EPA WATCH LIST	0.028		0	NR	NR	NR	NR	0
2020 COR ACTION	0.028		0	NR	NR	NR	NR	0
TSCA	0.028		0	NR	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
TRIS	0.028		0	NR	NR	NR	NR	0
SSTS	0.028		0	NR	NR	NR	NR	0
ROD	0.028		0	NR	NR	NR	NR	0
RMP	0.028		0	NR	NR	NR	NR	0
RAATS	0.028		0	NR	NR	NR	NR	0
PRP	0.028		0	NR	NR	NR	NR	0
PADS	0.028		0	NR	NR	NR	NR	0
ICIS	0.028	1	0	NR	NR	NR	NR	1
FTTS	0.028		0	NR	NR	NR	NR	0
MLTS	0.028		0	NR	NR	NR	NR	0
COAL ASH DOE	0.028		0	NR	NR	NR	NR	0
COAL ASH EPA	0.028		0	NR	NR	NR	NR	0
PCB TRANSFORMER	0.028		0	NR	NR	NR	NR	0
RADINFO	0.028		0	NR	NR	NR	NR	0
HIST FTTS	0.028		0	NR	NR	NR	NR	0
DOT OPS	0.028		0	NR	NR	NR	NR	0
CONSENT	0.028		0	NR	NR	NR	NR	0
INDIAN RESERV	0.028		0	NR	NR	NR	NR	0
FUSRAP	0.028		0	NR	NR	NR	NR	0
UMTRA	0.028		0	NR	NR	NR	NR	0
LEAD SMELTERS	0.028		0	NR	NR	NR	NR	0
US AIRS	0.028		1	NR	NR	NR	NR	1
US MINES	0.028		0	NR	NR	NR	NR	0
ABANDONED MINES	0.028		0	NR	NR	NR	NR	0
FINDS	0.028	2	3	NR	NR	NR	NR	5
ECHO	0.028	1	1	NR	NR	NR	NR	2
DOCKET HWC	0.028		0	NR	NR	NR	NR	0
UXO	0.028		0	NR	NR	NR	NR	0
FUELS PROGRAM	0.028		0	NR	NR	NR	NR	0
AIRS	0.028		0	NR	NR	NR	NR	0
NPDES	0.028		0	NR	NR	NR	NR	0
COAL ASH	0.028		0	NR	NR	NR	NR	0
DRYCLEANERS	0.028		0	NR	NR	NR	NR	0
ENF	0.028		0	NR	NR	NR	NR	0
Financial Assurance	0.028	1	0	NR	NR	NR	NR	1
TIER 2	0.028		5	NR	NR	NR	NR	5
UIC	0.028		0	NR	NR	NR	NR	0
MINES MRDS	0.028		0	NR	NR	NR	NR	0

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP	0.028		0	NR	NR	NR	NR	0
EDR Hist Auto	0.028		0	NR	NR	NR	NR	0
EDR Hist Cleaner	0.028		0	NR	NR	NR	NR	0

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA LF	0.028		0	NR	NR	NR	NR	0
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MAP FINDINGS SUMMARY

<u>Database</u>	<u>Search Distance (Miles)</u>	<u>Target Property</u>	<u>< 1/8</u>	<u>1/8 - 1/4</u>	<u>1/4 - 1/2</u>	<u>1/2 - 1</u>	<u>> 1</u>	<u>Total Plotted</u>
RGA LUST	0.028	2	1	NR	NR	NR	NR	3
- Totals --		10	18	0	0	0	0	28

NOTES:

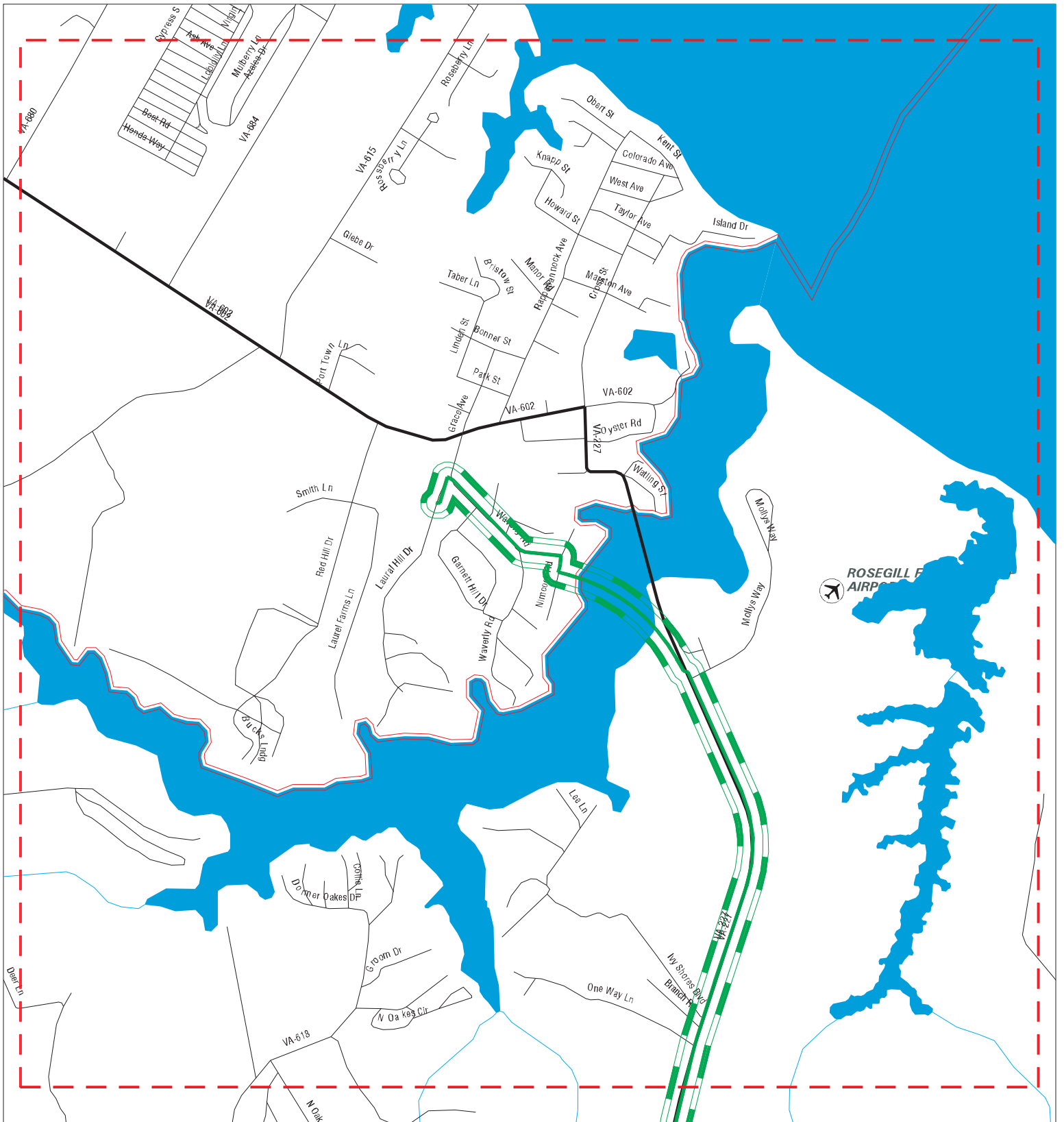
TP = Target Property

NR = Not Requested at this Search Distance

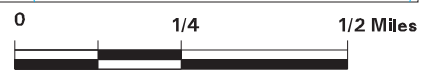
Sites may be listed in more than one database

N/A = This State does not maintain a SHWS list. See the Federal CERCLIS list.

Focus Map - 1 - 6051134.2s



ROSEGILL F
AIRPORT



- ▲ Sites
- ▬▬ Target Property
- ▬▬ Search Buffer
- ▬▬▬▬ Focus Map - Sites
- ▬▬▬▬ National Priority List Sites
- ▬▬▬▬ Dept. Defense Sites
- ▬▬▬▬ Focus Map - No Sites
- ▬▬▬▬ Indian Reservations BIA

<p>SITE NAME: MIDDLESEX INTERCEPTOR SYSTEM PROGRAM PHASE I ADDRESS: URBANNA TO MATHEWS TRANSMISSION FORCE MAINLINE CITY/STATE: Urbanna VA ZIP: 23175</p>	<p>CLIENT: Tetra Tech CONTACT: Emily Foster INQUIRY #: 6051134.2s DATE: 04/28/20</p>
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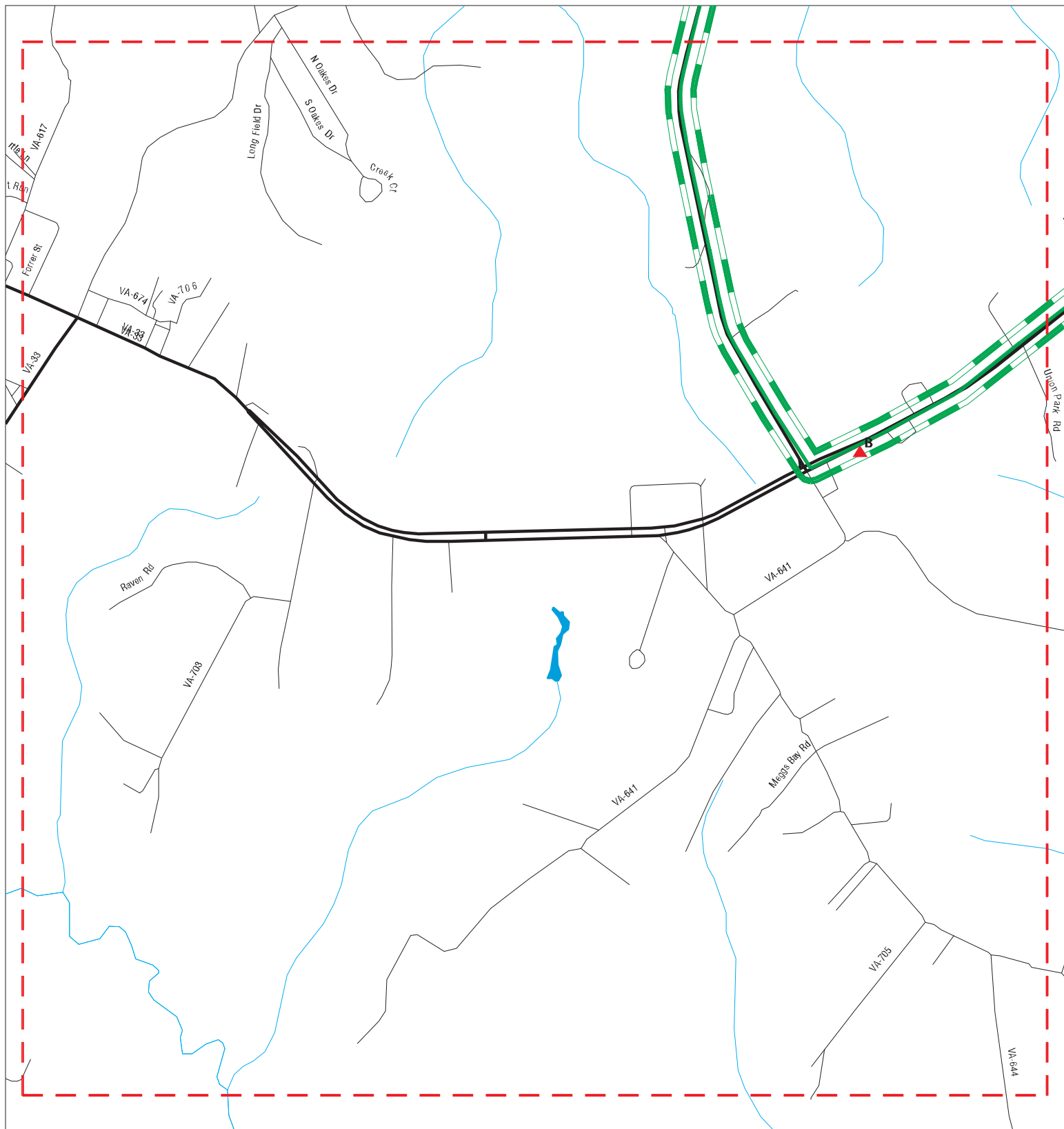
MAPPED SITES SUMMARY - FOCUS MAP 1

Target Property:
URBANNA TO MATHEWS TRANSMISSION FORCE MAIN
URBANNA, VA 23175

MAP ID / FOCUS MAP	SITE NAME	ADDRESS	DATABASE ACRONYMS	DIST (ft. & mi.) DIRECTION
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NO MAPPED SITES FOUND

Focus Map - 2 - 6051134.2s



- ▲ Sites
- - - Target Property
- - - Search Buffer
- - - Focus Map - No Sites
- - - Focus Map - Sites
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA



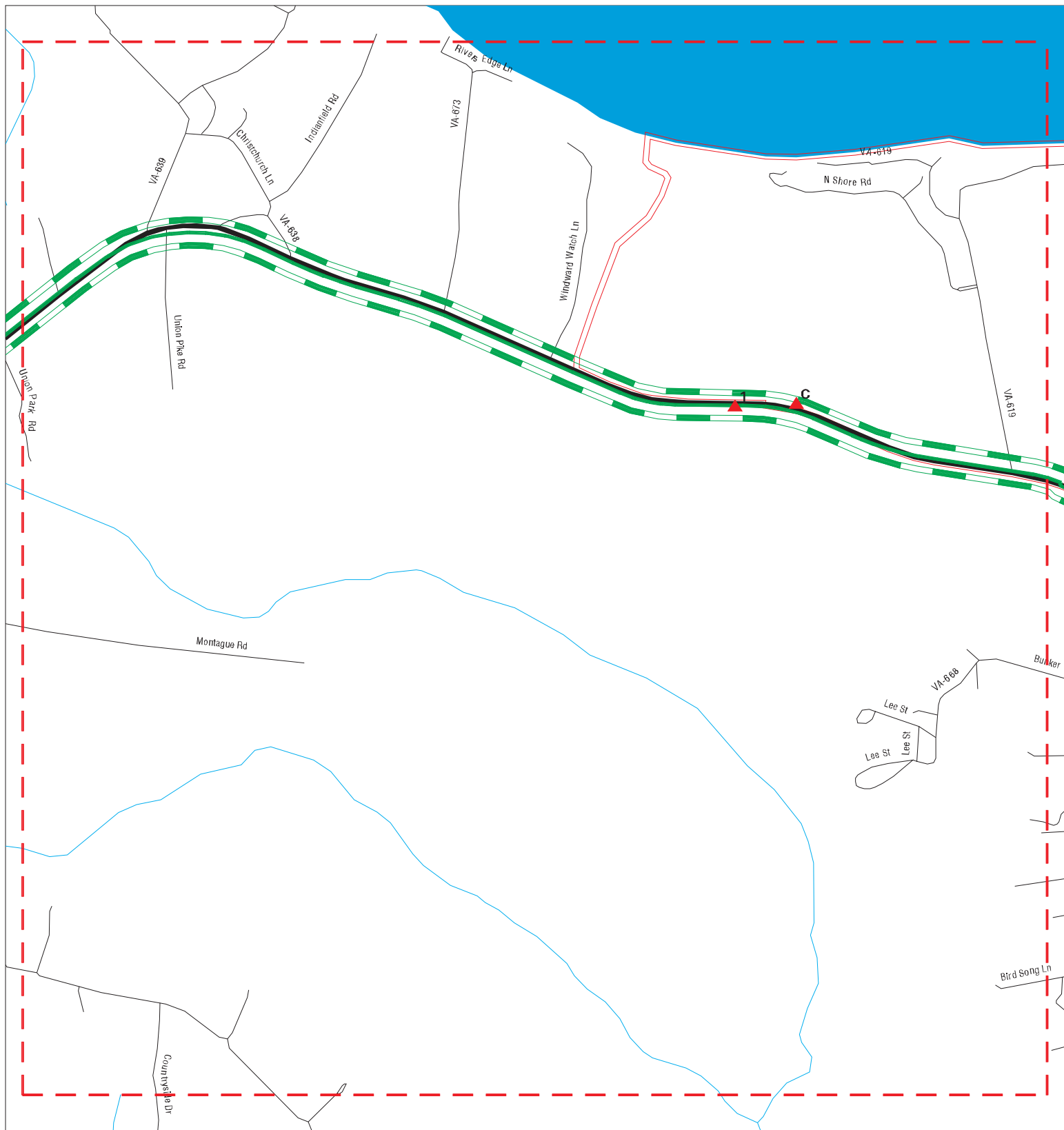
SITE NAME: MIDDLESEX INTERCEPTOR SYSTEM PROGRAM PHASE II ADDRESS: URBANNA TO MATHEWS TRANSMISSION FORCE MAINLINE CITY/STATE: Urbanna VA ZIP: 23175	CLIENT: Tetra Tech CONTACT: Emily Foster INQUIRY #: 6051134.2s DATE: 04/28/20
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MAPPED SITES SUMMARY - FOCUS MAP 2

Target Property:
 URBANNA TO MATHEWS TRANSMISSION FORCE MAIN
 URBANNA, VA 23175

MAP ID / FOCUS MAP	SITE NAME	ADDRESS	DATABASE ACRONYMS	DIST (ft. & mi.) DIRECTION
B8 / 2	THRIFT OIL COMPANY	2742 GENERAL PULLER	UST, AST	75 0.014 SSE
B9 / 2	J T THRIFT OIL EXXON	2742 GENERAL PULLER	FINDS	75 0.014 SSE
B10 / 2	THRIFT OIL	2742 GENERAL PULLER	LUST, LTANKS, TIER 2	75 0.014 SSE
B11 / 2	J T AND C A THRIFT I	2742 GENERAL PULLER	US AIRS, FINDS, ECHO	75 0.014 SSE
B12 / 2	J. T. & C. A. THRIFT	2742 GENERAL PULLER	LTANKS, TIER 2	75 0.014 SSE
B13 / 2	THRIFT OIL	2742 GENERAL PULLER	RGA LUST	75 0.014 SSE

Focus Map - 3 - 6051134.2s



- ▲ Sites
- ▬▬ Target Property
- ▬▬ Search Buffer
- ▬▬ Focus Map - No Sites
- ▬▬ Focus Map - Sites
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA



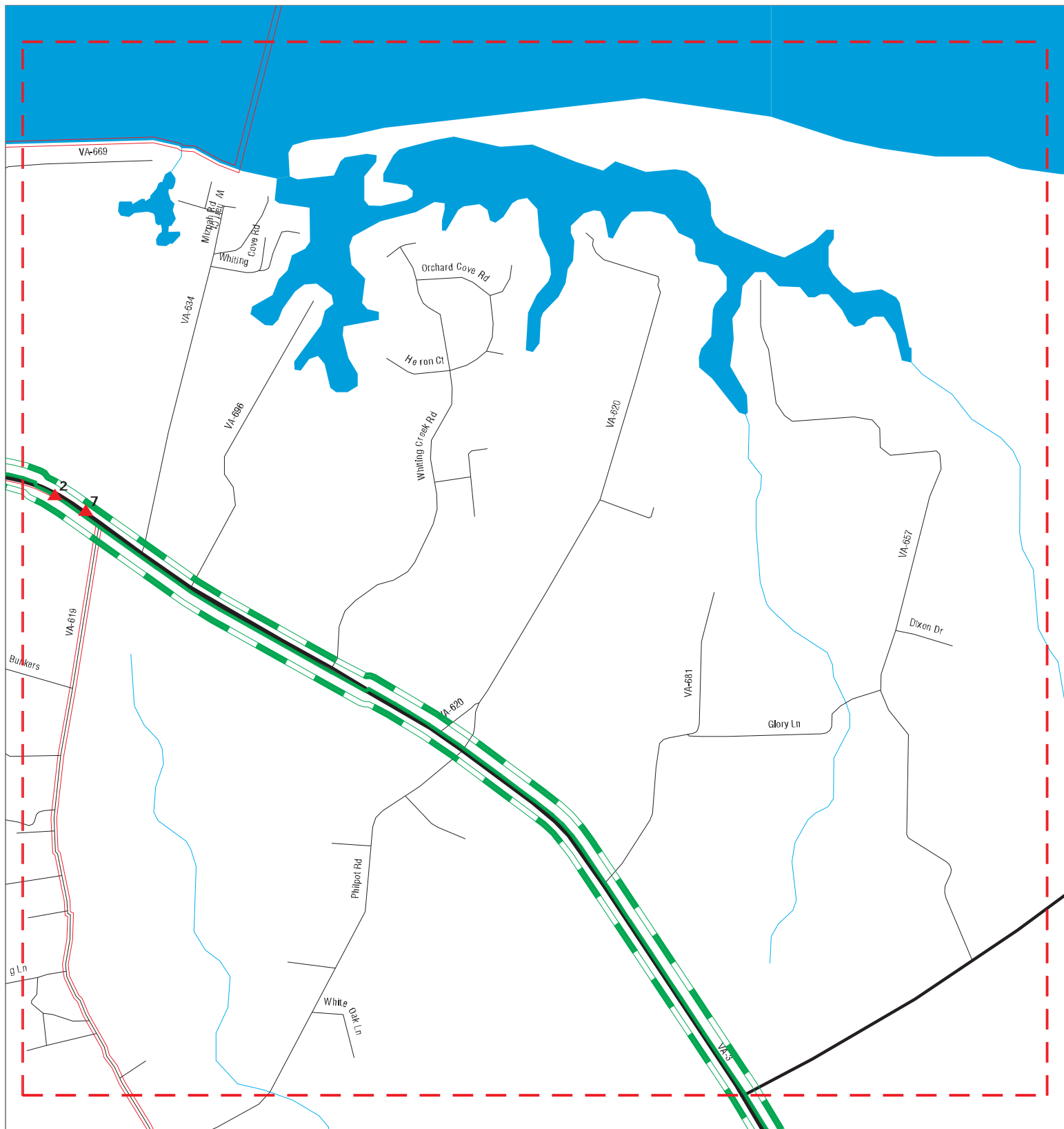
SITE NAME: MIDDLESEX INTERCEPTOR SYSTEM PROGRAM PHASE II ADDRESS: URBANNA TO MATHEWS TRANSMISSION FORCE MAINLINE CITY/STATE: Urbanna VA ZIP: 23175	CLIENT: Tetra Tech CONTACT: Emily Foster INQUIRY #: 6051134.2s DATE: 04/28/20
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MAPPED SITES SUMMARY - FOCUS MAP 3

Target Property:
 URBANNA TO MATHEWS TRANSMISSION FORCE MAIN
 URBANNA, VA 23175

MAP ID / FOCUS MAP	SITE NAME	ADDRESS	DATABASE ACRONYMS	DIST (ft. & mi.) DIRECTION
1 / 3	XCELPLUS INTERNATIONAL	5041 GENERAL PULLER	ICIS, FINDS	TP
C15 / 3	GOODGIRL INDUSTRIES	5041 GENERAL PULLER	FINDS	107 0.020 NNE
C16 / 3	PARVINS SUPER MARKET	5041 GENERAL PULLER	UST	107 0.020 NNE

Focus Map - 4 - 6051134.2s



- ▲ Sites
- ↗ Target Property
- ↘ Search Buffer
- ↗ Focus Map - No Sites
- ↘ Focus Map - Sites
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA



SITE NAME: MIDDLESEX INTERCEPTOR SYSTEM PROGRAM PHASE II
 ADDRESS: URBANNA TO MATHEWS TRANSMISSION FORCE MAIN
 CITY/STATE: Urbanna VA
 ZIP: 23175

CLIENT: Tetra Tech
 CONTACT: Emily Foster
 INQUIRY #: 6051134.2s
 DATE: 04/28/20

MAPPED SITES SUMMARY - FOCUS MAP 4

Target Property:
URBANNA TO MATHEWS TRANSMISSION FORCE MAIN
URBANNA, VA 23175

MAP ID / FOCUS MAP	SITE NAME	ADDRESS	DATABASE ACRONYMS	DIST (ft. & mi.) DIRECTION
2 / 4	VDACS PESTICIDE COLL	5730 GENERAL PULLER	FINDS, ECHO	TP
7 / 4	MEHERRIN AG & CHEMIC	5730 GENERAL PULLER	TIER 2	67 0.013 NE

Focus Map - 5 - 6051134.2s



- ▲ Sites
- ↗ Target Property
- ↘ Search Buffer
- - - Focus Map - No Sites
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA

SITE NAME: MIDDLESEX INTERCEPTOR SYSTEM PROGRAM PHASE II ADDRESS: URBANNA TO MATHEWS TRANSMISSION FORCE MAINLINE CITY/STATE: Urbanna VA ZIP: 23175	CLIENT: Tetra Tech CONTACT: Emily Foster INQUIRY #: 6051134.2s DATE: 04/28/20
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MAPPED SITES SUMMARY - FOCUS MAP 5

Target Property:
URBANNA TO MATHEWS TRANSMISSION FORCE MAIN
URBANNA, VA 23175

MAP ID / FOCUS MAP	SITE NAME	ADDRESS	DATABASE ACRONYMS	DIST (ft. & mi.) DIRECTION
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NO MAPPED SITES FOUND

Focus Map - 6 - 6051134.2s



- ▲ Sites
- ▬▬▬ Target Property
- ▬▬▬ Search Buffer
- ▬▬▬ Focus Map - No Sites
- ▬▬▬ Focus Map - Sites
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA



<p>SITE NAME: MIDDLESEX INTERCEPTOR SYSTEM PROGRAM PHASE II ADDRESS: URBANNA TO MATHEWS TRANSMISSION FORCE MAIN CITY/STATE: Urbanna VA ZIP: 23175</p>	<p>CLIENT: Tetra Tech CONTACT: Emily Foster INQUIRY #: 6051134.2s DATE: 04/28/20</p>
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MAPPED SITES SUMMARY - FOCUS MAP 6

Target Property:
 URBANNA TO MATHEWS TRANSMISSION FORCE MAIN
 URBANNA, VA 23175

MAP ID / FOCUS MAP	SITE NAME	ADDRESS	DATABASE ACRONYMS	DIST (ft. & mi.) DIRECTION
A3 / 6	LITTLE SUE 136	11102 GENERAL PULLER	RGA LUST	TP
A4 / 6	7 ELEVEN INCORPORATE	11102 GENERAL PULLER	UST, Financial Assurance	TP
A5 / 6	7 ELEVEN INCORPORATE	11102 GENERAL PULLER	LUST, LTANKS	TP
A6 / 6	7 ELEVEN INCORPORATE	11102 GENERAL PULLER	RGA LUST	TP
D17 / 6	REVERE GAS, INC.	11128 GENERAL PULLER	TIER 2	143 0.027 SSW
D18 / 6	REVERE GAS & APPLIAN	11128 GENERAL PULLER	TIER 2	143 0.027 SSW

Focus Map - 7 - 6051134.2s



- ▲ Sites
- ▨ Target Property
- ▨ Search Buffer
- ▨ Focus Map - No Sites
- ▨ Focus Map - Sites
- ▨ National Priority List Sites
- ▨ Dept. Defense Sites
- ▨ Indian Reservations BIA



<p>SITE NAME: MIDDLESEX INTERCEPTOR SYSTEM PROGRAM PHASE II ADDRESS: URBANNA TO MATHEWS TRANSMISSION FORCE MAIN CITY/STATE: Urbanna VA ZIP: 23175</p>	<p>CLIENT: Tetra Tech CONTACT: Emily Foster INQUIRY #: 6051134.2s DATE: 04/28/20</p>
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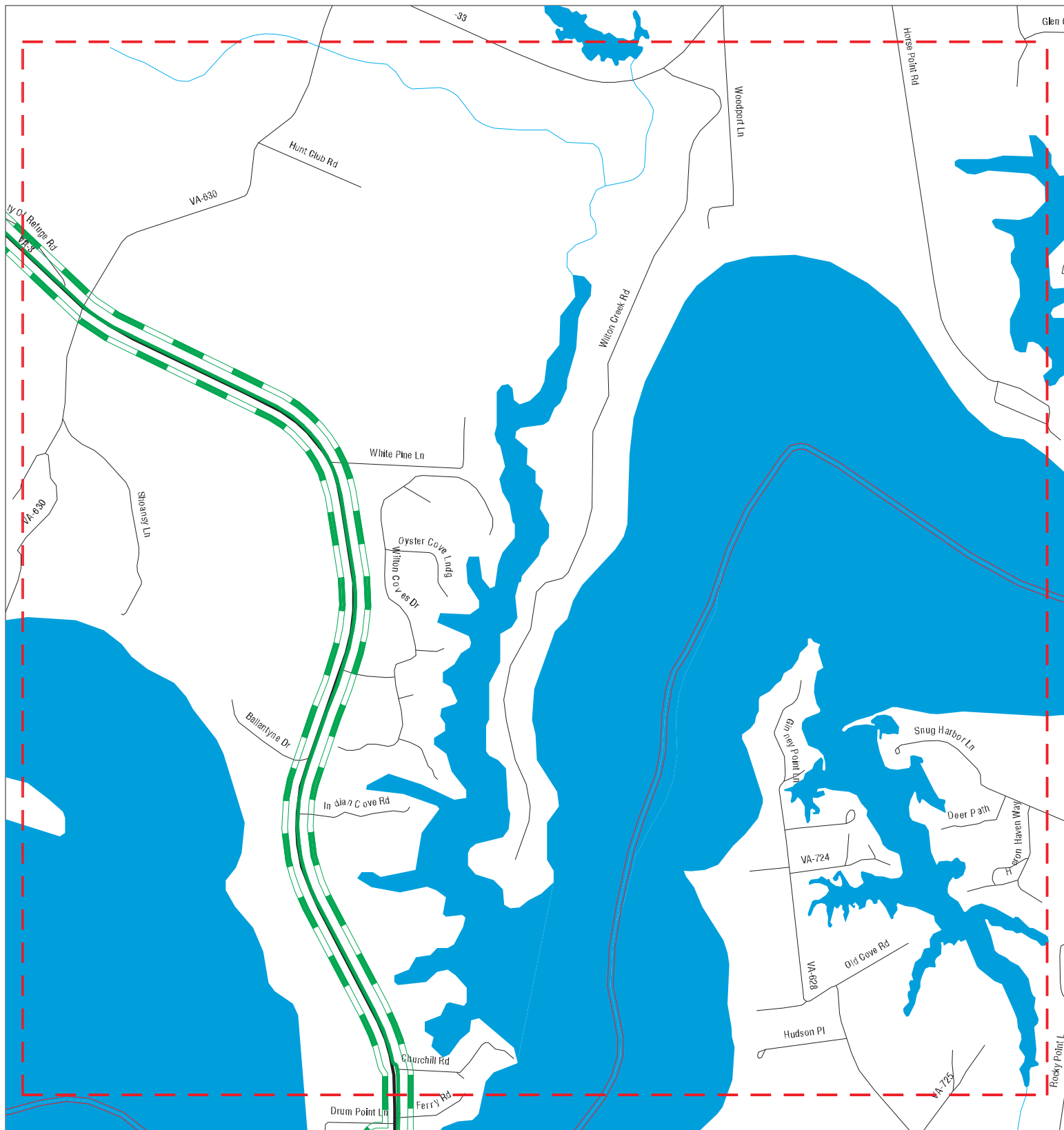
MAPPED SITES SUMMARY - FOCUS MAP 7

Target Property:
URBANNA TO MATHEWS TRANSMISSION FORCE MAIN
URBANNA, VA 23175

MAP ID / FOCUS MAP	SITE NAME	ADDRESS	DATABASE ACRONYMS	DIST (ft. & mi.) DIRECTION
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NO MAPPED SITES FOUND

Focus Map - 8 - 6051134.2s



- ▲ Sites
- ▬▬ Target Property
- ▬▬ Search Buffer
- ▬▬ Focus Map - No Sites
- ▬▬ Focus Map - Sites
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA



SITE NAME: MIDDLESEX INTERCEPTOR SYSTEM PROGRAM PHASE II
 ADDRESS: URBANNA TO MATHEWS TRANSMISSION FORCE MAIN
 CITY/STATE: Urbanna VA
 ZIP: 23175

CLIENT: Tetra Tech
 CONTACT: Emily Foster
 INQUIRY #: 6051134.2s
 DATE: 04/28/20

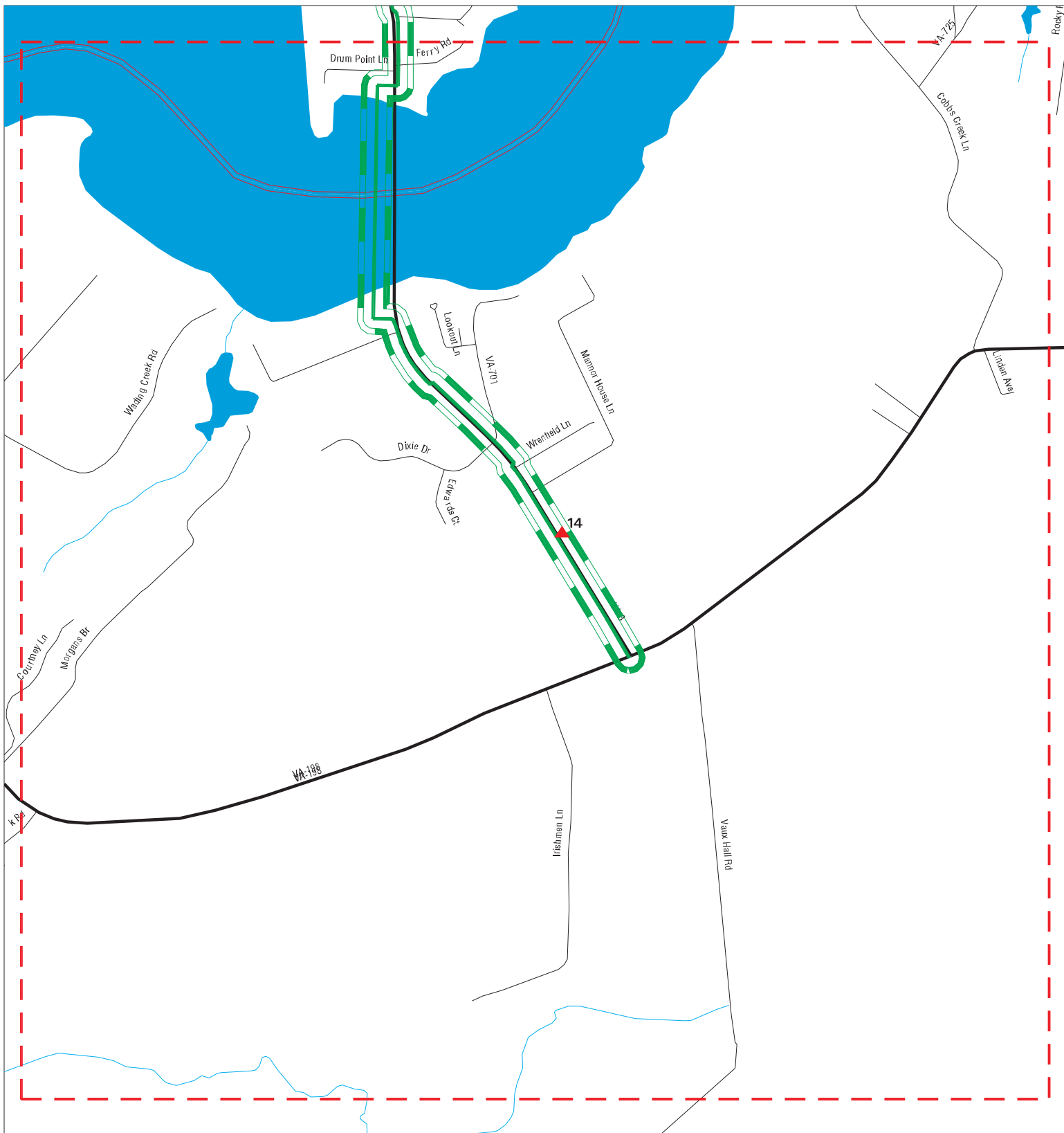
MAPPED SITES SUMMARY - FOCUS MAP 8

Target Property:
URBANNA TO MATHEWS TRANSMISSION FORCE MAIN
URBANNA, VA 23175

MAP ID / FOCUS MAP	SITE NAME	ADDRESS	DATABASE ACRONYMS	DIST (ft. & mi.) DIRECTION
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NO MAPPED SITES FOUND

Focus Map - 9 - 6051134.2s



- ▲ Sites
- ▬ Target Property
- ▬ Search Buffer
- ▬ Focus Map - No Sites
- ▬ Focus Map - Sites
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA



SITE NAME: MIDDLESEX INTERCEPTOR SYSTEM PROGRAM PHASE II ADDRESS: URBANNA TO MATHEWS TRANSMISSION FORCE MAIN CITY/STATE: Urbanna VA ZIP: 23175	CLIENT: Tetra Tech CONTACT: Emily Foster INQUIRY #: 6051134.2s DATE: 04/28/20
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MAPPED SITES SUMMARY - FOCUS MAP 9

Target Property:
URBANNA TO MATHEWS TRANSMISSION FORCE MAIN
URBANNA, VA 23175

MAP ID / FOCUS MAP	SITE NAME	ADDRESS	DATABASE ACRONYMS	DIST (ft. & mi.) DIRECTION
14 / 9		52 TWIGGS FERRY ROAD	SPILLS	82 0.016 ENE

Map ID
 Direction
 Distance
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
 EPA ID Number

1 **XCELPLUS INTERNATIONAL**
Target **5041 GENERAL PULLER HIGHWAY**
Property **SALUDA, VA 23149**

ICIS **1009331987**
FINDS **N/A**

Actual:
76 ft.
Focus Map:
3

ICIS:
 Enforcement Action ID: 03-100022540
 FRS ID: 110024538598
 Action Name: FIFRA - Xcelplus International
 Facility Name: XCELPLUS INTERNATIONAL
 Facility Address: 5041 GENERAL PULLER HIGHWAY
 SALUDA, VA 23149
 Enforcement Action Type: Letter to Regulated Entity
 Facility County: MIDDLESEX
 Program System Acronym: ICIS
 Enforcement Action Forum Desc: Administrative - Informal
 EA Type Code: LRE
 Facility SIC Code: Not reported
 Federal Facility ID: Not reported
 Latitude in Decimal Degrees: 37.60129
 Longitude in Decimal Degrees: -76.51742
 Permit Type Desc: Not reported
 Program System Acronym: 7825695
 Facility NAICS Code: Not reported
 Tribal Land Code: Not reported

FINDS:
 Registry ID: 110024538598
 Facility URL: http://ofmpub.epa.gov/enviro/fii_query_detail.disp_program_facility?p_registry_id=110024538598

Environmental Interest/Information System:
 ICIS (Integrated Compliance Information System) is the Integrated Compliance Information System and provides a database that, when complete, will contain integrated Enforcement and Compliance information across most of EPA's programs. The vision for ICIS is to replace EPA's independent databases that contain Enforcement data with a single repository for that information. Currently, ICIS contains all Federal Administrative and Judicial enforcement actions. This information is maintained in ICIS by EPA in the Regional offices and it Headquarters. A future release of ICIS will replace the Permit Compliance System (PCS) which supports the NPDES and will integrate that information with Federal actions already in the system. ICIS also has the capability to track other activities occurring in the Region that support Compliance and Enforcement programs. These include; Incident Tracking, Compliance Assistance, and Compliance Monitoring.

[Click this hyperlink](#) while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

2 **VDACS PESTICIDE COLLECTION PROGRAM / MEHERRIN AG &**
Target **5730 GENERAL PULLER HIGHWAY**
Property **LOCUST HILL, VA 23092**

FINDS **1018363038**
ECHO **N/A**

Actual:
83 ft.
Focus Map:
4

FINDS:
 Registry ID: 110067265248
 Facility URL: http://ofmpub.epa.gov/enviro/fii_query_detail.disp_program_facility?p_registry_id=110067265248
 Environmental Interest/Information System:
 RCRAInfo is a national information system that supports the Resource

Map ID
 Direction
 Distance
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
 EPA ID Number

VDACS PESTICIDE COLLECTION PROGRAM / MEHERRIN AG & CHEMICAL (Continued)

1018363038

Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

[Click this hyperlink](#) while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:

Envid: 1018363038
 Registry ID: 110067265248
 DFR URL: <http://echo.epa.gov/detailed-facility-report?fid=110067265248>
 Name: VDACS PESTICIDE COLLECTION PROGRAM / MEHERRIN AG & CHEMICAL
 Address: 5730 GENERAL PULLER HIGHWAY
 City,State,Zip: LOCUST HILL, VA 23092

A3 **LITTLE SUE 136**
Target **11102 GENERAL PULLER BLVD**
Property **HARTFIELD, VA**

RGA LUST **S115975373**
N/A

Site 1 of 4 in cluster A

Actual: RGA LUST:
78 ft. 2012 LITTLE SUE 136 11102 GENERAL PULLER BLVD
Focus Map: 2011 LITTLE SUE 136 11102 GENERAL PULLER BLVD
6 2010 LITTLE SUE 136 11102 GENERAL PULLER BLVD
 2009 LITTLE SUE 136 11102 GENERAL PULLER BLVD
 2008 LITTLE SUE 136 11102 GENERAL PULLER BLVD

A4 **7 ELEVEN INCORPORATED 34062**
Target **11102 GENERAL PULLER BLVD**
Property **HARTFIELD, VA 23071**

UST **U003686646**
Financial Assurance **N/A**

Site 2 of 4 in cluster A

Actual: Facility:
78 ft. Name: 7 ELEVEN INCORPORATED 34062
Focus Map: Address: 11102 GENERAL PULLER BLVD
6 City,State,Zip: HARTFIELD, VA 23071
 Facility Id: 4018362
 Facility Type: GAS STATION
 CEDS Facility ID: 200000165442

Owner:
 Owner Id: 38838
 Owner Name: 7 Eleven Incorporated
 Owner Address: PO Box 711 (Attn: Gasoline Compliance)
 Owner Address2: Not reported
 Owner City, State, Zip: Dallas, TX 75221
 Owner Type: COMMERCIAL
 Number of Active AST: 0
 Number of Active UST: 3
 Number of Inactive AST: 0
 Number of Inactive UST: 5

Owner Id: 28628
 Owner Name: H.L. REVERE

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

7 ELEVEN INCORPORATED 34062 (Continued)

U003686646

Owner Address:	BOX 100
Owner Address2:	MIDDLESEX
Owner City, State, Zip:	HARTFIELD, VA 23071
Owner Type:	COMMERCIAL
Number of Active AST:	0
Number of Active UST:	3
Number of Inactive AST:	0
Number of Inactive UST:	5
UST:	
Facility ID:	4018362
Federally Regulated:	Yes
Tank Number: 1	
Tank Capacity:	6000
Tank Contents:	GASOLINE
Tank Status:	CURR IN USE
Tank Type:	UST
Tank Material:	
Install Date:	1/1/1990
Tank Materials: Bare Steel	No
Tank Materials: Cath Protect Steel	Yes
Tank Materials: Epoxy Steel	No
Tank Materials: Fiberglass	No
Tank Materials: Concrete	No
Tank Materials: Composite	No
Tank Materials: Double Walled	No
Tank Materials: Lined Interior	No
Tank Materials: Excav Liner	No
Tank Materials: Insulated Tank Jacket	No
Tank Materials: Repaired	No
Tank Materials: Unknown	No
Tank Materials: Other	No
Tank Materials: Other Note	Not reported
Release Detection:	
Tank Release Detection: Leak Deferred	No
Tank Release Detection: Manual Gauge	No
Tank Release Detection: Auto Gauge	Yes
Tank Release Detection: Tank Tightness	No
Tank Release Detection: Vapor Monitor	No
Tank Release Detection: Inventory	No
Tank Release Detection: Stat Invent Recon	No
Tank Release Detection: Spill Install	Yes
Tank Release Detection: Overfill Install	Not reported
Tank Release Detection: Groundwater	No
Tank Release Detection: Int Sec Containment	No
Tank Release Detection: Int Double Walled	No
Tank Release Detection: Other Method	No
Tank Release Detection: Other Note	Not reported
Pipe Release Detection: Leak Deferred	Not reported
Pipe Release Detection: Autoleak	Not reported
Pipe Release Detection: Line Tightness	Yes
Pipe Release Detection: Stat Invent Recon	No
Pipe Release Detection: Groundwater	No
Pipe Release Detection: Int Sec Containment	No

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

7 ELEVEN INCORPORATED 34062 (Continued)

U003686646

Pipe Release Det: Interior Double Walled	No
Pipe Release Detection: Other Method	No
Pipe Release Detection: Other Note	Not reported
Pipe Type:	PRESSURE
Pipe Materials: Bare Steel	No
Pipe Materials: Galvanized Steel	No
Pipe Materials: Copper	No
Pipe Materials: Fiberglass	Yes
Pipe Materials: Cath Protect	No
Pipe Materials: Double Walled	No
Pipe Materials: Sec Containment	No
Pipe Materials: Repaired	No
Pipe Materials: Unknown	No
Pipe Materials: Other	No
Pipe Materials: Other Note	Not reported
Facility ID:	4018362
Federally Regulated:	Yes
Tank Number:	2
Tank Capacity:	6000
Tank Contents:	GASOLINE
Tank Status:	CURR IN USE
Tank Type:	UST
Tank Material:	
Install Date:	1/1/1990
Tank Materials: Bare Steel	No
Tank Materials: Cath Protect Steel	Yes
Tank Materials: Epoxy Steel	No
Tank Materials: Fiberglass	No
Tank Materials: Concrete	No
Tank Materials: Composite	No
Tank Materials: Double Walled	No
Tank Materials: Lined Interior	No
Tank Materials: Excav Liner	No
Tank Materials: Insulated Tank Jacket	No
Tank Materials: Repaired	No
Tank Materials: Unknown	No
Tank Materials: Other	No
Tank Materials: Other Note	Not reported
Release Detection:	
Tank Release Detection: Leak Deferred	No
Tank Release Detection: Manual Gauge	No
Tank Release Detection: Auto Gauge	Yes
Tank Release Detection: Tank Tightness	No
Tank Release Detection: Vapor Monitor	No
Tank Release Detection: Inventory	No
Tank Release Detection: Stat Invent Recon	No
Tank Release Detection: Spill Install	Yes
Tank Release Detection: Overfill Install	Not reported
Tank Release Detection: Groundwater	No
Tank Release Detection: Int Sec Containment	No
Tank Release Detection: Int Double Walled	No

Map ID
 Direction
 Distance
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
 EPA ID Number

7 ELEVEN INCORPORATED 34062 (Continued)

U003686646

Tank Release Detection: Other Method	No
Tank Release Detection: Other Note	Not reported
Pipe Release Detection: Leak Deferred	Not reported
Pipe Release Detection: Autoleak	Not reported
Pipe Release Detection: Line Tightness	Yes
Pipe Release Detection: Stat Invent Recon	No
Pipe Release Detection: Groundwater	No
Pipe Release Detection: Int Sec Containment	No
Pipe Release Det: Interior Double Walled	No
Pipe Release Detection: Other Method	No
Pipe Release Detection: Other Note	Not reported
Pipe Type:	PRESSURE
Pipe Materials: Bare Steel	No
Pipe Materials: Galvanized Steel	No
Pipe Materials: Copper	No
Pipe Materials: Fiberglass	Yes
Pipe Materials: Cath Protect	No
Pipe Materials: Double Walled	No
Pipe Materials: Sec Containment	No
Pipe Materials: Repaired	No
Pipe Materials: Unknown	No
Pipe Materials: Other	No
Pipe Materials: Other Note	Not reported
Facility ID:	4018362
Federally Regulated:	Yes
Tank Number:	3
Tank Capacity:	6000
Tank Contents:	GASOLINE
Tank Status:	CURR IN USE
Tank Type:	UST
Tank Material:	
Install Date:	1/1/1987
Tank Materials: Bare Steel	No
Tank Materials: Cath Protect Steel	Yes
Tank Materials: Epoxy Steel	No
Tank Materials: Fiberglass	No
Tank Materials: Concrete	No
Tank Materials: Composite	No
Tank Materials: Double Walled	No
Tank Materials: Lined Interior	No
Tank Materials: Excav Liner	No
Tank Materials: Insulated Tank Jacket	No
Tank Materials: Repaired	No
Tank Materials: Unknown	No
Tank Materials: Other	No
Tank Materials: Other Note	Not reported
Release Detection:	
Tank Release Detection: Leak Deferred	No
Tank Release Detection: Manual Gauge	No
Tank Release Detection: Auto Gauge	Yes
Tank Release Detection: Tank Tightness	No

Map ID
 Direction
 Distance
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
 EPA ID Number

7 ELEVEN INCORPORATED 34062 (Continued)

U003686646

Tank Release Detection: Vapor Monitor	No
Tank Release Detection: Inventory	No
Tank Release Detection: Stat Invent Recon	No
Tank Release Detection: Spill Install	Yes
Tank Release Detection: Overfill Install	Not reported
Tank Release Detection: Groundwater	No
Tank Release Detection: Int Sec Containment	No
Tank Release Detection: Int Double Walled	No
Tank Release Detection: Other Method	No
Tank Release Detection: Other Note	Not reported
Pipe Release Detection: Leak Deferred	Not reported
Pipe Release Detection: Autoleak	Not reported
Pipe Release Detection: Line Tightness	Yes
Pipe Release Detection: Stat Invent Recon	No
Pipe Release Detection: Groundwater	No
Pipe Release Detection: Int Sec Containment	No
Pipe Release Det: Interior Double Walled	No
Pipe Release Detection: Other Method	No
Pipe Release Detection: Other Note	Not reported
Pipe Type:	PRESSURE
Pipe Materials: Bare Steel	No
Pipe Materials: Galvanized Steel	No
Pipe Materials: Copper	No
Pipe Materials: Fiberglass	Yes
Pipe Materials: Cath Protect	No
Pipe Materials: Double Walled	No
Pipe Materials: Sec Containment	No
Pipe Materials: Repaired	No
Pipe Materials: Unknown	No
Pipe Materials: Other	No
Pipe Materials: Other Note	Not reported
Facility ID:	4018362
Federally Regulated:	Yes
Tank Number:	G5
Tank Capacity:	550
Tank Contents:	KEROSENE
Tank Status:	CLS IN GRD
Tank Type:	UST
Tank Material:	
Install Date:	5/8/1960
Tank Materials: Bare Steel	Yes
Tank Materials: Cath Protect Steel	No
Tank Materials: Epoxy Steel	No
Tank Materials: Fiberglass	No
Tank Materials: Concrete	No
Tank Materials: Composite	No
Tank Materials: Double Walled	No
Tank Materials: Lined Interior	No
Tank Materials: Excav Liner	No
Tank Materials: Insulated Tank Jacket	No
Tank Materials: Repaired	No
Tank Materials: Unknown	No
Tank Materials: Other	No

Map ID
 Direction
 Distance
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
 EPA ID Number

7 ELEVEN INCORPORATED 34062 (Continued)

U003686646

Tank Materials: Other Note	Not reported
Release Detection:	
Tank Release Detection: Leak Deferred	No
Tank Release Detection: Manual Gauge	No
Tank Release Detection: Auto Gauge	No
Tank Release Detection: Tank Tightness	No
Tank Release Detection: Vapor Monitor	No
Tank Release Detection: Inventory	No
Tank Release Detection: Stat Invent Recon	No
Tank Release Detection: Spill Install	No
Tank Release Detection: Overfill Install	No
Tank Release Detection: Groundwater	No
Tank Release Detection: Int Sec Containment	No
Tank Release Detection: Int Double Walled	No
Tank Release Detection: Other Method	No
Tank Release Detection: Other Note	Not reported
Pipe Release Detection: Leak Deferred	Not reported
Pipe Release Detection: Autoleak	Not reported
Pipe Release Detection: Line Tightness	No
Pipe Release Detection: Stat Invent Recon	No
Pipe Release Detection: Groundwater	No
Pipe Release Detection: Int Sec Containment	No
Pipe Release Det: Interior Double Walled	No
Pipe Release Detection: Other Method	No
Pipe Release Detection: Other Note	Not reported
Pipe Type:	
Pipe Materials: Bare Steel	UNKNOWN
Pipe Materials: Galvanized Steel	No
Pipe Materials: Copper	Yes
Pipe Materials: Fiberglass	No
Pipe Materials: Cath Protect	No
Pipe Materials: Double Walled	No
Pipe Materials: Sec Containment	No
Pipe Materials: Repaired	No
Pipe Materials: Unknown	No
Pipe Materials: Other	No
Pipe Materials: Other Note	Not reported
Facility ID: 4018362	
Federally Regulated: Yes	
Tank Number: R1	
Tank Capacity: 4000	
Tank Contents: GASOLINE	
Tank Status: REM FROM GRD	
Tank Type: UST	
Tank Material:	
Install Date:	5/8/1960
Tank Materials: Bare Steel	Yes
Tank Materials: Cath Protect Steel	No
Tank Materials: Epoxy Steel	No
Tank Materials: Fiberglass	No
Tank Materials: Concrete	No

Map ID
 Direction
 Distance
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
 EPA ID Number

7 ELEVEN INCORPORATED 34062 (Continued)

U003686646

Tank Materials: Composite	No
Tank Materials: Double Walled	No
Tank Materials: Lined Interior	No
Tank Materials: Excav Liner	No
Tank Materials: Insulated Tank Jacket	No
Tank Materials: Repaired	No
Tank Materials: Unknown	No
Tank Materials: Other	No
Tank Materials: Other Note	Not reported

Release Detection:

Tank Release Detection: Leak Deferred	No
Tank Release Detection: Manual Gauge	No
Tank Release Detection: Auto Gauge	No
Tank Release Detection: Tank Tightness	No
Tank Release Detection: Vapor Monitor	No
Tank Release Detection: Inventory	No
Tank Release Detection: Stat Invent Recon	No
Tank Release Detection: Spill Install	No
Tank Release Detection: Overfill Install	No
Tank Release Detection: Groundwater	No
Tank Release Detection: Int Sec Containment	No
Tank Release Detection: Int Double Walled	No
Tank Release Detection: Other Method	No
Tank Release Detection: Other Note	Not reported
Pipe Release Detection: Leak Deferred	Not reported
Pipe Release Detection: Autoleak	Not reported
Pipe Release Detection: Line Tightness	No
Pipe Release Detection: Stat Invent Recon	No
Pipe Release Detection: Groundwater	No
Pipe Release Detection: Int Sec Containment	No
Pipe Release Det: Interior Double Walled	No
Pipe Release Detection: Other Method	No
Pipe Release Detection: Other Note	Not reported

Pipe Type:

Pipe Type:	UNKNOWN
Pipe Materials: Bare Steel	No
Pipe Materials: Galvanized Steel	Yes
Pipe Materials: Copper	No
Pipe Materials: Fiberglass	No
Pipe Materials: Cath Protect	No
Pipe Materials: Double Walled	No
Pipe Materials: Sec Containment	No
Pipe Materials: Repaired	No
Pipe Materials: Unknown	No
Pipe Materials: Other	No
Pipe Materials: Other Note	Not reported

Facility ID:	4018362
Federally Regulated:	Yes

Tank Number:	R2
Tank Capacity:	3000
Tank Contents:	GASOLINE
Tank Status:	REM FROM GRD
Tank Type:	UST

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

7 ELEVEN INCORPORATED 34062 (Continued)

U003686646

Tank Material:

Install Date:	5/8/1960
Tank Materials: Bare Steel	Yes
Tank Materials: Cath Protect Steel	No
Tank Materials: Epoxy Steel	No
Tank Materials: Fiberglass	No
Tank Materials: Concrete	No
Tank Materials: Composite	No
Tank Materials: Double Walled	No
Tank Materials: Lined Interior	No
Tank Materials: Excav Liner	No
Tank Materials: Insulated Tank Jacket	No
Tank Materials: Repaired	No
Tank Materials: Unknown	No
Tank Materials: Other	No
Tank Materials: Other Note	Not reported

Release Detection:

Tank Release Detection: Leak Deferred	No
Tank Release Detection: Manual Gauge	No
Tank Release Detection: Auto Gauge	No
Tank Release Detection: Tank Tightness	No
Tank Release Detection: Vapor Monitor	No
Tank Release Detection: Inventory	No
Tank Release Detection: Stat Invent Recon	No
Tank Release Detection: Spill Install	No
Tank Release Detection: Overfill Install	No
Tank Release Detection: Groundwater	No
Tank Release Detection: Int Sec Containment	No
Tank Release Detection: Int Double Walled	No
Tank Release Detection: Other Method	No
Tank Release Detection: Other Note	Not reported
Pipe Release Detection: Leak Deferred	Not reported
Pipe Release Detection: Autoleak	Not reported
Pipe Release Detection: Line Tightness	No
Pipe Release Detection: Stat Invent Recon	No
Pipe Release Detection: Groundwater	No
Pipe Release Detection: Int Sec Containment	No
Pipe Release Det: Interior Double Walled	No
Pipe Release Detection: Other Method	No
Pipe Release Detection: Other Note	Not reported

Pipe Type:

Pipe Type:	UNKNOWN
Pipe Materials: Bare Steel	No
Pipe Materials: Galvanized Steel	Yes
Pipe Materials: Copper	No
Pipe Materials: Fiberglass	No
Pipe Materials: Cath Protect	No
Pipe Materials: Double Walled	No
Pipe Materials: Sec Containment	No
Pipe Materials: Repaired	No
Pipe Materials: Unknown	No
Pipe Materials: Other	No
Pipe Materials: Other Note	Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

7 ELEVEN INCORPORATED 34062 (Continued)

U003686646

Facility ID:	4018362
Federally Regulated:	Yes
Tank Number:	R3
Tank Capacity:	2000
Tank Contents:	GASOLINE
Tank Status:	REM FROM GRD
Tank Type:	UST
Tank Material:	
Install Date:	5/8/1960
Tank Materials: Bare Steel	Yes
Tank Materials: Cath Protect Steel	No
Tank Materials: Epoxy Steel	No
Tank Materials: Fiberglass	No
Tank Materials: Concrete	No
Tank Materials: Composite	No
Tank Materials: Double Walled	No
Tank Materials: Lined Interior	No
Tank Materials: Excav Liner	No
Tank Materials: Insulated Tank Jacket	No
Tank Materials: Repaired	No
Tank Materials: Unknown	No
Tank Materials: Other	No
Tank Materials: Other Note	Not reported
Release Detection:	
Tank Release Detection: Leak Deferred	No
Tank Release Detection: Manual Gauge	No
Tank Release Detection: Auto Gauge	No
Tank Release Detection: Tank Tightness	No
Tank Release Detection: Vapor Monitor	No
Tank Release Detection: Inventory	No
Tank Release Detection: Stat Invent Recon	No
Tank Release Detection: Spill Install	No
Tank Release Detection: Overfill Install	No
Tank Release Detection: Groundwater	No
Tank Release Detection: Int Sec Containment	No
Tank Release Detection: Int Double Walled	No
Tank Release Detection: Other Method	No
Tank Release Detection: Other Note	Not reported
Pipe Release Detection: Leak Deferred	Not reported
Pipe Release Detection: Autoleak	Not reported
Pipe Release Detection: Line Tightness	No
Pipe Release Detection: Stat Invent Recon	No
Pipe Release Detection: Groundwater	No
Pipe Release Detection: Int Sec Containment	No
Pipe Release Det: Interior Double Walled	No
Pipe Release Detection: Other Method	No
Pipe Release Detection: Other Note	Not reported
Pipe Type:	UNKNOWN
Pipe Materials: Bare Steel	No
Pipe Materials: Galvanized Steel	Yes
Pipe Materials: Copper	No
Pipe Materials: Fiberglass	No
Pipe Materials: Cath Protect	No

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

7 ELEVEN INCORPORATED 34062 (Continued)

U003686646

Pipe Materials: Double Walled	No
Pipe Materials: Sec Containment	No
Pipe Materials: Repaired	No
Pipe Materials: Unknown	No
Pipe Materials: Other	No
Pipe Materials: Other Note	Not reported
Facility ID:	4018362
Federally Regulated:	Yes
Tank Number:	R4
Tank Capacity:	2000
Tank Contents:	GASOLINE
Tank Status:	REM FROM GRD
Tank Type:	UST
Tank Material:	
Install Date:	5/8/1960
Tank Materials: Bare Steel	Yes
Tank Materials: Cath Protect Steel	No
Tank Materials: Epoxy Steel	No
Tank Materials: Fiberglass	No
Tank Materials: Concrete	No
Tank Materials: Composite	No
Tank Materials: Double Walled	No
Tank Materials: Lined Interior	No
Tank Materials: Excav Liner	No
Tank Materials: Insulated Tank Jacket	No
Tank Materials: Repaired	No
Tank Materials: Unknown	No
Tank Materials: Other	No
Tank Materials: Other Note	Not reported
Release Detection:	
Tank Release Detection: Leak Deferred	No
Tank Release Detection: Manual Gauge	No
Tank Release Detection: Auto Gauge	No
Tank Release Detection: Tank Tightness	No
Tank Release Detection: Vapor Monitor	No
Tank Release Detection: Inventory	No
Tank Release Detection: Stat Invent Recon	No
Tank Release Detection: Spill Install	No
Tank Release Detection: Overfill Install	No
Tank Release Detection: Groundwater	No
Tank Release Detection: Int Sec Containment	No
Tank Release Detection: Int Double Walled	No
Tank Release Detection: Other Method	No
Tank Release Detection: Other Note	Not reported
Pipe Release Detection: Leak Deferred	Not reported
Pipe Release Detection: Autoleak	Not reported
Pipe Release Detection: Line Tightness	No
Pipe Release Detection: Stat Invent Recon	No
Pipe Release Detection: Groundwater	No
Pipe Release Detection: Int Sec Containment	No
Pipe Release Det: Interior Double Walled	No
Pipe Release Detection: Other Method	No

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

7 ELEVEN INCORPORATED 34062 (Continued)

U003686646

Pipe Release Detection: Other Note	Not reported
Pipe Type:	UNKNOWN
Pipe Materials: Bare Steel	No
Pipe Materials: Galvanized Steel	Yes
Pipe Materials: Copper	No
Pipe Materials: Fiberglass	No
Pipe Materials: Cath Protect	No
Pipe Materials: Double Walled	No
Pipe Materials: Sec Containment	No
Pipe Materials: Repaired	No
Pipe Materials: Unknown	No
Pipe Materials: Other	No
Pipe Materials: Other Note	Not reported

VA Financial Assurance 1:

Name:	7 ELEVEN INCORPORATED 34062
Address:	11102 GENERAL PULLER BLVD
Address 2:	Not reported
City,State,Zip:	HARTFIELD, VA 23071
Facility ID:	4018362
Owner Name:	7 Eleven Incorporated
ROF Own Id:	38838
Tank Type:	UST
Mechanism:	Insurance
Gallonage:	Not reported
Per Occurrence:	1000000
Third Party:	1000000
Annual Aggregate:	2000000
In Compliance:	Not reported
Total Capacity:	6000
CEDS Facility Name:	7 Eleven Incorporated 34062
Tank Status:	CURR IN USE
Active Federally Regualted UST:	Y

Name:	7 ELEVEN INCORPORATED 34062
Address:	11102 GENERAL PULLER BLVD
Address 2:	Not reported
City,State,Zip:	HARTFIELD, VA 23071
Facility ID:	4018362
Owner Name:	7 Eleven Incorporated
ROF Own Id:	38838
Tank Type:	UST
Mechanism:	Insurance
Gallonage:	Not reported
Per Occurrence:	1000000
Third Party:	1000000
Annual Aggregate:	2000000
In Compliance:	Not reported
Total Capacity:	6000
CEDS Facility Name:	7 Eleven Incorporated 34062
Tank Status:	CURR IN USE
Active Federally Regualted UST:	Y

Name:	7 ELEVEN INCORPORATED 34062
Address:	11102 GENERAL PULLER BLVD

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

7 ELEVEN INCORPORATED 34062 (Continued)

U003686646

Address 2: Not reported
City,State,Zip: HARTFIELD, VA 23071
Facility ID: 4018362
Owner Name: 7 Eleven Incorporated
ROF Own Id: 38838
Tank Type: UST
Mechanism: Insurance
Gallonage: Not reported
Per Occurrence: 1000000
Third Party: 1000000
Annual Aggregate: 2000000
In Compliance: Not reported
Total Capacity: 6000
CEDS Facility Name: 7 Eleven Incorporated 34062
Tank Status: CURR IN USE
Active Federally Regualted UST: Y

A5 **7 ELEVEN INCORPORATED 34062**
Target **11102 GENERAL PULLER BLVD**
Property **HARTFIELD, VA 23071**

LUST **S108968362**
LTANKS **N/A**

Site 3 of 4 in cluster A

Actual:
78 ft.

LUST REG PD:

Focus Map:
6

Region: PD
Status: Closed
Pollution Complaint #: 20114166
Reg Code: PRO

Region: PD
Status: Closed
Pollution Complaint #: 20114147
Reg Code: PRO

Region: PD
Status: Closed
Pollution Complaint #: 20084342
Reg Code: PRO

LTANKS:

Name: 7 ELEVEN INCORPORATED 34062
Address: 11102 GENERAL PULLER BLVD
City,State,Zip: HARTFIELD, VA 23071
City,State,Zip: HARTFIELD, VA 23071
Region: PRO
CEDS Facility Id: 200000165442
Case Status: Closed
Pollution Complaint #: 20114166
Reported: 10/18/2010
Case Closed Date: 10/18/2010
Program: RP Lead
Federally Regulated UST (Y/N): Y
Regulated Petroleum UST (1): Y
Excluded UST (1): N
Deferred UST (1): N
Partially Deferred UST (1): N
Exempt 1 UST (2): N

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

7 ELEVEN INCORPORATED 34062 (Continued)

S108968362

Exempt 2 Heating Oil UST (2): N
Small Heating Oil AST (2): N
Regulated AST (3): N
Unregulated AST (3): N
Other Y/N: N
Unknown Y/N: N
Other Description: Not reported
Heating Oil Category: Not reported

Name: 7 ELEVEN INCORPORATED 34062
Address: 11102 GENERAL PULLER BLVD
City,State,Zip: HARTFIELD, VA 23071
City,State,Zip: HARTFIELD, VA 23071
Region: PRO
CEDS Facility Id: 200000165442
Case Status: Closed
Pollution Complaint #: 20114147
Reported: 10/11/2010
Case Closed Date: 01/28/2011
Program: RP Lead
Federally Regulated UST (Y/N): N
Regulated Petroleum UST (1): N
Excluded UST (1): N
Deferred UST (1): N
Partially Deferred UST (1): N
Exempt 1 UST (2): N
Exempt 2 Heating Oil UST (2): N
Small Heating Oil AST (2): N
Regulated AST (3): N
Unregulated AST (3): Y
Other Y/N: N
Unknown Y/N: N
Other Description: Not reported
Heating Oil Category: Not reported

Name: LITTLE SUE 136
Address: 11102 GENERAL PULLER BLVD
City,State,Zip: HARTFIELD, VA 23071
City,State,Zip: HARTFIELD, VA 23071
Region: PRO
CEDS Facility Id: 200000165442
Case Status: Closed
Pollution Complaint #: 20084342
Reported: 11/21/2007
Case Closed Date: 12/17/2007
Program: RP Lead
Federally Regulated UST (Y/N): Y
Regulated Petroleum UST (1): Y
Excluded UST (1): N
Deferred UST (1): N
Partially Deferred UST (1): N
Exempt 1 UST (2): N
Exempt 2 Heating Oil UST (2): N
Small Heating Oil AST (2): N
Regulated AST (3): N
Unregulated AST (3): N
Other Y/N: N

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

7 ELEVEN INCORPORATED 34062 (Continued)

S108968362

Unknown Y/N: N
Other Description: Not reported
Heating Oil Category: Not reported

A6 **7 ELEVEN INCORPORATED 34062**
Target **11102 GENERAL PULLER BLVD**
Property **HARTFIELD, VA**

RGA LUST **S115951760**
N/A

Site 4 of 4 in cluster A

Actual: RGA LUST:
78 ft. 2012 7 ELEVEN INCORPORATED 34062 11102 GENERAL PULLER BLVD
Focus Map: 2011 7 ELEVEN INCORPORATED 34062 11102 GENERAL PULLER BLVD
6 2010 7 ELEVEN INCORPORATED 34062 11102 GENERAL PULLER BLVD

7 **MEHERRIN AG & CHEMICAL CO - LOCUST HILL**
NE **5730 GENERAL PULLER HWY**
< 1/8 **LOCUST HILL, VA 23092**
0.013 mi.
67 ft.

TIER 2 **S118192727**
N/A

Actual: TIER 2:
80 ft. Facility ID: Not reported
Focus Map: CAS Number: 7783188
4 SIC Code: Not reported
NAICS: Not reported
Entered Chemical Name: AMMONIUM THIOSULFATE
Average Amt Code: 39243.0
Owner Name: Not reported
Owner Phone: Not reported
Contact Type: Not reported

Facility ID: Not reported
CAS Number: 7783280
SIC Code: Not reported
NAICS: Not reported
Entered Chemical Name: DIAMMONIUM PHOSPHATE
Average Amt Code: 97965.0
Owner Name: Not reported
Owner Phone: Not reported
Contact Type: Not reported

Facility ID: Not reported
CAS Number: 38641940
SIC Code: Not reported
NAICS: Not reported
Entered Chemical Name: Glyphosphate
Average Amt Code: 7191.0
Owner Name: Not reported
Owner Phone: Not reported
Contact Type: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MEHERRIN AG & CHEMICAL CO - LOCUST HILL (Continued)

S118192727

Facility ID: Not reported
CAS Number: 7447407
SIC Code: Not reported
NAICS: Not reported
Entered Chemical Name: MURIATE OF POTASH
Average Amt Code: 149674.0
Owner Name: Not reported
Owner Phone: Not reported
Contact Type: Not reported

Facility ID: Not reported
CAS Number: 1910425
SIC Code: Not reported
NAICS: Not reported
Entered Chemical Name: PARAQUAT DICHLORIDE
Average Amt Code: 1231.0
Owner Name: Not reported
Owner Phone: Not reported
Contact Type: Not reported

Facility ID: Not reported
CAS Number: 15978775
SIC Code: Not reported
NAICS: Not reported
Entered Chemical Name: UREA AMMONIUM NITRATE SOLUTION
Average Amt Code: 123000.0
Owner Name: Not reported
Owner Phone: Not reported
Contact Type: Not reported

Facility ID: Not reported
CAS Number: 7783202
SIC Code: Not reported
NAICS: Not reported
Entered Chemical Name: AMMONIUM SULFATE
Average Amt Code: 63651.0
Owner Name: Not reported
Owner Phone: Not reported
Contact Type: Not reported

B8 **THRIFT OIL COMPANY**
SSE **2742 GENERAL PULLER HWY**
< 1/8 **SALUDA, VA 23149**
0.014 mi.
75 ft. **Site 1 of 6 in cluster B**

UST **U003988870**
AST **N/A**

Actual: **90 ft.** Facility:
Focus Map: **2** Name: THRIFT OIL COMPANY
Address: 2742 GENERAL PULLER HWY
City,State,Zip: SALUDA, VA 23149
Facility Id: 4012594
Facility Type: PETROLEUM DISTRIBUTOR
CEDs Facility ID: 200000159612

Owner:
Owner Id: 27894
Owner Name: JT & CA Thrift Inc t/a Thrift Oil Company
Owner Address: 2742 General Puller Hwy

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

THRIFT OIL COMPANY (Continued)

U003988870

Owner Address2: Not reported
Owner City, State, Zip: Saluda, VA 23149
Owner Type: COMMERCIAL
Number of Active AST: 5
Number of Active UST: 0
Number of Inactive AST: 17
Number of Inactive UST: 2

UST:

Facility ID: 4012594
Federally Regulated: Yes

Tank Number: R1
Tank Capacity: 2000
Tank Contents: DIESEL
Tank Status: REM FROM GRD
Tank Type: UST

Tank Material:

Install Date: 9/6/1969
Tank Materials: Bare Steel Yes
Tank Materials: Cath Protect Steel No
Tank Materials: Epoxy Steel No
Tank Materials: Fiberglass No
Tank Materials: Concrete No
Tank Materials: Composite No
Tank Materials: Double Walled No
Tank Materials: Lined Interior No
Tank Materials: Excav Liner No
Tank Materials: Insulated Tank Jacket No
Tank Materials: Repaired No
Tank Materials: Unknown No
Tank Materials: Other No
Tank Materials: Other Note Not reported

Release Detection:

Tank Release Detection: Leak Deferred No
Tank Release Detection: Manual Gauge No
Tank Release Detection: Auto Gauge No
Tank Release Detection: Tank Tightness No
Tank Release Detection: Vapor Monitor No
Tank Release Detection: Inventory No
Tank Release Detection: Stat Invent Recon No
Tank Release Detection: Spill Install No
Tank Release Detection: Overfill Install No
Tank Release Detection: Groundwater No
Tank Release Detection: Int Sec Containment No
Tank Release Detection: Int Double Walled No
Tank Release Detection: Other Method No
Tank Release Detection: Other Note Not reported
Pipe Release Detection: Leak Deferred Not reported
Pipe Release Detection: Autoleak Not reported
Pipe Release Detection: Line Tightness No
Pipe Release Detection: Stat Invent Recon No
Pipe Release Detection: Groundwater No
Pipe Release Detection: Int Sec Containment No
Pipe Release Det: Interior Double Walled No

Map ID
 Direction
 Distance
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
 EPA ID Number

THRIFT OIL COMPANY (Continued)

U003988870

Pipe Release Detection: Other Method	No
Pipe Release Detection: Other Note	Not reported
Pipe Type:	UNKNOWN
Pipe Materials: Bare Steel	No
Pipe Materials: Galvanized Steel	Yes
Pipe Materials: Copper	No
Pipe Materials: Fiberglass	No
Pipe Materials: Cath Protect	No
Pipe Materials: Double Walled	No
Pipe Materials: Sec Containment	No
Pipe Materials: Repaired	No
Pipe Materials: Unknown	No
Pipe Materials: Other	No
Pipe Materials: Other Note	Not reported
Facility ID:	4012594
Federally Regulated:	Yes
Tank Number:	R2
Tank Capacity:	550
Tank Contents:	GASOLINE
Tank Status:	REM FROM GRD
Tank Type:	UST
Tank Material:	
Install Date:	9/6/1969
Tank Materials: Bare Steel	Yes
Tank Materials: Cath Protect Steel	No
Tank Materials: Epoxy Steel	No
Tank Materials: Fiberglass	No
Tank Materials: Concrete	No
Tank Materials: Composite	No
Tank Materials: Double Walled	No
Tank Materials: Lined Interior	No
Tank Materials: Excav Liner	No
Tank Materials: Insulated Tank Jacket	No
Tank Materials: Repaired	No
Tank Materials: Unknown	No
Tank Materials: Other	No
Tank Materials: Other Note	Not reported
Release Detection:	
Tank Release Detection: Leak Deferred	No
Tank Release Detection: Manual Gauge	No
Tank Release Detection: Auto Gauge	No
Tank Release Detection: Tank Tightness	No
Tank Release Detection: Vapor Monitor	No
Tank Release Detection: Inventory	No
Tank Release Detection: Stat Invent Recon	No
Tank Release Detection: Spill Install	No
Tank Release Detection: Overfill Install	No
Tank Release Detection: Groundwater	No
Tank Release Detection: Int Sec Containment	No
Tank Release Detection: Int Double Walled	No
Tank Release Detection: Other Method	No

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

THRIFT OIL COMPANY (Continued)

U003988870

Tank Release Detection: Other Note	Not reported
Pipe Release Detection: Leak Deferred	Not reported
Pipe Release Detection: Autoleak	Not reported
Pipe Release Detection: Line Tightness	No
Pipe Release Detection: Stat Invent Recon	No
Pipe Release Detection: Groundwater	No
Pipe Release Detection: Int Sec Containment	No
Pipe Release Det: Interior Double Walled	No
Pipe Release Detection: Other Method	No
Pipe Release Detection: Other Note	Not reported

Pipe Type:	UNKNOWN
Pipe Materials: Bare Steel	No
Pipe Materials: Galvanized Steel	Yes
Pipe Materials: Copper	No
Pipe Materials: Fiberglass	No
Pipe Materials: Cath Protect	No
Pipe Materials: Double Walled	No
Pipe Materials: Sec Containment	No
Pipe Materials: Repaired	No
Pipe Materials: Unknown	No
Pipe Materials: Other	No
Pipe Materials: Other Note	Not reported

AST:

Facility ID:	4012594
Facility Type:	PETROLEUM DISTRIBUTOR
CEDS Facility ID:	200000159612

Tank Info:

Owner:

Owner Id:	27894
Owner Name:	JT & CA Thrift Inc t/a Thrift Oil Company
Owner Address:	2742 General Puller Hwy
Owner Address2:	Not reported
Owner City/State/Zip:	Saluda, VA 23149
Owner Type:	COMMERCIAL
Number of Active AST:	5
Number of Active UST:	0
Number of Inactive AST:	17
Number of Inactive UST:	2

Fed Regulated:	No
Tank Number:	1
Tank Type:	AST
Tank Capacity:	15120
Tank Contents:	DIESEL
Tank Status:	CLOSED IN PLACE

Tank Containment:

Install Date:	9/30/1962
Containment: Curbing	No
Containment: Weirs	No
Containment: Sorbent	No
Containment: Culvert	No

Map ID
 Direction
 Distance
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
 EPA ID Number

THRIFT OIL COMPANY (Continued)

U003988870

Containment: Diversion	No
Containment: Retention	No
Containment: Dike	Yes
Containment: Unknown	No
Containment: Other	No
Containment: Other Note	Not reported
Release Detection:	
Release Detection: Ground Water	No
Release Detection: Visual	No
Release Detection: Vapor	Yes
Release Detection: Interstitial	No
Release Detection: None	No
Release Detection: Other	No
Release Detection: Other Note	Not reported
Release Prevention: Double Bottom	No
Release Prevention: Double Walled	No
Release Prevention: Lined Interior	Not reported
Release Prevention: Poly Jacket	No
Release Prevention: Exc Liner	No
Release Prevention: None	No
Release Prevention: Unknown	Yes
Release Prevention: Other	No
Release Prevention: Other Note	Not reported
Tank Foundation: Steel	No
Tank Foundation: Earthen	Yes
Tank Foundation: Concrete Imp	No
Tank Foundation: Unknown	No
Tank Foundation: Other	No
Tank Foundation: Other Note	Not reported
Tank Roof: Float	No
Tank Roof: Cone	No
Tank Roof: Breather	Not reported
Tank Roof: Dbldeck	Not reported
Tank Roof: Pontoon	Not reported
Tank Roof: Balloon	Not reported
Tank Roof: Lifter	Not reported
Tank Roof: Pan	Not reported
Tank Roof: Other	No
Tank Roof: Other Note	Not reported
Tank Material:	
Tank Materials: Bare Steel	Yes
Tank Materials: Concrete	No
Tank Materials: Insulated Tank Jacket	No
Tank Materials: Unknown	No
Tank Materials: Other	No
Tank Materials: Other Note	Not reported
Tank Type Cathodic/CP:	N
Tank Type Single Wall:	N
Tank Type Double Wall:	N
Tank Type Lined Interior:	N
Tank Type Double Bottom:	N
Tank Type Potable/Skid:	N
Tank Type Shop Fabricated/Built:	N
Tank Type Vaulted Below Grade:	N

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

THRIFT OIL COMPANY (Continued)

U003988870

Tank Type Vertical:	N
Tank Type Horizontal:	N
Tank Type Unknown:	N
Tank Type Other:	N
Tank Type Other Specify:	N
Owner:	
Owner Id:	27894
Owner Name:	JT & CA Thrift Inc t/a Thrift Oil Company
Owner Address:	2742 General Puller Hwy
Owner Address2:	Not reported
Owner City/State/Zip:	Saluda, VA 23149
Owner Type:	COMMERCIAL
Number of Active AST:	5
Number of Active UST:	0
Number of Inactive AST:	17
Number of Inactive UST:	2
Fed Regulated: No	
Tank Number:	10
Tank Type:	AST
Tank Capacity:	15120
Tank Contents:	FUEL OIL
Tank Status:	CLOSED IN PLACE
Tank Containment:	
Install Date:	10/30/1974
Containment: Curbing	No
Containment: Weirs	No
Containment: Sorbent	Yes
Containment: Culvert	No
Containment: Diversion	No
Containment: Retention	No
Containment: Dike	No
Containment: Unknown	No
Containment: Other	No
Containment: Other Note	Not reported
Release Detection:	
Release Detection: Ground Water	No
Release Detection: Visual	Yes
Release Detection: Vapor	No
Release Detection: Interstitial	No
Release Detection: None	No
Release Detection: Other	Yes
Release Detection: Other Note	Not reported
Release Prevention: Double Bottom	No
Release Prevention: Double Walled	No
Release Prevention: Lined Interior	Not reported
Release Prevention: Poly Jacket	No
Release Prevention: Exc Liner	No
Release Prevention: None	No
Release Prevention: Unknown	No
Release Prevention: Other	Yes
Release Prevention: Other Note	Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

THRIFT OIL COMPANY (Continued)

U003988870

Tank Foundation: Steel	No
Tank Foundation: Earthen	Yes
Tank Foundation: Concrete Imp	No
Tank Foundation: Unknown	No
Tank Foundation: Other	No
Tank Foundation: Other Note	Not reported
Tank Roof: Float	No
Tank Roof: Cone	Yes
Tank Roof: Breather	Not reported
Tank Roof: Dbldck	Not reported
Tank Roof: Pontoon	Not reported
Tank Roof: Balloon	Not reported
Tank Roof: Lifter	Not reported
Tank Roof: Pan	Not reported
Tank Roof: Other	No
Tank Roof: Other Note	Not reported

Tank Material:

Tank Materials: Bare Steel	Yes
Tank Materials: Concrete	No
Tank Materials: Insulated Tank Jacket	No
Tank Materials: Unknown	No
Tank Materials: Other	No
Tank Materials: Other Note	Not reported
Tank Type Cathodic/CP:	N
Tank Type Single Wall:	N
Tank Type Double Wall:	N
Tank Type Lined Interior:	N
Tank Type Double Bottom:	N
Tank Type Potable/Skid:	N
Tank Type Shop Fabricated/Built:	N
Tank Type Vaulted Below Grade:	N
Tank Type Vertical:	N
Tank Type Horizontal:	N
Tank Type Unknown:	N
Tank Type Other:	N
Tank Type Other Specify:	N

Owner:

Owner Id:	27894
Owner Name:	JT & CA Thrift Inc t/a Thrift Oil Company
Owner Address:	2742 General Puller Hwy
Owner Address2:	Not reported
Owner City/State/Zip:	Saluda, VA 23149
Owner Type:	COMMERCIAL
Number of Active AST:	5
Number of Active UST:	0
Number of Inactive AST:	17
Number of Inactive UST:	2
Fed Regulated:	No
Tank Number:	11
Tank Type:	AST
Tank Capacity:	15120
Tank Contents:	DIESEL

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

THRIFT OIL COMPANY (Continued)

U003988870

Tank Status:	CLOSED IN PLACE
Tank Containment:	
Install Date:	1/1/1965
Containment: Curbing	No
Containment: Weirs	No
Containment: Sorbent	Yes
Containment: Culvert	No
Containment: Diversion	No
Containment: Retention	No
Containment: Dike	Yes
Containment: Unknown	No
Containment: Other	No
Containment: Other Note	Not reported
Release Detection:	
Release Detection: Ground Water	No
Release Detection: Visual	Yes
Release Detection: Vapor	No
Release Detection: Interstitial	No
Release Detection: None	No
Release Detection: Other	Yes
Release Detection: Other Note	Not reported
Release Prevention: Double Bottom	No
Release Prevention: Double Walled	No
Release Prevention: Lined Interior	Not reported
Release Prevention: Poly Jacket	No
Release Prevention: Exc Liner	No
Release Prevention: None	Yes
Release Prevention: Unknown	No
Release Prevention: Other	No
Release Prevention: Other Note	Not reported
Tank Foundation:	
Tank Foundation: Steel	No
Tank Foundation: Earthen	Yes
Tank Foundation: Concrete Imp	No
Tank Foundation: Unknown	No
Tank Foundation: Other	No
Tank Foundation: Other Note	Not reported
Tank Roof:	
Tank Roof: Float	No
Tank Roof: Cone	Yes
Tank Roof: Breather	Not reported
Tank Roof: Dbldck	Not reported
Tank Roof: Pontoon	Not reported
Tank Roof: Balloon	Not reported
Tank Roof: Lifter	Not reported
Tank Roof: Pan	Not reported
Tank Roof: Other	No
Tank Roof: Other Note	Not reported
Tank Material:	
Tank Materials: Bare Steel	Yes
Tank Materials: Concrete	No
Tank Materials: Insulated Tank Jacket	No
Tank Materials: Unknown	No
Tank Materials: Other	No
Tank Materials: Other Note	Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

THRIFT OIL COMPANY (Continued)

U003988870

Tank Type Cathodic/CP: N
Tank Type Single Wall: N
Tank Type Double Wall: N
Tank Type Lined Interior: N
Tank Type Double Bottom: N
Tank Type Potable/Skid: N
Tank Type Shop Fabricated/Built: N
Tank Type Vaulted Below Grade: N
Tank Type Vertical: N
Tank Type Horizontal: N
Tank Type Unknown: N
Tank Type Other: N
Tank Type Other Specify: N

Owner:

Owner Id: 27894
Owner Name: JT & CA Thrift Inc t/a Thrift Oil Company
Owner Address: 2742 General Puller Hwy
Owner Address2: Not reported
Owner City/State/Zip: Saluda, VA 23149
Owner Type: COMMERCIAL
Number of Active AST: 5
Number of Active UST: 0
Number of Inactive AST: 17
Number of Inactive UST: 2

Fed Regulated: No
Tank Number: 12
Tank Type: AST
Tank Capacity: 15000
Tank Contents: GASOLINE
Tank Status: CURR IN USE

Tank Containment:

Install Date: 11/17/2011
Containment: Curbing No
Containment: Weirs No
Containment: Sorbent No
Containment: Culvert No
Containment: Diversion No
Containment: Retention No
Containment: Dike Yes
Containment: Unknown No
Containment: Other No
Containment: Other Note Not reported

Release Detection:

Release Detection: Ground Water Yes
Release Detection: Visual Yes
Release Detection: Vapor No
Release Detection: Interstitial No
Release Detection: None No
Release Detection: Other No
Release Detection: Other Note Not reported
Release Prevention: Double Bottom Yes
Release Prevention: Double Walled No

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

THRIFT OIL COMPANY (Continued)

U003988870

Release Prevention: Lined Interior Not reported
Release Prevention: Poly Jacket No
Release Prevention: Exc Liner Yes
Release Prevention: None No
Release Prevention: Unknown No
Release Prevention: Other No
Release Prevention: Other Note Not reported

Tank Foundation: Steel No
Tank Foundation: Earthen Yes
Tank Foundation: Concrete Imp No
Tank Foundation: Unknown No
Tank Foundation: Other No
Tank Foundation: Other Note Not reported
Tank Roof: Float No
Tank Roof: Cone Yes
Tank Roof: Breather Not reported
Tank Roof: Dbldck Not reported
Tank Roof: Pontoon Not reported
Tank Roof: Balloon Not reported
Tank Roof: Lifter Not reported
Tank Roof: Pan Not reported
Tank Roof: Other No
Tank Roof: Other Note Not reported

Tank Material:

Tank Materials: Bare Steel Yes
Tank Materials: Concrete No
Tank Materials: Insulated Tank Jacket No
Tank Materials: Unknown No
Tank Materials: Other No
Tank Materials: Other Note Not reported
Tank Type Cathodic/CP: N
Tank Type Single Wall: N
Tank Type Double Wall: N
Tank Type Lined Interior: N
Tank Type Double Bottom: N
Tank Type Potable/Skid: N
Tank Type Shop Fabricated/Built: N
Tank Type Vaulted Below Grade: N
Tank Type Vertical: N
Tank Type Horizontal: N
Tank Type Unknown: N
Tank Type Other: N
Tank Type Other Specify: N

Owner:

Owner Id: 27894
Owner Name: JT & CA Thrift Inc t/a Thrift Oil Company
Owner Address: 2742 General Puller Hwy
Owner Address2: Not reported
Owner City/State/Zip: Saluda, VA 23149
Owner Type: COMMERCIAL
Number of Active AST: 5
Number of Active UST: 0

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

THRIFT OIL COMPANY (Continued)

U003988870

Number of Inactive AST:	17
Number of Inactive UST:	2
Fed Regulated:	No
Tank Number:	13
Tank Type:	AST
Tank Capacity:	4000
Tank Contents:	DIESEL
Tank Status:	CLOSED IN PLACE
Tank Containment:	
Install Date:	9/30/1962
Containment: Curbing	No
Containment: Weirs	No
Containment: Sorbent	Yes
Containment: Culvert	No
Containment: Diversion	No
Containment: Retention	No
Containment: Dike	Yes
Containment: Unknown	No
Containment: Other	No
Containment: Other Note	Not reported
Release Detection:	
Release Detection: Ground Water	No
Release Detection: Visual	Yes
Release Detection: Vapor	Yes
Release Detection: Interstitial	No
Release Detection: None	No
Release Detection: Other	No
Release Detection: Other Note	Not reported
Release Prevention: Double Bottom	No
Release Prevention: Double Walled	No
Release Prevention: Lined Interior	Not reported
Release Prevention: Poly Jacket	No
Release Prevention: Exc Liner	Yes
Release Prevention: None	No
Release Prevention: Unknown	No
Release Prevention: Other	No
Release Prevention: Other Note	Not reported
Tank Foundation: Steel	Yes
Tank Foundation: Earthen	No
Tank Foundation: Concrete Imp	No
Tank Foundation: Unknown	No
Tank Foundation: Other	No
Tank Foundation: Other Note	Not reported
Tank Roof: Float	No
Tank Roof: Cone	No
Tank Roof: Breather	Not reported
Tank Roof: Dbldck	Not reported
Tank Roof: Pontoon	Not reported
Tank Roof: Balloon	Not reported
Tank Roof: Lifter	Not reported
Tank Roof: Pan	Not reported
Tank Roof: Other	Yes
Tank Roof: Other Note	Horizontal

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

THRIFT OIL COMPANY (Continued)

U003988870

Tank Material:

Tank Materials: Bare Steel	Yes
Tank Materials: Concrete	Yes
Tank Materials: Insulated Tank Jacket	No
Tank Materials: Unknown	No
Tank Materials: Other	No
Tank Materials: Other Note	Not reported
Tank Type Cathodic/CP:	N
Tank Type Single Wall:	N
Tank Type Double Wall:	N
Tank Type Lined Interior:	N
Tank Type Double Bottom:	N
Tank Type Potable/Skid:	N
Tank Type Shop Fabricated/Built:	N
Tank Type Vaulted Below Grade:	N
Tank Type Vertical:	N
Tank Type Horizontal:	N
Tank Type Unknown:	N
Tank Type Other:	N
Tank Type Other Specify:	N

Owner:

Owner Id:	27894
Owner Name:	JT & CA Thrift Inc t/a Thrift Oil Company
Owner Address:	2742 General Puller Hwy
Owner Address2:	Not reported
Owner City/State/Zip:	Saluda, VA 23149
Owner Type:	COMMERCIAL
Number of Active AST:	5
Number of Active UST:	0
Number of Inactive AST:	17
Number of Inactive UST:	2

Fed Regulated:	No
Tank Number:	17
Tank Type:	AST
Tank Capacity:	10000
Tank Contents:	GASOLINE
Tank Status:	CLOSED IN PLACE

Tank Containment:

Install Date:	9/30/1987
Containment: Curbing	No
Containment: Weirs	No
Containment: Sorbent	Yes
Containment: Culvert	No
Containment: Diversion	No
Containment: Retention	No
Containment: Dike	Yes
Containment: Unknown	No
Containment: Other	No
Containment: Other Note	Not reported

Release Detection:

Release Detection: Ground Water	No
---------------------------------	----

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

THRIFT OIL COMPANY (Continued)

U003988870

Release Detection: Visual	Yes
Release Detection: Vapor	No
Release Detection: Interstitial	No
Release Detection: None	No
Release Detection: Other	No
Release Detection: Other Note	Not reported
Release Prevention: Double Bottom	No
Release Prevention: Double Walled	No
Release Prevention: Lined Interior	Not reported
Release Prevention: Poly Jacket	No
Release Prevention: Exc Liner	No
Release Prevention: None	No
Release Prevention: Unknown	No
Release Prevention: Other	Yes
Release Prevention: Other Note	Not reported

Tank Foundation: Steel	No
Tank Foundation: Earthen	Yes
Tank Foundation: Concrete Imp	No
Tank Foundation: Unknown	No
Tank Foundation: Other	No
Tank Foundation: Other Note	Not reported
Tank Roof: Float	No
Tank Roof: Cone	No
Tank Roof: Breather	Not reported
Tank Roof: Dbldeck	Not reported
Tank Roof: Pontoon	Not reported
Tank Roof: Balloon	Not reported
Tank Roof: Lifter	Not reported
Tank Roof: Pan	Not reported
Tank Roof: Other	No
Tank Roof: Other Note	Not reported

Tank Material:

Tank Materials: Bare Steel	Yes
Tank Materials: Concrete	No
Tank Materials: Insulated Tank Jacket	No
Tank Materials: Unknown	No
Tank Materials: Other	No
Tank Materials: Other Note	Not reported
Tank Type Cathodic/CP:	N
Tank Type Single Wall:	N
Tank Type Double Wall:	N
Tank Type Lined Interior:	N
Tank Type Double Bottom:	N
Tank Type Potable/Skid:	N
Tank Type Shop Fabricated/Built:	N
Tank Type Vaulted Below Grade:	N
Tank Type Vertical:	N
Tank Type Horizontal:	N
Tank Type Unknown:	N
Tank Type Other:	N
Tank Type Other Specify:	N

Owner:

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

THRIFT OIL COMPANY (Continued)

U003988870

Owner Id: 27894
Owner Name: JT & CA Thrift Inc t/a Thrift Oil Company
Owner Address: 2742 General Puller Hwy
Owner Address2: Not reported
Owner City/State/Zip: Saluda, VA 23149
Owner Type: COMMERCIAL
Number of Active AST: 5
Number of Active UST: 0
Number of Inactive AST: 17
Number of Inactive UST: 2

Fed Regulated: No
Tank Number: 18
Tank Type: AST
Tank Capacity: 10000
Tank Contents: GASOLINE
Tank Status: CLOSED IN PLACE

Tank Containment:
Install Date: 9/30/1987
Containment: Curbing No
Containment: Weirs No
Containment: Sorbent Yes
Containment: Culvert No
Containment: Diversion No
Containment: Retention No
Containment: Dike Yes
Containment: Unknown No
Containment: Other No
Containment: Other Note Not reported

Release Detection:
Release Detection: Ground Water No
Release Detection: Visual No
Release Detection: Vapor No
Release Detection: Interstitial No
Release Detection: None No
Release Detection: Other Yes
Release Detection: Other Note Not reported
Release Prevention: Double Bottom No
Release Prevention: Double Walled No
Release Prevention: Lined Interior Not reported
Release Prevention: Poly Jacket No
Release Prevention: Exc Liner No
Release Prevention: None No
Release Prevention: Unknown No
Release Prevention: Other Yes
Release Prevention: Other Note Not reported

Tank Foundation: Steel No
Tank Foundation: Earthen Yes
Tank Foundation: Concrete Imp No
Tank Foundation: Unknown No
Tank Foundation: Other No
Tank Foundation: Other Note Not reported
Tank Roof: Float No
Tank Roof: Cone No

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

THRIFT OIL COMPANY (Continued)

U003988870

Tank Roof: Breather	Not reported
Tank Roof: Dbldeck	Not reported
Tank Roof: Pontoon	Not reported
Tank Roof: Balloon	Not reported
Tank Roof: Lifter	Not reported
Tank Roof: Pan	Not reported
Tank Roof: Other	No
Tank Roof: Other Note	Not reported

Tank Material:

Tank Materials: Bare Steel	Yes
Tank Materials: Concrete	No
Tank Materials: Insulated Tank Jacket	No
Tank Materials: Unknown	No
Tank Materials: Other	No
Tank Materials: Other Note	Not reported
Tank Type Cathodic/CP:	N
Tank Type Single Wall:	N
Tank Type Double Wall:	N
Tank Type Lined Interior:	N
Tank Type Double Bottom:	N
Tank Type Potable/Skid:	N
Tank Type Shop Fabricated/Built:	N
Tank Type Vaulted Below Grade:	N
Tank Type Vertical:	N
Tank Type Horizontal:	N
Tank Type Unknown:	N
Tank Type Other:	N
Tank Type Other Specify:	N

Owner:

Owner Id:	27894
Owner Name:	JT & CA Thrift Inc t/a Thrift Oil Company
Owner Address:	2742 General Puller Hwy
Owner Address2:	Not reported
Owner City/State/Zip:	Saluda, VA 23149
Owner Type:	COMMERCIAL
Number of Active AST:	5
Number of Active UST:	0
Number of Inactive AST:	17
Number of Inactive UST:	2

Fed Regulated:	No
Tank Number:	19
Tank Type:	AST
Tank Capacity:	10000
Tank Contents:	GASOLINE
Tank Status:	CLOSED IN PLACE

Tank Containment:

Install Date:	9/30/1987
Containment: Curbing	No
Containment: Weirs	No
Containment: Sorbent	Yes
Containment: Culvert	No

Map ID
 Direction
 Distance
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
 EPA ID Number

THRIFT OIL COMPANY (Continued)

U003988870

Containment: Diversion	No
Containment: Retention	No
Containment: Dike	Yes
Containment: Unknown	No
Containment: Other	No
Containment: Other Note	Not reported
Release Detection:	
Release Detection: Ground Water	No
Release Detection: Visual	Yes
Release Detection: Vapor	No
Release Detection: Interstitial	No
Release Detection: None	No
Release Detection: Other	Yes
Release Detection: Other Note	Not reported
Release Prevention: Double Bottom	No
Release Prevention: Double Walled	No
Release Prevention: Lined Interior	Not reported
Release Prevention: Poly Jacket	No
Release Prevention: Exc Liner	No
Release Prevention: None	No
Release Prevention: Unknown	No
Release Prevention: Other	Yes
Release Prevention: Other Note	Not reported
Tank Foundation: Steel	No
Tank Foundation: Earthen	Yes
Tank Foundation: Concrete Imp	No
Tank Foundation: Unknown	No
Tank Foundation: Other	No
Tank Foundation: Other Note	Not reported
Tank Roof: Float	No
Tank Roof: Cone	No
Tank Roof: Breather	Not reported
Tank Roof: Dbldeck	Not reported
Tank Roof: Pontoon	Not reported
Tank Roof: Balloon	Not reported
Tank Roof: Lifter	Not reported
Tank Roof: Pan	Not reported
Tank Roof: Other	No
Tank Roof: Other Note	Not reported
Tank Material:	
Tank Materials: Bare Steel	Yes
Tank Materials: Concrete	No
Tank Materials: Insulated Tank Jacket	No
Tank Materials: Unknown	No
Tank Materials: Other	No
Tank Materials: Other Note	Not reported
Tank Type Cathodic/CP:	N
Tank Type Single Wall:	N
Tank Type Double Wall:	N
Tank Type Lined Interior:	N
Tank Type Double Bottom:	N
Tank Type Potable/Skid:	N
Tank Type Shop Fabricated/Built:	N
Tank Type Vaulted Below Grade:	N

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

THRIFT OIL COMPANY (Continued)

U003988870

Tank Type Vertical: N
Tank Type Horizontal: N
Tank Type Unknown: N
Tank Type Other: N
Tank Type Other Specify: N

Owner:
Owner Id: 27894
Owner Name: JT & CA Thrift Inc t/a Thrift Oil Company
Owner Address: 2742 General Puller Hwy
Owner Address2: Not reported
Owner City/State/Zip: Saluda, VA 23149
Owner Type: COMMERCIAL
Number of Active AST: 5
Number of Active UST: 0
Number of Inactive AST: 17
Number of Inactive UST: 2

Fed Regulated: No
Tank Number: 2
Tank Type: AST
Tank Capacity: 15000
Tank Contents: GASOLINE
Tank Status: CURR IN USE

Tank Containment:
Install Date: 11/1/2017
Containment: Curbing No
Containment: Weirs No
Containment: Sorbent No
Containment: Culvert No
Containment: Diversion No
Containment: Retention No
Containment: Dike Yes
Containment: Unknown No
Containment: Other No
Containment: Other Note Not reported

Release Detection:
Release Detection: Ground Water Yes
Release Detection: Visual Yes
Release Detection: Vapor No
Release Detection: Interstitial No
Release Detection: None No
Release Detection: Other No
Release Detection: Other Note Not reported
Release Prevention: Double Bottom Yes
Release Prevention: Double Walled No
Release Prevention: Lined Interior Not reported
Release Prevention: Poly Jacket No
Release Prevention: Exc Liner No
Release Prevention: None No
Release Prevention: Unknown No
Release Prevention: Other No
Release Prevention: Other Note Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

THRIFT OIL COMPANY (Continued)

U003988870

Tank Foundation: Steel	No
Tank Foundation: Earthen	Yes
Tank Foundation: Concrete Imp	No
Tank Foundation: Unknown	No
Tank Foundation: Other	No
Tank Foundation: Other Note	Not reported
Tank Roof: Float	No
Tank Roof: Cone	Yes
Tank Roof: Breather	Not reported
Tank Roof: Dbldeck	Not reported
Tank Roof: Pontoon	Not reported
Tank Roof: Balloon	Not reported
Tank Roof: Lifter	Not reported
Tank Roof: Pan	Not reported
Tank Roof: Other	No
Tank Roof: Other Note	Not reported

Tank Material:

Tank Materials: Bare Steel	Yes
Tank Materials: Concrete	No
Tank Materials: Insulated Tank Jacket	No
Tank Materials: Unknown	No
Tank Materials: Other	No
Tank Materials: Other Note	Not reported
Tank Type Cathodic/CP:	N
Tank Type Single Wall:	N
Tank Type Double Wall:	N
Tank Type Lined Interior:	N
Tank Type Double Bottom:	N
Tank Type Potable/Skid:	N
Tank Type Shop Fabricated/Built:	N
Tank Type Vaulted Below Grade:	N
Tank Type Vertical:	N
Tank Type Horizontal:	N
Tank Type Unknown:	N
Tank Type Other:	N
Tank Type Other Specify:	N

Owner:

Owner Id:	27894
Owner Name:	JT & CA Thrift Inc t/a Thrift Oil Company
Owner Address:	2742 General Puller Hwy
Owner Address2:	Not reported
Owner City/State/Zip:	Saluda, VA 23149
Owner Type:	COMMERCIAL
Number of Active AST:	5
Number of Active UST:	0
Number of Inactive AST:	17
Number of Inactive UST:	2

Fed Regulated:	No
Tank Number:	3
Tank Type:	AST
Tank Capacity:	15000
Tank Contents:	DIESEL

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

THRIFT OIL COMPANY (Continued)

U003988870

Tank Status:	CURR IN USE
Tank Containment:	
Install Date:	11/1/2017
Containment: Curbing	No
Containment: Weirs	No
Containment: Sorbent	No
Containment: Culvert	No
Containment: Diversion	No
Containment: Retention	No
Containment: Dike	No
Containment: Unknown	No
Containment: Other	No
Containment: Other Note	Not reported
Release Detection:	
Release Detection: Ground Water	No
Release Detection: Visual	No
Release Detection: Vapor	No
Release Detection: Interstitial	No
Release Detection: None	No
Release Detection: Other	No
Release Detection: Other Note	Not reported
Release Prevention: Double Bottom	No
Release Prevention: Double Walled	No
Release Prevention: Lined Interior	Not reported
Release Prevention: Poly Jacket	No
Release Prevention: Exc Liner	No
Release Prevention: None	No
Release Prevention: Unknown	No
Release Prevention: Other	No
Release Prevention: Other Note	Not reported
Tank Foundation:	
Tank Foundation: Steel	No
Tank Foundation: Earthen	No
Tank Foundation: Concrete Imp	No
Tank Foundation: Unknown	No
Tank Foundation: Other	No
Tank Foundation: Other Note	Not reported
Tank Roof:	
Tank Roof: Float	No
Tank Roof: Cone	No
Tank Roof: Breather	Not reported
Tank Roof: Dbldck	Not reported
Tank Roof: Pontoon	Not reported
Tank Roof: Balloon	Not reported
Tank Roof: Lifter	Not reported
Tank Roof: Pan	Not reported
Tank Roof: Other	No
Tank Roof: Other Note	Not reported
Tank Material:	
Tank Materials: Bare Steel	No
Tank Materials: Concrete	No
Tank Materials: Insulated Tank Jacket	No
Tank Materials: Unknown	No
Tank Materials: Other	No
Tank Materials: Other Note	Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

THRIFT OIL COMPANY (Continued)

U003988870

Tank Type Cathodic/CP: N
Tank Type Single Wall: N
Tank Type Double Wall: N
Tank Type Lined Interior: N
Tank Type Double Bottom: N
Tank Type Potable/Skid: N
Tank Type Shop Fabricated/Built: N
Tank Type Vaulted Below Grade: N
Tank Type Vertical: N
Tank Type Horizontal: N
Tank Type Unknown: N
Tank Type Other: N
Tank Type Other Specify: N

Owner:

Owner Id: 27894
Owner Name: JT & CA Thrift Inc t/a Thrift Oil Company
Owner Address: 2742 General Puller Hwy
Owner Address2: Not reported
Owner City/State/Zip: Saluda, VA 23149
Owner Type: COMMERCIAL
Number of Active AST: 5
Number of Active UST: 0
Number of Inactive AST: 17
Number of Inactive UST: 2

Fed Regulated: No
Tank Number: 4
Tank Type: AST
Tank Capacity: 10000
Tank Contents: KEROSENE
Tank Status: CURR IN USE

Tank Containment:

Install Date: 11/1/2017
Containment: Curbing No
Containment: Weirs No
Containment: Sorbent No
Containment: Culvert No
Containment: Diversion No
Containment: Retention No
Containment: Dike Yes
Containment: Unknown No
Containment: Other No
Containment: Other Note Not reported

Release Detection:

Release Detection: Ground Water Yes
Release Detection: Visual Yes
Release Detection: Vapor No
Release Detection: Interstitial No
Release Detection: None No
Release Detection: Other No
Release Detection: Other Note Not reported
Release Prevention: Double Bottom Yes
Release Prevention: Double Walled No

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

THRIFT OIL COMPANY (Continued)

U003988870

Release Prevention: Lined Interior Not reported
Release Prevention: Poly Jacket No
Release Prevention: Exc Liner No
Release Prevention: None No
Release Prevention: Unknown No
Release Prevention: Other No
Release Prevention: Other Note Not reported

Tank Foundation: Steel No
Tank Foundation: Earthen Yes
Tank Foundation: Concrete Imp No
Tank Foundation: Unknown No
Tank Foundation: Other No
Tank Foundation: Other Note Not reported
Tank Roof: Float No
Tank Roof: Cone Yes
Tank Roof: Breather Not reported
Tank Roof: Dbldck Not reported
Tank Roof: Pontoon Not reported
Tank Roof: Balloon Not reported
Tank Roof: Lifter Not reported
Tank Roof: Pan Not reported
Tank Roof: Other No
Tank Roof: Other Note Not reported

Tank Material:

Tank Materials: Bare Steel Yes
Tank Materials: Concrete No
Tank Materials: Insulated Tank Jacket No
Tank Materials: Unknown No
Tank Materials: Other No
Tank Materials: Other Note Not reported
Tank Type Cathodic/CP: N
Tank Type Single Wall: N
Tank Type Double Wall: N
Tank Type Lined Interior: N
Tank Type Double Bottom: N
Tank Type Potable/Skid: N
Tank Type Shop Fabricated/Built: N
Tank Type Vaulted Below Grade: N
Tank Type Vertical: N
Tank Type Horizontal: N
Tank Type Unknown: N
Tank Type Other: N
Tank Type Other Specify: N

Owner:

Owner Id: 27894
Owner Name: JT & CA Thrift Inc t/a Thrift Oil Company
Owner Address: 2742 General Puller Hwy
Owner Address2: Not reported
Owner City/State/Zip: Saluda, VA 23149
Owner Type: COMMERCIAL
Number of Active AST: 5
Number of Active UST: 0

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

THRIFT OIL COMPANY (Continued)

U003988870

Number of Inactive AST:	17
Number of Inactive UST:	2
Fed Regulated:	No
Tank Number:	6
Tank Type:	AST
Tank Capacity:	15000
Tank Contents:	DIESEL
Tank Status:	CURR IN USE
Tank Containment:	
Install Date:	11/1/2017
Containment: Curbing	No
Containment: Weirs	No
Containment: Sorbent	No
Containment: Culvert	No
Containment: Diversion	No
Containment: Retention	No
Containment: Dike	Yes
Containment: Unknown	No
Containment: Other	No
Containment: Other Note	Not reported
Release Detection:	
Release Detection: Ground Water	Yes
Release Detection: Visual	Yes
Release Detection: Vapor	No
Release Detection: Interstitial	No
Release Detection: None	No
Release Detection: Other	No
Release Detection: Other Note	Not reported
Release Prevention: Double Bottom	Yes
Release Prevention: Double Walled	No
Release Prevention: Lined Interior	Not reported
Release Prevention: Poly Jacket	No
Release Prevention: Exc Liner	No
Release Prevention: None	No
Release Prevention: Unknown	No
Release Prevention: Other	No
Release Prevention: Other Note	Not reported
Tank Foundation: Steel	No
Tank Foundation: Earthen	Yes
Tank Foundation: Concrete Imp	No
Tank Foundation: Unknown	No
Tank Foundation: Other	No
Tank Foundation: Other Note	Not reported
Tank Roof: Float	No
Tank Roof: Cone	Yes
Tank Roof: Breather	Not reported
Tank Roof: Dbldeck	Not reported
Tank Roof: Pontoon	Not reported
Tank Roof: Balloon	Not reported
Tank Roof: Lifter	Not reported
Tank Roof: Pan	Not reported
Tank Roof: Other	No
Tank Roof: Other Note	Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

THRIFT OIL COMPANY (Continued)

U003988870

Tank Material:

Tank Materials: Bare Steel	Yes
Tank Materials: Concrete	No
Tank Materials: Insulated Tank Jacket	No
Tank Materials: Unknown	No
Tank Materials: Other	No
Tank Materials: Other Note	Not reported
Tank Type Cathodic/CP:	N
Tank Type Single Wall:	N
Tank Type Double Wall:	N
Tank Type Lined Interior:	N
Tank Type Double Bottom:	N
Tank Type Potable/Skid:	N
Tank Type Shop Fabricated/Built:	N
Tank Type Vaulted Below Grade:	N
Tank Type Vertical:	N
Tank Type Horizontal:	N
Tank Type Unknown:	N
Tank Type Other:	N
Tank Type Other Specify:	N

Owner:

Owner Id:	27894
Owner Name:	JT & CA Thrift Inc t/a Thrift Oil Company
Owner Address:	2742 General Puller Hwy
Owner Address2:	Not reported
Owner City/State/Zip:	Saluda, VA 23149
Owner Type:	COMMERCIAL
Number of Active AST:	5
Number of Active UST:	0
Number of Inactive AST:	17
Number of Inactive UST:	2

Fed Regulated:	No
Tank Number:	7
Tank Type:	AST
Tank Capacity:	15120
Tank Contents:	KEROSENE
Tank Status:	CLOSED IN PLACE

Tank Containment:

Install Date:	1/1/1965
Containment: Curbing	No
Containment: Weirs	No
Containment: Sorbent	Yes
Containment: Culvert	No
Containment: Diversion	No
Containment: Retention	No
Containment: Dike	Yes
Containment: Unknown	No
Containment: Other	No
Containment: Other Note	Not reported

Release Detection:

Release Detection: Ground Water	No
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Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

THRIFT OIL COMPANY (Continued)

U003988870

Release Detection: Visual	Yes
Release Detection: Vapor	No
Release Detection: Interstitial	No
Release Detection: None	No
Release Detection: Other	Yes
Release Detection: Other Note	Not reported
Release Prevention: Double Bottom	No
Release Prevention: Double Walled	No
Release Prevention: Lined Interior	Not reported
Release Prevention: Poly Jacket	No
Release Prevention: Exc Liner	No
Release Prevention: None	Yes
Release Prevention: Unknown	No
Release Prevention: Other	No
Release Prevention: Other Note	Not reported

Tank Foundation: Steel	No
Tank Foundation: Earthen	Yes
Tank Foundation: Concrete Imp	No
Tank Foundation: Unknown	No
Tank Foundation: Other	No
Tank Foundation: Other Note	Not reported
Tank Roof: Float	No
Tank Roof: Cone	Yes
Tank Roof: Breather	Not reported
Tank Roof: Dbldeck	Not reported
Tank Roof: Pontoon	Not reported
Tank Roof: Balloon	Not reported
Tank Roof: Lifter	Not reported
Tank Roof: Pan	Not reported
Tank Roof: Other	No
Tank Roof: Other Note	Not reported

Tank Material:

Tank Materials: Bare Steel	Yes
Tank Materials: Concrete	No
Tank Materials: Insulated Tank Jacket	No
Tank Materials: Unknown	No
Tank Materials: Other	No
Tank Materials: Other Note	Not reported
Tank Type Cathodic/CP:	N
Tank Type Single Wall:	N
Tank Type Double Wall:	N
Tank Type Lined Interior:	N
Tank Type Double Bottom:	N
Tank Type Potable/Skid:	N
Tank Type Shop Fabricated/Built:	N
Tank Type Vaulted Below Grade:	N
Tank Type Vertical:	N
Tank Type Horizontal:	N
Tank Type Unknown:	N
Tank Type Other:	N
Tank Type Other Specify:	N

Owner:

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

THRIFT OIL COMPANY (Continued)

U003988870

Owner Id:	27894
Owner Name:	JT & CA Thrift Inc t/a Thrift Oil Company
Owner Address:	2742 General Puller Hwy
Owner Address2:	Not reported
Owner City/State/Zip:	Saluda, VA 23149
Owner Type:	COMMERCIAL
Number of Active AST:	5
Number of Active UST:	0
Number of Inactive AST:	17
Number of Inactive UST:	2
Fed Regulated:	No
Tank Number:	8
Tank Type:	AST
Tank Capacity:	15120
Tank Contents:	DIESEL
Tank Status:	CLOSED IN PLACE
Tank Containment:	
Install Date:	1/1/1965
Containment: Curbing	No
Containment: Weirs	No
Containment: Sorbent	Yes
Containment: Culvert	No
Containment: Diversion	No
Containment: Retention	No
Containment: Dike	No
Containment: Unknown	No
Containment: Other	No
Containment: Other Note	Not reported
Release Detection:	
Release Detection: Ground Water	No
Release Detection: Visual	Yes
Release Detection: Vapor	No
Release Detection: Interstitial	No
Release Detection: None	No
Release Detection: Other	Yes
Release Detection: Other Note	Not reported
Release Prevention: Double Bottom	No
Release Prevention: Double Walled	No
Release Prevention: Lined Interior	Not reported
Release Prevention: Poly Jacket	No
Release Prevention: Exc Liner	No
Release Prevention: None	Yes
Release Prevention: Unknown	No
Release Prevention: Other	No
Release Prevention: Other Note	Not reported
Tank Foundation: Steel	No
Tank Foundation: Earthen	Yes
Tank Foundation: Concrete Imp	No
Tank Foundation: Unknown	No
Tank Foundation: Other	No
Tank Foundation: Other Note	Not reported
Tank Roof: Float	No
Tank Roof: Cone	Yes

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

THRIFT OIL COMPANY (Continued)

U003988870

Tank Roof: Breather	Not reported
Tank Roof: Dbldeck	Not reported
Tank Roof: Pontoon	Not reported
Tank Roof: Balloon	Not reported
Tank Roof: Lifter	Not reported
Tank Roof: Pan	Not reported
Tank Roof: Other	No
Tank Roof: Other Note	Not reported

Tank Material:

Tank Materials: Bare Steel	Yes
Tank Materials: Concrete	No
Tank Materials: Insulated Tank Jacket	No
Tank Materials: Unknown	No
Tank Materials: Other	No
Tank Materials: Other Note	Not reported
Tank Type Cathodic/CP:	N
Tank Type Single Wall:	N
Tank Type Double Wall:	N
Tank Type Lined Interior:	N
Tank Type Double Bottom:	N
Tank Type Potable/Skid:	N
Tank Type Shop Fabricated/Built:	N
Tank Type Vaulted Below Grade:	N
Tank Type Vertical:	N
Tank Type Horizontal:	N
Tank Type Unknown:	N
Tank Type Other:	N
Tank Type Other Specify:	N

Owner:

Owner Id:	27894
Owner Name:	JT & CA Thrift Inc t/a Thrift Oil Company
Owner Address:	2742 General Puller Hwy
Owner Address2:	Not reported
Owner City/State/Zip:	Saluda, VA 23149
Owner Type:	COMMERCIAL
Number of Active AST:	5
Number of Active UST:	0
Number of Inactive AST:	17
Number of Inactive UST:	2

Fed Regulated:	No
Tank Number:	9
Tank Type:	AST
Tank Capacity:	15120
Tank Contents:	HEATING OIL
Tank Status:	DISMANTLED

Tank Containment:

Install Date:	10/30/1974
Containment: Curbing	No
Containment: Weirs	No
Containment: Sorbent	Yes
Containment: Culvert	No

Map ID
 Direction
 Distance
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
 EPA ID Number

THRIFT OIL COMPANY (Continued)

U003988870

Containment: Diversion	No
Containment: Retention	No
Containment: Dike	Yes
Containment: Unknown	No
Containment: Other	No
Containment: Other Note	Not reported
Release Detection:	
Release Detection: Ground Water	Yes
Release Detection: Visual	Yes
Release Detection: Vapor	Yes
Release Detection: Interstitial	No
Release Detection: None	No
Release Detection: Other	Yes
Release Detection: Other Note	Not reported
Release Prevention: Double Bottom	No
Release Prevention: Double Walled	No
Release Prevention: Lined Interior	Not reported
Release Prevention: Poly Jacket	No
Release Prevention: Exc Liner	No
Release Prevention: None	No
Release Prevention: Unknown	No
Release Prevention: Other	Yes
Release Prevention: Other Note	Ultrasonic Testing 9-5-97
Tank Foundation: Steel	No
Tank Foundation: Earthen	Yes
Tank Foundation: Concrete Imp	No
Tank Foundation: Unknown	No
Tank Foundation: Other	No
Tank Foundation: Other Note	Not reported
Tank Roof: Float	No
Tank Roof: Cone	No
Tank Roof: Breather	Not reported
Tank Roof: Dbldeck	Not reported
Tank Roof: Pontoon	Not reported
Tank Roof: Balloon	Not reported
Tank Roof: Lifter	Not reported
Tank Roof: Pan	Not reported
Tank Roof: Other	Yes
Tank Roof: Other Note	Fixed Cone
Tank Material:	
Tank Materials: Bare Steel	Yes
Tank Materials: Concrete	No
Tank Materials: Insulated Tank Jacket	No
Tank Materials: Unknown	No
Tank Materials: Other	No
Tank Materials: Other Note	Riveted; Painted
Tank Type Cathodic/CP:	Y
Tank Type Single Wall:	Y
Tank Type Double Wall:	Y
Tank Type Lined Interior:	Y
Tank Type Double Bottom:	Y
Tank Type Potable/Skid:	Y
Tank Type Shop Fabricated/Built:	Y
Tank Type Vaulted Below Grade:	Y

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

THRIFT OIL COMPANY (Continued)

U003988870

Tank Type Vertical: Y
Tank Type Horizontal: Y
Tank Type Unknown: Y
Tank Type Other: Y
Tank Type Other Specify: Y

Owner:

Owner Id: 27894
Owner Name: JT & CA Thrift Inc t/a Thrift Oil Company
Owner Address: 2742 General Puller Hwy
Owner Address2: Not reported
Owner City/State/Zip: Saluda, VA 23149
Owner Type: COMMERCIAL
Number of Active AST: 5
Number of Active UST: 0
Number of Inactive AST: 17
Number of Inactive UST: 2

Fed Regulated: No
Tank Number: Old 12
Tank Type: AST
Tank Capacity: 15120
Tank Contents: HEATING OIL
Tank Status: DISMANTLED

Tank Containment:

Install Date: 10/30/1974
Containment: Curbing No
Containment: Weirs No
Containment: Sorbent Yes
Containment: Culvert No
Containment: Diversion No
Containment: Retention No
Containment: Dike Yes
Containment: Unknown No
Containment: Other No
Containment: Other Note Not reported

Release Detection:

Release Detection: Ground Water Yes
Release Detection: Visual Yes
Release Detection: Vapor Yes
Release Detection: Interstitial No
Release Detection: None No
Release Detection: Other No
Release Detection: Other Note Not reported
Release Prevention: Double Bottom No
Release Prevention: Double Walled No
Release Prevention: Lined Interior Not reported
Release Prevention: Poly Jacket No
Release Prevention: Exc Liner No
Release Prevention: None No
Release Prevention: Unknown No
Release Prevention: Other Yes
Release Prevention: Other Note Ultrasonic Testing 9-5-97

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

THRIFT OIL COMPANY (Continued)

U003988870

Tank Foundation: Steel	No
Tank Foundation: Earthen	Yes
Tank Foundation: Concrete Imp	No
Tank Foundation: Unknown	No
Tank Foundation: Other	No
Tank Foundation: Other Note	Not reported
Tank Roof: Float	No
Tank Roof: Cone	No
Tank Roof: Breather	Not reported
Tank Roof: Dbldeck	Not reported
Tank Roof: Pontoon	Not reported
Tank Roof: Balloon	Not reported
Tank Roof: Lifter	Not reported
Tank Roof: Pan	Not reported
Tank Roof: Other	Yes
Tank Roof: Other Note	Fixed Cone

Tank Material:

Tank Materials: Bare Steel	Yes
Tank Materials: Concrete	No
Tank Materials: Insulated Tank Jacket	No
Tank Materials: Unknown	No
Tank Materials: Other	No
Tank Materials: Other Note	Riveted; Painted
Tank Type Cathodic/CP:	Y
Tank Type Single Wall:	Y
Tank Type Double Wall:	Y
Tank Type Lined Interior:	Y
Tank Type Double Bottom:	Y
Tank Type Potable/Skid:	Y
Tank Type Shop Fabricated/Built:	Y
Tank Type Vaulted Below Grade:	Y
Tank Type Vertical:	Y
Tank Type Horizontal:	Y
Tank Type Unknown:	Y
Tank Type Other:	Y
Tank Type Other Specify:	Y

Owner:

Owner Id:	27894
Owner Name:	JT & CA Thrift Inc t/a Thrift Oil Company
Owner Address:	2742 General Puller Hwy
Owner Address2:	Not reported
Owner City/State/Zip:	Saluda, VA 23149
Owner Type:	COMMERCIAL
Number of Active AST:	5
Number of Active UST:	0
Number of Inactive AST:	17
Number of Inactive UST:	2

Fed Regulated:	No
Tank Number:	R14
Tank Type:	AST
Tank Capacity:	1000
Tank Contents:	KEROSENE

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

THRIFT OIL COMPANY (Continued)

U003988870

Tank Status:	DISMANTLED
Tank Containment:	
Install Date:	9/30/1988
Containment: Curbing	No
Containment: Weirs	No
Containment: Sorbent	No
Containment: Culvert	No
Containment: Diversion	No
Containment: Retention	No
Containment: Dike	Yes
Containment: Unknown	No
Containment: Other	No
Containment: Other Note	Not reported
Release Detection:	
Release Detection: Ground Water	Yes
Release Detection: Visual	Yes
Release Detection: Vapor	No
Release Detection: Interstitial	No
Release Detection: None	No
Release Detection: Other	No
Release Detection: Other Note	Not reported
Release Prevention: Double Bottom	No
Release Prevention: Double Walled	No
Release Prevention: Lined Interior	Not reported
Release Prevention: Poly Jacket	No
Release Prevention: Exc Liner	No
Release Prevention: None	Yes
Release Prevention: Unknown	No
Release Prevention: Other	No
Release Prevention: Other Note	Not reported
Tank Foundation:	
Tank Foundation: Steel	No
Tank Foundation: Earthen	Yes
Tank Foundation: Concrete Imp	No
Tank Foundation: Unknown	No
Tank Foundation: Other	No
Tank Foundation: Other Note	Not reported
Tank Roof:	
Tank Roof: Float	No
Tank Roof: Cone	No
Tank Roof: Breather	Not reported
Tank Roof: Dbldck	Not reported
Tank Roof: Pontoon	Not reported
Tank Roof: Balloon	Not reported
Tank Roof: Lifter	Not reported
Tank Roof: Pan	Not reported
Tank Roof: Other	Yes
Tank Roof: Other Note	Horizontal Tank
Tank Material:	
Tank Materials: Bare Steel	Yes
Tank Materials: Concrete	No
Tank Materials: Insulated Tank Jacket	No
Tank Materials: Unknown	No
Tank Materials: Other	No
Tank Materials: Other Note	Painted

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

THRIFT OIL COMPANY (Continued)

U003988870

Tank Type Cathodic/CP: N
Tank Type Single Wall: N
Tank Type Double Wall: N
Tank Type Lined Interior: N
Tank Type Double Bottom: N
Tank Type Potable/Skid: N
Tank Type Shop Fabricated/Built: N
Tank Type Vaulted Below Grade: N
Tank Type Vertical: N
Tank Type Horizontal: N
Tank Type Unknown: N
Tank Type Other: N
Tank Type Other Specify: N

Owner:

Owner Id: 27894
Owner Name: JT & CA Thrift Inc t/a Thrift Oil Company
Owner Address: 2742 General Puller Hwy
Owner Address2: Not reported
Owner City/State/Zip: Saluda, VA 23149
Owner Type: COMMERCIAL
Number of Active AST: 5
Number of Active UST: 0
Number of Inactive AST: 17
Number of Inactive UST: 2

Fed Regulated: No
Tank Number: R2
Tank Type: AST
Tank Capacity: 18841
Tank Contents: GASOLINE
Tank Status: DISMANTLED

Tank Containment:

Install Date: 10/30/1956
Containment: Curbing No
Containment: Weirs No
Containment: Sorbent No
Containment: Culvert No
Containment: Diversion No
Containment: Retention No
Containment: Dike Yes
Containment: Unknown No
Containment: Other No
Containment: Other Note Not reported

Release Detection:

Release Detection: Ground Water Yes
Release Detection: Visual Yes
Release Detection: Vapor Yes
Release Detection: Interstitial No
Release Detection: None No
Release Detection: Other No
Release Detection: Other Note Not reported
Release Prevention: Double Bottom No
Release Prevention: Double Walled No

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

THRIFT OIL COMPANY (Continued)

U003988870

Release Prevention: Lined Interior Not reported
Release Prevention: Poly Jacket No
Release Prevention: Exc Liner No
Release Prevention: None Yes
Release Prevention: Unknown No
Release Prevention: Other No
Release Prevention: Other Note Not reported

Tank Foundation: Steel No
Tank Foundation: Earthen Yes
Tank Foundation: Concrete Imp No
Tank Foundation: Unknown No
Tank Foundation: Other No
Tank Foundation: Other Note Not reported
Tank Roof: Float No
Tank Roof: Cone Yes
Tank Roof: Breather Not reported
Tank Roof: Dbldck Not reported
Tank Roof: Pontoon Not reported
Tank Roof: Balloon Not reported
Tank Roof: Lifter Not reported
Tank Roof: Pan Not reported
Tank Roof: Other No
Tank Roof: Other Note Not reported

Tank Material:

Tank Materials: Bare Steel Yes
Tank Materials: Concrete No
Tank Materials: Insulated Tank Jacket No
Tank Materials: Unknown No
Tank Materials: Other No
Tank Materials: Other Note Riveted; Painted
Tank Type Cathodic/CP: Y
Tank Type Single Wall: Y
Tank Type Double Wall: Y
Tank Type Lined Interior: Y
Tank Type Double Bottom: Y
Tank Type Potable/Skid: Y
Tank Type Shop Fabricated/Built: Y
Tank Type Vaulted Below Grade: Y
Tank Type Vertical: Y
Tank Type Horizontal: Y
Tank Type Unknown: Y
Tank Type Other: Y
Tank Type Other Specify: Y

Owner:

Owner Id: 27894
Owner Name: JT & CA Thrift Inc t/a Thrift Oil Company
Owner Address: 2742 General Puller Hwy
Owner Address2: Not reported
Owner City/State/Zip: Saluda, VA 23149
Owner Type: COMMERCIAL
Number of Active AST: 5
Number of Active UST: 0

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

THRIFT OIL COMPANY (Continued)

U003988870

Number of Inactive AST:	17
Number of Inactive UST:	2
Fed Regulated:	No
Tank Number:	R3
Tank Type:	AST
Tank Capacity:	18841
Tank Contents:	DIESEL
Tank Status:	DISMANTLED
Tank Containment:	
Install Date:	10/30/1956
Containment: Curbing	No
Containment: Weirs	No
Containment: Sorbent	No
Containment: Culvert	No
Containment: Diversion	No
Containment: Retention	No
Containment: Dike	Yes
Containment: Unknown	No
Containment: Other	No
Containment: Other Note	Not reported
Release Detection:	
Release Detection: Ground Water	Yes
Release Detection: Visual	Yes
Release Detection: Vapor	Yes
Release Detection: Interstitial	No
Release Detection: None	No
Release Detection: Other	No
Release Detection: Other Note	Not reported
Release Prevention: Double Bottom	No
Release Prevention: Double Walled	No
Release Prevention: Lined Interior	Not reported
Release Prevention: Poly Jacket	No
Release Prevention: Exc Liner	No
Release Prevention: None	Yes
Release Prevention: Unknown	No
Release Prevention: Other	No
Release Prevention: Other Note	Not reported
Tank Foundation: Steel	No
Tank Foundation: Earthen	Yes
Tank Foundation: Concrete Imp	No
Tank Foundation: Unknown	No
Tank Foundation: Other	No
Tank Foundation: Other Note	Not reported
Tank Roof: Float	No
Tank Roof: Cone	Yes
Tank Roof: Breather	Not reported
Tank Roof: Dbldck	Not reported
Tank Roof: Pontoon	Not reported
Tank Roof: Balloon	Not reported
Tank Roof: Lifter	Not reported
Tank Roof: Pan	Not reported
Tank Roof: Other	No
Tank Roof: Other Note	Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

THRIFT OIL COMPANY (Continued)

U003988870

Tank Material:

Tank Materials: Bare Steel	Yes
Tank Materials: Concrete	No
Tank Materials: Insulated Tank Jacket	No
Tank Materials: Unknown	No
Tank Materials: Other	No
Tank Materials: Other Note	Riveted; Painted
Tank Type Cathodic/CP:	Y
Tank Type Single Wall:	Y
Tank Type Double Wall:	Y
Tank Type Lined Interior:	Y
Tank Type Double Bottom:	Y
Tank Type Potable/Skid:	Y
Tank Type Shop Fabricated/Built:	Y
Tank Type Vaulted Below Grade:	Y
Tank Type Vertical:	Y
Tank Type Horizontal:	Y
Tank Type Unknown:	Y
Tank Type Other:	Y
Tank Type Other Specify:	Y

Owner:

Owner Id:	27894
Owner Name:	JT & CA Thrift Inc t/a Thrift Oil Company
Owner Address:	2742 General Puller Hwy
Owner Address2:	Not reported
Owner City/State/Zip:	Saluda, VA 23149
Owner Type:	COMMERCIAL
Number of Active AST:	5
Number of Active UST:	0
Number of Inactive AST:	17
Number of Inactive UST:	2

Fed Regulated:	No
Tank Number:	R4
Tank Type:	AST
Tank Capacity:	9982
Tank Contents:	KEROSENE
Tank Status:	DISMANTLED

Tank Containment:

Install Date:	10/30/1956
Containment: Curbing	No
Containment: Weirs	No
Containment: Sorbent	No
Containment: Culvert	No
Containment: Diversion	No
Containment: Retention	No
Containment: Dike	Yes
Containment: Unknown	No
Containment: Other	No
Containment: Other Note	Not reported

Release Detection:

Release Detection: Ground Water	Yes
---------------------------------	-----

Map ID
 Direction
 Distance
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
 EPA ID Number

THRIFT OIL COMPANY (Continued)

U003988870

Release Detection: Visual	Yes
Release Detection: Vapor	Yes
Release Detection: Interstitial	No
Release Detection: None	No
Release Detection: Other	No
Release Detection: Other Note	Not reported
Release Prevention: Double Bottom	No
Release Prevention: Double Walled	No
Release Prevention: Lined Interior	Not reported
Release Prevention: Poly Jacket	No
Release Prevention: Exc Liner	No
Release Prevention: None	Yes
Release Prevention: Unknown	No
Release Prevention: Other	No
Release Prevention: Other Note	Not reported

Tank Foundation: Steel	No
Tank Foundation: Earthen	Yes
Tank Foundation: Concrete Imp	No
Tank Foundation: Unknown	No
Tank Foundation: Other	No
Tank Foundation: Other Note	Not reported
Tank Roof: Float	No
Tank Roof: Cone	No
Tank Roof: Breather	Not reported
Tank Roof: Dbldeck	Not reported
Tank Roof: Pontoon	Not reported
Tank Roof: Balloon	Not reported
Tank Roof: Lifter	Not reported
Tank Roof: Pan	Not reported
Tank Roof: Other	No
Tank Roof: Other Note	Not reported

Tank Material:

Tank Materials: Bare Steel	Yes
Tank Materials: Concrete	No
Tank Materials: Insulated Tank Jacket	No
Tank Materials: Unknown	No
Tank Materials: Other	No
Tank Materials: Other Note	Painted
Tank Type Cathodic/CP:	Y
Tank Type Single Wall:	Y
Tank Type Double Wall:	Y
Tank Type Lined Interior:	Y
Tank Type Double Bottom:	Y
Tank Type Potable/Skid:	Y
Tank Type Shop Fabricated/Built:	Y
Tank Type Vaulted Below Grade:	Y
Tank Type Vertical:	Y
Tank Type Horizontal:	Y
Tank Type Unknown:	Y
Tank Type Other:	Y
Tank Type Other Specify:	Y

Owner:

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

THRIFT OIL COMPANY (Continued)

U003988870

Owner Id:	27894
Owner Name:	JT & CA Thrift Inc t/a Thrift Oil Company
Owner Address:	2742 General Puller Hwy
Owner Address2:	Not reported
Owner City/State/Zip:	Saluda, VA 23149
Owner Type:	COMMERCIAL
Number of Active AST:	5
Number of Active UST:	0
Number of Inactive AST:	17
Number of Inactive UST:	2
Fed Regulated:	No
Tank Number:	R5
Tank Type:	AST
Tank Capacity:	9982
Tank Contents:	GASOLINE
Tank Status:	DISMANTLED
Tank Containment:	
Install Date:	10/30/1956
Containment: Curbing	No
Containment: Weirs	No
Containment: Sorbent	No
Containment: Culvert	No
Containment: Diversion	No
Containment: Retention	No
Containment: Dike	Yes
Containment: Unknown	No
Containment: Other	No
Containment: Other Note	Not reported
Release Detection:	
Release Detection: Ground Water	Yes
Release Detection: Visual	Yes
Release Detection: Vapor	Yes
Release Detection: Interstitial	No
Release Detection: None	No
Release Detection: Other	No
Release Detection: Other Note	Not reported
Release Prevention: Double Bottom	No
Release Prevention: Double Walled	No
Release Prevention: Lined Interior	Not reported
Release Prevention: Poly Jacket	No
Release Prevention: Exc Liner	No
Release Prevention: None	Yes
Release Prevention: Unknown	No
Release Prevention: Other	No
Release Prevention: Other Note	Not reported
Tank Foundation: Steel	No
Tank Foundation: Earthen	Yes
Tank Foundation: Concrete Imp	No
Tank Foundation: Unknown	No
Tank Foundation: Other	No
Tank Foundation: Other Note	Not reported
Tank Roof: Float	No
Tank Roof: Cone	No

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

THRIFT OIL COMPANY (Continued)

U003988870

Tank Roof: Breather	Not reported
Tank Roof: Dbldeck	Not reported
Tank Roof: Pontoon	Not reported
Tank Roof: Balloon	Not reported
Tank Roof: Lifter	Not reported
Tank Roof: Pan	Not reported
Tank Roof: Other	No
Tank Roof: Other Note	Not reported

Tank Material:

Tank Materials: Bare Steel	Yes
Tank Materials: Concrete	No
Tank Materials: Insulated Tank Jacket	No
Tank Materials: Unknown	No
Tank Materials: Other	No
Tank Materials: Other Note	Painted
Tank Type Cathodic/CP:	Y
Tank Type Single Wall:	Y
Tank Type Double Wall:	Y
Tank Type Lined Interior:	Y
Tank Type Double Bottom:	Y
Tank Type Potable/Skid:	Y
Tank Type Shop Fabricated/Built:	Y
Tank Type Vaulted Below Grade:	Y
Tank Type Vertical:	Y
Tank Type Horizontal:	Y
Tank Type Unknown:	Y
Tank Type Other:	Y
Tank Type Other Specify:	Y

Owner:

Owner Id:	27894
Owner Name:	JT & CA Thrift Inc t/a Thrift Oil Company
Owner Address:	2742 General Puller Hwy
Owner Address2:	Not reported
Owner City/State/Zip:	Saluda, VA 23149
Owner Type:	COMMERCIAL
Number of Active AST:	5
Number of Active UST:	0
Number of Inactive AST:	17
Number of Inactive UST:	2

Fed Regulated:	No
Tank Number:	R6
Tank Type:	AST
Tank Capacity:	17640
Tank Contents:	DIESEL
Tank Status:	DISMANTLED

Tank Containment:

Install Date:	9/30/1960
Containment: Curbing	No
Containment: Weirs	No
Containment: Sorbent	No
Containment: Culvert	No

Map ID
 Direction
 Distance
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
 EPA ID Number

THRIFT OIL COMPANY (Continued)

U003988870

Containment: Diversion	No
Containment: Retention	No
Containment: Dike	Yes
Containment: Unknown	No
Containment: Other	No
Containment: Other Note	Not reported
Release Detection:	
Release Detection: Ground Water	Yes
Release Detection: Visual	Yes
Release Detection: Vapor	Yes
Release Detection: Interstitial	No
Release Detection: None	No
Release Detection: Other	No
Release Detection: Other Note	Not reported
Release Prevention: Double Bottom	No
Release Prevention: Double Walled	No
Release Prevention: Lined Interior	Not reported
Release Prevention: Poly Jacket	No
Release Prevention: Exc Liner	No
Release Prevention: None	Yes
Release Prevention: Unknown	No
Release Prevention: Other	No
Release Prevention: Other Note	Not reported
Tank Foundation: Steel	No
Tank Foundation: Earthen	Yes
Tank Foundation: Concrete Imp	No
Tank Foundation: Unknown	No
Tank Foundation: Other	No
Tank Foundation: Other Note	Not reported
Tank Roof: Float	No
Tank Roof: Cone	No
Tank Roof: Breather	Not reported
Tank Roof: Dbldeck	Not reported
Tank Roof: Pontoon	Not reported
Tank Roof: Balloon	Not reported
Tank Roof: Lifter	Not reported
Tank Roof: Pan	Not reported
Tank Roof: Other	No
Tank Roof: Other Note	Not reported
Tank Material:	
Tank Materials: Bare Steel	Yes
Tank Materials: Concrete	No
Tank Materials: Insulated Tank Jacket	No
Tank Materials: Unknown	No
Tank Materials: Other	No
Tank Materials: Other Note	Painted
Tank Type Cathodic/CP:	Y
Tank Type Single Wall:	Y
Tank Type Double Wall:	Y
Tank Type Lined Interior:	Y
Tank Type Double Bottom:	Y
Tank Type Potable/Skid:	Y
Tank Type Shop Fabricated/Built:	Y
Tank Type Vaulted Below Grade:	Y

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

THRIFT OIL COMPANY (Continued)

U003988870

Tank Type Vertical: Y
Tank Type Horizontal: Y
Tank Type Unknown: Y
Tank Type Other: Y
Tank Type Other Specify: Y

B9
SSE
< 1/8
0.014 mi.
75 ft.

J T THRIFT OIL EXXON
2742 GENERAL PULLER HWY
SALUDA, VA 23149

FINDS **1008167701**
N/A

Site 2 of 6 in cluster B

Actual:
90 ft.

FINDS:

Registry ID: 110020672388
Facility URL: http://ofmpub.epa.gov/enviro/fii_query_detail.disp_program_facility?p_registry_id=110020672388

Focus Map:
2

Environmental Interest/Information System:

CEDS (Virginia - Comprehensive Environmental Data System) is the Department of Environmental Quality's (DEQ) electronic data system for maintaining databases on sources of pollutants in all media.

[Click this hyperlink](#) while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

B10
SSE
< 1/8
0.014 mi.
75 ft.

THRIFT OIL
2742 GENERAL PULLER HWY
SALUDA, VA 23149

LUST **S110068788**
LTANKS **N/A**
TIER 2

Site 3 of 6 in cluster B

Actual:
90 ft.

LUST REG PD:

Region: PD
Status: Closed
Pollution Complaint #: 19984155
Reg Code: PRO

Focus Map:
2

LTANKS:

Name: THRIFT OIL
Address: 2742 GENERAL PULLER HWY
City,State,Zip: SALUDA, VA 23149
City,State,Zip: SALUDA, VA 23149
Region: PRO
CEDS Facility Id: 200000159612
Case Status: Closed
Pollution Complaint #: 19984155
Reported: 11/13/1997
Case Closed Date: 01/25/2001
Program: RP Lead
Federally Regulated UST (Y/N): N
Regulated Petroleum UST (1): N
Excluded UST (1): N
Deferred UST (1): N
Partially Deferred UST (1): N
Exempt 1 UST (2): N

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

THRIFT OIL (Continued)

S110068788

Exempt 2 Heating Oil UST (2): N
Small Heating Oil AST (2): N
Regulated AST (3): Y
Unregulated AST (3): N
Other Y/N: N
Unknown Y/N: N
Other Description: Not reported
Heating Oil Category: Not reported

TIER 2:

Facility ID: Not reported
CAS Number: Not reported
SIC Code: 99999
NAICS: Not reported
Entered Chemical Name: MOTOR OIL
Average Amt Code: 3
Owner Name: THRIFT OIL CO.
Owner Phone: 804-758-2366
Contact Type: Not reported

Facility ID: Not reported
CAS Number: 64742-81-0
SIC Code: 99999
NAICS: Not reported
Entered Chemical Name: KEROSENE K-1
Average Amt Code: 4
Owner Name: THRIFT OIL CO.
Owner Phone: 804-758-2366
Contact Type: Not reported

Facility ID: Not reported
CAS Number: 68334-30-5
SIC Code: 99999
NAICS: Not reported
Entered Chemical Name: LOW SULFUR DIESEL
Average Amt Code: 5
Owner Name: THRIFT OIL CO.
Owner Phone: 804-758-2366
Contact Type: Not reported

Facility ID: Not reported
CAS Number: 86290-81-5
SIC Code: 99999
NAICS: Not reported
Entered Chemical Name: GASOLINE-UNLEADED
Average Amt Code: 4
Owner Name: THRIFT OIL CO.
Owner Phone: 804-758-2366
Contact Type: Not reported

MAP FINDINGS

Map ID
 Direction
 Distance
 Elevation

Site

Database(s)

EDR ID Number
 EPA ID Number

B11
SSE
 < 1/8
 0.014 mi.
 75 ft.

J T AND C A THRIFT INCORPORATED
2742 GENERAL PULLER HWY
SALUDA, VA 23149
Site 4 of 6 in cluster B

US AIRS 1004607294
FINDS N/A
ECHO

Actual:
 90 ft.

US AIRS MINOR:
 Envid: 1004607294
 Region Code: 03
 Programmatic ID: AIR VA0000005111900015
 Facility Registry ID: 110007319543
 D and B Number: Not reported
 Primary SIC Code: Not reported
 NAICS Code: 424710
 Default Air Classification Code: MIN
 Facility Type of Ownership Code: NON
 Air CMS Category Code: Not reported
 HPV Status: Not reported

Focus Map:
 2

US AIRS MINOR:
 Region Code: 03
 Programmatic ID: AIR VA0000005111900015
 Facility Registry ID: 110007319543
 Air Operating Status Code: OPR
 Default Air Classification Code: MIN
 Air Program: MACT Standards (40 CFR Part 63)
 Activity Date: 2013-02-04 00:00:00
 Activity Status Date: Not reported
 Activity Group: Compliance Monitoring
 Activity Type: Inspection/Evaluation
 Activity Status: Not reported

Region Code: 03
 Programmatic ID: AIR VA0000005111900015
 Facility Registry ID: 110007319543
 Air Operating Status Code: OPR
 Default Air Classification Code: MIN
 Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
 Activity Date: 1992-04-07 00:00:00
 Activity Status Date: Not reported
 Activity Group: Compliance Monitoring
 Activity Type: Inspection/Evaluation
 Activity Status: Not reported

Region Code: 03
 Programmatic ID: AIR VA0000005111900015
 Facility Registry ID: 110007319543
 Air Operating Status Code: OPR
 Default Air Classification Code: MIN
 Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
 Activity Date: 1997-09-11 00:00:00
 Activity Status Date: Not reported
 Activity Group: Compliance Monitoring
 Activity Type: Inspection/Evaluation
 Activity Status: Not reported

Region Code: 03
 Programmatic ID: AIR VA0000005111900015
 Facility Registry ID: 110007319543
 Air Operating Status Code: OPR

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

J T AND C A THRIFT INCORPORATED (Continued)

1004607294

Default Air Classification Code: MIN
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2010-09-17 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 03
Programmatic ID: AIR VA0000005111900015
Facility Registry ID: 110007319543
Air Operating Status Code: OPR
Default Air Classification Code: MIN
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2013-02-04 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 03
Programmatic ID: AIR VA0000005111900015
Facility Registry ID: 110007319543
Air Operating Status Code: OPR
Default Air Classification Code: MIN
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2013-02-05 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

FINDS:

Registry ID: 110007319543
Facility URL: http://ofmpub.epa.gov/enviro/fii_query_detail.disp_program_facility?p_registry_id=110007319543

Environmental Interest/Information System:

AFS (Aerometric Information Retrieval System (AIRS) Facility Subsystem) replaces the former Compliance Data System (CDS), the National Emission Data System (NEDS), and the Storage and Retrieval of Aerometric Data (SAROAD). AIRS is the national repository for information concerning airborne pollution in the United States. AFS is used to track emissions and compliance data from industrial plants. AFS data are utilized by states to prepare State Implementation Plans to comply with regulatory programs and by EPA as an input for the estimation of total national emissions. AFS is undergoing a major redesign to support facility operating permits required under Title V of the Clean Air Act.
AIR MINOR

[Click this hyperlink](#) while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:

Envid: 1004607294
Registry ID: 110007319543

Map ID
 Direction
 Distance
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
 EPA ID Number

J T AND C A THRIFT INCORPORATED (Continued)

1004607294

DFR URL: <http://echo.epa.gov/detailed-facility-report?fid=110007319543>
 Name: J T AND C A THRIFT INCORPORATED
 Address: 2742 GENERAL PULLER HWY
 City,State,Zip: SALUDA, VA 23149

B12
SSE
 < 1/8
 0.014 mi.
 75 ft.

J. T. & C. A. THRIFT, INC. T/A THRIFT OIL CO.
2742 GENERAL PULLER HWY.
SALUDA, VA 23149
Site 5 of 6 in cluster B

LTANKS **S118192560**
TIER 2 **N/A**

Actual:
90 ft.
Focus Map:
2

LTANKS:
 Name: THRIFT OIL COMPANY
 Address: 2742 GENERAL PULLER HWY
 City,State,Zip: SALUDA, VA 23149
 City,State,Zip: SALUDA, VA 23149
 Region: PRO
 CEDS Facility Id: 200000159612
Case Status: Open
 Pollution Complaint #: 20184442
 Reported: 06/08/2018
 Case Closed Date: Not reported
 Program: RP Lead
 Federally Regulated UST (Y/N): N
 Regulated Petroleum UST (1): N
 Excluded UST (1): N
 Deferred UST (1): N
 Partially Deferred UST (1): N
 Exempt 1 UST (2): N
 Exempt 2 Heating Oil UST (2): N
 Small Heating Oil AST (2): N
 Regulated AST (3): Y
 Unregulated AST (3): N
 Other Y/N: N
 Unknown Y/N: N
 Other Description: Not reported
 Heating Oil Category: Not reported

TIER 2:

Facility ID: Not reported
 CAS Number: 64742810
 SIC Code: Not reported
 NAICS: Not reported
 Entered Chemical Name: Kerosene K-1
 Average Amt Code: 99999.0
 Owner Name: Not reported
 Owner Phone: Not reported
 Contact Type: Not reported

Facility ID: Not reported
 CAS Number: 8012951
 SIC Code: Not reported
 NAICS: Not reported
 Entered Chemical Name: Motor Oil
 Average Amt Code: 9999.0
 Owner Name: Not reported
 Owner Phone: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

J. T. & C. A. THRIFT, INC. T/A THRIFT OIL CO. (Continued)

S118192560

Contact Type:	Not reported
Facility ID:	Not reported
CAS Number:	Not reported
SIC Code:	Not reported
NAICS:	Not reported
Entered Chemical Name:	Ultra Low Sulfur Diesel
Average Amt Code:	999999.0
Owner Name:	Not reported
Owner Phone:	Not reported
Contact Type:	Not reported
Facility ID:	Not reported
CAS Number:	8006619
SIC Code:	Not reported
NAICS:	Not reported
Entered Chemical Name:	Gasoline
Average Amt Code:	99999.0
Owner Name:	Not reported
Owner Phone:	Not reported
Contact Type:	Not reported
Facility ID:	5423922
CAS Number:	8012951
SIC Code:	Not reported
NAICS:	Not reported
Entered Chemical Name:	GEAR OIL
Average Amt Code:	490
Owner Name:	Not reported
Owner Phone:	Not reported
Contact Type:	Not reported
Facility ID:	5423922
CAS Number:	8012951
SIC Code:	Not reported
NAICS:	Not reported
Entered Chemical Name:	RONEX GREASE (MULTIPURPOSE)
Average Amt Code:	10
Owner Name:	Not reported
Owner Phone:	Not reported
Contact Type:	Not reported
Facility ID:	5423922
CAS Number:	8012951
SIC Code:	Not reported
NAICS:	Not reported
Entered Chemical Name:	MOTOR OIL
Average Amt Code:	150
Owner Name:	Not reported
Owner Phone:	Not reported
Contact Type:	Not reported
Facility ID:	5423922
CAS Number:	8008206
SIC Code:	Not reported
NAICS:	Not reported
Entered Chemical Name:	K-1 KEROSENE

Map ID
 Direction
 Distance
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
 EPA ID Number

(Continued)

S117881835

Incident Date:	08/16/2015
Call Received Date:	04/16/2015
Closure Comments:	Not reported
Threat To:	Not reported
Terrorism (Y/N):	N
Characterize Incident:	Unknown
Incident Type:	Not reported
Incident Subtype:	Not reported
Materials:	Not reported
Effect To Receptor:	Not reported
Water Body:	Not reported
Low Quantity To Water:	Not reported
High Quantity To Water:	Not reported
Quantity Units:	Not reported
Other Receptors:	Not reported
RP Company:	Not reported
RP Name:	Not reported
Property Owner:	Not reported
Property Company:	Not reported
Duration Of Event (Hrs):	0
Impacts:	Not reported
Other Impacts:	Not reported
Steps Taken:	Not reported
Steps Taken Description:	Not reported
System Components:	Not reported
Other System Components:	Not reported
Cause Of Event:	Not reported
Corrective Action Taken:	Not reported
Weather Status:	No
Precipitation (Wet):	0
Discharge Type:	Not reported
Discharge Volume:	0
Unknown Discharge (Y/N):	N
Site Name:	52 TWIGGS FERRY ROAD, MATHEWS COUNTY, DUTTON VIRGINIA 23050
Closure Date:	07/11/2018
Orig. Call Incident Description:	Complaint that RP has jerry rigged gasoline and diesel tanks, used to own a petroleum company. Complainant states that runoff from the tanks may have killed one of her trees and she is worried about her drinking water.
Original Call Material Description:	Not reported
Original Call Location Description:	52 Twiggs Ferry Road, Mathews County, Dutton Virginia 23050
Incident Ongoing at time of Call:	No
Agencies Notified (Y/N):	Not reported
Other Agencies:	Not reported
Permitted (Y/N):	No
Call Reported By Company Name:	Not reported
Call Property Owner Company Name:	Not reported
Call Property Owner Name:	Tim Cox
Site Summary:	Complaint that RP has jerry rigged gasoline and diesel tanks, used to own a petroleum company. Complainant states that runoff from the tanks may have killed one of her trees and she is worried about her drinking water.

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

C15 **GOODGIRL INDUSTRIES**
NNE **5041 GENERAL PULLER HIGHWAY**
< 1/8 **LOCUST HILL, VA 23092**
0.020 mi.
107 ft. **Site 1 of 2 in cluster C**

FINDS **1024417095**
N/A

Actual: FINDS:
79 ft. Registry ID: 110070334863
Focus Map: Facility URL: http://ofmpub.epa.gov/enviro/fii_query_detail.disp_program_facility?p_registry_id=110070334863
3

Environmental Interest/Information System:
OSHA ESTABLISHMENT

[Click this hyperlink](#) while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

C16 **PARVINS SUPER MARKET (FORMER)**
NNE **5041 GENERAL PULLER HWY**
< 1/8 **LOCUST HILL, VA 23092**
0.020 mi.
107 ft. **Site 2 of 2 in cluster C**

UST **U003683203**
N/A

Actual: Facility:
79 ft. Name: PARVINS SUPER MARKET (FORMER)
Focus Map: Address: 5041 GENERAL PULLER HWY
3 City,State,Zip: LOCUST HILL, VA 23092
Facility Id: 4002797
Facility Type: GAS STATION
CEDS Facility ID: 200000168116

Owner:
Owner Id: 26833
Owner Name: TC Treakle and JA Christopher Inc
Owner Address: PO Box 339
Owner Address2: 37 Seafood Ln
Owner City, State, Zip: Irvington, VA 22480
Owner Type: COMMERCIAL
Number of Active AST: 0
Number of Active UST: 0
Number of Inactive AST: 0
Number of Inactive UST: 6

Owner Id: 34157
Owner Name: PARVINS SUPER MARKET
Owner Address: GENERAL DELIVERY
Owner Address2: MIDDLESEX
Owner City, State, Zip: LOCUST HILL, VA 23092
Owner Type: COMMERCIAL
Number of Active AST: 0
Number of Active UST: 0
Number of Inactive AST: 0
Number of Inactive UST: 6

UST:
Facility ID: 4002797
Federally Regulated: Yes

Tank Number: 1
Tank Capacity: 10000
Tank Contents: GASOLINE

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

PARVINS SUPER MARKET (FORMER) (Continued)

U003683203

Tank Status:	REM FROM GRD
Tank Type:	UST
Tank Material:	
Install Date:	4/16/1971
Tank Materials: Bare Steel	Yes
Tank Materials: Cath Protect Steel	No
Tank Materials: Epoxy Steel	No
Tank Materials: Fiberglass	No
Tank Materials: Concrete	No
Tank Materials: Composite	No
Tank Materials: Double Walled	No
Tank Materials: Lined Interior	No
Tank Materials: Excav Liner	No
Tank Materials: Insulated Tank Jacket	No
Tank Materials: Repaired	No
Tank Materials: Unknown	No
Tank Materials: Other	No
Tank Materials: Other Note	Not reported
Release Detection:	
Tank Release Detection: Leak Deferred	No
Tank Release Detection: Manual Gauge	No
Tank Release Detection: Auto Gauge	No
Tank Release Detection: Tank Tightness	No
Tank Release Detection: Vapor Monitor	No
Tank Release Detection: Inventory	No
Tank Release Detection: Stat Invent Recon	No
Tank Release Detection: Spill Install	No
Tank Release Detection: Overfill Install	No
Tank Release Detection: Groundwater	No
Tank Release Detection: Int Sec Containment	No
Tank Release Detection: Int Double Walled	No
Tank Release Detection: Other Method	No
Tank Release Detection: Other Note	Not reported
Pipe Release Detection: Leak Deferred	Not reported
Pipe Release Detection: Autoleak	Not reported
Pipe Release Detection: Line Tightness	No
Pipe Release Detection: Stat Invent Recon	No
Pipe Release Detection: Groundwater	No
Pipe Release Detection: Int Sec Containment	No
Pipe Release Det: Interior Double Walled	No
Pipe Release Detection: Other Method	No
Pipe Release Detection: Other Note	Not reported
Pipe Type:	UNKNOWN
Pipe Materials: Bare Steel	No
Pipe Materials: Galvanized Steel	Yes
Pipe Materials: Copper	No
Pipe Materials: Fiberglass	No
Pipe Materials: Cath Protect	No
Pipe Materials: Double Walled	No
Pipe Materials: Sec Containment	No
Pipe Materials: Repaired	No
Pipe Materials: Unknown	No
Pipe Materials: Other	No
Pipe Materials: Other Note	Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

PARVINS SUPER MARKET (FORMER) (Continued)

U003683203

Facility ID:	4002797
Federally Regulated:	Yes
Tank Number:	2
Tank Capacity:	10000
Tank Contents:	GASOLINE
Tank Status:	REM FROM GRD
Tank Type:	UST
Tank Material:	
Install Date:	4/16/1971
Tank Materials: Bare Steel	Yes
Tank Materials: Cath Protect Steel	No
Tank Materials: Epoxy Steel	No
Tank Materials: Fiberglass	No
Tank Materials: Concrete	No
Tank Materials: Composite	No
Tank Materials: Double Walled	No
Tank Materials: Lined Interior	No
Tank Materials: Excav Liner	No
Tank Materials: Insulated Tank Jacket	No
Tank Materials: Repaired	No
Tank Materials: Unknown	No
Tank Materials: Other	No
Tank Materials: Other Note	Not reported
Release Detection:	
Tank Release Detection: Leak Deferred	No
Tank Release Detection: Manual Gauge	No
Tank Release Detection: Auto Gauge	No
Tank Release Detection: Tank Tightness	No
Tank Release Detection: Vapor Monitor	No
Tank Release Detection: Inventory	No
Tank Release Detection: Stat Invent Recon	No
Tank Release Detection: Spill Install	No
Tank Release Detection: Overfill Install	No
Tank Release Detection: Groundwater	No
Tank Release Detection: Int Sec Containment	No
Tank Release Detection: Int Double Walled	No
Tank Release Detection: Other Method	No
Tank Release Detection: Other Note	Not reported
Pipe Release Detection: Leak Deferred	Not reported
Pipe Release Detection: Autoleak	Not reported
Pipe Release Detection: Line Tightness	No
Pipe Release Detection: Stat Invent Recon	No
Pipe Release Detection: Groundwater	No
Pipe Release Detection: Int Sec Containment	No
Pipe Release Det: Interior Double Walled	No
Pipe Release Detection: Other Method	No
Pipe Release Detection: Other Note	Not reported
Pipe Type:	UNKNOWN
Pipe Materials: Bare Steel	No
Pipe Materials: Galvanized Steel	Yes
Pipe Materials: Copper	No
Pipe Materials: Fiberglass	No
Pipe Materials: Cath Protect	No

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

PARVINS SUPER MARKET (FORMER) (Continued)

U003683203

Pipe Materials: Double Walled	No
Pipe Materials: Sec Containment	No
Pipe Materials: Repaired	No
Pipe Materials: Unknown	No
Pipe Materials: Other	No
Pipe Materials: Other Note	Not reported
Facility ID:	4002797
Federally Regulated:	No
Tank Number:	3
Tank Capacity:	10000
Tank Contents:	KEROSENE
Tank Status:	REM FROM GRD
Tank Type:	UST
Tank Material:	
Install Date:	4/16/1971
Tank Materials: Bare Steel	Yes
Tank Materials: Cath Protect Steel	No
Tank Materials: Epoxy Steel	No
Tank Materials: Fiberglass	No
Tank Materials: Concrete	No
Tank Materials: Composite	No
Tank Materials: Double Walled	No
Tank Materials: Lined Interior	No
Tank Materials: Excav Liner	No
Tank Materials: Insulated Tank Jacket	No
Tank Materials: Repaired	No
Tank Materials: Unknown	No
Tank Materials: Other	No
Tank Materials: Other Note	Not reported
Release Detection:	
Tank Release Detection: Leak Deferred	No
Tank Release Detection: Manual Gauge	No
Tank Release Detection: Auto Gauge	No
Tank Release Detection: Tank Tightness	No
Tank Release Detection: Vapor Monitor	No
Tank Release Detection: Inventory	No
Tank Release Detection: Stat Invent Recon	No
Tank Release Detection: Spill Install	No
Tank Release Detection: Overfill Install	No
Tank Release Detection: Groundwater	No
Tank Release Detection: Int Sec Containment	No
Tank Release Detection: Int Double Walled	No
Tank Release Detection: Other Method	No
Tank Release Detection: Other Note	Not reported
Pipe Release Detection: Leak Deferred	Not reported
Pipe Release Detection: Autoleak	Not reported
Pipe Release Detection: Line Tightness	No
Pipe Release Detection: Stat Invent Recon	No
Pipe Release Detection: Groundwater	No
Pipe Release Detection: Int Sec Containment	No
Pipe Release Det: Interior Double Walled	No
Pipe Release Detection: Other Method	No

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

PARVINS SUPER MARKET (FORMER) (Continued)

U003683203

Pipe Release Detection: Other Note	Not reported
Pipe Type:	UNKNOWN
Pipe Materials: Bare Steel	No
Pipe Materials: Galvanized Steel	Yes
Pipe Materials: Copper	No
Pipe Materials: Fiberglass	No
Pipe Materials: Cath Protect	No
Pipe Materials: Double Walled	No
Pipe Materials: Sec Containment	No
Pipe Materials: Repaired	No
Pipe Materials: Unknown	No
Pipe Materials: Other	No
Pipe Materials: Other Note	Not reported
Facility ID:	4002797
Federally Regulated:	Yes
Tank Number:	R4
Tank Capacity:	4000
Tank Contents:	GASOLINE
Tank Status:	REM FROM GRD
Tank Type:	UST
Tank Material:	
Install Date:	4/15/1983
Tank Materials: Bare Steel	Yes
Tank Materials: Cath Protect Steel	No
Tank Materials: Epoxy Steel	No
Tank Materials: Fiberglass	No
Tank Materials: Concrete	No
Tank Materials: Composite	No
Tank Materials: Double Walled	No
Tank Materials: Lined Interior	No
Tank Materials: Excav Liner	No
Tank Materials: Insulated Tank Jacket	No
Tank Materials: Repaired	No
Tank Materials: Unknown	No
Tank Materials: Other	No
Tank Materials: Other Note	Not reported
Release Detection:	
Tank Release Detection: Leak Deferred	No
Tank Release Detection: Manual Gauge	No
Tank Release Detection: Auto Gauge	No
Tank Release Detection: Tank Tightness	No
Tank Release Detection: Vapor Monitor	No
Tank Release Detection: Inventory	No
Tank Release Detection: Stat Invent Recon	No
Tank Release Detection: Spill Install	No
Tank Release Detection: Overfill Install	No
Tank Release Detection: Groundwater	No
Tank Release Detection: Int Sec Containment	No
Tank Release Detection: Int Double Walled	No
Tank Release Detection: Other Method	No
Tank Release Detection: Other Note	Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

PARVINS SUPER MARKET (FORMER) (Continued)

U003683203

Pipe Release Detection: Leak Deferred	Not reported
Pipe Release Detection: Autoleak	Not reported
Pipe Release Detection: Line Tightness	No
Pipe Release Detection: Stat Invent Recon	No
Pipe Release Detection: Groundwater	No
Pipe Release Detection: Int Sec Containment	No
Pipe Release Det: Interior Double Walled	No
Pipe Release Detection: Other Method	No
Pipe Release Detection: Other Note	Not reported
Pipe Type:	UNKNOWN
Pipe Materials: Bare Steel	No
Pipe Materials: Galvanized Steel	Yes
Pipe Materials: Copper	No
Pipe Materials: Fiberglass	No
Pipe Materials: Cath Protect	No
Pipe Materials: Double Walled	No
Pipe Materials: Sec Containment	No
Pipe Materials: Repaired	No
Pipe Materials: Unknown	No
Pipe Materials: Other	No
Pipe Materials: Other Note	Not reported
Facility ID:	4002797
Federally Regulated:	Yes
Tank Number:	R5
Tank Capacity:	4000
Tank Contents:	DIESEL
Tank Status:	REM FROM GRD
Tank Type:	UST
Tank Material:	
Install Date:	4/15/1983
Tank Materials: Bare Steel	Yes
Tank Materials: Cath Protect Steel	No
Tank Materials: Epoxy Steel	No
Tank Materials: Fiberglass	No
Tank Materials: Concrete	No
Tank Materials: Composite	No
Tank Materials: Double Walled	No
Tank Materials: Lined Interior	No
Tank Materials: Excav Liner	No
Tank Materials: Insulated Tank Jacket	No
Tank Materials: Repaired	No
Tank Materials: Unknown	No
Tank Materials: Other	No
Tank Materials: Other Note	Not reported
Release Detection:	
Tank Release Detection: Leak Deferred	No
Tank Release Detection: Manual Gauge	No
Tank Release Detection: Auto Gauge	No
Tank Release Detection: Tank Tightness	No
Tank Release Detection: Vapor Monitor	No
Tank Release Detection: Inventory	No

Map ID
 Direction
 Distance
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
 EPA ID Number

PARVINS SUPER MARKET (FORMER) (Continued)

U003683203

Tank Release Detection: Stat Invent Recon	No
Tank Release Detection: Spill Install	No
Tank Release Detection: Overfill Install	No
Tank Release Detection: Groundwater	No
Tank Release Detection: Int Sec Containment	No
Tank Release Detection: Int Double Walled	No
Tank Release Detection: Other Method	No
Tank Release Detection: Other Note	Not reported
Pipe Release Detection: Leak Deferred	Not reported
Pipe Release Detection: Autoleak	Not reported
Pipe Release Detection: Line Tightness	No
Pipe Release Detection: Stat Invent Recon	No
Pipe Release Detection: Groundwater	No
Pipe Release Detection: Int Sec Containment	No
Pipe Release Det: Interior Double Walled	No
Pipe Release Detection: Other Method	No
Pipe Release Detection: Other Note	Not reported
Pipe Type:	UNKNOWN
Pipe Materials: Bare Steel	No
Pipe Materials: Galvanized Steel	Yes
Pipe Materials: Copper	No
Pipe Materials: Fiberglass	No
Pipe Materials: Cath Protect	No
Pipe Materials: Double Walled	No
Pipe Materials: Sec Containment	No
Pipe Materials: Repaired	No
Pipe Materials: Unknown	No
Pipe Materials: Other	No
Pipe Materials: Other Note	Not reported
Facility ID:	4002797
Federally Regulated:	No
Tank Number:	R6
Tank Capacity:	4000
Tank Contents:	DIESEL
Tank Status:	REM FROM GRD
Tank Type:	UST
Tank Material:	
Install Date:	Not reported
Tank Materials: Bare Steel	No
Tank Materials: Cath Protect Steel	No
Tank Materials: Epoxy Steel	No
Tank Materials: Fiberglass	No
Tank Materials: Concrete	No
Tank Materials: Composite	No
Tank Materials: Double Walled	No
Tank Materials: Lined Interior	No
Tank Materials: Excav Liner	No
Tank Materials: Insulated Tank Jacket	No
Tank Materials: Repaired	No
Tank Materials: Unknown	No
Tank Materials: Other	No
Tank Materials: Other Note	Not reported

Map ID
 Direction
 Distance
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
 EPA ID Number

PARVINS SUPER MARKET (FORMER) (Continued)

U003683203

Release Detection:

Tank Release Detection: Leak Deferred	No
Tank Release Detection: Manual Gauge	No
Tank Release Detection: Auto Gauge	No
Tank Release Detection: Tank Tightness	No
Tank Release Detection: Vapor Monitor	No
Tank Release Detection: Inventory	No
Tank Release Detection: Stat Invent Recon	No
Tank Release Detection: Spill Install	No
Tank Release Detection: Overfill Install	No
Tank Release Detection: Groundwater	No
Tank Release Detection: Int Sec Containment	No
Tank Release Detection: Int Double Walled	No
Tank Release Detection: Other Method	No
Tank Release Detection: Other Note	Not reported
Pipe Release Detection: Leak Deferred	Not reported
Pipe Release Detection: Autoleak	Not reported
Pipe Release Detection: Line Tightness	No
Pipe Release Detection: Stat Invent Recon	No
Pipe Release Detection: Groundwater	No
Pipe Release Detection: Int Sec Containment	No
Pipe Release Det: Interior Double Walled	No
Pipe Release Detection: Other Method	No
Pipe Release Detection: Other Note	Not reported
Pipe Type:	Not reported
Pipe Materials: Bare Steel	No
Pipe Materials: Galvanized Steel	No
Pipe Materials: Copper	No
Pipe Materials: Fiberglass	No
Pipe Materials: Cath Protect	No
Pipe Materials: Double Walled	No
Pipe Materials: Sec Containment	No
Pipe Materials: Repaired	No
Pipe Materials: Unknown	No
Pipe Materials: Other	No
Pipe Materials: Other Note	Not reported

D17
SSW
 < 1/8
 0.027 mi.
 143 ft.

REVERE GAS, INC.
11128 GENERAL PULLER HIGHWAY
HARTFIELD, VA 23071
 Site 1 of 2 in cluster D

TIER 2 **S118192981**
 N/A

Actual:
 78 ft.
Focus Map:
 6

TIER 2:

Facility ID:	Not reported
CAS Number:	74986
SIC Code:	Not reported
NAICS:	Not reported
Entered Chemical Name:	Propane
Average Amt Code:	999999.0
Owner Name:	Not reported
Owner Phone:	Not reported
Contact Type:	Not reported
Facility ID:	5422183

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

REVERE GAS, INC. (Continued)

S118192981

CAS Number: 74986
SIC Code: Not reported
NAICS: Not reported
Entered Chemical Name: Propane
Average Amt Code: 9999
Owner Name: Not reported
Owner Phone: Not reported
Contact Type: Not reported

**D18
SSW
< 1/8
0.027 mi.
143 ft.**

**REVERE GAS & APPLIANCES, INC.
11128 GENERAL PULLER HIGHWAY
HARTFIELD, VA 23071
Site 2 of 2 in cluster D**

**TIER 2 S110069108
N/A**

**Actual:
78 ft.
Focus Map:
6**

TIER 2:
Facility ID: Not reported
CAS Number: 74-98-6
SIC Code: Not reported
NAICS: Not reported
Entered Chemical Name: PROPANE
Average Amt Code: Not reported
Owner Name: REVERE GAS & APPLIANCES, INC.
Owner Phone: 804-776-6834
Contact Type: Not reported

Facility ID: Not reported
CAS Number: 74-98-6
SIC Code: 42271
NAICS: Not reported
Entered Chemical Name: PROPANE
Average Amt Code: 5
Owner Name: REVERE GAS & APPLIANCES, INC.
Owner Phone: 804-776-6834
Contact Type: Not reported

Facility ID: Not reported
CAS Number: 74-98-6
SIC Code: 99999
NAICS: Not reported
Entered Chemical Name: PROPANE
Average Amt Code: 5
Owner Name: REVERE GAS & APPLIANCES, INC.
Owner Phone: 804-776-6834
Contact Type: Not reported

Count: 13 records

ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
COUNTY	S118639938		REGENT ROAD AT DIRT BRIDGE ROAD	23169	SPILLS
COUNTY	S116162983		88 NO HEAD BOTTOM ROAD, LOCUST HILL	23092	SPILLS
HARTFIELD	S111331170		STAMPERS BAY ROAD		SPILLS
HARTFIELD	S118639981		GENERAL PULLER HIGHWAY	23071	SPILLS
HARTFIELD	S122855220	PULLER SOLAR FACILITY	INTERSECTION OF GENERAL PULLER HWY. & BOBS HOLE RD.		SPILLS
MIDDLESEX COUNTY	S109382912	HIGHWAY	5818 GENERAL PULLER HWY		SPILLS
MIDDLESEX COUNTY	S109381273	URBANNA HARBOUR CONDO. YACHT CLUB	URBANNA CREEK ACROSS FROM TOWN OF URBANNA		SPILLS
SALUDA	S109602572	EXXON	CORNER OF URBANNA ROAD		SPILLS
URBANNA	2009927365		URBANNA HARBOR MARINA		ERNS
URBANNA	2000530346		URBANNA CREEK		ERNS
URBANNA	S117368572	ROSEGILL FARM LLC PROPERTY	1824 URBANNA RD	23175	LUST, LTANKS
URBANNA	S122855215		PERKINS CREEK 922 LORD MOTT ROAD, URBANNA, VA 23175	23175	SPILLS
URBANNA	S113705242		WAVERLY ROAD / OLD VIRGINIA STREET		SPILLS

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

To maintain currency of the following federal and state databases, EDR contacts the appropriate governmental agency on a monthly or quarterly basis, as required.

Number of Days to Update: Provides confirmation that EDR is reporting records that have been updated within 90 days from the date the government agency made the information available to the public.

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL: National Priority List

National Priorities List (Superfund). The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. NPL sites may encompass relatively large areas. As such, EDR provides polygon coverage for over 1,000 NPL site boundaries produced by EPA's Environmental Photographic Interpretation Center (EPIC) and regional EPA offices.

Date of Government Version: 01/30/2020	Source: EPA
Date Data Arrived at EDR: 02/05/2020	Telephone: N/A
Date Made Active in Reports: 02/14/2020	Last EDR Contact: 03/25/2020
Number of Days to Update: 9	Next Scheduled EDR Contact: 07/13/2020
	Data Release Frequency: Quarterly

NPL Site Boundaries

Sources:

EPA's Environmental Photographic Interpretation Center (EPIC)
Telephone: 202-564-7333

EPA Region 1
Telephone 617-918-1143

EPA Region 6
Telephone: 214-655-6659

EPA Region 3
Telephone 215-814-5418

EPA Region 7
Telephone: 913-551-7247

EPA Region 4
Telephone 404-562-8033

EPA Region 8
Telephone: 303-312-6774

EPA Region 5
Telephone 312-886-6686

EPA Region 9
Telephone: 415-947-4246

EPA Region 10
Telephone 206-553-8665

Proposed NPL: Proposed National Priority List Sites

A site that has been proposed for listing on the National Priorities List through the issuance of a proposed rule in the Federal Register. EPA then accepts public comments on the site, responds to the comments, and places on the NPL those sites that continue to meet the requirements for listing.

Date of Government Version: 01/30/2020	Source: EPA
Date Data Arrived at EDR: 02/05/2020	Telephone: N/A
Date Made Active in Reports: 02/14/2020	Last EDR Contact: 04/02/2020
Number of Days to Update: 9	Next Scheduled EDR Contact: 07/13/2020
	Data Release Frequency: Quarterly

NPL LIENS: Federal Superfund Liens

Federal Superfund Liens. Under the authority granted the USEPA by CERCLA of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner received notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 10/15/1991
Date Data Arrived at EDR: 02/02/1994
Date Made Active in Reports: 03/30/1994
Number of Days to Update: 56

Source: EPA
Telephone: 202-564-4267
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

Federal Delisted NPL site list

Delisted NPL: National Priority List Deletions

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate.

Date of Government Version: 01/30/2020
Date Data Arrived at EDR: 02/05/2020
Date Made Active in Reports: 02/14/2020
Number of Days to Update: 9

Source: EPA
Telephone: N/A
Last EDR Contact: 04/02/2020
Next Scheduled EDR Contact: 07/13/2020
Data Release Frequency: Quarterly

Federal CERCLIS list

FEDERAL FACILITY: Federal Facility Site Information listing

A listing of National Priority List (NPL) and Base Realignment and Closure (BRAC) sites found in the Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) Database where EPA Federal Facilities Restoration and Reuse Office is involved in cleanup activities.

Date of Government Version: 04/03/2019
Date Data Arrived at EDR: 04/05/2019
Date Made Active in Reports: 05/14/2019
Number of Days to Update: 39

Source: Environmental Protection Agency
Telephone: 703-603-8704
Last EDR Contact: 04/03/2020
Next Scheduled EDR Contact: 07/13/2020
Data Release Frequency: Varies

SEMS: Superfund Enterprise Management System

SEMS (Superfund Enterprise Management System) tracks hazardous waste sites, potentially hazardous waste sites, and remedial activities performed in support of EPA's Superfund Program across the United States. The list was formerly known as CERCLIS, renamed to SEMS by the EPA in 2015. The list contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). This dataset also contains sites which are either proposed to or on the National Priorities List (NPL) and the sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 01/30/2020
Date Data Arrived at EDR: 02/05/2020
Date Made Active in Reports: 02/14/2020
Number of Days to Update: 9

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 04/02/2020
Next Scheduled EDR Contact: 07/27/2020
Data Release Frequency: Quarterly

Federal CERCLIS NFRAP site list

SEMS-ARCHIVE: Superfund Enterprise Management System Archive

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

SEMS-ARCHIVE (Superfund Enterprise Management System Archive) tracks sites that have no further interest under the Federal Superfund Program based on available information. The list was formerly known as the CERCLIS-NFRAP, renamed to SEMS ARCHIVE by the EPA in 2015. EPA may perform a minimal level of assessment work at a site while it is archived if site conditions change and/or new information becomes available. Archived sites have been removed and archived from the inventory of SEMS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list the site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. The decision does not necessarily mean that there is no hazard associated with a given site; it only means that, based upon available information, the location is not judged to be potential NPL site.

Date of Government Version: 01/30/2020	Source: EPA
Date Data Arrived at EDR: 02/05/2020	Telephone: 800-424-9346
Date Made Active in Reports: 02/14/2020	Last EDR Contact: 04/02/2020
Number of Days to Update: 9	Next Scheduled EDR Contact: 07/27/2020
	Data Release Frequency: Quarterly

Federal RCRA CORRACTS facilities list

CORRACTS: Corrective Action Report

CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 12/16/2019	Source: EPA
Date Data Arrived at EDR: 12/16/2019	Telephone: 800-424-9346
Date Made Active in Reports: 12/20/2019	Last EDR Contact: 03/25/2020
Number of Days to Update: 4	Next Scheduled EDR Contact: 07/06/2020
	Data Release Frequency: Quarterly

Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF: RCRA - Treatment, Storage and Disposal

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Transporters are individuals or entities that move hazardous waste from the generator offsite to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

Date of Government Version: 12/16/2019	Source: Environmental Protection Agency
Date Data Arrived at EDR: 12/16/2019	Telephone: 800-438-2474
Date Made Active in Reports: 12/20/2019	Last EDR Contact: 03/25/2020
Number of Days to Update: 4	Next Scheduled EDR Contact: 07/06/2020
	Data Release Frequency: Quarterly

Federal RCRA generators list

RCRA-LQG: RCRA - Large Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month.

Date of Government Version: 12/16/2019	Source: Environmental Protection Agency
Date Data Arrived at EDR: 12/16/2019	Telephone: 800-438-2474
Date Made Active in Reports: 12/20/2019	Last EDR Contact: 03/25/2020
Number of Days to Update: 4	Next Scheduled EDR Contact: 07/06/2020
	Data Release Frequency: Quarterly

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

RCRA-SQG: RCRA - Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

Date of Government Version: 12/16/2019	Source: Environmental Protection Agency
Date Data Arrived at EDR: 12/16/2019	Telephone: 800-438-2474
Date Made Active in Reports: 12/20/2019	Last EDR Contact: 03/25/2020
Number of Days to Update: 4	Next Scheduled EDR Contact: 07/06/2020
	Data Release Frequency: Quarterly

RCRA-VSQG: RCRA - Very Small Quantity Generators (Formerly Conditionally Exempt Small Quantity Generators)

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Very small quantity generators (VSQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

Date of Government Version: 12/16/2019	Source: Environmental Protection Agency
Date Data Arrived at EDR: 12/16/2019	Telephone: 800-438-2474
Date Made Active in Reports: 12/20/2019	Last EDR Contact: 03/25/2020
Number of Days to Update: 4	Next Scheduled EDR Contact: 07/06/2020
	Data Release Frequency: Quarterly

Federal institutional controls / engineering controls registries

LUCIS: Land Use Control Information System

LUCIS contains records of land use control information pertaining to the former Navy Base Realignment and Closure properties.

Date of Government Version: 11/04/2019	Source: Department of the Navy
Date Data Arrived at EDR: 11/13/2019	Telephone: 843-820-7326
Date Made Active in Reports: 01/28/2020	Last EDR Contact: 02/10/2020
Number of Days to Update: 76	Next Scheduled EDR Contact: 05/25/2020
	Data Release Frequency: Varies

US ENG CONTROLS: Engineering Controls Sites List

A listing of sites with engineering controls in place. Engineering controls include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or effect human health.

Date of Government Version: 11/22/2019	Source: Environmental Protection Agency
Date Data Arrived at EDR: 11/22/2019	Telephone: 703-603-0695
Date Made Active in Reports: 01/28/2020	Last EDR Contact: 02/20/2020
Number of Days to Update: 67	Next Scheduled EDR Contact: 06/08/2020
	Data Release Frequency: Varies

US INST CONTROLS: Institutional Controls Sites List

A listing of sites with institutional controls in place. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are generally required as part of the institutional controls.

Date of Government Version: 11/22/2019	Source: Environmental Protection Agency
Date Data Arrived at EDR: 11/22/2019	Telephone: 703-603-0695
Date Made Active in Reports: 01/28/2020	Last EDR Contact: 02/20/2020
Number of Days to Update: 67	Next Scheduled EDR Contact: 06/08/2020
	Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Federal ERNS list

ERNS: Emergency Response Notification System

Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous substances.

Date of Government Version: 12/16/2019

Source: National Response Center, United States Coast Guard

Date Data Arrived at EDR: 12/19/2019

Telephone: 202-267-2180

Date Made Active in Reports: 03/06/2020

Last EDR Contact: 03/24/2020

Number of Days to Update: 78

Next Scheduled EDR Contact: 07/06/2020

Data Release Frequency: Quarterly

State- and tribal - equivalent CERCLIS

SHWS: This state does not maintain a SHWS list. See the Federal CERCLIS list and Federal NPL list.

State Hazardous Waste Sites. State hazardous waste site records are the states' equivalent to CERCLIS. These sites may or may not already be listed on the federal CERCLIS list. Priority sites planned for cleanup using state funds (state equivalent of Superfund) are identified along with sites where cleanup will be paid for by potentially responsible parties. Available information varies by state.

Date of Government Version: N/A

Source: Department of Environmental Quality

Date Data Arrived at EDR: N/A

Telephone: 804-698-4236

Date Made Active in Reports: N/A

Last EDR Contact: 03/16/2020

Number of Days to Update: N/A

Next Scheduled EDR Contact: 06/29/2020

Data Release Frequency: N/A

State and tribal landfill and/or solid waste disposal site lists

SWF/LF: Solid Waste Management Facilities

Solid Waste Facilities/Landfill Sites. SWF/LF type records typically contain an inventory of solid waste disposal facilities or landfills in a particular state. Depending on the state, these may be active or inactive facilities or open dumps that failed to meet RCRA Subtitle D Section 4004 criteria for solid waste landfills or disposal sites.

Date of Government Version: 12/02/2019

Source: Department of Environmental Quality

Date Data Arrived at EDR: 12/03/2019

Telephone: 804-698-4238

Date Made Active in Reports: 02/10/2020

Last EDR Contact: 03/02/2020

Number of Days to Update: 69

Next Scheduled EDR Contact: 06/15/2020

Data Release Frequency: Semi-Annually

State and tribal leaking storage tank lists

LUST REG PD: Leaking Underground Storage Tank Sites

Leaking underground storage tank site locations. Includes: counties of Amelia, Brunswick, Charles City, Chesterfield, Dinwiddie, Essex, Gloucester, Goochland, Greensville, Hanover, Henrico, King and Queen, King William, Lancaster, Mathews, Middlesex, New Kent, Northumberland, Powhatan, Prince George, Richmond, Surry, Sussex, Westmoreland; cities of Colonial Heights, Emporia, Hopewell, Petersburg.

Date of Government Version: 12/02/2014

Source: Department of Environmental Quality Piedmont Regional Office

Date Data Arrived at EDR: 12/04/2014

Telephone: 804-527-5020

Date Made Active in Reports: 01/16/2015

Last EDR Contact: 08/29/2016

Number of Days to Update: 43

Next Scheduled EDR Contact: 12/12/2016

Data Release Frequency: Quarterly

LUST REG VA: Leaking Underground Storage Tank List

Leaking underground storage tank site locations. Includes: counties of Albemarle, Augusta, Bath, Clarke, Fluvanna, Frederick, Greene, Highland, Nelson, Page, Rockbridge, Rockingham, Shenandoah, Warren; cities of Buena Vista, Charlottesville, Harrisonburg, Lexington, Staunton, Waynesboro, Winchester.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 12/06/2011
Date Data Arrived at EDR: 12/08/2011
Date Made Active in Reports: 01/16/2012
Number of Days to Update: 39

Source: Department of Environmental Quality Valley Regional Office
Telephone: 540-574-7800
Last EDR Contact: 08/29/2016
Next Scheduled EDR Contact: 12/12/2016
Data Release Frequency: No Update Planned

LUST REG NO: Leaking Underground Storage Tank Tracking Database

Leaking underground storage tank site locations. Includes: counties of Arlington, Caroline, Culpeper, Fairfax, Fauquier, King George, Loudoun, Louisa, Madison, Orange, Prince William, Rappahannock, Spotsylvania, Stafford; cities of Alexandria, Fairfax, Falls Church, Fredericksburg, Manassas, Manassas Park.

Date of Government Version: 05/18/2004
Date Data Arrived at EDR: 05/22/2004
Date Made Active in Reports: 07/09/2004
Number of Days to Update: 48

Source: Department of Environmental Quality Northern Regional Office
Telephone: 703-583-3800
Last EDR Contact: 09/06/2011
Next Scheduled EDR Contact: 12/19/2011
Data Release Frequency: No Update Planned

LUST REG WC: Leaking Underground Storage Tank List

Leaking underground storage tank site locations. Includes: counties of Alleghany, Bedford, Botetourt, Craig, Floyd, Franklin, Giles, Henry, Montgomery, Patrick, Pulaski, Roanoke; cities of Bedford, Clifton Forge, Covington, Martinsville, Radford, Roanoke, Salem.

Date of Government Version: 06/04/2015
Date Data Arrived at EDR: 06/05/2015
Date Made Active in Reports: 07/07/2015
Number of Days to Update: 32

Source: Department of Environmental Quality West Central Regional Office
Telephone: 540-562-6700
Last EDR Contact: 08/29/2016
Next Scheduled EDR Contact: 12/12/2016
Data Release Frequency: No Update Planned

LUST REG TD: Leaking Underground Storage Tank Sites

Leaking underground storage tank site locations. Includes: counties of Accomack, Isle of Wight, James City, Northampton, Southampton, York; cities of Chesapeake, Franklin, Hampton, Newport News, Norfolk, Poquoson, Portsmouth, Suffolk, Virginia Beach, Williamsburg.

Date of Government Version: 06/30/2013
Date Data Arrived at EDR: 07/05/2013
Date Made Active in Reports: 09/16/2013
Number of Days to Update: 73

Source: Department of Environmental Quality Tidewater Regional Office
Telephone: trofoia@deq.vir
Last EDR Contact: 09/26/2016
Next Scheduled EDR Contact: 01/09/2017
Data Release Frequency: Quarterly

LUST REG SW: Leaking Underground Storage Tank Database

Leaking underground storage tank site locations. Includes: counties of Bland, Buchanan, Carroll, Dickenson, Grayson, Lee, Russell, Scott, Smyth, Tazewell, Washington, Wise, Wythe; cities of Bristol, Galax, Norton.

Date of Government Version: 07/15/2013
Date Data Arrived at EDR: 07/18/2013
Date Made Active in Reports: 09/16/2013
Number of Days to Update: 60

Source: Department of Environmental Quality Southwest Regional Office
Telephone: 276-676-4800
Last EDR Contact: 10/11/2016
Next Scheduled EDR Contact: 01/23/2017
Data Release Frequency: No Update Planned

LUST REG SC: Leaking Underground Storage Tanks

Leaking underground storage tank site locations. Includes: counties of Amherst, Appomattox, Buckingham, Campbell, Charlotte, Cumberland, Halifax, Lunenburg, Mecklenburg, Nottoway, Pittsylvania, Prince Edward; cities of Danville, Lynchburg.

Date of Government Version: 09/06/2013
Date Data Arrived at EDR: 09/06/2013
Date Made Active in Reports: 09/17/2013
Number of Days to Update: 11

Source: Department of Environmental Quality, South Central Region
Telephone: 434-582-5120
Last EDR Contact: 08/29/2016
Next Scheduled EDR Contact: 12/12/2016
Data Release Frequency: Semi-Annually

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

INDIAN LUST R4: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Florida, Mississippi and North Carolina.

Date of Government Version: 10/10/2019	Source: EPA Region 4
Date Data Arrived at EDR: 12/05/2019	Telephone: 404-562-8677
Date Made Active in Reports: 02/10/2020	Last EDR Contact: 04/24/2020
Number of Days to Update: 67	Next Scheduled EDR Contact: 08/03/2020
	Data Release Frequency: Varies

INDIAN LUST R10: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Alaska, Idaho, Oregon and Washington.

Date of Government Version: 10/11/2019	Source: EPA Region 10
Date Data Arrived at EDR: 12/04/2019	Telephone: 206-553-2857
Date Made Active in Reports: 02/10/2020	Last EDR Contact: 04/23/2020
Number of Days to Update: 68	Next Scheduled EDR Contact: 08/02/2020
	Data Release Frequency: Varies

INDIAN LUST R8: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Colorado, Montana, North Dakota, South Dakota, Utah and Wyoming.

Date of Government Version: 10/03/2019	Source: EPA Region 8
Date Data Arrived at EDR: 12/04/2019	Telephone: 303-312-6271
Date Made Active in Reports: 02/14/2020	Last EDR Contact: 04/24/2020
Number of Days to Update: 72	Next Scheduled EDR Contact: 08/03/2020
	Data Release Frequency: Varies

INDIAN LUST R7: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Iowa, Kansas, and Nebraska

Date of Government Version: 10/15/2019	Source: EPA Region 7
Date Data Arrived at EDR: 12/17/2019	Telephone: 913-551-7003
Date Made Active in Reports: 02/10/2020	Last EDR Contact: 04/24/2020
Number of Days to Update: 55	Next Scheduled EDR Contact: 08/03/2020
	Data Release Frequency: Varies

INDIAN LUST R9: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Arizona, California, New Mexico and Nevada

Date of Government Version: 10/04/2019	Source: Environmental Protection Agency
Date Data Arrived at EDR: 12/04/2019	Telephone: 415-972-3372
Date Made Active in Reports: 02/27/2020	Last EDR Contact: 04/24/2020
Number of Days to Update: 85	Next Scheduled EDR Contact: 08/03/2020
	Data Release Frequency: Varies

INDIAN LUST R1: Leaking Underground Storage Tanks on Indian Land
A listing of leaking underground storage tank locations on Indian Land.

Date of Government Version: 10/01/2019	Source: EPA Region 1
Date Data Arrived at EDR: 12/04/2019	Telephone: 617-918-1313
Date Made Active in Reports: 02/10/2020	Last EDR Contact: 04/24/2020
Number of Days to Update: 68	Next Scheduled EDR Contact: 08/03/2020
	Data Release Frequency: Varies

INDIAN LUST R6: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in New Mexico and Oklahoma.

Date of Government Version: 10/02/2019	Source: EPA Region 6
Date Data Arrived at EDR: 12/04/2019	Telephone: 214-665-6597
Date Made Active in Reports: 02/10/2020	Last EDR Contact: 04/24/2020
Number of Days to Update: 68	Next Scheduled EDR Contact: 08/03/2020
	Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

INDIAN LUST R5: Leaking Underground Storage Tanks on Indian Land

Leaking underground storage tanks located on Indian Land in Michigan, Minnesota and Wisconsin.

Date of Government Version: 10/01/2019	Source: EPA, Region 5
Date Data Arrived at EDR: 12/04/2019	Telephone: 312-886-7439
Date Made Active in Reports: 02/10/2020	Last EDR Contact: 04/24/2020
Number of Days to Update: 68	Next Scheduled EDR Contact: 08/03/2020
	Data Release Frequency: Varies

LTANKS: Leaking Petroleum Storage Tanks

Includes releases of petroleum from underground storage tanks and aboveground storage tanks.

Date of Government Version: 11/04/2019	Source: Department of Environmental Quality
Date Data Arrived at EDR: 11/25/2019	Telephone: 804-698-4010
Date Made Active in Reports: 02/03/2020	Last EDR Contact: 02/26/2020
Number of Days to Update: 70	Next Scheduled EDR Contact: 06/08/2020
	Data Release Frequency: Quarterly

State and tribal registered storage tank lists

FEMA UST: Underground Storage Tank Listing

A listing of all FEMA owned underground storage tanks.

Date of Government Version: 08/27/2019	Source: FEMA
Date Data Arrived at EDR: 08/28/2019	Telephone: 202-646-5797
Date Made Active in Reports: 11/11/2019	Last EDR Contact: 03/19/2020
Number of Days to Update: 75	Next Scheduled EDR Contact: 07/20/2020
	Data Release Frequency: Varies

UST: Registered Petroleum Storage Tanks

Registered Underground Storage Tanks. UST's are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA) and must be registered with the state department responsible for administering the UST program. Available information varies by state program.

Date of Government Version: 11/01/2019	Source: Department of Environmental Quality
Date Data Arrived at EDR: 11/25/2019	Telephone: 804-698-4010
Date Made Active in Reports: 02/03/2020	Last EDR Contact: 02/26/2020
Number of Days to Update: 70	Next Scheduled EDR Contact: 06/08/2020
	Data Release Frequency: Quarterly

AST: Registered Petroleum Storage Tanks

Registered Aboveground Storage Tanks.

Date of Government Version: 11/01/2019	Source: Department of Environmental Quality
Date Data Arrived at EDR: 11/25/2019	Telephone: 804-698-4010
Date Made Active in Reports: 02/03/2020	Last EDR Contact: 02/26/2020
Number of Days to Update: 70	Next Scheduled EDR Contact: 06/08/2020
	Data Release Frequency: Quarterly

INDIAN UST R5: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 5 (Michigan, Minnesota and Wisconsin and Tribal Nations).

Date of Government Version: 10/01/2019	Source: EPA Region 5
Date Data Arrived at EDR: 12/04/2019	Telephone: 312-886-6136
Date Made Active in Reports: 02/10/2020	Last EDR Contact: 04/24/2020
Number of Days to Update: 68	Next Scheduled EDR Contact: 08/03/2020
	Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

INDIAN UST R8: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 8 (Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming and 27 Tribal Nations).

Date of Government Version: 10/03/2019	Source: EPA Region 8
Date Data Arrived at EDR: 12/04/2019	Telephone: 303-312-6137
Date Made Active in Reports: 02/14/2020	Last EDR Contact: 04/24/2020
Number of Days to Update: 72	Next Scheduled EDR Contact: 08/03/2020
	Data Release Frequency: Varies

INDIAN UST R6: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 6 (Louisiana, Arkansas, Oklahoma, New Mexico, Texas and 65 Tribes).

Date of Government Version: 10/02/2019	Source: EPA Region 6
Date Data Arrived at EDR: 12/04/2019	Telephone: 214-665-7591
Date Made Active in Reports: 02/10/2020	Last EDR Contact: 04/24/2020
Number of Days to Update: 68	Next Scheduled EDR Contact: 08/03/2020
	Data Release Frequency: Varies

INDIAN UST R7: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 7 (Iowa, Kansas, Missouri, Nebraska, and 9 Tribal Nations).

Date of Government Version: 10/11/2019	Source: EPA Region 7
Date Data Arrived at EDR: 12/04/2019	Telephone: 913-551-7003
Date Made Active in Reports: 02/10/2020	Last EDR Contact: 04/24/2020
Number of Days to Update: 68	Next Scheduled EDR Contact: 08/03/2020
	Data Release Frequency: Varies

INDIAN UST R10: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 10 (Alaska, Idaho, Oregon, Washington, and Tribal Nations).

Date of Government Version: 10/11/2019	Source: EPA Region 10
Date Data Arrived at EDR: 12/04/2019	Telephone: 206-553-2857
Date Made Active in Reports: 02/10/2020	Last EDR Contact: 04/24/2020
Number of Days to Update: 68	Next Scheduled EDR Contact: 08/03/2020
	Data Release Frequency: Varies

INDIAN UST R1: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 1 (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont and ten Tribal Nations).

Date of Government Version: 10/01/2019	Source: EPA, Region 1
Date Data Arrived at EDR: 12/04/2019	Telephone: 617-918-1313
Date Made Active in Reports: 02/10/2020	Last EDR Contact: 04/24/2020
Number of Days to Update: 68	Next Scheduled EDR Contact: 08/03/2020
	Data Release Frequency: Varies

INDIAN UST R9: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 9 (Arizona, California, Hawaii, Nevada, the Pacific Islands, and Tribal Nations).

Date of Government Version: 10/04/2019	Source: EPA Region 9
Date Data Arrived at EDR: 12/04/2019	Telephone: 415-972-3368
Date Made Active in Reports: 02/27/2020	Last EDR Contact: 04/24/2020
Number of Days to Update: 85	Next Scheduled EDR Contact: 08/03/2020
	Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

INDIAN UST R4: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 4 (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee and Tribal Nations)

Date of Government Version: 10/10/2019	Source: EPA Region 4
Date Data Arrived at EDR: 12/05/2019	Telephone: 404-562-9424
Date Made Active in Reports: 02/10/2020	Last EDR Contact: 04/24/2020
Number of Days to Update: 67	Next Scheduled EDR Contact: 08/03/2020
	Data Release Frequency: Varies

State and tribal institutional control / engineering control registries

ENG CONTROLS: Engineering Controls Sites Listing

A listing of sites with Engineering Controls in place. Engineering controls include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or effect human health.

Date of Government Version: 01/07/2020	Source: Department of Environmental Quality
Date Data Arrived at EDR: 01/08/2020	Telephone: 804-698-4228
Date Made Active in Reports: 03/13/2020	Last EDR Contact: 03/26/2020
Number of Days to Update: 65	Next Scheduled EDR Contact: 07/20/2020
	Data Release Frequency: Quarterly

INST CONTROL: Voluntary Remediation Program Database

Sites included in the Voluntary Remediation Program database that have deed restrictions.

Date of Government Version: 01/07/2020	Source: Department of Environmental Quality
Date Data Arrived at EDR: 01/08/2020	Telephone: 804-698-4228
Date Made Active in Reports: 03/13/2020	Last EDR Contact: 03/26/2020
Number of Days to Update: 65	Next Scheduled EDR Contact: 07/20/2020
	Data Release Frequency: Quarterly

State and tribal voluntary cleanup sites

INDIAN VCP R1: Voluntary Cleanup Priority Listing

A listing of voluntary cleanup priority sites located on Indian Land located in Region 1.

Date of Government Version: 07/27/2015	Source: EPA, Region 1
Date Data Arrived at EDR: 09/29/2015	Telephone: 617-918-1102
Date Made Active in Reports: 02/18/2016	Last EDR Contact: 03/18/2020
Number of Days to Update: 142	Next Scheduled EDR Contact: 07/06/2020
	Data Release Frequency: Varies

VRP: Voluntary Remediation Program

The Voluntary Cleanup Program encourages owners of elected contaminated sites to take the initiative and conduct voluntary cleanups that meet state environmental standards.

Date of Government Version: 01/07/2020	Source: Department of Environmental Quality
Date Data Arrived at EDR: 01/08/2020	Telephone: 804-698-4228
Date Made Active in Reports: 03/13/2020	Last EDR Contact: 03/26/2020
Number of Days to Update: 65	Next Scheduled EDR Contact: 07/20/2020
	Data Release Frequency: Quarterly

INDIAN VCP R7: Voluntary Cleanup Priority Listing

A listing of voluntary cleanup priority sites located on Indian Land located in Region 7.

Date of Government Version: 03/20/2008	Source: EPA, Region 7
Date Data Arrived at EDR: 04/22/2008	Telephone: 913-551-7365
Date Made Active in Reports: 05/19/2008	Last EDR Contact: 04/20/2009
Number of Days to Update: 27	Next Scheduled EDR Contact: 07/20/2009
	Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

State and tribal Brownfields sites

BROWNFIELDS: Brownfields Site Specific Assessments

To qualify for Brownfields Assessment, the site must meet the Federal definition of a Brownfields and should have contaminant issues that need to be addressed and a redevelopment plan supported by the local government and community. Virginia's Department of Environmental Quality performs brownfields assessments under a cooperative agreement with the U.S. Environmental Protection Agency at no cost to communities, property owners or, prospective purchasers. The assessment is an evaluation of environmental impacts caused by previous site uses similar to a Phase II Environmental Assessment.

Date of Government Version: 01/20/2020
Date Data Arrived at EDR: 01/23/2020
Date Made Active in Reports: 03/31/2020
Number of Days to Update: 68

Source: Department of Environmental Quality
Telephone: 804-698-4207
Last EDR Contact: 04/22/2020
Next Scheduled EDR Contact: 08/03/2020
Data Release Frequency: Quarterly

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS: A Listing of Brownfields Sites

Brownfields are real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Cleaning up and reinvesting in these properties takes development pressures off of undeveloped, open land, and both improves and protects the environment. Assessment, Cleanup and Redevelopment Exchange System (ACRES) stores information reported by EPA Brownfields grant recipients on brownfields properties assessed or cleaned up with grant funding as well as information on Targeted Brownfields Assessments performed by EPA Regions. A listing of ACRES Brownfield sites is obtained from Cleanups in My Community. Cleanups in My Community provides information on Brownfields properties for which information is reported back to EPA, as well as areas served by Brownfields grant programs.

Date of Government Version: 12/02/2019
Date Data Arrived at EDR: 12/16/2019
Date Made Active in Reports: 03/06/2020
Number of Days to Update: 81

Source: Environmental Protection Agency
Telephone: 202-566-2777
Last EDR Contact: 03/17/2020
Next Scheduled EDR Contact: 06/29/2020
Data Release Frequency: Semi-Annually

Local Lists of Landfill / Solid Waste Disposal Sites

INDIAN ODI: Report on the Status of Open Dumps on Indian Lands

Location of open dumps on Indian land.

Date of Government Version: 12/31/1998
Date Data Arrived at EDR: 12/03/2007
Date Made Active in Reports: 01/24/2008
Number of Days to Update: 52

Source: Environmental Protection Agency
Telephone: 703-308-8245
Last EDR Contact: 04/16/2020
Next Scheduled EDR Contact: 08/10/2020
Data Release Frequency: Varies

DEBRIS REGION 9: Torres Martinez Reservation Illegal Dump Site Locations

A listing of illegal dump sites location on the Torres Martinez Indian Reservation located in eastern Riverside County and northern Imperial County, California.

Date of Government Version: 01/12/2009
Date Data Arrived at EDR: 05/07/2009
Date Made Active in Reports: 09/21/2009
Number of Days to Update: 137

Source: EPA, Region 9
Telephone: 415-947-4219
Last EDR Contact: 04/09/2020
Next Scheduled EDR Contact: 08/03/2020
Data Release Frequency: No Update Planned

ODI: Open Dump Inventory

An open dump is defined as a disposal facility that does not comply with one or more of the Part 257 or Part 258 Subtitle D Criteria.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 06/30/1985
Date Data Arrived at EDR: 08/09/2004
Date Made Active in Reports: 09/17/2004
Number of Days to Update: 39

Source: Environmental Protection Agency
Telephone: 800-424-9346
Last EDR Contact: 06/09/2004
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

IHS OPEN DUMPS: Open Dumps on Indian Land

A listing of all open dumps located on Indian Land in the United States.

Date of Government Version: 04/01/2014
Date Data Arrived at EDR: 08/06/2014
Date Made Active in Reports: 01/29/2015
Number of Days to Update: 176

Source: Department of Health & Human Services, Indian Health Service
Telephone: 301-443-1452
Last EDR Contact: 01/31/2020
Next Scheduled EDR Contact: 05/11/2020
Data Release Frequency: Varies

Local Lists of Hazardous waste / Contaminated Sites

US HIST CDL: National Clandestine Laboratory Register

A listing of clandestine drug lab locations that have been removed from the DEAs National Clandestine Laboratory Register.

Date of Government Version: 06/11/2019
Date Data Arrived at EDR: 06/13/2019
Date Made Active in Reports: 09/03/2019
Number of Days to Update: 82

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 02/21/2020
Next Scheduled EDR Contact: 06/08/2020
Data Release Frequency: No Update Planned

US CDL: Clandestine Drug Labs

A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

Date of Government Version: 06/11/2019
Date Data Arrived at EDR: 06/13/2019
Date Made Active in Reports: 09/03/2019
Number of Days to Update: 82

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 02/21/2020
Next Scheduled EDR Contact: 06/08/2020
Data Release Frequency: Quarterly

PFAS: Per- and Polyfluoroalkyl Substances

PFOS and PFOA stand for perfluorooctane sulfonate and perfluorooctanoic acid, respectively. Both are fluorinated organic chemicals, part of a larger family of compounds referred to as perfluoroalkyl substances (PFASs).

Date of Government Version: 01/21/2020
Date Data Arrived at EDR: 01/23/2020
Date Made Active in Reports: 03/31/2020
Number of Days to Update: 68

Source: Department of Environmental Quality
Telephone: 804-698-4336
Last EDR Contact: 03/26/2020
Next Scheduled EDR Contact: 07/20/2020
Data Release Frequency: Varies

Local Land Records

LIENS 2: CERCLA Lien Information

A Federal CERCLA ('Superfund') lien can exist by operation of law at any site or property at which EPA has spent Superfund monies. These monies are spent to investigate and address releases and threatened releases of contamination. CERCLIS provides information as to the identity of these sites and properties.

Date of Government Version: 01/30/2020
Date Data Arrived at EDR: 02/05/2020
Date Made Active in Reports: 02/14/2020
Number of Days to Update: 9

Source: Environmental Protection Agency
Telephone: 202-564-6023
Last EDR Contact: 04/02/2020
Next Scheduled EDR Contact: 07/13/2020
Data Release Frequency: Semi-Annually

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Records of Emergency Release Reports

HMIRS: Hazardous Materials Information Reporting System

Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.

Date of Government Version: 12/05/2019	Source: U.S. Department of Transportation
Date Data Arrived at EDR: 12/06/2019	Telephone: 202-366-4555
Date Made Active in Reports: 02/14/2020	Last EDR Contact: 03/24/2020
Number of Days to Update: 70	Next Scheduled EDR Contact: 07/06/2020
	Data Release Frequency: Quarterly

SPILLS WC: Prep Database

The Department of Environmental Quality's POLLUTION RESPONSE PROGRAM, known as PREP, provides for responses to air, water, and waste pollution incidents in order to protect human health and the environment.

Date of Government Version: 09/21/2009	Source: Department of Environmental Quality, West Central Region
Date Data Arrived at EDR: 09/29/2009	Telephone: 540-562-6700
Date Made Active in Reports: 10/30/2009	Last EDR Contact: 09/06/2011
Number of Days to Update: 31	Next Scheduled EDR Contact: 12/19/2011
	Data Release Frequency: No Update Planned

SPILLS SW: Reportable Spills

The Department of Environmental Quality's POLLUTION RESPONSE PROGRAM, known as PREP, provides for responses to air, water, and waste pollution incidents in order to protect human health and the environment.

Date of Government Version: 01/21/2010	Source: Department of Environmental Quality, Southwest Region
Date Data Arrived at EDR: 01/22/2010	Telephone: 276-676-4839
Date Made Active in Reports: 02/16/2010	Last EDR Contact: 07/13/2012
Number of Days to Update: 25	Next Scheduled EDR Contact: 10/29/2012
	Data Release Frequency: No Update Planned

SPILLS NO: PREP Database

The Department of Environmental Quality's POLLUTION RESPONSE PROGRAM, known as PREP, provides for responses to air, water, and waste pollution incidents in order to protect human health and the environment.

Date of Government Version: 09/23/2009	Source: Department of Environmental Quality, Northern Region
Date Data Arrived at EDR: 09/29/2009	Telephone: 703-583-3864
Date Made Active in Reports: 10/30/2009	Last EDR Contact: 09/06/2011
Number of Days to Update: 31	Next Scheduled EDR Contact: 12/19/2011
	Data Release Frequency: No Update Planned

SPILLS TD: PREP Database

The Department of Environmental Quality's POLLUTION RESPONSE PROGRAM, known as PREP, provides for responses to air, water, and waste pollution incidents in order to protect human health and the environment.

Date of Government Version: 09/17/2009	Source: Department of Environmental Quality, Tidewater Region
Date Data Arrived at EDR: 09/23/2009	Telephone: trofoia@deq.vir
Date Made Active in Reports: 10/06/2009	Last EDR Contact: 09/06/2011
Number of Days to Update: 13	Next Scheduled EDR Contact: 12/19/2011
	Data Release Frequency: Quarterly

SPILLS VA: PREP Database

The Department of Environmental Quality's POLLUTION RESPONSE PROGRAM, known as PREP, provides for responses to air, water, and waste pollution incidents in order to protect human health and the environment.

Date of Government Version: 08/08/2012	Source: Department of Environmental Quality, Valley Regional Office
Date Data Arrived at EDR: 08/09/2012	Telephone: 540-574-7800
Date Made Active in Reports: 10/05/2012	Last EDR Contact: 05/06/2013
Number of Days to Update: 57	Next Scheduled EDR Contact: 08/19/2013
	Data Release Frequency: Quarterly

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

SPILLS: Prep/Spills Database Listing

The Department of Environmental Quality's POLLUTION RESPONSE PROGRAM, known as PREP, provides for responses to air, water, and waste pollution incidents in order to protect human health and the environment. PREP staff often work to assist local emergency responders, other state agencies, federal agencies, and responsible parties, as may be needed, to manage pollution incidents. Oil spills, fish kills, and hazardous materials spills are examples of incidents that may involve the DEQ's PREP Program.

Date of Government Version: 11/04/2019	Source: Department of Environmental Quality
Date Data Arrived at EDR: 11/25/2019	Telephone: 804-698-4287
Date Made Active in Reports: 02/04/2020	Last EDR Contact: 02/26/2020
Number of Days to Update: 71	Next Scheduled EDR Contact: 06/08/2020
	Data Release Frequency: Quarterly

SPILLS PD: PREP Database

The Department of Environmental Quality's POLLUTION RESPONSE PROGRAM, known as PREP, provides for responses to air, water, and waste pollution incidents in order to protect human health and the environment.

Date of Government Version: 10/20/2009	Source: Department of Environmental Quality, Piedmont Region
Date Data Arrived at EDR: 10/29/2009	Telephone: 804-527-5020
Date Made Active in Reports: 12/03/2009	Last EDR Contact: 02/06/2012
Number of Days to Update: 35	Next Scheduled EDR Contact: 05/21/2012
	Data Release Frequency: Quarterly

SPILLS PC: Pollution Complaint Database

Pollution Complaints Database. The pollution reports contained in the PC database include the initial release reporting of Leaking Underground Storage Tanks and all other releases of petroleum to the environment as well as releases to state waters. The database is current through 12/1/93. Since that time, all spill and pollution reporting information has been collected and tracked through the DEQ regional offices.

Date of Government Version: 06/01/1996	Source: Department of Environmental Quality
Date Data Arrived at EDR: 10/22/1996	Telephone: 804-698-4287
Date Made Active in Reports: 11/21/1996	Last EDR Contact: 03/08/2010
Number of Days to Update: 30	Next Scheduled EDR Contact: 06/21/2010
	Data Release Frequency: No Update Planned

SPILLS BRL: Prep/Spills Database Listing

A listing of spills locations located in the Blue Ridge Regional area, Lynchburg.

Date of Government Version: 09/18/2009	Source: DEQ, Blue Ridge Regional Office
Date Data Arrived at EDR: 09/18/2009	Telephone: 434-582-6218
Date Made Active in Reports: 10/06/2009	Last EDR Contact: 11/28/2011
Number of Days to Update: 18	Next Scheduled EDR Contact: 03/12/2012
	Data Release Frequency: Varies

SPILLS 90: SPILLS90 data from FirstSearch

Spills 90 includes those spill and release records available exclusively from FirstSearch databases. Typically, they may include chemical, oil and/or hazardous substance spills recorded after 1990. Duplicate records that are already included in EDR incident and release records are not included in Spills 90.

Date of Government Version: 09/01/2012	Source: FirstSearch
Date Data Arrived at EDR: 01/03/2013	Telephone: N/A
Date Made Active in Reports: 02/15/2013	Last EDR Contact: 01/03/2013
Number of Days to Update: 43	Next Scheduled EDR Contact: N/A
	Data Release Frequency: No Update Planned

Other Ascertainable Records

RCRA NonGen / NLR: RCRA - Non Generators / No Longer Regulated

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 12/16/2019
Date Data Arrived at EDR: 12/16/2019
Date Made Active in Reports: 12/20/2019
Number of Days to Update: 4

Source: Environmental Protection Agency
Telephone: 800-438-2474
Last EDR Contact: 03/25/2020
Next Scheduled EDR Contact: 07/06/2020
Data Release Frequency: Quarterly

FUDS: Formerly Used Defense Sites

The listing includes locations of Formerly Used Defense Sites properties where the US Army Corps of Engineers is actively working or will take necessary cleanup actions.

Date of Government Version: 11/12/2019
Date Data Arrived at EDR: 11/19/2019
Date Made Active in Reports: 01/28/2020
Number of Days to Update: 70

Source: U.S. Army Corps of Engineers
Telephone: 202-528-4285
Last EDR Contact: 02/19/2020
Next Scheduled EDR Contact: 06/01/2020
Data Release Frequency: Varies

DOD: Department of Defense Sites

This data set consists of federally owned or administered lands, administered by the Department of Defense, that have any area equal to or greater than 640 acres of the United States, Puerto Rico, and the U.S. Virgin Islands.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 11/10/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 62

Source: USGS
Telephone: 888-275-8747
Last EDR Contact: 04/10/2020
Next Scheduled EDR Contact: 07/20/2020
Data Release Frequency: Semi-Annually

FEDLAND: Federal and Indian Lands

Federally and Indian administrated lands of the United States. Lands included are administrated by: Army Corps of Engineers, Bureau of Reclamation, National Wild and Scenic River, National Wildlife Refuge, Public Domain Land, Wilderness, Wilderness Study Area, Wildlife Management Area, Bureau of Indian Affairs, Bureau of Land Management, Department of Justice, Forest Service, Fish and Wildlife Service, National Park Service.

Date of Government Version: 04/02/2018
Date Data Arrived at EDR: 04/11/2018
Date Made Active in Reports: 11/06/2019
Number of Days to Update: 574

Source: U.S. Geological Survey
Telephone: 888-275-8747
Last EDR Contact: 04/06/2020
Next Scheduled EDR Contact: 07/20/2020
Data Release Frequency: N/A

SCRD DRYCLEANERS: State Coalition for Remediation of Drycleaners Listing

The State Coalition for Remediation of Drycleaners was established in 1998, with support from the U.S. EPA Office of Superfund Remediation and Technology Innovation. It is comprised of representatives of states with established drycleaner remediation programs. Currently the member states are Alabama, Connecticut, Florida, Illinois, Kansas, Minnesota, Missouri, North Carolina, Oregon, South Carolina, Tennessee, Texas, and Wisconsin.

Date of Government Version: 01/01/2017
Date Data Arrived at EDR: 02/03/2017
Date Made Active in Reports: 04/07/2017
Number of Days to Update: 63

Source: Environmental Protection Agency
Telephone: 615-532-8599
Last EDR Contact: 02/13/2020
Next Scheduled EDR Contact: 05/25/2020
Data Release Frequency: Varies

US FIN ASSUR: Financial Assurance Information

All owners and operators of facilities that treat, store, or dispose of hazardous waste are required to provide proof that they will have sufficient funds to pay for the clean up, closure, and post-closure care of their facilities.

Date of Government Version: 12/16/2019
Date Data Arrived at EDR: 12/19/2019
Date Made Active in Reports: 02/27/2020
Number of Days to Update: 70

Source: Environmental Protection Agency
Telephone: 202-566-1917
Last EDR Contact: 03/24/2020
Next Scheduled EDR Contact: 07/06/2020
Data Release Frequency: Quarterly

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

EPA WATCH LIST: EPA WATCH LIST

EPA maintains a "Watch List" to facilitate dialogue between EPA, state and local environmental agencies on enforcement matters relating to facilities with alleged violations identified as either significant or high priority. Being on the Watch List does not mean that the facility has actually violated the law only that an investigation by EPA or a state or local environmental agency has led those organizations to allege that an unproven violation has in fact occurred. Being on the Watch List does not represent a higher level of concern regarding the alleged violations that were detected, but instead indicates cases requiring additional dialogue between EPA, state and local agencies - primarily because of the length of time the alleged violation has gone unaddressed or unresolved.

Date of Government Version: 08/30/2013	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/21/2014	Telephone: 617-520-3000
Date Made Active in Reports: 06/17/2014	Last EDR Contact: 02/03/2020
Number of Days to Update: 88	Next Scheduled EDR Contact: 05/18/2020
	Data Release Frequency: Quarterly

2020 COR ACTION: 2020 Corrective Action Program List

The EPA has set ambitious goals for the RCRA Corrective Action program by creating the 2020 Corrective Action Universe. This RCRA cleanup baseline includes facilities expected to need corrective action. The 2020 universe contains a wide variety of sites. Some properties are heavily contaminated while others were contaminated but have since been cleaned up. Still others have not been fully investigated yet, and may require little or no remediation. Inclusion in the 2020 Universe does not necessarily imply failure on the part of a facility to meet its RCRA obligations.

Date of Government Version: 09/30/2017	Source: Environmental Protection Agency
Date Data Arrived at EDR: 05/08/2018	Telephone: 703-308-4044
Date Made Active in Reports: 07/20/2018	Last EDR Contact: 02/07/2020
Number of Days to Update: 73	Next Scheduled EDR Contact: 05/18/2020
	Data Release Frequency: Varies

TSCA: Toxic Substances Control Act

Toxic Substances Control Act. TSCA identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list. It includes data on the production volume of these substances by plant site.

Date of Government Version: 12/31/2016	Source: EPA
Date Data Arrived at EDR: 06/21/2017	Telephone: 202-260-5521
Date Made Active in Reports: 01/05/2018	Last EDR Contact: 03/20/2020
Number of Days to Update: 198	Next Scheduled EDR Contact: 06/29/2020
	Data Release Frequency: Every 4 Years

TRIS: Toxic Chemical Release Inventory System

Toxic Release Inventory System. TRIS identifies facilities which release toxic chemicals to the air, water and land in reportable quantities under SARA Title III Section 313.

Date of Government Version: 12/31/2018	Source: EPA
Date Data Arrived at EDR: 02/05/2020	Telephone: 202-566-0250
Date Made Active in Reports: 04/24/2020	Last EDR Contact: 02/05/2020
Number of Days to Update: 79	Next Scheduled EDR Contact: 06/01/2020
	Data Release Frequency: Annually

SSTS: Section 7 Tracking Systems

Section 7 of the Federal Insecticide, Fungicide and Rodenticide Act, as amended (92 Stat. 829) requires all registered pesticide-producing establishments to submit a report to the Environmental Protection Agency by March 1st each year. Each establishment must report the types and amounts of pesticides, active ingredients and devices being produced, and those having been produced and sold or distributed in the past year.

Date of Government Version: 05/01/2019	Source: EPA
Date Data Arrived at EDR: 10/23/2019	Telephone: 202-564-4203
Date Made Active in Reports: 01/15/2020	Last EDR Contact: 04/21/2020
Number of Days to Update: 84	Next Scheduled EDR Contact: 08/03/2020
	Data Release Frequency: Annually

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

ROD: Records Of Decision

Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid in the cleanup.

Date of Government Version: 01/30/2020	Source: EPA
Date Data Arrived at EDR: 02/05/2020	Telephone: 703-416-0223
Date Made Active in Reports: 02/14/2020	Last EDR Contact: 04/02/2020
Number of Days to Update: 9	Next Scheduled EDR Contact: 06/15/2020
	Data Release Frequency: Annually

RMP: Risk Management Plans

When Congress passed the Clean Air Act Amendments of 1990, it required EPA to publish regulations and guidance for chemical accident prevention at facilities using extremely hazardous substances. The Risk Management Program Rule (RMP Rule) was written to implement Section 112(r) of these amendments. The rule, which built upon existing industry codes and standards, requires companies of all sizes that use certain flammable and toxic substances to develop a Risk Management Program, which includes a(n): Hazard assessment that details the potential effects of an accidental release, an accident history of the last five years, and an evaluation of worst-case and alternative accidental releases; Prevention program that includes safety precautions and maintenance, monitoring, and employee training measures; and Emergency response program that spells out emergency health care, employee training measures and procedures for informing the public and response agencies (e.g the fire department) should an accident occur.

Date of Government Version: 11/05/2019	Source: Environmental Protection Agency
Date Data Arrived at EDR: 11/20/2019	Telephone: 202-564-8600
Date Made Active in Reports: 04/17/2020	Last EDR Contact: 04/15/2020
Number of Days to Update: 149	Next Scheduled EDR Contact: 08/03/2020
	Data Release Frequency: Varies

RAATS: RCRA Administrative Action Tracking System

RCRA Administration Action Tracking System. RAATS contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA. For administration actions after September 30, 1995, data entry in the RAATS database was discontinued. EPA will retain a copy of the database for historical records. It was necessary to terminate RAATS because a decrease in agency resources made it impossible to continue to update the information contained in the database.

Date of Government Version: 04/17/1995	Source: EPA
Date Data Arrived at EDR: 07/03/1995	Telephone: 202-564-4104
Date Made Active in Reports: 08/07/1995	Last EDR Contact: 06/02/2008
Number of Days to Update: 35	Next Scheduled EDR Contact: 09/01/2008
	Data Release Frequency: No Update Planned

PRP: Potentially Responsible Parties

A listing of verified Potentially Responsible Parties

Date of Government Version: 01/30/2020	Source: EPA
Date Data Arrived at EDR: 02/06/2020	Telephone: 202-564-6023
Date Made Active in Reports: 02/14/2020	Last EDR Contact: 04/02/2020
Number of Days to Update: 8	Next Scheduled EDR Contact: 05/18/2020
	Data Release Frequency: Quarterly

PADS: PCB Activity Database System

PCB Activity Database. PADS Identifies generators, transporters, commercial storers and/or brokers and disposers of PCB's who are required to notify the EPA of such activities.

Date of Government Version: 10/09/2019	Source: EPA
Date Data Arrived at EDR: 10/11/2019	Telephone: 202-566-0500
Date Made Active in Reports: 12/20/2019	Last EDR Contact: 04/10/2020
Number of Days to Update: 70	Next Scheduled EDR Contact: 07/20/2020
	Data Release Frequency: Annually

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

ICIS: Integrated Compliance Information System

The Integrated Compliance Information System (ICIS) supports the information needs of the national enforcement and compliance program as well as the unique needs of the National Pollutant Discharge Elimination System (NPDES) program.

Date of Government Version: 11/18/2016	Source: Environmental Protection Agency
Date Data Arrived at EDR: 11/23/2016	Telephone: 202-564-2501
Date Made Active in Reports: 02/10/2017	Last EDR Contact: 03/26/2020
Number of Days to Update: 79	Next Scheduled EDR Contact: 07/20/2020
	Data Release Frequency: Quarterly

FTTS: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
FTTS tracks administrative cases and pesticide enforcement actions and compliance activities related to FIFRA, TSCA and EPCRA (Emergency Planning and Community Right-to-Know Act). To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 04/09/2009	Source: EPA/Office of Prevention, Pesticides and Toxic Substances
Date Data Arrived at EDR: 04/16/2009	Telephone: 202-566-1667
Date Made Active in Reports: 05/11/2009	Last EDR Contact: 08/18/2017
Number of Days to Update: 25	Next Scheduled EDR Contact: 12/04/2017
	Data Release Frequency: No Update Planned

FTTS INSP: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
A listing of FIFRA/TSCA Tracking System (FTTS) inspections and enforcements.

Date of Government Version: 04/09/2009	Source: EPA
Date Data Arrived at EDR: 04/16/2009	Telephone: 202-566-1667
Date Made Active in Reports: 05/11/2009	Last EDR Contact: 08/18/2017
Number of Days to Update: 25	Next Scheduled EDR Contact: 12/04/2017
	Data Release Frequency: No Update Planned

MLTS: Material Licensing Tracking System

MLTS is maintained by the Nuclear Regulatory Commission and contains a list of approximately 8,100 sites which possess or use radioactive materials and which are subject to NRC licensing requirements. To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 10/25/2019	Source: Nuclear Regulatory Commission
Date Data Arrived at EDR: 10/25/2019	Telephone: 301-415-7169
Date Made Active in Reports: 01/15/2020	Last EDR Contact: 04/10/2020
Number of Days to Update: 82	Next Scheduled EDR Contact: 08/03/2020
	Data Release Frequency: Quarterly

COAL ASH DOE: Steam-Electric Plant Operation Data

A listing of power plants that store ash in surface ponds.

Date of Government Version: 12/31/2018	Source: Department of Energy
Date Data Arrived at EDR: 12/04/2019	Telephone: 202-586-8719
Date Made Active in Reports: 01/15/2020	Last EDR Contact: 03/06/2020
Number of Days to Update: 42	Next Scheduled EDR Contact: 06/15/2020
	Data Release Frequency: Varies

COAL ASH EPA: Coal Combustion Residues Surface Impoundments List

A listing of coal combustion residues surface impoundments with high hazard potential ratings.

Date of Government Version: 01/12/2017	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/05/2019	Telephone: N/A
Date Made Active in Reports: 11/11/2019	Last EDR Contact: 02/27/2020
Number of Days to Update: 251	Next Scheduled EDR Contact: 06/15/2020
	Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

PCB TRANSFORMER: PCB Transformer Registration Database

The database of PCB transformer registrations that includes all PCB registration submittals.

Date of Government Version: 09/13/2019	Source: Environmental Protection Agency
Date Data Arrived at EDR: 11/06/2019	Telephone: 202-566-0517
Date Made Active in Reports: 02/10/2020	Last EDR Contact: 02/07/2020
Number of Days to Update: 96	Next Scheduled EDR Contact: 05/18/2020
	Data Release Frequency: Varies

RADINFO: Radiation Information Database

The Radiation Information Database (RADINFO) contains information about facilities that are regulated by U.S. Environmental Protection Agency (EPA) regulations for radiation and radioactivity.

Date of Government Version: 07/01/2019	Source: Environmental Protection Agency
Date Data Arrived at EDR: 07/01/2019	Telephone: 202-343-9775
Date Made Active in Reports: 09/23/2019	Last EDR Contact: 07/01/2019
Number of Days to Update: 84	Next Scheduled EDR Contact: 07/13/2020
	Data Release Frequency: Quarterly

HIST FTTS: FIFRA/TSCA Tracking System Administrative Case Listing

A complete administrative case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/01/2007	Telephone: 202-564-2501
Date Made Active in Reports: 04/10/2007	Last EDR Contact: 12/17/2007
Number of Days to Update: 40	Next Scheduled EDR Contact: 03/17/2008
	Data Release Frequency: No Update Planned

HIST FTTS INSP: FIFRA/TSCA Tracking System Inspection & Enforcement Case Listing

A complete inspection and enforcement case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/01/2007	Telephone: 202-564-2501
Date Made Active in Reports: 04/10/2007	Last EDR Contact: 12/17/2008
Number of Days to Update: 40	Next Scheduled EDR Contact: 03/17/2008
	Data Release Frequency: No Update Planned

DOT OPS: Incident and Accident Data

Department of Transportation, Office of Pipeline Safety Incident and Accident data.

Date of Government Version: 01/02/2020	Source: Department of Transportation, Office of Pipeline Safety
Date Data Arrived at EDR: 01/28/2020	Telephone: 202-366-4595
Date Made Active in Reports: 04/17/2020	Last EDR Contact: 01/28/2020
Number of Days to Update: 80	Next Scheduled EDR Contact: 05/11/2020
	Data Release Frequency: Quarterly

CONSENT: Superfund (CERCLA) Consent Decrees

Major legal settlements that establish responsibility and standards for cleanup at NPL (Superfund) sites. Released periodically by United States District Courts after settlement by parties to litigation matters.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 12/31/2019
Date Data Arrived at EDR: 01/17/2020
Date Made Active in Reports: 03/06/2020
Number of Days to Update: 49

Source: Department of Justice, Consent Decree Library
Telephone: Varies
Last EDR Contact: 03/26/2020
Next Scheduled EDR Contact: 07/20/2020
Data Release Frequency: Varies

BRS: Biennial Reporting System

The Biennial Reporting System is a national system administered by the EPA that collects data on the generation and management of hazardous waste. BRS captures detailed data from two groups: Large Quantity Generators (LQG) and Treatment, Storage, and Disposal Facilities.

Date of Government Version: 12/31/2015
Date Data Arrived at EDR: 02/22/2017
Date Made Active in Reports: 09/28/2017
Number of Days to Update: 218

Source: EPA/NTIS
Telephone: 800-424-9346
Last EDR Contact: 03/25/2020
Next Scheduled EDR Contact: 07/06/2020
Data Release Frequency: Biennially

INDIAN RESERV: Indian Reservations

This map layer portrays Indian administered lands of the United States that have any area equal to or greater than 640 acres.

Date of Government Version: 12/31/2014
Date Data Arrived at EDR: 07/14/2015
Date Made Active in Reports: 01/10/2017
Number of Days to Update: 546

Source: USGS
Telephone: 202-208-3710
Last EDR Contact: 04/10/2020
Next Scheduled EDR Contact: 07/20/2020
Data Release Frequency: Semi-Annually

FUSRAP: Formerly Utilized Sites Remedial Action Program

DOE established the Formerly Utilized Sites Remedial Action Program (FUSRAP) in 1974 to remediate sites where radioactive contamination remained from Manhattan Project and early U.S. Atomic Energy Commission (AEC) operations.

Date of Government Version: 08/08/2017
Date Data Arrived at EDR: 09/11/2018
Date Made Active in Reports: 09/14/2018
Number of Days to Update: 3

Source: Department of Energy
Telephone: 202-586-3559
Last EDR Contact: 01/31/2020
Next Scheduled EDR Contact: 05/18/2020
Data Release Frequency: Varies

UMTRA: Uranium Mill Tailings Sites

Uranium ore was mined by private companies for federal government use in national defense programs. When the mills shut down, large piles of the sand-like material (mill tailings) remain after uranium has been extracted from the ore. Levels of human exposure to radioactive materials from the piles are low; however, in some cases tailings were used as construction materials before the potential health hazards of the tailings were recognized.

Date of Government Version: 08/30/2019
Date Data Arrived at EDR: 11/15/2019
Date Made Active in Reports: 01/28/2020
Number of Days to Update: 74

Source: Department of Energy
Telephone: 505-845-0011
Last EDR Contact: 02/21/2020
Next Scheduled EDR Contact: 06/01/2020
Data Release Frequency: Varies

LEAD SMELTER 1: Lead Smelter Sites

A listing of former lead smelter site locations.

Date of Government Version: 01/30/2020
Date Data Arrived at EDR: 02/05/2020
Date Made Active in Reports: 02/14/2020
Number of Days to Update: 9

Source: Environmental Protection Agency
Telephone: 703-603-8787
Last EDR Contact: 04/02/2020
Next Scheduled EDR Contact: 07/13/2020
Data Release Frequency: Varies

LEAD SMELTER 2: Lead Smelter Sites

A list of several hundred sites in the U.S. where secondary lead smelting was done from 1931 and 1964. These sites may pose a threat to public health through ingestion or inhalation of contaminated soil or dust

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 04/05/2001
Date Data Arrived at EDR: 10/27/2010
Date Made Active in Reports: 12/02/2010
Number of Days to Update: 36

Source: American Journal of Public Health
Telephone: 703-305-6451
Last EDR Contact: 12/02/2009
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

US AIRS (AFS): Aerometric Information Retrieval System Facility Subsystem (AFS)

The database is a sub-system of Aerometric Information Retrieval System (AIRS). AFS contains compliance data on air pollution point sources regulated by the U.S. EPA and/or state and local air regulatory agencies. This information comes from source reports by various stationary sources of air pollution, such as electric power plants, steel mills, factories, and universities, and provides information about the air pollutants they produce. Action, air program, air program pollutant, and general level plant data. It is used to track emissions and compliance data from industrial plants.

Date of Government Version: 10/12/2016
Date Data Arrived at EDR: 10/26/2016
Date Made Active in Reports: 02/03/2017
Number of Days to Update: 100

Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 09/26/2017
Next Scheduled EDR Contact: 01/08/2018
Data Release Frequency: Annually

US AIRS MINOR: Air Facility System Data

A listing of minor source facilities.

Date of Government Version: 10/12/2016
Date Data Arrived at EDR: 10/26/2016
Date Made Active in Reports: 02/03/2017
Number of Days to Update: 100

Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 09/26/2017
Next Scheduled EDR Contact: 01/08/2018
Data Release Frequency: Annually

MINES VIOLATIONS: MSHA Violation Assessment Data

Mines violation and assessment information. Department of Labor, Mine Safety & Health Administration.

Date of Government Version: 12/03/2019
Date Data Arrived at EDR: 12/03/2019
Date Made Active in Reports: 01/28/2020
Number of Days to Update: 56

Source: DOL, Mine Safety & Health Admi
Telephone: 202-693-9424
Last EDR Contact: 03/02/2020
Next Scheduled EDR Contact: 06/15/2020
Data Release Frequency: Quarterly

US MINES: Mines Master Index File

Contains all mine identification numbers issued for mines active or opened since 1971. The data also includes violation information.

Date of Government Version: 11/06/2019
Date Data Arrived at EDR: 11/25/2019
Date Made Active in Reports: 01/28/2020
Number of Days to Update: 64

Source: Department of Labor, Mine Safety and Health Administration
Telephone: 303-231-5959
Last EDR Contact: 02/25/2020
Next Scheduled EDR Contact: 06/08/2020
Data Release Frequency: Semi-Annually

US MINES 2: Ferrous and Nonferrous Metal Mines Database Listing

This map layer includes ferrous (ferrous metal mines are facilities that extract ferrous metals, such as iron ore or molybdenum) and nonferrous (Nonferrous metal mines are facilities that extract nonferrous metals, such as gold, silver, copper, zinc, and lead) metal mines in the United States.

Date of Government Version: 12/05/2005
Date Data Arrived at EDR: 02/29/2008
Date Made Active in Reports: 04/18/2008
Number of Days to Update: 49

Source: USGS
Telephone: 703-648-7709
Last EDR Contact: 02/28/2020
Next Scheduled EDR Contact: 06/08/2020
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

US MINES 3: Active Mines & Mineral Plants Database Listing

Active Mines and Mineral Processing Plant operations for commodities monitored by the Minerals Information Team of the USGS.

Date of Government Version: 04/14/2011	Source: USGS
Date Data Arrived at EDR: 06/08/2011	Telephone: 703-648-7709
Date Made Active in Reports: 09/13/2011	Last EDR Contact: 02/28/2020
Number of Days to Update: 97	Next Scheduled EDR Contact: 06/08/2020
	Data Release Frequency: Varies

ABANDONED MINES: Abandoned Mines

An inventory of land and water impacted by past mining (primarily coal mining) is maintained by OSMRE to provide information needed to implement the Surface Mining Control and Reclamation Act of 1977 (SMCRA). The inventory contains information on the location, type, and extent of AML impacts, as well as, information on the cost associated with the reclamation of those problems. The inventory is based upon field surveys by State, Tribal, and OSMRE program officials. It is dynamic to the extent that it is modified as new problems are identified and existing problems are reclaimed.

Date of Government Version: 12/09/2019	Source: Department of Interior
Date Data Arrived at EDR: 12/11/2019	Telephone: 202-208-2609
Date Made Active in Reports: 02/27/2020	Last EDR Contact: 03/05/2020
Number of Days to Update: 78	Next Scheduled EDR Contact: 06/22/2020
	Data Release Frequency: Quarterly

FINDS: Facility Index System/Facility Registry System

Facility Index System. FINDS contains both facility information and 'pointers' to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCB Activity Data System).

Date of Government Version: 11/22/2019	Source: EPA
Date Data Arrived at EDR: 12/04/2019	Telephone: (215) 814-5000
Date Made Active in Reports: 03/02/2020	Last EDR Contact: 03/03/2020
Number of Days to Update: 89	Next Scheduled EDR Contact: 06/15/2020
	Data Release Frequency: Quarterly

UXO: Unexploded Ordnance Sites

A listing of unexploded ordnance site locations

Date of Government Version: 12/31/2017	Source: Department of Defense
Date Data Arrived at EDR: 01/17/2019	Telephone: 703-704-1564
Date Made Active in Reports: 04/01/2019	Last EDR Contact: 04/03/2020
Number of Days to Update: 74	Next Scheduled EDR Contact: 07/27/2020
	Data Release Frequency: Varies

ECHO: Enforcement & Compliance History Information

ECHO provides integrated compliance and enforcement information for about 800,000 regulated facilities nationwide.

Date of Government Version: 01/05/2020	Source: Environmental Protection Agency
Date Data Arrived at EDR: 01/07/2020	Telephone: 202-564-2280
Date Made Active in Reports: 03/06/2020	Last EDR Contact: 04/07/2020
Number of Days to Update: 59	Next Scheduled EDR Contact: 07/20/2020
	Data Release Frequency: Quarterly

DOCKET HWC: Hazardous Waste Compliance Docket Listing

A complete list of the Federal Agency Hazardous Waste Compliance Docket Facilities.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 05/31/2018
Date Data Arrived at EDR: 07/26/2018
Date Made Active in Reports: 10/05/2018
Number of Days to Update: 71

Source: Environmental Protection Agency
Telephone: 202-564-0527
Last EDR Contact: 02/21/2020
Next Scheduled EDR Contact: 06/08/2020
Data Release Frequency: Varies

FUELS PROGRAM: EPA Fuels Program Registered Listing

This listing includes facilities that are registered under the Part 80 (Code of Federal Regulations) EPA Fuels Programs. All companies now are required to submit new and updated registrations.

Date of Government Version: 11/18/2019
Date Data Arrived at EDR: 11/19/2019
Date Made Active in Reports: 01/28/2020
Number of Days to Update: 70

Source: EPA
Telephone: 800-385-6164
Last EDR Contact: 02/19/2020
Next Scheduled EDR Contact: 06/01/2020
Data Release Frequency: Quarterly

AIRS: Permitted Airs Facility List

A listing of permitted Airs facilities.

Date of Government Version: 12/23/2019
Date Data Arrived at EDR: 01/02/2020
Date Made Active in Reports: 03/03/2020
Number of Days to Update: 61

Source: Department of Environmental Quality
Telephone: 804-698-4000
Last EDR Contact: 03/16/2020
Next Scheduled EDR Contact: 06/29/2020
Data Release Frequency: Annually

CEDS: Comprehensive Environmental Data System

Virginia Water Protection Permits, Virginia Pollution Discharge System (point discharge) permits and Virginia Pollution Abatement (no point discharge) permits.

Date of Government Version: 12/11/2019
Date Data Arrived at EDR: 12/20/2019
Date Made Active in Reports: 03/03/2020
Number of Days to Update: 74

Source: Department of Environmental Quality
Telephone: 804-698-4077
Last EDR Contact: 03/02/2020
Next Scheduled EDR Contact: 06/15/2020
Data Release Frequency: Quarterly

COAL ASH: Coal Ash Disposal Sites

A listing of facilities with coal ash impoundments.

Date of Government Version: 12/19/2019
Date Data Arrived at EDR: 12/23/2019
Date Made Active in Reports: 03/03/2020
Number of Days to Update: 71

Source: Department of Environmental Protection
Telephone: 804-698-4285
Last EDR Contact: 03/02/2020
Next Scheduled EDR Contact: 06/15/2020
Data Release Frequency: Varies

DRYCLEANERS: Drycleaner List

A listing of registered drycleaners.

Date of Government Version: 10/21/2019
Date Data Arrived at EDR: 10/23/2019
Date Made Active in Reports: 01/03/2020
Number of Days to Update: 72

Source: Department of Environmental Quality
Telephone: 804-698-4407
Last EDR Contact: 03/26/2020
Next Scheduled EDR Contact: 07/20/2020
Data Release Frequency: Varies

ENFORCEMENT: Enforcement Actions Data

A listing of enforcement actions.

Date of Government Version: 11/21/2019
Date Data Arrived at EDR: 11/21/2019
Date Made Active in Reports: 01/28/2020
Number of Days to Update: 68

Source: Department of Environmental Quality
Telephone: 804-698-4031
Last EDR Contact: 03/23/2020
Next Scheduled EDR Contact: 07/13/2020
Data Release Frequency: Quarterly

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Financial Assurance 1: Financial Assurance Information Listing

A listing of financial assurance information for underground storage tank facilities. Financial assurance is intended to ensure that resources are available to pay for the cost of closure, post-closure care, and corrective measures if the owner or operator of a regulated facility is unable or unwilling to pay.

Date of Government Version: 01/27/2020	Source: Department of Environmental Quality
Date Data Arrived at EDR: 01/28/2020	Telephone: 804-698-4205
Date Made Active in Reports: 03/31/2020	Last EDR Contact: 04/17/2020
Number of Days to Update: 63	Next Scheduled EDR Contact: 08/10/2020
	Data Release Frequency: Varies

Financial Assurance 2: Financial Assurance Information listing

Solid waste financial assurance information.

Date of Government Version: 01/28/2020	Source: Department of Environmental Quality
Date Data Arrived at EDR: 01/30/2020	Telephone: 804-698-4123
Date Made Active in Reports: 03/31/2020	Last EDR Contact: 04/17/2020
Number of Days to Update: 61	Next Scheduled EDR Contact: 08/10/2020
	Data Release Frequency: Varies

TIER 2: Tier 2 Information Listing

A listing of facilities which store or manufacture hazardous materials and submit a chemical inventory report.

Date of Government Version: 12/31/2014	Source: Department of Environmental Quality
Date Data Arrived at EDR: 01/20/2017	Telephone: 804-698-4159
Date Made Active in Reports: 02/14/2017	Last EDR Contact: 03/16/2020
Number of Days to Update: 25	Next Scheduled EDR Contact: 06/29/2020
	Data Release Frequency: Annually

UIC: Underground Injection Control Wells

A listing of underground injection controls wells.

Date of Government Version: 10/29/2019	Source: Department of Mines, Minerals and Energy
Date Data Arrived at EDR: 10/30/2019	Telephone: 276-415-9700
Date Made Active in Reports: 01/10/2020	Last EDR Contact: 03/31/2020
Number of Days to Update: 72	Next Scheduled EDR Contact: 05/11/2020
	Data Release Frequency: Quarterly

MINES MRDS: Mineral Resources Data System

Mineral Resources Data System

Date of Government Version: 04/06/2018	Source: USGS
Date Data Arrived at EDR: 10/21/2019	Telephone: 703-648-6533
Date Made Active in Reports: 10/24/2019	Last EDR Contact: 02/28/2020
Number of Days to Update: 3	Next Scheduled EDR Contact: 06/08/2020
	Data Release Frequency: Varies

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP: EDR Proprietary Manufactured Gas Plants

The EDR Proprietary Manufactured Gas Plant Database includes records of coal gas plants (manufactured gas plants) compiled by EDR's researchers. Manufactured gas sites were used in the United States from the 1800's to 1950's to produce a gas that could be distributed and used as fuel. These plants used whale oil, rosin, coal, or a mixture of coal, oil, and water that also produced a significant amount of waste. Many of the byproducts of the gas production, such as coal tar (oily waste containing volatile and non-volatile chemicals), sludges, oils and other compounds are potentially hazardous to human health and the environment. The byproduct from this process was frequently disposed of directly at the plant site and can remain or spread slowly, serving as a continuous source of soil and groundwater contamination.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

EDR Hist Auto: EDR Exclusive Historical Auto Stations

EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR Hist Cleaner: EDR Exclusive Historical Cleaners

EDR has searched selected national collections of business directories and has collected listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, wash & dry etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA LF: Recovered Government Archive Solid Waste Facilities List

The EDR Recovered Government Archive Landfill database provides a list of landfills derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Environmental Quality in Virginia.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 01/20/2014
Number of Days to Update: 203

Source: Department of Environmental Quality
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

RGA LUST: Recovered Government Archive Leaking Underground Storage Tank

The EDR Recovered Government Archive Leaking Underground Storage Tank database provides a list of LUST incidents derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Environmental Quality in Virginia and at the Regional VA Levels.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 01/15/2014
Number of Days to Update: 198

Source: Department of Environmental Quality
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

OTHER DATABASE(S)

Depending on the geographic area covered by this report, the data provided in these specialty databases may or may not be complete. For example, the existence of wetlands information data in a specific report does not mean that all wetlands in the area covered by the report are included. Moreover, the absence of any reported wetlands information does not necessarily mean that wetlands do not exist in the area covered by the report.

CT MANIFEST: Hazardous Waste Manifest Data

Facility and manifest data. Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a tsd facility.

Date of Government Version: 01/30/2020	Source: Department of Energy & Environmental Protection
Date Data Arrived at EDR: 01/30/2020	Telephone: 860-424-3375
Date Made Active in Reports: 03/09/2020	Last EDR Contact: 01/30/2020
Number of Days to Update: 39	Next Scheduled EDR Contact: 05/25/2020
	Data Release Frequency: No Update Planned

NJ MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 12/31/2018	Source: Department of Environmental Protection
Date Data Arrived at EDR: 04/10/2019	Telephone: N/A
Date Made Active in Reports: 05/16/2019	Last EDR Contact: 04/10/2020
Number of Days to Update: 36	Next Scheduled EDR Contact: 07/20/2020
	Data Release Frequency: Annually

NY MANIFEST: Facility and Manifest Data

Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a TSD facility.

Date of Government Version: 01/01/2019	Source: Department of Environmental Conservation
Date Data Arrived at EDR: 05/01/2019	Telephone: 518-402-8651
Date Made Active in Reports: 06/21/2019	Last EDR Contact: 01/31/2020
Number of Days to Update: 51	Next Scheduled EDR Contact: 05/11/2020
	Data Release Frequency: Quarterly

PA MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 06/30/2018	Source: Department of Environmental Protection
Date Data Arrived at EDR: 07/19/2019	Telephone: 717-783-8990
Date Made Active in Reports: 09/10/2019	Last EDR Contact: 04/02/2020
Number of Days to Update: 53	Next Scheduled EDR Contact: 07/27/2020
	Data Release Frequency: Annually

RI MANIFEST: Manifest information

Hazardous waste manifest information

Date of Government Version: 12/31/2018	Source: Department of Environmental Management
Date Data Arrived at EDR: 10/02/2019	Telephone: 401-222-2797
Date Made Active in Reports: 12/10/2019	Last EDR Contact: 02/18/2020
Number of Days to Update: 69	Next Scheduled EDR Contact: 06/01/2020
	Data Release Frequency: Annually

WI MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 05/31/2018	Source: Department of Natural Resources
Date Data Arrived at EDR: 06/19/2019	Telephone: N/A
Date Made Active in Reports: 09/03/2019	Last EDR Contact: 03/09/2020
Number of Days to Update: 76	Next Scheduled EDR Contact: 06/22/2020
	Data Release Frequency: Annually

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Oil/Gas Pipelines

Source: Endeavor Business Media

Petroleum Bundle (Crude Oil, Refined Products, Petrochemicals, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)) N = Natural Gas Bundle (Natural Gas, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)). This map includes information copyrighted by Endeavor Business Media. This information is provided on a best effort basis and Endeavor Business Media does not guarantee its accuracy nor warrant its fitness for any particular purpose. Such information has been reprinted with the permission of Endeavor Business Media.

Electric Power Transmission Line Data

Source: Endeavor Business Media

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Sensitive Receptors: There are individuals deemed sensitive receptors due to their fragile immune systems and special sensitivity to environmental discharges. These sensitive receptors typically include the elderly, the sick, and children. While the location of all sensitive receptors cannot be determined, EDR indicates those buildings and facilities - schools, daycares, hospitals, medical centers, and nursing homes - where individuals who are sensitive receptors are likely to be located.

AHA Hospitals:

Source: American Hospital Association, Inc.

Telephone: 312-280-5991

The database includes a listing of hospitals based on the American Hospital Association's annual survey of hospitals.

Medical Centers: Provider of Services Listing

Source: Centers for Medicare & Medicaid Services

Telephone: 410-786-3000

A listing of hospitals with Medicare provider number, produced by Centers of Medicare & Medicaid Services, a federal agency within the U.S. Department of Health and Human Services.

Nursing Homes

Source: National Institutes of Health

Telephone: 301-594-6248

Information on Medicare and Medicaid certified nursing homes in the United States.

Public Schools

Source: National Center for Education Statistics

Telephone: 202-502-7300

The National Center for Education Statistics' primary database on elementary and secondary public education in the United States. It is a comprehensive, annual, national statistical database of all public elementary and secondary schools and school districts, which contains data that are comparable across all states.

Private Schools

Source: National Center for Education Statistics

Telephone: 202-502-7300

The National Center for Education Statistics' primary database on private school locations in the United States.

Daycare Centers: Licensed Facilities

Source: Department of Social Services

Telephone: 804-692-1900

Flood Zone Data: This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.

Source: FEMA

Telephone: 877-336-2627

Date of Government Version: 2003, 2015

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

STREET AND ADDRESS INFORMATION

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MIDDLESEX INTERCEPTOR SYSTEM PROGRAM PHASE II

URBANNA TO MATHEWS TRANSMISSION FORCE MAIN

Urbanna, VA 23175

Inquiry Number: 6051134.6

April 28, 2020

Certified Sanborn® Map Report



6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

Certified Sanborn® Map Report

04/28/20

Site Name:

MIDDLESEX INTERCEPTOR ;
URBANNA TO MATHEWS TR
Urbanna, VA 23175
EDR Inquiry # 6051134.6

Client Name:

Tetra Tech
5700 Lake Wright Dr # 102
Norfolk, VA 23502
Contact: Emily Foster



The Sanborn Library has been searched by EDR and maps covering the target property location as provided by Tetra Tech were identified for the years listed below. The Sanborn Library is the largest, most complete collection of fire insurance maps. The collection includes maps from Sanborn, Bromley, Perris & Browne, Hopkins, Barlow, and others. Only Environmental Data Resources Inc. (EDR) is authorized to grant rights for commercial reproduction of maps by the Sanborn Library LLC, the copyright holder for the collection. Results can be authenticated by visiting www.edrnet.com/sanborn.

The Sanborn Library is continually enhanced with newly identified map archives. This report accesses all maps in the collection as of the day this report was generated.

Certified Sanborn Results:

Certification # A31A-4F87-94DC
PO # 1172620
Project NA

UNMAPPED PROPERTY

This report certifies that the complete holdings of the Sanborn Library, LLC collection have been searched based on client supplied target property information, and fire insurance maps covering the target property were not found.



Sanborn® Library search results

Certification #: A31A-4F87-94DC

The Sanborn Library includes more than 1.2 million fire insurance maps from Sanborn, Bromley, Perris & Browne, Hopkins, Barlow and others which track historical property usage in approximately 12,000 American cities and towns. Collections searched:

- Library of Congress
- University Publications of America
- EDR Private Collection

The Sanborn Library LLC Since 1866™

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MIDDLESEX INTERCEPTOR SYSTEM PROGRAM PHASE II
URBANNA TO MATHEWS TRANSMISSION FORCE MAIN
Urbanna, VA 23175

Inquiry Number: 6051134.9
April 29, 2020

The EDR-City Directory Image Report

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Executive Summary

Findings

City Directory Images

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EXECUTIVE SUMMARY

DESCRIPTION

Environmental Data Resources, Inc.'s (EDR) City Directory Report is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR's City Directory Report includes a search of available city directory data at 5 year intervals.

RECORD SOURCES

EDR's Digital Archive combines historical directory listings from sources such as Cole Information and Dun & Bradstreet. These standard sources of property information complement and enhance each other to provide a more comprehensive report.

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Data by

infoUSA[®]

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RESEARCH SUMMARY

The following research sources were consulted in the preparation of this report. A check mark indicates where information was identified in the source and provided in this report.

<u>Year</u>	<u>Target Street</u>	<u>Cross Street</u>	<u>Source</u>
2017	<input type="checkbox"/>	<input checked="" type="checkbox"/>	EDR Digital Archive
2014	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	EDR Digital Archive
2010	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	EDR Digital Archive
2005	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	EDR Digital Archive
2000	<input type="checkbox"/>	<input type="checkbox"/>	EDR Digital Archive
1995	<input type="checkbox"/>	<input type="checkbox"/>	EDR Digital Archive
1992	<input type="checkbox"/>	<input type="checkbox"/>	EDR Digital Archive

FINDINGS

TARGET PROPERTY STREET

URBANNA TO MATHEWS TRANSMISSION FORCE MAIN
Urbanna, VA 23175

Year

CD Image

Source

LAUREL HILL DR

2017	-	EDR Digital Archive	Street not listed in Source
2014	pg A3	EDR Digital Archive	
2010	pg A6	EDR Digital Archive	
2005	pg A9	EDR Digital Archive	
2000	-	EDR Digital Archive	Street not listed in Source
1995	-	EDR Digital Archive	Street not listed in Source
1992	-	EDR Digital Archive	Street not listed in Source

FINDINGS

CROSS STREETS

<u>Year</u>	<u>CD Image</u>	<u>Source</u>	
<u>NIMCOCK RD</u>			
2017	pg. A1	EDR Digital Archive	
2014	pg. A4	EDR Digital Archive	
2010	pg. A7	EDR Digital Archive	
2005	pg. A10	EDR Digital Archive	
2000	-	EDR Digital Archive	Street not listed in Source
1995	-	EDR Digital Archive	Street not listed in Source
1992	-	EDR Digital Archive	Street not listed in Source

WAVERLY RD

2017	pg. A2	EDR Digital Archive	
2014	pg. A5	EDR Digital Archive	
2010	pg. A8	EDR Digital Archive	
2005	pg. A11	EDR Digital Archive	
2000	-	EDR Digital Archive	Street not listed in Source
1995	-	EDR Digital Archive	Street not listed in Source
1992	-	EDR Digital Archive	Street not listed in Source

City Directory Images

NIMCOCK RD 2017

91	SCHACHT, PETER
97	COULSON, GLENN
99	HALL, ED A
218	HOVEY, STANFORD L
219	BUNTING, CATHARINE J

WAVERLY RD 2017

126	PITTS, ROBERT
172	BURCH, ROBERT L
204	CHRIS HILL CONSUTLING & INSURACE I
	WALLACE, CHRISCIA
271	HALL, CRAIG
275	VANDYKE, NICHOLAS R
294	STELLWAGEN, JAMES O
338	MORALES, NANCY
446	SHARP, JACK
478	RILEY, THOMAS W
575	FRITTER, CAROLINE B
618	BAKER, JOSEPH B
624	WARD, RANDY

LAUREL HILL DR 2014

329	CROS, JOHN
403	TONEY, EMMETT W
510	CRAINE, JOHN

NIMCOCK RD 2014

91	SCHACHT, PETER
95	REYES, GEARLDEAN
97	COULSON, GLENN
99	HALL, ED A
178	BAY PAWS
218	OCCUPANT UNKNOWN,
219	BUNTING, CATHARINE J

WAVERLY RD 2014

126	OCCUPANT UNKNOWN,
133	CARMELL, KEITH
172	BURCH, ROBERT L
204	DANDRIDGE, TERRYNCE
216	DESKINS, ANDREA
267	OCCUPANT UNKNOWN,
275	MOON, GRACE
294	STELLWAGEN, JAMES O
338	MONTANO, ALMA R
356	POCIASK, JOSEPH
375	SHORES, JILL A
446	MORGAN, BRENDA G
467	MILBY, JOSEPH
478	RILEY, THOMAS W
497	ALLISON, BILL
563	GARNETT, DENNY W
567	OCCUPANT UNKNOWN,
575	FRITTER, CHARLES A
618	BAKER, JOSEPH B
624	OCCUPANT UNKNOWN,

LAUREL HILL DR 2010

329	CROS, JOHN
510	CRAINE, JOHN

NIMCOCK RD 2010

72	BARNHARDT, MARION F
91	HUDSON, DAVID W
95	NICKELSON, HOLLI J
99	HALL, ED A
178	BAY PAWS
218	HOVEY, STANFORD L
219	GENUNG, ASHLEY

WAVERLY RD 2010

133	GRESHAM, CHARLENE
172	BURCH, ROBERT L
204	WARD, MILDRED L
216	WALTON, BRIAN L
238	LOVING, BOYD D
256	SMITH, DANA
267	HALL, FRANCIS L
271	HALL, LANDRON C
275	VANDYKE, NICHOLAS R
294	STELLWAGEN, JAMES O
356	GILLIAM, FRANK E
375	SHORES, JILL A
446	MORGAN, BRENDA G
471	LOVING, BOYD D
478	RILEY, THOMAS W
497	ALLISON, BILL
563	GARNETT, DENNY W
575	FRITTER, CHARLES A
618	BAKER, JOSEPH B

LAUREL HILL DR

2005

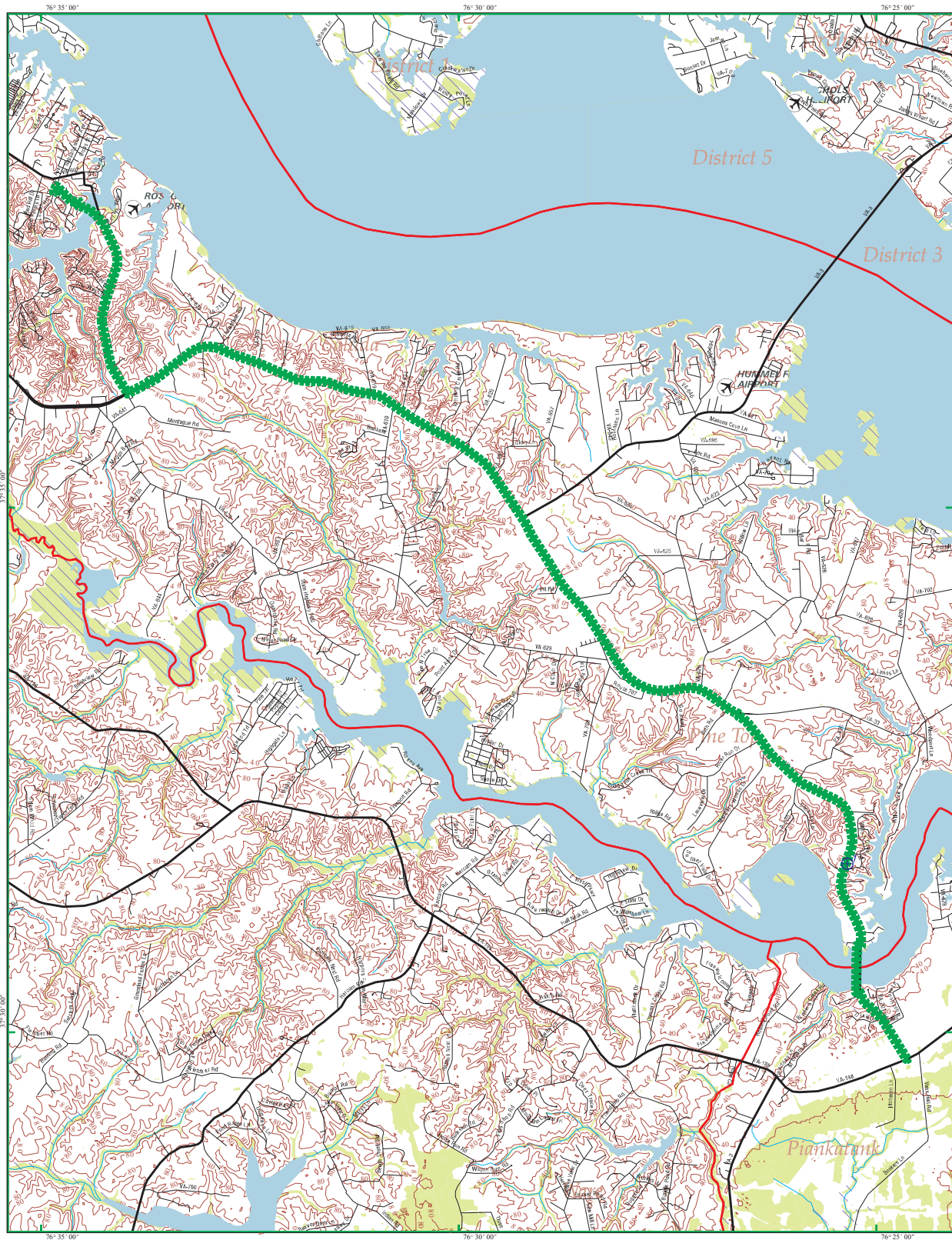
14	CRAINE, WENDY
329	CROS, JOHN
490	VANCE, DON

NIMCOCK RD 2005

91	SCHACHT PETER CO THE
95	STEVENS, ALVIN T
99	HALL, ED A
279	HOVEY, STANFORD L

WAVERLY RD 2005

172	BURCH, ROBERT L
216	WALTON, BRIAN L
256	SMITH, DANA
294	STELLWAGEN, JAMES O
338	GUESS, CLYDE A
356	GILLIAM, FRANK E
375	SHORES, LARRY S
478	RILEY, THOMAS W
538	MILLER, ERIC N
567	GARNETT, DENNY W
624	OAKLEY, BARBARA



EDR DataMap® - Well Search

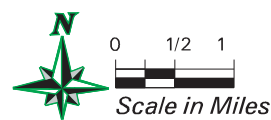


Middlesex Interceptor System Program Phase II



Urbana, VA

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Middlesex Interceptor System Program Phase II
Urbanna, VA 23175

Inquiry Number: 6051134.2w
April 29, 2020

EDR DataMap™ Well Search Report



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GEOCHECK VERSION 2.1 SUMMARY

FEDERAL DATABASE WELL INFORMATION

MAP ID _____ WELL ID _____

NO WELLS FOUND

STATE WATER WELL INFORMATION

MAP ID _____ WELL ID _____

1 VA5000000003357

PUBLIC WATER SUPPLY SYSTEM INFORMATION

NO WELLS FOUND

USGS TOPOGRAPHIC MAP(S)

37076-D4 WARE NECK, VA
37076-E4 WILTON, VA
37076-E5 SALUDA, VA
37076-F5 URBANNA, VA

AREA RADON INFORMATION

EPA Region 3 Statistical Summary Readings for Zip Code: 23175

Number of sites tested: 4.

Maximum Radon Level: 0.2 pCi/L.

Minimum Radon Level: 0.1 pCi/L.

pCi/L <4	pCi/L 4-10	pCi/L 10-20	pCi/L 20-50	pCi/L 50-100	pCi/L >100
4 (100.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)

EPA Region 3 Statistical Summary Readings for Zip Code: 23149

Number of sites tested: 3.

Maximum Radon Level: 1.4 pCi/L.

Minimum Radon Level: 0.5 pCi/L.

pCi/L <4	pCi/L 4-10	pCi/L 10-20	pCi/L 20-50	pCi/L 50-100	pCi/L >100
3 (100.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)

GEOCHECK VERSION 2.1 SUMMARY

AREA RADON INFORMATION

EPA Region 3 Statistical Summary Readings for Zip Code: 23169

Number of sites tested: 3.

Maximum Radon Level: 1.1 pCi/L.

Minimum Radon Level: 1.1 pCi/L.

pCi/L <4	pCi/L 4-10	pCi/L 10-20	pCi/L 20-50	pCi/L 50-100	pCi/L >100
3 (100.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)

EPA Region 3 Statistical Summary Readings for Zip Code: 23092

Number of sites tested: 1.

Maximum Radon Level: 0.8 pCi/L.

Minimum Radon Level: 0.8 pCi/L.

pCi/L <4	pCi/L 4-10	pCi/L 10-20	pCi/L 20-50	pCi/L 50-100	pCi/L >100
1 (100.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)

EPA Region 3 Statistical Summary Readings for Zip Code: 23035

Number of sites tested: 2.

Maximum Radon Level: 0.6 pCi/L.

Minimum Radon Level: 0.4 pCi/L.

pCi/L <4	pCi/L 4-10	pCi/L 10-20	pCi/L 20-50	pCi/L 50-100	pCi/L >100
2 (100.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)

Federal EPA Radon Zone for MIDDLESEX County: 3

- Note: Zone 1 indoor average level > 4 pCi/L.
- : Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.
- : Zone 3 indoor average level < 2 pCi/L.

Federal Area Radon Information for MIDDLESEX COUNTY, VA

Number of sites tested: 1

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor	1.300 pCi/L	100%	0%	0%
Living Area - 2nd Floor	Not Reported	Not Reported	Not Reported	Not Reported
Basement	Not Reported	Not Reported	Not Reported	Not Reported

GEOCHECK VERSION 2.1 SUMMARY

AREA RADON INFORMATION

Federal EPA Radon Zone for MATHEWS County: 3

- Note: Zone 1 indoor average level > 4 pCi/L.
- : Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.
- : Zone 3 indoor average level < 2 pCi/L.

Federal Area Radon Information for MATHEWS COUNTY, VA

Number of sites tested: 1

<u>Area</u>	<u>Average Activity</u>	<u>% <4 pCi/L</u>	<u>% 4-20 pCi/L</u>	<u>% >20 pCi/L</u>
Living Area - 1st Floor	0.400 pCi/L	100%	0%	0%
Living Area - 2nd Floor	Not Reported	Not Reported	Not Reported	Not Reported
Basement	Not Reported	Not Reported	Not Reported	Not Reported

GEOCHECK VERSION 2.1
STATE DATABASE WELL INFORMATION

Water Well Information:

Map ID:	1		
TINWSF:	2683132	PWS ID:	4119405
System Name:	COVES AT WILTON CREEK	Type:	Well
Facility Name:	WELL NO. 3A	Fed Primary Src Classif:	Groundwater
PWS Fed Classif:	Community	Population Served:	206
Avg Daily Production:	8929 GPD		

VIRGINIA GOVERNMENT WELL RECORDS SEARCHED

PWS: Public Water Systems

Source: EPA/Office of Drinking Water

Telephone: 202-564-3750

Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

PWS ENF: Public Water Systems Violation and Enforcement Data

Source: EPA/Office of Drinking Water

Telephone: 202-564-3750

Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SDWIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

USGS Water Wells: USGS National Water Inventory System (NWIS)

This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on wells, springs, and other sources of groundwater.

Virginia Public Water Supplies

Source: Department of Health, Office of Water Programs

Telephone: 804-786-1756

Virginia Oil and Gas Wells

Source: Department of Mines, Minerals and Energy

Telephone: 804-692-3200

A listing of oil and gas well locations.

STREET AND ADDRESS INFORMATION

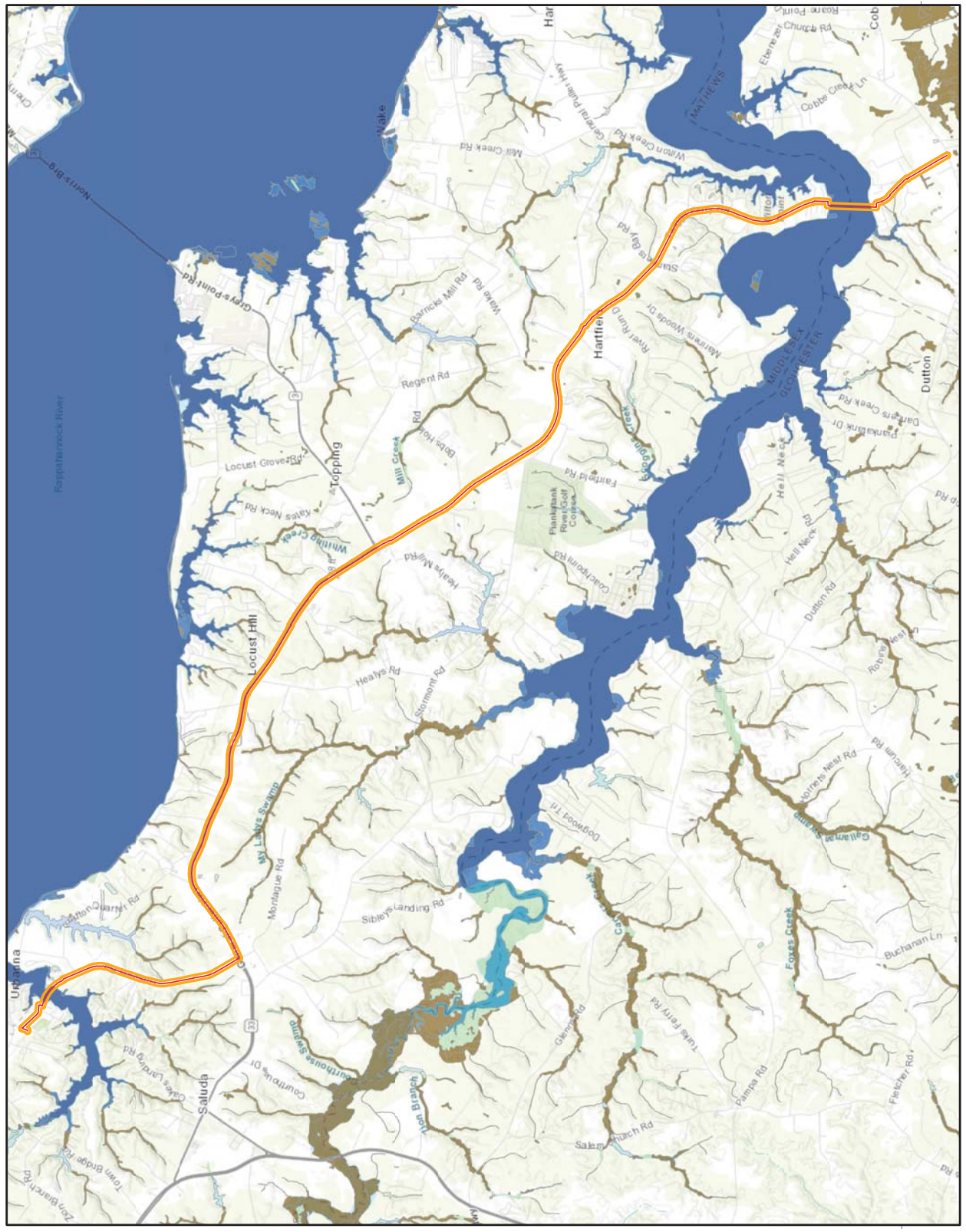
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Appendix J: Wetlands, Resource Protection Areas, and Threatened & Endangered Species Data

Legend 	Alignment
	150 Foot Buffer
NWI Wetland Type <ul style="list-style-type: none"> Estuarine and Marine Deepwater Estuarine and Marine Wetland Freshwater Emergent Wetland Freshwater Forested/Shrub Wetland Freshwater Pond Lake Other Riverine 	

Project Location

National Wetland Inventory Map	
Prepared For: Middlesex Interceptor Program Phase II	
Prepared By: Emily Foster	Date: 5/27/2020
Source: Esri et al., 2020, World Topo Map	
Coordinate System: World Geodetic System, 1984 Universal Transverse Mercator, Zone 18 North	





U.S. Fish and Wildlife Service

National Wetlands Inventory

HRSD Middlesex IFM



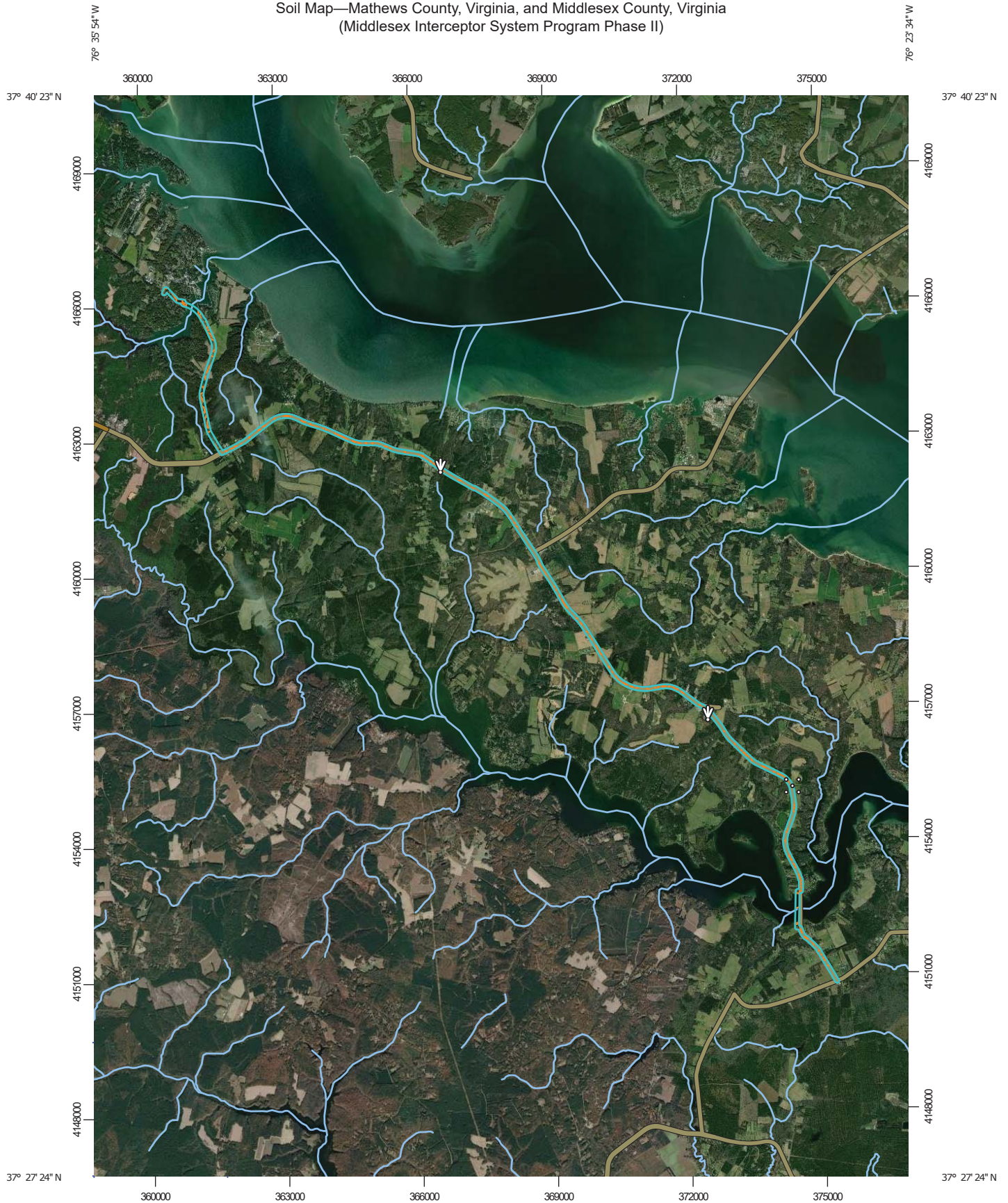
May 27, 2020

Wetlands

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Other
- Riverine

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.




















Soil Map—Mathews County, Virginia, and Middlesex County, Virginia
(Middlesex Interceptor System Program Phase II)



Map Scale: 1:117,000 if printed on A portrait (8.5" x 11") sheet.



MAP LEGEND

 Area of Interest (AOI)	 Spoil Area
 Soils	 Stony Spot
 Soil Map Unit Polygons	 Very Stony Spot
 Soil Map Unit Lines	 Wet Spot
 Soil Map Unit Points	 Other
 Special Point Features	 Special Line Features
 Blowout	 Streams and Canals
 Borrow Pit	 Railroads
 Clay Spot	 Interstate Highways
 Closed Depression	 US Routes
 Gravel Pit	 Major Roads
 Gravelly Spot	 Local Roads
 Landfill	 Background
 Lava Flow	 Aerial Photography
 Marsh or swamp	
 Mine or Quarry	
 Miscellaneous Water	
 Perennial Water	
 Rock Outcrop	
 Saline Spot	
 Sandy Spot	
 Severely Eroded Spot	
 Sinkhole	
 Slide or Slip	
 Sodic Spot	

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at scales ranging from 1:15,800 to 1:20,000.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Mathews County, Virginia
Survey Area Data: Version 11, Sep 16, 2019

Soil Survey Area: Middlesex County, Virginia
Survey Area Data: Version 12, Sep 16, 2019

Your area of interest (AOI) includes more than one soil survey area. These survey areas may have been mapped at different scales, with a different land use in mind, at different times, or at different levels of detail. This may result in map unit symbols, soil properties, and interpretations that do not completely agree across soil survey area boundaries.

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Dec 31, 2009—Feb 6, 2019

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
Dr	Dragston fine sandy loam, shallow	0.0	0.0%
Fa	Fallsington fine sandy loam	1.3	0.2%
KtA	Kempsville loamy fine sand, thick surface, 0 to 2 percent slopes	3.3	0.6%
SaA	Sassafras fine sandy loam, 0 to 2 percent slopes	9.6	1.6%
SdA	Sassafras loamy fine sand, 0 to 2 percent slopes	12.1	2.1%
StE	Steep sandy land	6.2	1.1%
W	Water	7.7	1.3%
Wo	Woodstown fine sandy loam	5.3	0.9%
Subtotals for Soil Survey Area		45.5	7.8%
Totals for Area of Interest		581.9	100.0%

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
3	Bethera and Daleville soils	7.4	1.3%
4	Catpoint loamy sand	1.5	0.3%
5B	Craven silt loam, 2 to 6 percent slopes	2.0	0.3%
6A	Emporia loam, 0 to 2 percent slopes	6.3	1.1%
6B	Emporia loam, 2 to 6 percent slopes	129.8	22.3%
7D	Emporia-Nevarc complex, 6 to 15 percent slopes	18.5	3.2%
7F	Emporia-Nevarc complex, 15 to 45 percent slopes	8.2	1.4%
8	Eunola loam	13.9	2.4%
9A	Kempsville sandy loam, 0 to 2 percent slopes	7.0	1.2%
9B	Kempsville sandy loam, 2 to 6 percent slopes	39.5	6.8%
10	Kenansville fine sand	0.1	0.0%
13	Myatt loam	6.8	1.2%
15	Ochlockonee silt loam	18.7	3.2%
18B	Rumford fine sandy loam, 2 to 6 percent slopes	8.1	1.4%
19A	Slagle silt loam, 0 to 2 percent slopes	68.9	11.8%

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
19B	Slagle silt loam, 2 to 6 percent slopes	146.6	25.2%
20A	Suffolk fine sandy loam, 0 to 2 percent slopes	2.2	0.4%
20B	Suffolk fine sandy loam, 2 to 6 percent slopes	25.7	4.4%
21D	Suffolk-Remlik complex, 6 to 15 percent slopes	2.5	0.4%
21F	Suffolk-Remlik complex, 15 to 45 percent slopes	4.6	0.8%
22B	Udorthents and Psamments, gently sloping	3.8	0.7%
W	Water	14.3	2.5%
Subtotals for Soil Survey Area		536.3	92.2%
Totals for Area of Interest		581.9	100.0%

National Flood Hazard Layer FIRMette



37°30'41.24"N



USGS The National Map: Orthoimagery. Data refreshed April, 2019.

37°30'12.70"N

1:6,000



Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS

- Without Base Flood Elevation (BFE)
Zone A, V, A99
- With BFE or Depth
Zone AE, AO, AH, VE, AR
- Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD

- 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance Flood with average depth less than one foot or with drainage areas of less than one square mile
Zone X
- Future Conditions 1% Annual Chance Flood Hazard
Zone X
- Area with Reduced Flood Risk due to Levee. See Notes.
Zone X
- Area with Flood Risk due to Levee
Zone D

OTHER AREAS

- Area of Minimal Flood Hazard
Zone X
- Effective LOMR
- Area of Undetermined Flood Hazard
Zone D

GENERAL STRUCTURES

- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

OTHER FEATURES

- Cross Sections with 1% Annual Chance Water Surface Elevation
- Coastal Transect
- Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature

MAP PANELS

- Digital Data Available
- No Digital Data Available
- Unmapped

The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 5/27/2020 at 2:54:18 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

76°24'53.22"W

National Flood Hazard Layer FIRMette



37°38'1.68"N



76°34'43.88"W 76°34'6.43"W 37°37'33.19"N

Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS

- Without Base Flood Elevation (BFE)
Zone A, V, A99
- With BFE or Depth *Zone AE, AO, AH, VE, AR*
- Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD

- 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile *Zone X*
- Future Conditions 1% Annual Chance Flood Hazard *Zone X*
- Area with Reduced Flood Risk due to Levee. See Notes. *Zone X*
- Area with Flood Risk due to Levee *Zone D*

OTHER AREAS

- Area of Minimal Flood Hazard *Zone X*
- Effective LOMRs *Zone D*
- Area of Undetermined Flood Hazard *Zone D*

GENERAL STRUCTURES

- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

OTHER FEATURES

- Cross Sections with 1% Annual Chance Water Surface Elevation
- Coastal Transect
- Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature

MAP PANELS

- Digital Data Available
- No Digital Data Available
- Unmapped

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The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 5/27/2020 at 3:05:02 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

Mathews County Chesapeake Bay Preservation Areas and Assessors Parcels Map

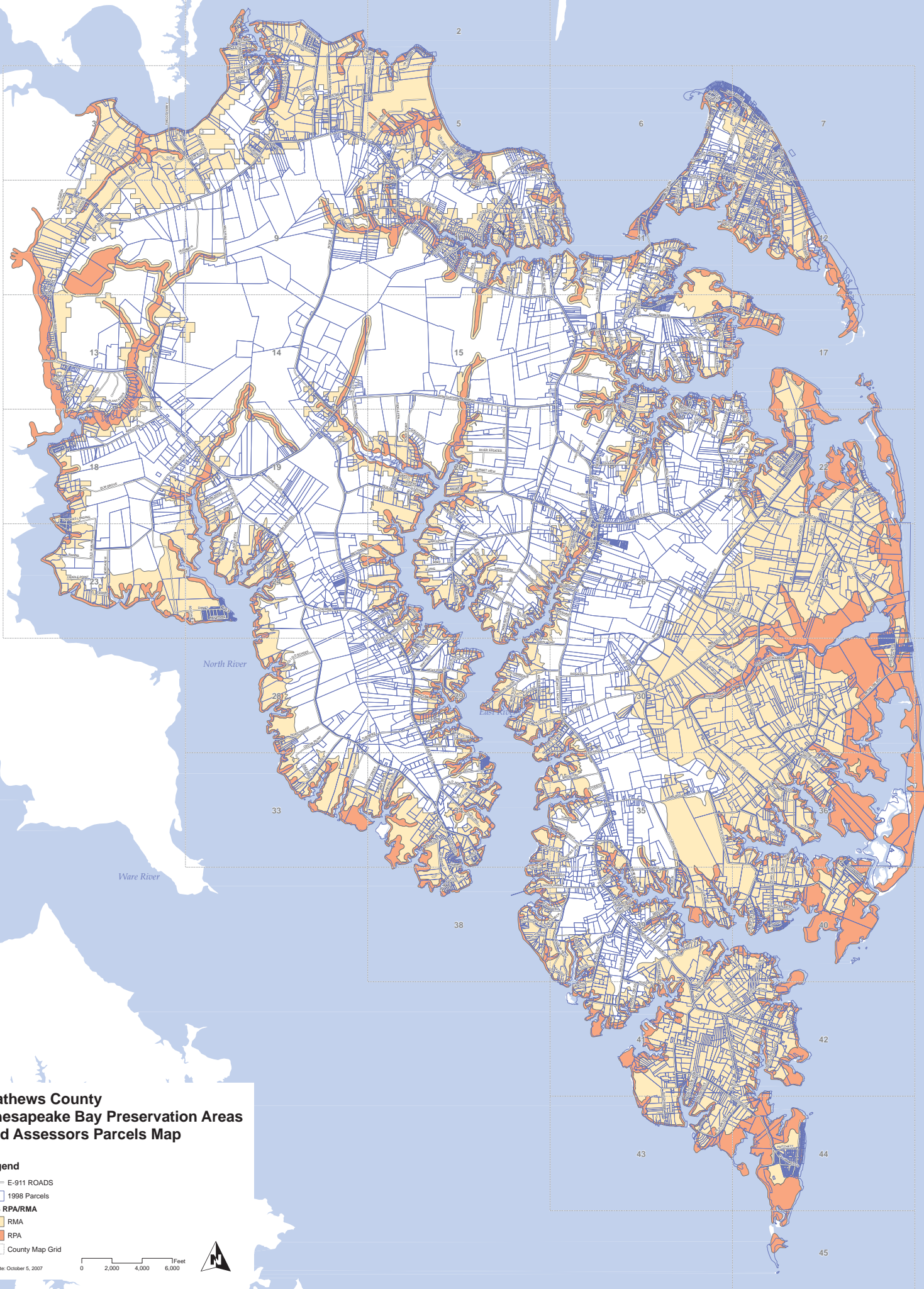
Legend

- E-911 ROADS
- 1998 Parcels
- 1993 RPA/RMA
- RMA
- RPA
- County Map Grid

0 2,000 4,000 6,000 Feet



Print Date: October 5, 2007





United States Department of the Interior



FISH AND WILDLIFE SERVICE
Virginia Ecological Services Field Office
6669 Short Lane
Gloucester, VA 23061-4410
Phone: (804) 693-6694 Fax: (804) 693-9032
<http://www.fws.gov/northeast/virginiafield/>

In Reply Refer To:

May 10, 2020

Consultation Code: 05E2VA00-2020-SLI-3693

Event Code: 05E2VA00-2020-E-10394

Project Name: HRSD Middlesex Interceptor Phase 2

Subject: List of threatened and endangered species that may occur in your proposed project location, and/or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*). Any activity proposed on National Wildlife Refuge lands must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered

species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

<http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF>

Please be aware that bald and golden eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 *et seq.*), and projects affecting these species may require development of an eagle conservation plan (http://www.fws.gov/windenergy/eagle_guidance.html). Additionally, wind energy projects should follow the wind energy guidelines (<http://www.fws.gov/windenergy/>) for minimizing impacts to migratory birds and bats.

Guidance for minimizing impacts to migratory birds for projects including communications towers (e.g., cellular, digital television, radio, and emergency broadcast) can be found at: <http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/towers.htm>; <http://www.towerkill.com>; and <http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html>.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List
 - USFWS National Wildlife Refuges and Fish Hatcheries
-

Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

Virginia Ecological Services Field Office

6669 Short Lane

Gloucester, VA 23061-4410

(804) 693-6694

Project Summary

Consultation Code: 05E2VA00-2020-SLI-3693

Event Code: 05E2VA00-2020-E-10394

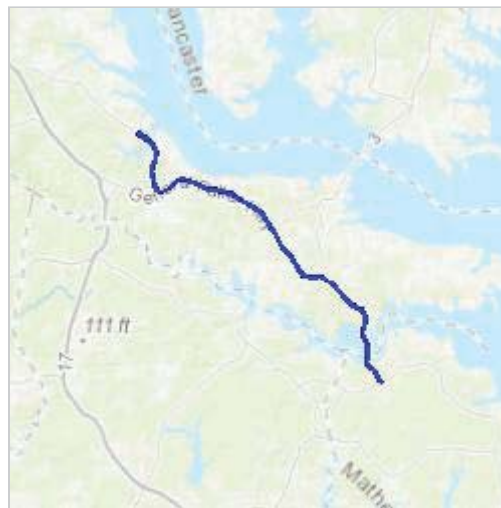
Project Name: HRSD Middlesex Interceptor Phase 2

Project Type: WASTEWATER PIPELINE

Project Description: Middlesex Interceptor System Program Phase II – Urbanna to Mathews Transmission Force Main project (MISPPII) includes the design of approximately 3.2 miles of force main from Urbanna to Cook's Corner in addition to approximately 13 miles of force main along Route 33 between Cook's Corner and the connection to HRSD's Mathews Transmission force main near the intersection of Twiggs Ferry Road and Buckley Hall Road (Route 3/198). The new force main will convey wastewater from Middlesex County to HRSD's York River Treatment Plant and enable decommissioning of both the HRSD Urbanna and Central Middlesex Treatment Plants. The new system will consist of a transmission force main, pump stations, and potential off-line storage tanks. The project will also provide for future connections of the Topping Service Area near the Route 3/Route 33 intersection and the Deltaville Service Area near Hartfield along General Puller Highway. New pump stations are proposed at the two treatment plants that will be decommissioned in addition to new booster pump stations along the force main alignment.

Project Location:

Approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/place/37.564988186246154N76.4732604043296W>



Counties: Mathews, VA | Middlesex, VA

Endangered Species Act Species

There is a total of 1 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries¹, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

-
1. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

Mammals

NAME	STATUS
Northern Long-eared Bat <i>Myotis septentrionalis</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9045	Threatened

Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

USFWS National Wildlife Refuge Lands And Fish Hatcheries

Any activity proposed on lands managed by the [National Wildlife Refuge](#) system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

THERE ARE NO REFUGE LANDS OR FISH HATCHERIES WITHIN YOUR PROJECT AREA.



United States Department of the Interior



FISH AND WILDLIFE SERVICE
Virginia Ecological Services Field Office
6669 Short Lane
Gloucester, VA 23061-4410
Phone: (804) 693-6694 Fax: (804) 693-9032
<http://www.fws.gov/northeast/virginiafield/>

In Reply Refer To:
Consultation Code: 05E2VA00-2020-TA-3693
Event Code: 05E2VA00-2020-E-10395
Project Name: HRSD Middlesex Interceptor Phase 2

May 10, 2020

Subject: Verification letter for the 'HRSD Middlesex Interceptor Phase 2' project under the January 5, 2016, Programmatic Biological Opinion on Final 4(d) Rule for the Northern Long-eared Bat and Activities Excepted from Take Prohibitions.

Dear Emily Foster:

The U.S. Fish and Wildlife Service (Service) received on May 10, 2020 your effects determination for the 'HRSD Middlesex Interceptor Phase 2' (the Action) using the northern long-eared bat (*Myotis septentrionalis*) key within the Information for Planning and Consultation (IPaC) system. This IPaC key assists users in determining whether a Federal action is consistent with the activities analyzed in the Service's January 5, 2016, Programmatic Biological Opinion (PBO). The PBO addresses activities excepted from "take"^[1] prohibitions applicable to the northern long-eared bat under the Endangered Species Act of 1973 (ESA) (87 Stat.884, as amended; 16 U.S.C. 1531 et seq.).

Based upon your IPaC submission, the Action is consistent with activities analyzed in the PBO. The Action may affect the northern long-eared bat; however, any take that may occur as a result of the Action is not prohibited under the ESA Section 4(d) rule adopted for this species at 50 CFR §17.40(o). Unless the Service advises you within 30 days of the date of this letter that your IPaC-assisted determination was incorrect, this letter verifies that the PBO satisfies and concludes your responsibilities for this Action under ESA Section 7(a)(2) with respect to the northern long-eared bat.

Please report to our office any changes to the information about the Action that you submitted in IPaC, the results of any bat surveys conducted in the Action area, and any dead, injured, or sick northern long-eared bats that are found during Action implementation. If the Action is not completed within one year of the date of this letter, you must update and resubmit the information required in the IPaC key.

If the Action may affect other federally listed species besides the northern long-eared bat, a proposed species, and/or designated critical habitat, additional consultation between you and this Service office is required. If the Action may disturb bald or golden eagles, additional coordination with the Service under the Bald and Golden Eagle Protection Act is recommended.

[1]Take means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct [ESA Section 3(19)].

Action Description

You provided to IPaC the following name and description for the subject Action.

1. Name

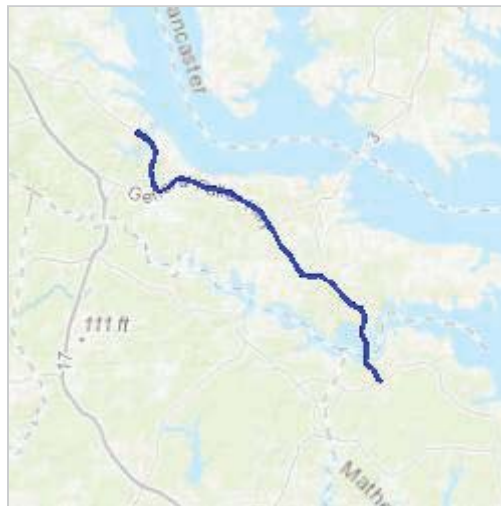
HRSD Middlesex Interceptor Phase 2

2. Description

The following description was provided for the project 'HRSD Middlesex Interceptor Phase 2':

Middlesex Interceptor System Program Phase II – Urbanna to Mathews Transmission Force Main project (MISPPHII) includes the design of approximately 3.2 miles of force main from Urbanna to Cook's Corner in addition to approximately 13 miles of force main along Route 33 between Cook's Corner and the connection to HRSD's Mathews Transmission force main near the intersection of Twiggs Ferry Road and Buckley Hall Road (Route 3/198). The new force main will convey wastewater from Middlesex County to HRSD's York River Treatment Plant and enable decommissioning of both the HRSD Urbanna and Central Middlesex Treatment Plants. The new system will consist of a transmission force main, pump stations, and potential off-line storage tanks. The project will also provide for future connections of the Topping Service Area near the Route 3/ Route 33 intersection and the Deltaville Service Area near Hartfield along General Puller Highway. New pump stations are proposed at the two treatment plants that will be decommissioned in addition to new booster pump stations along the force main alignment.

Approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/place/37.564988186246154N76.4732604043296W>



Determination Key Result

This Federal Action may affect the northern long-eared bat in a manner consistent with the description of activities addressed by the Service's PBO dated January 5, 2016. Any taking that may occur incidental to this Action is not prohibited under the final 4(d) rule at 50 CFR §17.40(o). Therefore, the PBO satisfies your responsibilities for this Action under ESA Section 7(a)(2) relative to the northern long-eared bat.

Determination Key Description: Northern Long-eared Bat 4(d) Rule

This key was last updated in IPaC on May 15, 2017. Keys are subject to periodic revision.

This key is intended for actions that may affect the threatened northern long-eared bat.

The purpose of the key for Federal actions is to assist determinations as to whether proposed actions are consistent with those analyzed in the Service's PBO dated January 5, 2016.

Federal actions that may cause prohibited take of northern long-eared bats, affect ESA-listed species other than the northern long-eared bat, or affect any designated critical habitat, require ESA Section 7(a)(2) consultation in addition to the use of this key. Federal actions that may affect species proposed for listing or critical habitat proposed for designation may require a conference under ESA Section 7(a)(4).

Determination Key Result

This project may affect the threatened Northern long-eared bat; therefore, consultation with the Service pursuant to Section 7(a)(2) of the Endangered Species Act of 1973 (87 Stat.884, as amended; 16 U.S.C. 1531 et seq.) is required. However, based on the information you provided, this project may rely on the Service's January 5, 2016, *Programmatic Biological Opinion on Final 4(d) Rule for the Northern Long-Eared Bat and Activities Excepted from Take Prohibitions* to fulfill its Section 7(a)(2) consultation obligation.

Qualification Interview

1. Is the action authorized, funded, or being carried out by a Federal agency?
Yes
2. Have you determined that the proposed action will have "no effect" on the northern long-eared bat? (If you are unsure select "No")
No
3. Will your activity purposefully **Take** northern long-eared bats?
No
4. Is the project action area located wholly outside the White-nose Syndrome Zone?
Automatically answered
No
5. Have you contacted the appropriate agency to determine if your project is near a known hibernaculum or maternity roost tree?

Location information for northern long-eared bat hibernacula is generally kept in state Natural Heritage Inventory databases – the availability of this data varies state-by-state. Many states provide online access to their data, either directly by providing maps or by providing the opportunity to make a data request. In some cases, to protect those resources, access to the information may be limited. A web page with links to state Natural Heritage Inventory databases and other sources of information on the locations of northern long-eared bat roost trees and hibernacula is available at www.fws.gov/midwest/endangered/mammals/nleb/nhisites.html.

Yes

6. Will the action affect a cave or mine where northern long-eared bats are known to hibernate (i.e., hibernaculum) or could it alter the entrance or the environment (physical or other alteration) of a hibernaculum?

No

7. Will the action involve Tree Removal?

Yes

8. Will the action only remove hazardous trees for the protection of human life or property?

No

9. Will the action remove trees within 0.25 miles of a known northern long-eared bat hibernaculum at any time of year?

No

10. Will the action remove a known occupied northern long-eared bat maternity roost tree or any trees within 150 feet of a known occupied maternity roost tree from June 1 through July 31?

No

Project Questionnaire

If the project includes forest conversion, report the appropriate acreages below. Otherwise, type '0' in questions 1-3.

1. Estimated total acres of forest conversion:

0

2. If known, estimated acres of forest conversion from April 1 to October 31

0

3. If known, estimated acres of forest conversion from June 1 to July 31

0

If the project includes timber harvest, report the appropriate acreages below. Otherwise, type '0' in questions 4-6.

4. Estimated total acres of timber harvest

0

5. If known, estimated acres of timber harvest from April 1 to October 31

0

6. If known, estimated acres of timber harvest from June 1 to July 31

0

If the project includes prescribed fire, report the appropriate acreages below. Otherwise, type '0' in questions 7-9.

7. Estimated total acres of prescribed fire

0

8. If known, estimated acres of prescribed fire from April 1 to October 31

0

9. If known, estimated acres of prescribed fire from June 1 to July 31

0

If the project includes new wind turbines, report the megawatts of wind capacity below. Otherwise, type '0' in question 10.

10. What is the estimated wind capacity (in megawatts) of the new turbine(s)?
0

VaFWIS Search Report Compiled on 5/10/2020, 8:23:25 PM[Help](#)

Known or likely to occur within a **9 mile radius around point 37.5710050 -76.4793470**
in **073 Gloucester County, 103 Lancaster County, 115 Mathews County, 119 Middlesex County, VA**

[View Map of Site Location](#)

524 Known or Likely Species ordered by Status Concern for Conservation
(displaying first 33) (33 species with Status* or Tier I** or Tier II**)

BOVA Code	Status*	Tier**	Common Name	Scientific Name	Confirmed	Database(s)
010031	FESE	Ia	Sturgeon, shortnose	Acipenser brevirostrum		BOVA,HU6
030074	FESE	Ia	Turtle, Kemp's ridley sea	Lepidochelys kempii	Yes	BOVA,SppObs,HU6
010032	FESE	Ib	Sturgeon, Atlantic	Acipenser oxyrinchus	Yes	BOVA,TEWaters,Habitat,SppObs,HU6
030075	FESE	Ic	Turtle, leatherback sea	Dermochelys coriacea		BOVA
030071	FTST	Ia	Turtle, loggerhead sea	Caretta caretta	Yes	BOVA,SppObs
050022	FTST	Ia	Bat, northern long-eared	Myotis septentrionalis		BOVA
030072	FTST	Ib	Turtle, green sea	Chelonia mydas		BOVA
040120	FTST	IIa	Plover, piping	Charadrius melodus		BOVA
100361	FTST	IIa	Beetle, northeastern beach tiger	Cicindela dorsalis dorsalis	Yes	BOVA,Habitat,SppObs,HU6
040110	FPSE	Ia	Rail, eastern black	Laterallus jamaicensis jamaicensis	Potential	BOVA,Habitat,HU6
050020	SE	Ia	Bat, little brown	Myotis lucifugus		BOVA
050027	SE	Ia	Bat, tri-colored	Perimyotis subflavus		BOVA
020052	SE	IIa	Salamander, eastern tiger	Ambystoma tigrinum	Yes	BOVA,Habitat,SppObs,HU6
040096	ST	Ia	Falcon, peregrine	Falco peregrinus	Yes	BOVA,SppObs,HU6
040293	ST	Ia	Shrike,	Lanius		BOVA

			loggerhead	ludovicianus		
040379	ST	Ia	Sparrow, Henslow's	Centronyx henslowii	Potential	Habitat,HU6
020044	ST	IIa	Salamander, Mabee's	Ambystoma mabeei	Yes	BOVA,Habitat,SppObs,HU6
020002	ST	IIa	Treefrog, barking	Hyla gratiosa	Yes	BOVA,SppObs,HU6
040292	ST		Shrike, migrant loggerhead	Lanius ludovicianus migrans		BOVA
030067	CC	IIa	Terrapin, northern diamond-backed	Malaclemys terrapin terrapin	Potential	BOVA,Habitat,HU6
030063	CC	IIIa	Turtle, spotted	Clemmys guttata	Yes	BOVA,SppObs,HU6
040040		Ia	Ibis, glossy	Plegadis falcinellus		BOVA,HU6
070148		Ic	Amphipod, Lancaster County	Crangonyx baculispina		BOVA,HU6
040052		IIa	Duck, American black	Anas rubripes		BOVA,HU6
040033		IIa	Egret, snowy	Egretta thula		BOVA
040029		IIa	Heron, little blue	Egretta caerulea caerulea		BOVA
040036		IIa	Night-heron, yellow-crowned	Nyctanassa violacea violacea		BOVA
040114		IIa	Oystercatcher, American	Haematopus palliatus	Potential	BOVA,Habitat,BBA,HU6
040181		IIa	Tern, common	Sterna hirundo	Potential	BOVA,BBA,HU6
040320		IIa	Warbler, cerulean	Setophaga cerulea		BOVA,HU6
040140		IIa	Woodcock, American	Scolopax minor		BOVA,HU6
040203		IIIb	Cuckoo, black-billed	Coccyzus erythrophthalmus		BOVA
040105		IIb	Rail, king	Rallus elegans		BOVA,HU6

To view **All 524 species** [View 524](#)

*FE=Federal Endangered; FT=Federal Threatened; SE=State Endangered; ST=State Threatened; FP=Federal Proposed; FC=Federal Candidate; CC=Collection Concern

**I=VA Wildlife Action Plan - Tier I - Critical Conservation Need; II=VA Wildlife Action Plan - Tier II - Very High Conservation Need; III=VA Wildlife Action Plan - Tier III - High Conservation Need; IV=VA Wildlife Action Plan - Tier IV - Moderate Conservation Need

Virginia Wildlife Action Plan Conservation Opportunity Ranking:

- a - On the ground management strategies/actions exist and can be feasibly implemented.;
- b - On the ground actions or research needs have been identified but cannot feasibly be implemented at this time.;
- c - No on the ground actions or research needs have been identified or all identified conservation opportunities have been exhausted.

[View Map of All Query Results from All Observation Tables](#)

Bat Colonies or Hibernacula: **Not Known**

Anadromous Fish Use Streams (20 records)

[View Map of All Anadromous Fish Use Streams](#)

Stream ID	Stream Name	Reach Status	Anadromous Fish Species			View Map
			Different Species	Highest TE*	Highest Tier**	
C103	Piankatank	Confirmed	1			Yes
C61	Piankatank river	Confirmed	5		IV	Yes
C69	Rappahannock river 1	Confirmed	6		IV	Yes
P105	Millenbeck prong	Potential	0			Yes
P108	Moran creek	Potential	0			Yes
P111	Myer creek	Potential	0			Yes
P115	My Lady's swamp	Potential	0			Yes
P148	Taylor creek	Potential	0			Yes
P174	Whitehouse creek	Potential	0			Yes
P181	Wilton creek	Potential	0			Yes
P27	Carter creek and coves	Potential	0			Yes
P32	Church prong	Potential	0			Yes
P37	Corrotoman river	Potential	0			Yes
P38	Corrotoman river, East branch	Potential	0			Yes
P39	Corrotoman river, West branch	Potential	0			Yes
P43	Carvers creek	Potential	0			Yes
P52	EB Carter creek	Potential	0			Yes
P55	Ewells prong	Potential	0			Yes
P61	Ferry creek	Potential	0			Yes
P78	Harper Creek	Potential	0			Yes

Impediments to Fish Passage (12 records)

[View Map of All Fish Impediments](#)

ID	Name	River	View Map
67	BARRICKS DAM	MILL CREEK	Yes
138	BURKE DAM	BURKE MILL STREAM	Yes

148	CONRADS DAM	WILTON CREEK	Yes
71	CORBIN HALL FARM DAM	TR-RAPPAHANNOCK RIVER	Yes
139	CYPRESS SHORES DAM	TR-PIANKATANK	Yes
146	GOLDEN EAGLE DAM	DYMER CREEK	Yes
149	GRAYS DAM	TR-DRAGON SWAMP	Yes
140	HAINES POND DAM	CARVERS CREEK	Yes
147	HEALEYS DAM	HEALYS CREEK	Yes
75	LOWER ROSEGILL LAKE DAM	RAPPAHANNOCK RIVER	Yes
70	ROSEGILL UPPER DAM	TR-RAPPAHANNOCK	Yes
74	TOWN BRIDGE POND DAM	TOWN BRIDGE SWAMP	Yes

Colonial Water Bird Survey (29 records - displaying first 20)

[View Map of All Query Results
Colonial Water Bird Survey.](#)

Colony_Name	N Obs	Latest Date	N Species			View Map
			Different Species	Highest TE*	Highest Tier**	
Western Shore, Mathews, Mathews	1	May 17 2013	1			Yes
Western Shore, Wilton, Gloucester	1	May 17 2013	1			Yes
Western Shore, Wilton, Mathews	1	May 17 2013	1			Yes
Western Shore, Wilton, Middlesex	4	May 17 2013	1			Yes
Western Shore, Deltaville, Lancaster	1	May 13 2013	1			Yes
Western Shore, Fleets Bay, Lancaster	1	May 13 2013	1			Yes
Western Shore, Irvington, Lancaster	1	May 13 2013	1			Yes
Western Shore, Urbanna, Lancaster	1	May 13 2013	1			Yes
Western Shore, Saluda, Middlesex	1	May 10 2013	1			Yes
Western Shore, Urbanna, Middlesex	2	May 10 2013	1			Yes
Towles Point	1	May 20 2003	1			Yes
Bland Point	1	May 7 2003	1			Yes
Dancing Creek	1	May 7 2003	1			Yes
Dragon Swamp 1	1	May 7 2003	1			Yes

Dragon Swamp 2	1	May 7 2003	1			Yes
Harper Creek	1	May 7 2003	1			Yes
Healy Creek	1	May 7 2003	1			Yes
Lacklies	2	May 7 2003	1			Yes
Mill Creek	1	May 7 2003	1			Yes
Queens Creek	1	May 7 2003	1			Yes

Displayed 20 Colonial Water Bird Survey

Selected 29 Observations [View all 29 Colonial Water Bird Survey](#)

Threatened and Endangered Waters (24 Reaches - displaying first 20)

[View Map of All Threatened and Endangered Waters](#)

Stream Name	T&E Waters Species						View Map
	Highest TE*	BOVA Code, Status*, Tier**, Common & Scientific Name					
Rappahannock River (041480.)	FESE	010032	FESE	Ib	Sturgeon, Atlantic	Acipenser oxyrinchus	Yes
Rappahannock River (042447.)	FESE	010032	FESE	Ib	Sturgeon, Atlantic	Acipenser oxyrinchus	Yes
Rappahannock River (043895.)	FESE	010032	FESE	Ib	Sturgeon, Atlantic	Acipenser oxyrinchus	Yes
Rappahannock River (047292.)	FESE	010032	FESE	Ib	Sturgeon, Atlantic	Acipenser oxyrinchus	Yes
Rappahannock River (048005.)	FESE	010032	FESE	Ib	Sturgeon, Atlantic	Acipenser oxyrinchus	Yes
Rappahannock River (048034.)	FESE	010032	FESE	Ib	Sturgeon, Atlantic	Acipenser oxyrinchus	Yes
Rappahannock River (048947.)	FESE	010032	FESE	Ib	Sturgeon, Atlantic	Acipenser oxyrinchus	Yes
Rappahannock River (049649.)	FESE	010032	FESE	Ib	Sturgeon, Atlantic	Acipenser oxyrinchus	Yes
Rappahannock River (049903.)	FESE	010032	FESE	Ib	Sturgeon, Atlantic	Acipenser oxyrinchus	Yes
Rappahannock River (052178.)	FESE	010032	FESE	Ib	Sturgeon, Atlantic	Acipenser oxyrinchus	Yes
Rappahannock River (052249.)	FESE	010032	FESE	Ib	Sturgeon, Atlantic	Acipenser oxyrinchus	Yes

Rappahannock River (052465.)	FESE	010032	FESE	Ib	Sturgeon, Atlantic	Acipenser oxyrinchus	Yes
Rappahannock River (052592.)	FESE	010032	FESE	Ib	Sturgeon, Atlantic	Acipenser oxyrinchus	Yes
Rappahannock River (053734.)	FESE	010032	FESE	Ib	Sturgeon, Atlantic	Acipenser oxyrinchus	Yes
Rappahannock River (054572.)	FESE	010032	FESE	Ib	Sturgeon, Atlantic	Acipenser oxyrinchus	Yes
Rappahannock River (054678.)	FESE	010032	FESE	Ib	Sturgeon, Atlantic	Acipenser oxyrinchus	Yes
Rappahannock River (056111.)	FESE	010032	FESE	Ib	Sturgeon, Atlantic	Acipenser oxyrinchus	Yes
Rappahannock River (056242.)	FESE	010032	FESE	Ib	Sturgeon, Atlantic	Acipenser oxyrinchus	Yes
Rappahannock River (056587.)	FESE	010032	FESE	Ib	Sturgeon, Atlantic	Acipenser oxyrinchus	Yes
Rappahannock River (056996.)	FESE	010032	FESE	Ib	Sturgeon, Atlantic	Acipenser oxyrinchus	Yes
Rappahannock River (057272.)	FESE	010032	FESE	Ib	Sturgeon, Atlantic	Acipenser oxyrinchus	Yes
Rappahannock River (057307.)	FESE	010032	FESE	Ib	Sturgeon, Atlantic	Acipenser oxyrinchus	Yes
Rappahannock River (058213.)	FESE	010032	FESE	Ib	Sturgeon, Atlantic	Acipenser oxyrinchus	Yes

To view **All 24 Threatened and Endangered Waters records** [View 24](#)

Managed Trout Streams

N/A

Bald Eagle Concentration Areas and Roosts

N/A

Bald Eagle Nests (56 records)

[View Map of All Query Results
Bald Eagle Nests](#)

Nest	N Obs	Latest Date	DGIF Nest Status	View Map
GL0003	4	Jan 1 2001	HISTORIC	Yes

GL0201	11	Apr 30 2008	Unknown	Yes
GL0403	9	May 13 2008	Unknown	Yes
GL0603	7	Apr 26 2008	UNKNOWN	Yes
GL8101	2	May 13 1982	HISTORIC	Yes
GL8301	5	Jan 1 1987	HISTORIC	Yes
GL8802	7	May 9 1994	HISTORIC	Yes
GL9501	7	Apr 26 2000	HISTORIC	Yes
GL9502	13	Apr 26 2000	HISTORIC	Yes
GL9602	11	Apr 26 2000	HISTORIC	Yes
GL9802	9	Jan 1 2003	HISTORIC	Yes
GL9901	5	Apr 26 2000	HISTORIC	Yes
LA0203	9	May 1 2007	HISTORIC	Yes
LA0302	2	May 1 2003	HISTORIC	Yes
LA0303	9	Mar 13 2008	HISTORIC	Yes
LA0405	7	May 1 2007	HISTORIC	Yes
LA0406	8	Mar 13 2008	UNKNOWN	Yes
LA0407	9	Apr 30 2008	Unknown	Yes
LA0603	5	May 1 2007	Unknown	Yes
LA0701	4	Apr 30 2008	Unknown	Yes
LA0702	3	Mar 13 2008	UNKNOWN	Yes
LA0703	4	Apr 30 2008	UNKNOWN	Yes
LA7502	2	Jan 1 1978	HISTORIC	Yes
LA7902	1	May 26 1979	HISTORIC	Yes
LA9702	2	May 7 1997	HISTORIC	Yes
LA9803	14	Apr 24 2006	HISTORIC	Yes
LA9804	5	Mar 8 1999	HISTORIC	Yes
MA0101	11	May 13 2008	UNKNOWN	Yes
MI0201	2	May 1 2002	HISTORIC	Yes
MI0202	1	Jan 1 2002	HISTORIC	Yes
MI0206	11	Apr 30 2008	HISTORIC	Yes
MI0207	9	Apr 28 2007	HISTORIC	Yes
MI0301	9	Apr 30 2008	Unknown	Yes
MI0401	8	Mar 11 2008	Unknown	Yes
MI0501	4	Apr 23 2006	HISTORIC	Yes
MI0601	7	Apr 30 2008	UNKNOWN	Yes
MI0602	7	Apr 30 2008	Unknown	Yes
MI0603	4	Apr 28 2007	Unknown	Yes
MI0701	2	Apr 28 2007	HISTORIC	Yes
MI0801	2	Apr 30 2008	Unknown	Yes
MI0802	2	Apr 30 2008	Unknown	Yes
MI0803	2	Apr 30 2008	Unknown	Yes

MI0804	2	Apr 30 2008	Unknown	Yes
MI0809	1	Apr 30 2008	UNKNOWN	Yes
MI7703	3	May 15 1980	HISTORIC	Yes
MI7802	1	May 22 1978	HISTORIC	Yes
MI8002	5	May 11 1985	HISTORIC	Yes
MI8301	1	Jan 1 1983	HISTORIC	Yes
MI8402	3	Jan 1 1986	HISTORIC	Yes
MI8501	20	Apr 30 2008	Unknown	Yes
MI8601	14	Apr 26 2000	HISTORIC	Yes
MI8702	17	Apr 21 1997	HISTORIC	Yes
MI9201	14	Jan 1 2001	HISTORIC	Yes
MI9601	24	Apr 30 2008	HISTORIC	Yes
MI9801	7	Apr 26 2000	HISTORIC	Yes
ND0801	2	Apr 30 2008	Unknown	Yes

Displayed 56 Bald Eagle Nests

Species Observations (382 records - displaying first 33 ,
33 Observations with Threatened or
Endangered species)

[View Map of All Query Results](#)
[Species Observations](#)

obsID	class	Date Observed	Observer	N Species			View Map
				Different Species	Highest TE*	Highest Tier**	
605250	SppObs	Jun 23 2008	Ryan; Gill	1	FESE	I	Yes
606377	SppObs	May 30 2008	Ryan; Gill	1	FESE	I	Yes
63014	SppObs	Oct 24 1997	USFWS	1	FESE	I	Yes
62950	SppObs	May 19 1997	USFWS	1	FESE	I	Yes
62999	SppObs	May 10 1997	USFWS	1	FESE	I	Yes
62971	SppObs	Apr 14 1997	USFWS	1	FESE	I	Yes
62970	SppObs	Apr 14 1997	USFWS	1	FESE	I	Yes
62963	SppObs	Apr 4 1997	USFWS	1	FESE	I	Yes
600506	SppObs	Aug 25 2008	Diane; Tulipani	1	FTST	I	Yes
319038	SppObs	Jun 16 2007	John Musick	1	FTST	I	Yes
319033	SppObs	Jun 14 2007	John Musick	1	FTST	I	Yes

313326	SppObs	Jun 24 2005	John Musick (principal permittee), K. Mansfield, M. Fagan & V. Saba collectors	1	FTST	I	Yes
308410	SppObs	Jul 27 2004	Meredith Fagan	1	FTST	I	Yes
308393	SppObs	Jun 2 2004	Meredith Fagan	1	FTST	I	Yes
367026	SppObs	Jan 1 1900		1	FTST	I	Yes
612788	SppObs	Jul 19 2011	Mike; Drummond	1	FTST	II	Yes
50923	SppObs	Oct 30 1997	C. Barry Knisley, Randolph-Macon College	1	FTST	II	Yes
54176	SppObs	Oct 30 1997	C. Barry Knisley, , Randolph-Macon College	1	FTST	II	Yes
9354	SppObs	Oct 21 1996	Barry Knisley, , Dept. of Biology, , Randolph-Macon College	1	FTST	II	Yes
1827	SppObs	Jan 1 1900		1	SE	II	Yes
608479	SppObs	May 27 2010	Bryan; Watts	1	ST	I	Yes
330012	SppObs	May 21 2009	Center for Conservation Biology, College of William and Mary - VCU	1	ST	I	Yes
305439	SppObs	May 1 2004	BRYAN D. WATTS, THE CENTER FOR CONSERVATION BIOLOGY	1	ST	I	Yes
305063	SppObs	May 1 2003	brian watts	1	ST	I	Yes
305427	SppObs	May 1 2003	BRYAN D. WATTS, THE CENTER FOR CONSERVATION BIOLOGY	1	ST	I	Yes
305409	SppObs	May 1 2002	BRYAN D. WATTS, THE CENTER FOR CONSERVATION BIOLOGY	1	ST	I	Yes
305393	SppObs	May 1 2001	BRYAN D. WATTS, THE CENTER FOR CONSERVATION BIOLOGY	1	ST	I	Yes
671	SppObs	Jan 1 1900		1	ST	I	Yes
628442	SppObs	Mar 24 2015	Ellison Orcutt	1	ST	II	Yes
64307	SppObs	Mar 2 2002	STEVEN M. ROBLE PH. D. , STAFF ZOOLOGIST DEPT. CONSERVATION & RECREATION	1	ST	II	Yes
64310	SppObs	Apr 23 2001	ROBERT A. S. WRIGHT (PRINCIPLE PERMITTEE)	1	ST	II	Yes
366148	SppObs	Jan 1 1900		3	ST	II	Yes
29738	SppObs	Jan 1 1900	Mitchell, J. C.	1	CC	III	Yes

Displayed 33 Species Observations

Selected 382 Observations [View all 382 Species Observations](#)

Habitat Predicted for Aquatic WAP Tier I & II Species (1 Reach)

[View Map Combined Reaches from Below of Habitat Predicted for WAP Tier I & II Aquatic Species](#)

Stream Name	Tier Species						View Map
	Highest TE*	BOVA Code, Status*, Tier**, Common & Scientific Name					
Rappahannock River (20801041)	FESE	010032	FESE	Ib	Sturgeon, Atlantic	Acipenser oxyrinchus	Yes
Rappahannock River (20801041)	FESE	010032	FESE	Ib	Sturgeon, Atlantic	Acipenser oxyrinchus	Yes

Habitat Predicted for Terrestrial WAP Tier I & II Species (8 Species)

[View Map of Combined Terrestrial Habitat Predicted for 8 WAP Tier I & II Species Listed Below](#)

ordered by Status Concern for Conservation

BOVA Code	Status*	Tier**	Common Name	Scientific Name	View Map
100361	FTST	IIa	Beetle, northeastern beach tiger	Cicindela dorsalis dorsalis	Yes
040110	FPSE	Ia	Rail, eastern black	Laterallus jamaicensis jamaicensis	Yes
020052	SE	IIa	Salamander, eastern tiger	Ambystoma tigrinum	Yes
040379	ST	Ia	Sparrow, Henslow's	Centronyx henslowii	Yes
020044	ST	IIa	Salamander, Mabee's	Ambystoma mabeei	Yes
030067	CC	IIa	Terrapin, northern diamond-backed	Malaclemys terrapin terrapin	Yes
040114		IIa	Oystercatcher, American	Haematopus palliatus	Yes
040186		IIIa	Tern, least	Sternula antillarum	Yes

Virginia Breeding Bird Atlas Blocks (32 records - displaying first 20)

[View Map of All Query Results Virginia Breeding Bird Atlas Blocks](#)

BBA ID	Atlas Quadrangle Block Name	Breeding Bird Atlas Species			View Map
		Different Species	Highest TE*	Highest Tier**	
57106	Church View, SE	50		III	Yes
60094	Deltaville, CE	1			Yes
60093	Deltaville, CW	46		III	Yes
60091	Deltaville, NW	1			Yes
60095	Deltaville, SW	2		III	Yes
60103	Fleets Bay, CW	2		II	Yes
60105	Fleets Bay, SW	63		III	Yes
58084	Gloucester, CE	1			Yes
59104	Irvington, CE	1			Yes

59103	Irvington, CW	13		III	Yes
59106	Irvington, SE	70		II	Yes
59105	Irvington, SW	1			Yes
60081	Mathews, NW	1			Yes
58094	Saluda, CE	1			Yes
58093	Saluda, CW	5			Yes
58092	Saluda, NE	1			Yes
58091	Saluda, NW	2			Yes
58096	Saluda, SE	52		III	Yes
57096	Shacklefords, SE	1			Yes
58104	Urbana, CE	34		III	Yes

To view All 32 Breeding Bird Atlas records [View 32](#)

Public Holdings:

N/A

Summary of BOVA Species Associated with Cities and Counties of the Commonwealth of Virginia:

FIPS Code	City and County Name	Different Species	Highest TE	Highest Tier
073	Gloucester	409	FESE	I
103	Lancaster	361	FESE	I
115	Mathews	372	FESE	I
119	Middlesex	386	FESE	I

USGS 7.5' Quadrangles:

Shacklefords
Church View
Gloucester
Saluda
Urbana
Ware Neck
Wilton
Irvington
Mathews
Deltaville
Fleets Bay

USGS NRCS Watersheds in Virginia:

N/A

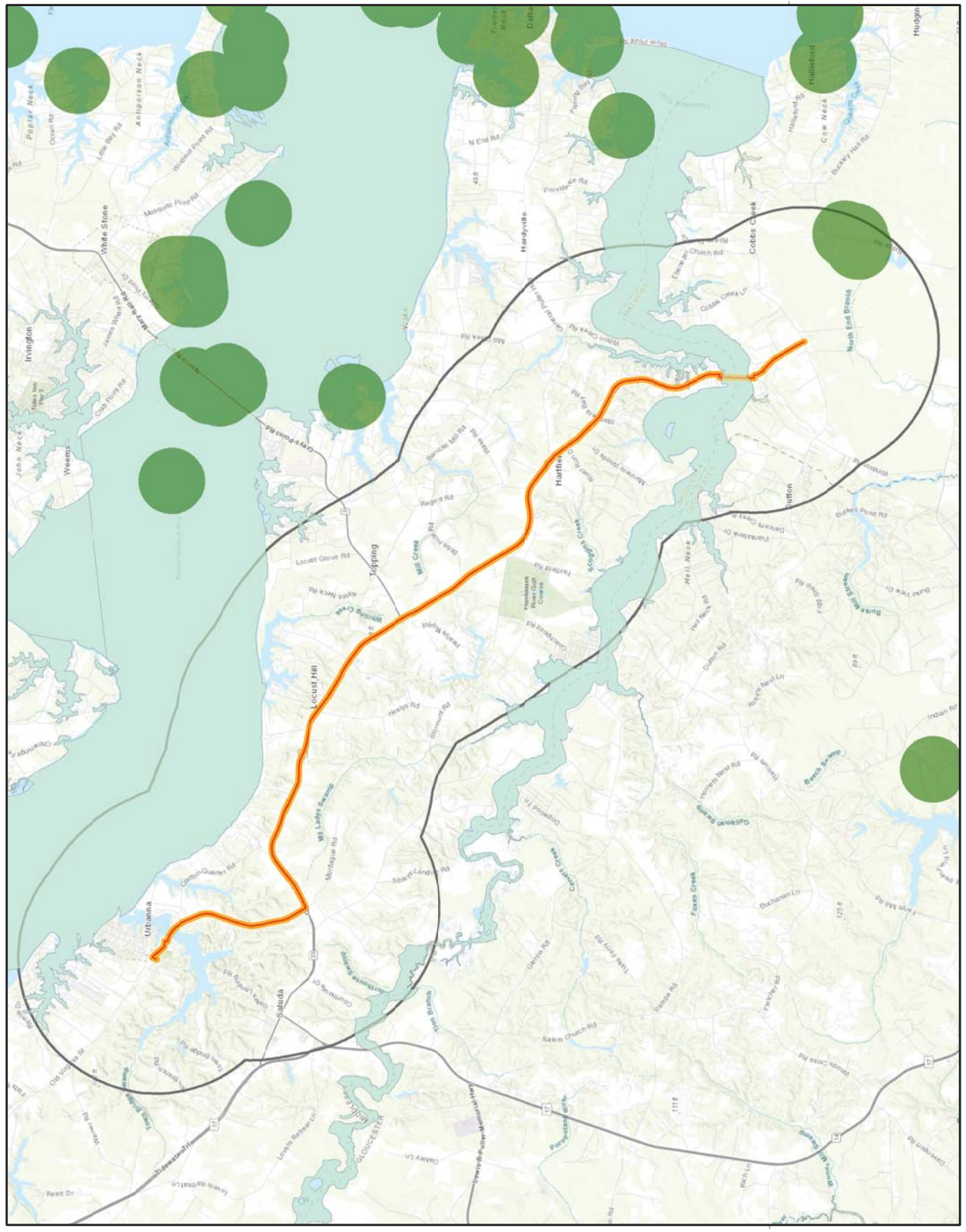
USGS National 6th Order Watersheds Summary of Wildlife Action Plan Tier I, II, III, and IV Species:

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HU6 Code	USGS 6th Order Hydrologic Unit	Different Species	Highest TE	Highest Tier
CB05	Lower Chesapeake Bay-Fleets Bay	64	FTSE	I
CB09	Dragon Swamp-Meggs Bay	67	SS	II
CB10	Piankatank River-Carvers Creek	74	ST	I
CB11	Piankatank River-Hills Bay	69	FESE	I
CB12	Lower Chesapeake Bay-Milford Haven	67	FESE	I
CB13	Beaverdam Swamp	59	ST	II
CB16	North River	69	SE	I
CB17	East River	61	FPSE	I
RA68	Rappahannock River-Parrotts Creek	57	FESE	I
RA69	Rappahannock River-Lagrange Creek	53	FESE	I
RA70	Western Branch Corrotoman River	55	SS	I
RA71	Eastern Branch Corrotoman River	56	SS	I
RA72	Corrotoman River-Taylor Creek	50	SS	I
RA73	Rappahannock River-Carter Creek	53	FESE	I
RA74	Rappahannock River-Locklies Creek	58	FESE	I
YO64	Poropotank River	61	ST	II

Compiled on 5/10/2020, 8:23:25 PM 11030146.0 report=all searchType=R dist= 14481 poi= 37.5710050 -76.4793470

PixelSize=256; Anadromous=0.045467; BBA=0.060555; BECAR=0.023428; Bats=0.025008; Buffer=0.124652; County=0.095682; HU6=0.105254; Impediments=0.037539; Init=0.212239; PublicLands=0.035434; Quad=0.0651969999999999; SppObs=0.437087; TEWaters=0.051577; TierReaches=0.061709; TierTerrestrial=0.04646; Total=1.584931; Tracking_BOVA=0.176575; Trout=0.033516; huva=0.053914



Legend

- WERMS Listed Species Observations
- WERMS Anadromous Fish Use
- Alignment
- 150 Foot Buffer
- 2 Mile Buffer



VDGIF Listed Species Observations and Anadromous Fish Use

Prepared For:
Middlesex Interceptor Program Phase II

Prepared By:
Emily Foster

Date:
5/27/2020

Source:
 Esri et al. 2020, World Topo Map
 VDGIF Wildlife Environmental Review Map Service
 (WERMS), 2020.

Coordinate System: World Geodetic System, 1984
 Universal Transverse Mercator, Zone 18 North

Natural Heritage Resources

Your Criteria

Taxonomic Group: Select All

Federal Legal Status: Select All

State Legal Status: Select All

Watershed (8 digit HUC): 02080102 - Great Wicomico-Piankatank,02080104 - Lower Rappahannock River

Subwatershed (12 digit HUC): CB10 - Piankatank River-Carvers Creek,CB11 - Piankatank River-Hills Bay,CB16 - North River-Blackwater Creek-Elmington Creek,RA69 - Rappahannock River-Lagrange Creek,RA73 - Rappahannock River-Carter Creek,RA74 - Rappahannock River-Locklies Creek

Search Run: 5/10/2020 20:41:33 PM

Result Summary

Total Species returned: 9

Total Communities returned: 0

Click scientific names below to go to NatureServe report.

Click column headings for an explanation of species and community ranks.

Common Name/Community	Scientific Name	Scientific Name Linked	Global Conservation Status Rank	State Conservation Status Rank	Federal Legal Status	State Legal Status	Statewide Occurrences	Virginia Coastal Zone
Great Wicomico-Piankatank								
Piankatank River-Hills Bay								
COLEOPTERA (BEETLES)								
Northeastern Cicindela		Cicindela	G3G4T2	S2	LT	LT	18	Y
Beach Tiger	dorsalis	dorsalis						
Beetle	dorsalis	dorsalis						
Rappahannock River-Carter Creek								
COLEOPTERA (BEETLES)								
Northeastern Cicindela		Cicindela	G3G4T2	S2	LT	LT	18	Y
Beach Tiger	dorsalis	dorsalis						
Beetle	dorsalis	dorsalis						
Rappahannock River-Locklies Creek								
COLEOPTERA (BEETLES)								
Northeastern Cicindela		Cicindela	G3G4T2	S2	LT	LT	18	Y
Beach Tiger	dorsalis	dorsalis						
Beetle	dorsalis	dorsalis						
Lower Rappahannock								
Rappahannock River-Carter Creek								
BIRDS								
Peregrine	Falco	Falco	G4	S1B,S2N	None	LT	36	Y
Falcon	peregrinus	peregrinus						
COLEOPTERA (BEETLES)								
Northeastern Cicindela		Cicindela	G3G4T2	S2	LT	LT	18	Y
Beach Tiger	dorsalis	dorsalis						
Beetle	dorsalis	dorsalis						
VASCULAR PLANTS								
Sensitive	Aeschynome	Aeschynome	G2	S2	LT	LT	22	Y
Joint-vetch	ne virginica	ne virginica						
Rappahannock River-Lagrange Creek								
VASCULAR PLANTS								

Common Name/Community	Scientific Name	Scientific Name Linked	Global Conservation Status Rank	State Conservation Status Rank	Federal Legal Status	State Legal Status	Statewide Occurrences	Virginia Coastal Zone
Sensitive Joint-vetch	Aeschynome ne virginica	Aeschynome ne virginica	G2	S2	LT	LT	22	Y
Rappahannock River-Locklites Creek								
COLEOPTERA (BEETLES)								
Northeastern Beach Tiger Beetle	Cicindela dorsalis	Cicindela dorsalis	G3G4T2	S2	LT	LT	18	Y
VASCULAR PLANTS								
Sensitive Joint-vetch	Aeschynome ne virginica	Aeschynome ne virginica	G2	S2	LT	LT	22	Y

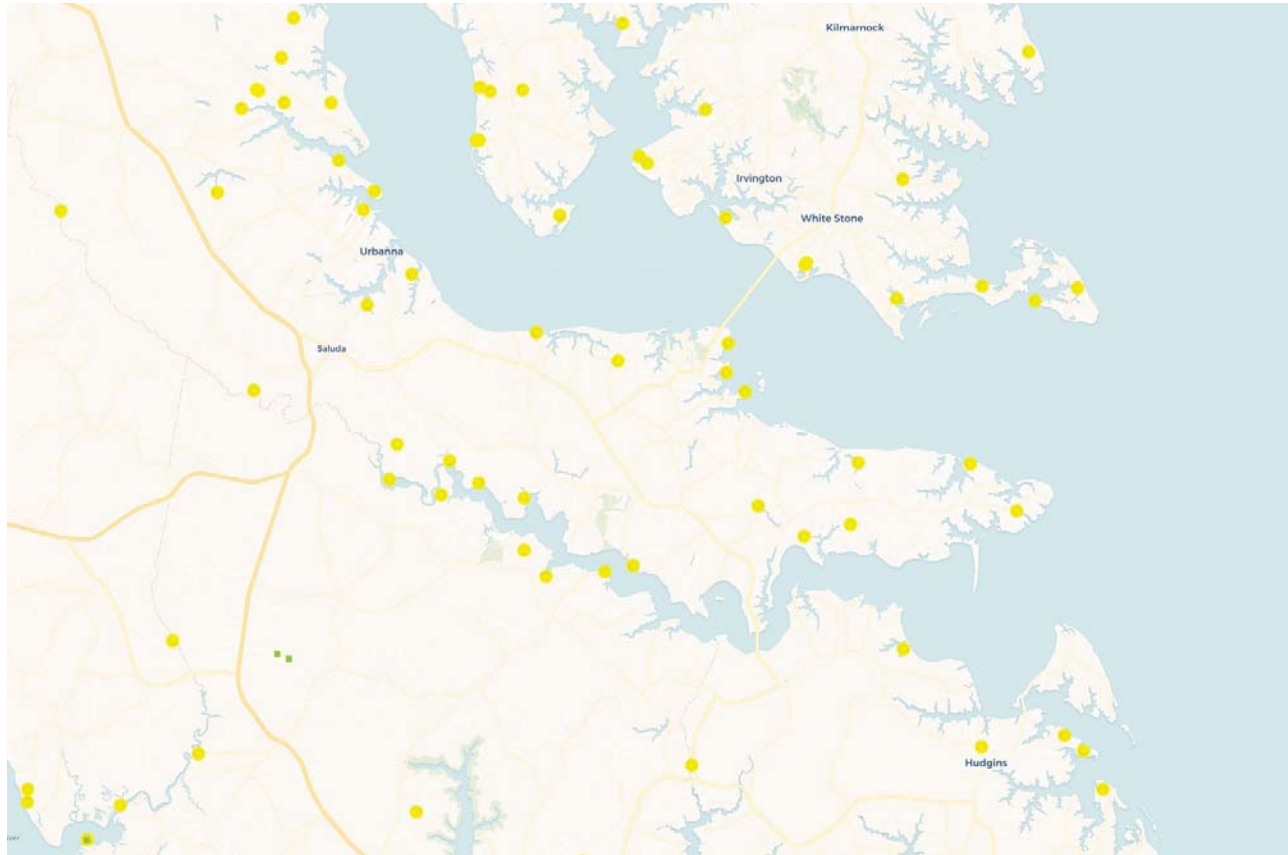
Note: On-line queries provide basic information from DCR's databases at the time of the request. They are NOT to be substituted for a project review or for on-site surveys required for environmental assessments of specific project areas.

For Additional Information on locations of Natural Heritage Resources please submit an [information request](#).

To Contribute information on locations of natural heritage resources, please fill out and submit a [rare species sighting form](#).



CCB Mapping Portal



Layers: VA Eagle Nest Locator, VA Eagle Nest Buffers, Eagle Roosts, Eagle Roost Polygons, Eagle Roost Buffers

Map Center [longitude, latitude]: [-76.46896362304688, 37.575603207605845]

Map Link:

https://ccbbirds.org/maps/#layer=VA+Eagle+Nest+Locator&layer=VA+Eagle+Nest+Buffers&layer=Eagle+Roosts&layer=Eagle+Roost+Polygons&layer=Eagle+Roost+Buffers&zoom=12&lat=37.575603207605845&lng=-76.46896362304688&legend=legend_tab_4ca7337c-c07d-11e5-93bc-0ecfd53eb7d3&base=Street+Map+%28OSM%2FCarto%29

Report Generated On: 05/10/2020

The Center for Conservation Biology (CCB) provides certain data online as a free service to the public and the regulatory sector. CCB encourages the use of its data sets in wildlife conservation and management applications. These data are protected by intellectual property laws. All users are reminded to view the [Data Use Agreement](#) to ensure compliance with our data use policies. For additional data access questions, view our [Data Distribution Policy](#), or contact our Data Manager, Marie Pitts, at mlpitts@wm.edu or 757-221-7503.

Report generated by [The Center for Conservation Biology Mapping Portal](#).

To learn more about CCB visit ccbbirds.org or contact us at info@ccbbirds.org

Appendix K: Anticipated Easement & Property Acquisition Tables

MISPPIL Force Main Easement Table

County	Parcel Number	Landowner (County GIS)	Total Parcel Area (acres)	Total Parcel Area (GIS) (sq. ft)	Property Value (GIS)	Property Value + 20%	Fee Value (per sq. ft)	Temp. Construction Easement (sq. ft)	Perm. Easement (sq. ft)	Temp. Construction Easement Cost	Perm. Easement Cost	Total Easement Cost	Comments
Middlesex	01	JUDITH PITTS & JAMES TITTEE	0.70	30,462.00	\$306,000	\$367,200	\$12.04	8637	3636	\$20,802.22	\$21,893.27	\$42,695.49	
Middlesex	02	ROSE GIL DEVELOPMENT LLC	104.50	4,552,020.00	\$1,593,000	\$1,911,600	\$0.35	33508	23512	\$2,345.26	\$4,114.07	\$6,459.32	
Middlesex	03	ROSE GIL FARM LLC	736.80	32,095,008.00	\$4,870,900	\$5,845,080	\$0.18	23442	0	\$853.84	\$0.00	\$853.84	
Middlesex	04	BROOKS, NANCY G	0.97	42,366.08	\$32,500	\$39,000	\$0.92	1312	0	\$242.70	\$0.00	\$242.70	
Middlesex	05	JACKES HENRY LOVELL	2.00	87,120.00	\$37,500	\$45,000	\$0.52	2097	0	\$216.63	\$0.00	\$216.63	
Middlesex	06	CONNOR, FORREST D	2.00	87,120.00	\$67,500	\$81,000	\$0.93	1275	0	\$237.09	\$0.00	\$237.09	
Middlesex	07	REED ROBERT EST/O GOLDIE MILES	9.24	402,276.60	\$49,700	\$59,640	\$0.15	3103	0	\$92.01	\$0.00	\$92.01	
Middlesex	08	WALLACE/LOTTIE HOLIDAY	1.00	43,560.00	\$25,000	\$30,000	\$0.69	1340	0	\$184.57	\$0.00	\$184.57	
Middlesex	09	BASHER, DIANE COX	16.88	735,249.24	\$64,700	\$77,640	\$0.11	4600	0	\$97.15	\$0.00	\$97.15	
Middlesex	10	CHASE MARGO L & HILTON BREWSTER	1.50	65,340.00	\$35,000	\$42,000	\$0.64	1668	0	\$214.44	\$0.00	\$214.44	
Middlesex	11	JANE GLORIA & EVAN	7.61	331,491.60	\$58,900	\$70,680	\$0.21	2820	0	\$120.25	\$0.00	\$120.25	
Middlesex	12	ENGLAND JOHN D & VERA A	8.90	387,684.00	\$48,700	\$58,440	\$0.15	3101	0	\$93.49	\$0.00	\$93.49	
Middlesex	13	JACKSON ESTELLE W & WILLIE	1.00	43,560.00	\$25,000	\$30,000	\$0.69	1818	0	\$250.41	\$0.00	\$250.41	
Middlesex	14	LEE STANLEY M ETAL	9.25	402,930.00	\$53,100	\$63,720	\$0.16	8230	0	\$260.30	\$0.00	\$260.30	
Middlesex	15	LAUGHTON FAMILY TRUST DAVID J & HAZELL LAUGHTON TRUSTEES	1.53	66,690.36	\$35,200	\$42,240	\$0.63	4322	0	\$547.49	\$0.00	\$547.49	
Middlesex	16	BEVERLY CHARLES & BEUNDA W	0.89	38,942.64	\$32,500	\$39,000	\$1.00	5640	0	\$1,129.66	\$0.00	\$1,129.66	
Middlesex	17	GALE JAMES D	14.16	616,853.16	\$64,500	\$77,400	\$0.13	1575	0	\$39.52	\$0.00	\$39.52	
Middlesex	18	GALE JAMES D	1.10	47,916.00	\$48,300	\$57,960	\$1.21	1848	0	\$447.07	\$0.00	\$447.07	
Middlesex	19	COOKE PAULNETTA R/S JAMES C YOUNG R/S C/O PAULNETTA YOUNG	1.90	82,546.20	\$37,000	\$44,400	\$0.54	1317	0	\$141.68	\$0.00	\$141.68	Land value unknown, used adjacent property info
Middlesex	20	WAKE HERMAN & ANNIE LEE	2.64	115,172.64	\$51,624	\$61,949	\$0.54	738	0	\$79.39	\$0.00	\$79.39	
Middlesex	21	SMITH PEARL & LUCILLE	0.50	21,780.00	\$23,000	\$27,600	\$1.27	1010	0	\$255.98	\$0.00	\$255.98	
Middlesex	22	FISHER ROY EDWARD II	2.50	108,900.00	\$40,000	\$48,000	\$0.44	1588	0	\$139.99	\$0.00	\$139.99	
Middlesex	23	FISHER ROY EDWARD II	2.92	126,977.40	\$40,000	\$48,000	\$0.38	1588	0	\$120.06	\$0.00	\$120.06	
Middlesex	24	FISHER ROY EDWARD II	2.61	113,756.94	\$55,600	\$66,720	\$0.59	1870	0	\$219.36	\$0.00	\$219.36	
Middlesex	25	FISHER ROY EDWARD II	0.06	2,657.16	\$200	\$240	\$0.09	595	0	\$10.75	\$0.00	\$10.75	
Middlesex	26	WAKE HERMAN & ANNIE LEE	5.91	257,469.60	\$39,700	\$47,640	\$0.19	2284	0	\$84.53	\$0.00	\$84.53	
Middlesex	27	ACKLES BERNICE	0.24	10,367.28	\$1,599	\$1,918	\$0.19	840	0	\$31.09	\$0.00	\$31.09	Land value unknown, used adjacent property info
Middlesex	28	VA POWER	0.16	6,838.92	\$1,055	\$1,266	\$0.19	738	0	\$27.31	\$0.00	\$27.31	Land value unknown, used adjacent property info
Middlesex	29	DAVIS JAMES ETAL	0.71	30,927.60	\$56,800	\$68,160	\$2.20	945	0	\$416.53	\$0.00	\$416.53	
Middlesex	30	MILLER VIRGIL	0.30	12,937.32	\$23,760	\$28,512	\$2.20	755	0	\$332.78	\$0.00	\$332.78	Land value unknown, used adjacent property info
Middlesex	31	SHORES IRFAMILY TR	0.45	19,776.24	\$68,100	\$81,720	\$4.13	2107	0	\$1,741.32	\$0.00	\$1,741.32	
Middlesex	32	MAJOR FAMILY TRUST T/C MAJOR BRIAN M	29.91	1,302,857.82	\$89,700	\$107,640	\$0.08	835	0	\$13.80	\$0.00	\$13.80	
Middlesex	33	FLEET ENTERPRISES LLC	3.28	142,659.00	\$166,400	\$199,680	\$1.40	412	0	\$115.34	\$0.00	\$115.34	
Middlesex	34	SHEPPARD WILLIAM M & KATHERINE LR	0.46	19,994.04	\$18,000	\$21,600	\$1.08	1014	0	\$219.09	\$0.00	\$219.09	
Middlesex	35	DELAWARE CORPORATION	37.78	1,645,779.56	\$266,700	\$320,040	\$0.19	1264	0	\$49.16	\$0.00	\$49.16	
Middlesex	36	STEVEN P. & TERRY M. SKINNER	2.22	96,572.52	\$99,500	\$119,400	\$1.24	1706	0	\$421.85	\$0.00	\$421.85	
Middlesex	37	LOT INTERNATIONAL INC/O	19.52	850,291.20	\$212,600	\$255,120	\$0.30	2360	28076	\$141.62	\$4,211.94	\$4,353.56	
Middlesex	38	REVERE FAMILY LLC	1.10	47,916.00	\$144,000	\$172,800	\$3.61	0	2941	\$0.00	\$5,303.08	\$5,303.08	
Middlesex	39	REVERE FAMILY LLC	19.30	840,708.00	\$179,000	\$214,800	\$0.26	4651	0	\$0.00	\$5,921.32	\$5,921.32	
Middlesex	40	REVERE FAMILY LLC	17.57	765,349.20	\$35,100	\$42,120	\$0.06	11877	0	\$0.00	\$326.82	\$326.82	
Middlesex	41	LINCOLN DOUGLAS AND ANGEL H	4.00	174,240.00	\$80,000	\$96,000	\$0.55	0	11636	\$0.00	\$3,205.51	\$3,205.51	

MISPPIL Force Main Easement Table

County	Parcel Number	Landowner (County GIS)	Total Parcel Area (acres)	Total Parcel Area (GIS) (sq. ft)	Property Value (GIS)	Property Value + 20%	Fee Value (per sq. ft)	Temp. Construction Easement (sq. ft)	Perm. Easement (sq. ft)	Temp. Construction Easement Cost	Perm. Easement Cost	Total Easement Cost	Comments
Middlesex	42	MAJORBRIAN M & LISA M R/S	2.00	87,120.00	\$41,400	\$49,680	\$0.57	0	0	\$0.00	\$1,512.87	\$1,512.87	
Middlesex	43	FOMINYURIY DANIL	2.56	111,513.60	\$39,500	\$47,400	\$0.43	0	0	\$0.00	\$1,207.17	\$1,207.17	
Middlesex	44	FOMINYURIY DANIL	2.52	109,771.20	\$39,100	\$46,920	\$0.43	0	0	\$0.00	\$1,229.30	\$1,229.30	
Middlesex	45	JOHNSON MICHAEL A SR & ELLEN M	11.07	482,209.20	\$38,100	\$46,720	\$0.09	0	0	\$0.00	\$147.44	\$147.44	
Middlesex	46	CASEY ARTHUR RUFUS C/O ELLA MAE CASEY	2.00	87,120.00	\$34,000	\$40,800	\$0.47	0	0	\$0.00	\$414.46	\$414.46	
Middlesex	47	GWYNN WOODLAN ETAL C/O SHEILA GWYNN CLUTCHER	0.25	10,890.00	\$500	\$600	\$0.06	0	0	\$0.00	\$397.55	\$397.55	
Middlesex	48	FORSTYNTHIA D	0.80	34,848.00	\$40,500	\$48,600	\$1.39	0	0	\$0.00	\$5,085.51	\$5,085.51	
Middlesex	49	STEVENS MARGARET M	0.75	32,670.00	\$42,500	\$51,000	\$1.56	0	0	\$0.00	\$6,810.93	\$6,810.93	
Middlesex	50	B.V.W. LLC	0.70	30,579.12	\$4,200	\$5,040	\$0.16	0	0	\$0.00	\$1,002.43	\$1,002.43	
Middlesex	51	JAMES MURRAY	0.88	38,419.92	\$38,000	\$45,600	\$1.19	0	0	\$0.00	\$5,813.95	\$5,813.95	
Middlesex	52						Not Used						
Middlesex	53	THOMAS SUSAN BELVIN	0.52	22,433.40	\$37,500	\$45,000.00	\$2.01	1850	0	\$742.20	\$5,542.41	\$6,284.60	
Middlesex	54	THOMAS DONALD W & THELMA C	1.55	67,605.12	\$51,400	\$61,680	\$0.91	0	0	\$0.00	\$1,674.17	\$1,674.17	
Middlesex	55	SUTHERLIN CAMILLA	4.00	174,240.00	\$65,500	\$78,600	\$0.45	0	0	\$0.00	\$311.71	\$311.71	
Middlesex	56	SUTHERLIN JAMES A ETA	1.00	48,560.00	\$47,500	\$57,000	\$1.31	0	0	\$0.00	\$4,404.55	\$4,404.55	
Middlesex	57	REVERE FAMILY LLC	10.01	435,861.36	\$81,000	\$97,200	\$0.22	0	0	\$0.00	\$2,442.15	\$2,442.15	
Middlesex	58	MCCALLON MACK M & VICKIE R/S	4.00	174,327.12	\$65,500	\$78,600	\$0.45	0	0	\$0.00	\$2,439.47	\$2,439.47	
Middlesex	59	JONES CLARENCE D	4.53	197,326.80	\$68,700	\$82,440	\$0.42	0	0	\$0.00	\$764.34	\$764.34	
Middlesex	60						Not Used						
Middlesex	61	MCCRACKEN DEBRAH T	0.35	15,246.00	\$2,500	\$3,000	\$0.20	0	0	\$0.00	\$97.50	\$97.50	
Middlesex	62	MCCRACKEN DEBRA	0.69	30,056.40	\$41,500	\$49,800	\$1.66	0	0	\$0.00	\$221.19	\$221.19	
Middlesex	63	MCCRACKEN DEBRAH T	0.07	3,049.20	\$500	\$600	\$0.20	0	0	\$0.00	\$162.24	\$162.24	
Middlesex	64	WHITE MACEVAUR	120.79	5,261,612.40	\$227,200	\$272,640	\$0.05	0	0	\$0.00	\$2,992.42	\$2,992.42	
Middlesex	65	COVES AT WILTON CREEK OWNERS ASSOC	50.46	2,198,081.16	\$94,915	\$113,898	\$0.05	0	0	\$0.00	\$866.64	\$866.64	Land value unknown, used adjacent property info
Middlesex	66	JONES PHILLIP W & MARY A R/S	3.62	157,730.76	\$65,700	\$78,840	\$0.50	0	0	\$0.00	\$4,329.61	\$4,329.61	
Middlesex	67	DOVE GREGORY & SUSAN L R/S	2.33	101,494.80	\$49,300	\$59,160	\$0.58	0	0	\$0.00	\$1,986.48	\$1,986.48	
Middlesex	68	LUNK	3.38	147,232.80	\$250,300	\$300,360	\$2.04	0	0	\$0.00	\$19,772.01	\$19,772.01	
Middlesex	69	GLASCO ANTHONY L & WENDY K R/	3.38	147,232.80	\$250,300	\$300,360	\$2.04	0	0	\$0.00	\$13,410.17	\$13,410.17	
Middlesex	70	ELIAS MANDY	4.25	185,130.00	\$250,000	\$300,000	\$1.62	0	0	\$0.00	\$6,968.08	\$6,968.08	
Middlesex	71	ECC RIVER LLC	3.42	148,975.20	\$246,400	\$295,680	\$1.98	0	0	\$0.00	\$7,659.19	\$7,659.19	
Middlesex	72	ECC RIVER LLC	2.00	87,120.00	\$300,000	\$360,000	\$4.13	0	0	\$0.00	\$3,661.16	\$3,661.16	
Middlesex	73	JONES ROBERT BRUCE ETAL	1.58	68,824.80	\$222,000	\$266,400	\$3.87	0	0	\$0.00	\$1,379.90	\$1,379.90	
Middlesex	74	CAROLINA WALTON	3.27	142,441.20	\$385,500	\$462,600	\$3.25	0	0	\$0.00	\$5,980.88	\$5,980.88	
Mathews	75	CASASA, MARY H.	1.81	78,843.60	\$187,800	\$225,360	\$2.86	0	0	\$0.00	\$16,845.49	\$16,845.49	
Mathews	76	CASASA, MARY H.	2.91	126,759.60	\$200,000	\$240,000	\$1.89	0	0	\$0.00	\$2,773.75	\$2,773.75	
Mathews	77	VEREIT REAL ESTATE	1.88	81,892.80	\$164,000	\$196,800	\$2.40	0	0	\$0.00	\$390.27	\$390.27	
Mathews	78						Not Used						
Middlesex	79	WILLIAM S SHEPARD MILLER III	144.88	6,310,972.80	\$956,208	\$1,147,450	\$0.18	340	0	\$12.36	\$0.00	\$12.36	Land value unknown, used adjacent property info
Middlesex	80	JOHN AND BARBARA MULLINS	1.74	75,794.40	\$217,500	\$261,000	\$3.44	0	0	\$891.87	\$0.00	\$891.87	
Mathews	81	HUDGINS, GAVILA K.	38.08	1,658,964.80	\$609,200	\$731,040	\$0.44	3800	0	\$334.94	\$0.00	\$334.94	
Mathews	82	WILLIAMS, JAMES M. & KIMBERLY U.	2.71	117,960.48	\$31,800	\$38,160	\$0.32	0	0	\$105.65	\$0.00	\$105.65	
Mathews	83						Not Used						
Mathews	88	Seima M Tremmer	4.500	196,020.00	\$39,000	\$46,800	\$0.24	2535	0	\$121.05	\$0.00	\$121.05	
							Totals	163,000	5,079,888	\$44,088.71	\$1,886,032.13	\$230,120.84	
							Total Acres	3.74	11.66				

Appendix L: Detailed Opinion of Probable Construction Costs



Middlesex Interceptor Program Phase II- MP013710 Middlesex Saluda Pump Station PER OPCC					
Engineer: Kimley-Horn and Associates				Date: 12/16/2020	
Item Number	Item	Unit	Total Quantity	Unit Cost	Total Cost
1	Mobilization (6%)	LS	1	\$ 87,000.00	\$ 87,000.00
2	3" DIPS HDPE Force Main (DR 7.3)	LF	1676	\$ 135.00	\$ 226,260.00
3	2" Air Vent	EA	2	\$ 6,450.00	\$ 12,900.00
4	3" Gate Valve & Box	EA	1	\$ 2,000.00	\$ 2,000.00
5	Connection to Exist 3" HDPE Force Main (Saluda)	LS	1	\$ 7,000.00	\$ 7,000.00
6	Pavement Patch	LF	1676	\$ 60.00	\$ 100,560.00
7	Mill & Overlay	SY	4535	\$ 20.00	\$ 90,700.00
8	Traffic Control	LS	1	\$ 14,000.00	\$ 14,000.00
9	Pump Station & Treatment Plant Decommissioning	LS	1	\$ 978,100.00	\$ 978,100.00
10	Undercut Excavation/Select Fill of Undercut Excavation	CY	93	\$ 75.00	\$ 6,975.00
11	Allowance Private Utility Relocation	LS	1	\$ 10,000.00	\$ 10,000.00
				Subtotals	\$ 1,535,495.00
				Total Project Cost (Rounded)	\$ 1,535,500.00

The Consultant has no control over the cost of labor, materials, equipment, or over the Contractor's methods of determining prices or over competitive bidding or market conditions. Opinions of probable costs provided herein are based on the information known to Consultant at this time and represent only the Consultant's judgment as a design professional familiar with the construction industry. The Consultant cannot and does not guarantee that proposals, bids, or actual construction costs will not vary from its opinions of probable costs.



Middlesex Interceptor Program Phase II- MP013720 Hartfield Pump Station PER OPCC					
Engineer: Kimley-Horn and Associates				Date: 12/16/2020	
Item Number	Item	Unit	Total Quantity	Unit Cost	Total Cost
1	Mobilization (6%)	LS	1	\$ 202,000.00	\$ 202,000.00
1	8" DIPS HDPE Force Main (DR 11)	LF	1564	\$ 155.00	\$ 242,420.00
2	Jack & Bore 20" Steel Encasement	LF	154	\$ 1,400.00	\$ 215,600.00
3	2" Air Vent	EA	2	\$ 6,450.00	\$ 12,900.00
4	8" Gate Valve & Box	EA	2	\$ 3,000.00	\$ 6,000.00
5	Pavement Patch	LF	430	\$ 85.00	\$ 36,550.00
6	Mill & Overlay	SY	1554	\$ 20.00	\$ 31,080.00
7	Traffic Control	LS	1	\$ 17,000.00	\$ 17,000.00
8	Pump Station	LS	1	\$ 2,765,900.00	\$ 2,765,900.00
9	Undercut Excavation/Select Fill of Undercut Excavation	CY	104	\$ 75.00	\$ 7,800.00
10	Allowance Private Utility Relocation	LS	1	\$ 20,000.00	\$ 20,000.00
				Subtotals	\$ 3,557,250.00
				Total Project Cost (Rounded)	\$ 3,557,300.00

The Consultant has no control over the cost of labor, materials, equipment, or over the Contractor's methods of determining prices or over competitive bidding or market conditions. Opinions of probable costs provided herein are based on the information known to Consultant at this time and represent only the Consultant's judgment as a design professional familiar with the construction industry. The Consultant cannot and does not guarantee that proposals, bids, or actual construction costs will not vary from its opinions of probable costs.



Middlesex Interceptor Program Phase II- MP013730 Middlesex Transmission Force Main PER OPCC					
Engineer: Kimley-Horn and Associates				Date: 12/16/2020	
Item Number	Item	Unit	Total Quantity	Unit Cost	Total Cost
1	Mobilization (6%)	LS	1	\$ 1,270,000.00	\$ 1,270,000.00
2	8" DIPS HDPE Force Main (DR 11)	LF	83106	\$ 105.00	\$ 8,726,130.00
3	Jack & Bore 20" Steel Encasement	LF	3274	\$ 1,270.00	\$ 4,157,980.00
4	2" Air Vent	EA	24	\$ 6,450.00	\$ 154,800.00
5	Blowoff & Manhole	EA	8	\$ 7,600.00	\$ 60,800.00
6	8" Gate Valve & Box	EA	28	\$ 3,000.00	\$ 84,000.00
7	Connection to Exist 6" HDPE Force Main (Mathews)	LS	1	\$ 32,000.00	\$ 32,000.00
8	Pavement Patch	LF	4016	\$ 85.00	\$ 341,360.00
9	Mill & Overlay	SY	11302	\$ 20.00	\$ 226,040.00
10	Traffic Control	LS	1	\$ 500,000.00	\$ 500,000.00
11	Undercut Excavation/Select Fill of Undercut Excavation	CY	4651	\$ 75.00	\$ 348,825.00
12	Replace Concrete Curb	LF	1600	\$ 30.00	\$ 48,000.00
13	Urbanna Creek HDD	LS	1	\$ 375,000.00	\$ 375,000.00
14	Painkatank River HDD	LS	1	\$ 550,000.00	\$ 550,000.00
15	Urbanna Pump Station & Treatment Plant Decomissioning	LS	1	\$ 1,005,000.00	\$ 1,005,000.00
16	Locust Hill Pump Station	LS	1	\$ 1,438,000.00	\$ 1,438,000.00
17	Cooks Corner PS Improvements	LS	1	\$ 240,000.00	\$ 240,000.00
18	County Line & Beaver Dam Pump Station Improvements	LS	1	\$ 869,000.00	\$ 869,000.00
19	New Pump Station in Gloucester	LS	1	\$ 2,000,000.00	\$ 2,000,000.00
Subtotals					\$ 22,426,935.00
Total Project Cost (Rounded)					\$ 22,426,900.00

The Consultant has no control over the cost of labor, materials, equipment, or over the Contractor's methods of determining prices or over competitive bidding or market conditions. Opinions of probable costs provided herein are based on the information known to Consultant at this time and represent only the Consultant's judgment as a design professional familiar with the construction industry. The Consultant cannot and does not guarantee that proposals, bids, or actual construction costs will not vary from its opinions of probable costs.

Appendix M: Envision[®] Pre-Assessment Checklist

Summary Results

SEE ATTACHMENT A FOR
ASSESSMENT JUSTIFICATIONS

Credit Assessment Status	Evaluation Questions Assessed		Assessment Status						Assessed Maximum Points Available	Total Maximum Points		
	Yes	No	Improved	Enhanced	Superior	Conserving	Restorative	Points				
Wellbeing	QL1.1	Improve Community Quality of Life	7	0	0	0	0	0	26	26	26	
	QL1.2	Enhance Public Health & Safety	4	2	0	0	12	0	0	12	20	20
	QL1.3	Improve Construction Safety	3	2	0	0	0	0	0	5	14	14
	QL1.4	Minimize Noise & Vibration	2	3	0	0	0	0	0	0	12	12
	QL1.5	Minimize Light Pollution	1	5	0	0	0	0	0	0	12	12
	QL1.6	Minimize Construction Impacts	3	3	0	2	0	0	0	2	8	8
Mobility	QL2.1	Improve Community Mobility Access	0	0	0	0	0	0	0	0	0	14
	QL2.2	Encourage Sustainable Transportation	0	0	0	0	0	0	0	0	0	16
	QL2.3	Improve Access & Wayfinding	2	2	0	5	0	0	0	5	14	14
Community	QL3.1	Advance Equity & Social Justice	0	0	0	0	0	0	0	0	0	18
	QL3.2	Preserve Historic & Cultural Resources	2	4	0	2	0	0	0	2	18	18
	QL3.3	Enhance Views & Local Character	2	4	1	0	0	0	0	1	14	14
	QL3.4	Enhance Public Space & Amenities	1	3	0	0	0	0	0	0	14	14



Credit Assessment Status	Evaluation Questions Assessed		Assessment Status						Assessed Maximum Points Available	Total Maximum Points	
	Yes	No	Improved	Enhanced	Superior	Conserving	Restorative	Points			
Collaboration	LD1.1	Provide Effective Leadership & Commitment	4	0	0	0	0	18	0	18	18
	LD1.2	Foster Collaboration & Teamwork	4	0	0	0	0	18	0	18	18
	LD1.3	Provide for Stakeholder Involvement	3	3	0	6	0	0	0	6	18
	LD1.4	Pursue Byproduct Synergies	4	1	0	0	0	14	0	14	18
Planning	LD2.1	Establish a Sustainability Management Plan	2	3	4	0	0	0	0	4	18
	LD2.2	Plan for Sustainable Communities	3	2	0	0	9	0	0	9	16
	LD2.3	Plan for Long-Term Monitoring & Maintenance	4	1	0	0	8	0	0	8	12
	LD2.4	Plan for End-of-Life	0	5	0	0	0	0	0	0	14
Economy	LD3.1	Stimulate Economic Prosperity & Development	5	0	0	0	0	20	0	20	20
	LD3.2	Develop Local Skills & Capabilities	0	4	0	0	0	0	0	0	16
	LD3.3	Conduct a Life-Cycle Economic Evaluation	1	4	0	0	0	0	0	0	14



Resource Allocation	Credit Assessment Status	Evaluation Questions Assessed		Assessment Status						Assessed Maximum Points Available	Total Maximum Points	
		Yes	No	Improved	Enhanced	Superior	Conserving	Restorative	Points			
												Yes
Materials	RA1.1 Support Sustainable Procurement Practices	0	2	0	0	0	0	0	0	0	12	12
	RA1.2 Use Recycled Materials	0	1	0	0	0	0	0	0	0	16	16
	RA1.3 Reduce Operational Waste	0	0	0	0	0	0	0	0	0	0	14
	RA1.4 Reduce Construction Waste	0	2	0	0	0	0	0	0	0	16	16
	RA1.5 Balance Earthwork On Site	1	0	2	0	0	0	0	0	2	8	8
Energy	RA2.1 Reduce Operational Energy Consumption	0	2	0	0	0	0	0	0	0	26	26
	RA2.2 Reduce Construction Energy Consumption	0	2	0	0	0	0	0	0	0	12	12
	RA2.3 Use Renewable Energy	0	1	0	0	0	0	0	0	0	24	24
	RA2.4 Commission & Monitor Energy Systems	0	3	0	0	0	0	0	0	0	14	14
Water	RA3.1 Preserve Water Resources	0	0	0	0	0	0	0	0	0	0	12
	RA3.2 Reduce Operational Water Consumption	0	0	0	0	0	0	0	0	0	0	22
	RA3.3 Reduce Construction Water Consumption	0	0	0	0	0	0	0	0	0	0	8
	RA3.4 Monitor Water Systems	0	0	0	0	0	0	0	0	0	0	12

Natural World	Credit Assessment Status	Evaluation Questions Assessed		Assessment Status						Assessed Maximum Points Available	Total Maximum Points	
		Yes	No	Improved	Enhanced	Superior	Conserving	Restorative	Points			
												Yes
Siting	NW1.1 Preserve Sites of High Ecological Value	2	4	0	0	12	0	0	0	0	22	22
	NW1.2 Provide Wetland & Surface Water Buffers	2	3	0	0	0	16	0	0	0	20	20
	NW1.3 Preserve Prime Farmland	0	0	0	0	0	0	0	0	0	0	16
	NW1.4 Preserve Undeveloped Land	1	1	0	0	12	0	0	0	0	24	24
	NW2.1 Reclaim Brownfields	0	0	0	0	0	0	0	0	0	0	22
Conservation	NW2.2 Manage Stormwater	3	1	2	0	0	0	0	0	0	24	24
	NW2.3 Reduce Pesticide & Fertilizer Impacts	2	2	1	0	0	0	0	0	0	12	12
	NW2.4 Protect Surface & Groundwater Quality	6	0	0	0	0	0	0	20	0	20	20
	NW3.1 Enhance Functional Habitats	0	0	0	0	0	0	0	0	0	0	18
Ecology	NW3.2 Enhance Wetland & Surface Water Functions	5	2	0	0	12	0	0	0	0	20	20
	NW3.3 Maintain Floodplain Functions	0	0	0	0	0	0	0	0	0	0	14
	NW3.4 Control Invasive Species	0	0	0	0	0	0	0	0	0	0	12
	NW3.5 Protect Soil Health	3	1	0	0	4	0	0	0	0	8	8

Climate and Resilience	Emissions	Credit Assessment Status	Evaluation Questions Assessed		Assessment Status						Assessed Maximum Points Available	Total Maximum Points	
			Yes	No	Improved	Enhanced	Superior	Conserving	Restorative	Points			
													Points
		Assessed	0	3	--	0	0	0	0	0	0	20	20
		Assessed	0	2	0	0	0	0	0	0	0	26	26
		Not Applicable	0	0	0	0	0	0	0	0	0	0	18
		Not Applicable	0	0	0	0	0	0	0	0	0	0	16
		Assessed	0	5	0	0	0	0	0	0	0	20	20
		Assessed	6	0	0	18	0	0	0	0	18	26	26
		Assessed	4	0	--	0	0	0	20	--	20	20	20
		Assessed	4	1	0	0	0	20	0	--	20	26	26
		Assessed	5	0	0	0	0	0	0	18	18	18	18

Climate and Resilience	Resilience	Credit Assessment Status	Evaluation Questions Assessed		Assessment Status						Assessed Maximum Points Available	Total Maximum Points
			Yes	No	Improved	Enhanced	Superior	Conserving	Restorative	Points		
		All Credits Assessed	101	89	10	38	89	106	64	307	768	1000
		Total Points										

Possible Award Level: Silver



Quality of Life

1. WELLBEING

QL 1.1 Improve Community Quality of Life

26 of 26 Points

Intent: Improve the net quality of life of all communities affected by the project and mitigate negative impacts to communities.

Metric: Measures taken to assess community needs and improve quality of life while minimizing negative impacts.

Applicability: It is likely that all projects have the ability to align project objectives with community needs and goals, identified through active engagement, in order to achieve broad community satisfaction. It would therefore be difficult to demonstrate that the credit is not relevant or applicable to a project seeking an Envision award.

		Yes/No
Is this credit applicable?		Yes
Assessment Questions:		Criteria Met?
A	Has the project team identified and taken into account community needs, goals, and issues?	Yes
B	Does the project meet or support the needs and goals of the host and/or affected communities?	Yes
C	Has the project team assessed the social impacts the project will have on the host and affected communities' quality of life?	Yes
D	Have the affected communities been meaningfully engaged in identifying how the project meets community needs and/or goals?	Yes
E	Has the project team addressed negative social impacts?	Yes
F	Are the affected communities satisfied that the project addresses their needs and goals as well as mitigates negative impacts?	Yes
G	Does the project proactively address long-term social, economic, or environmental changes that impact quality of life?	Yes
Yes =		7 of 7

Envision Framework Pre-Assessment Checklist

QL 1.2 Enhance Public Health and Safety

12 of 20 Points

Intent: Protect and enhance community health and safety during operation.

Metric: Measures taken to increase safety and provide health benefits on the project site, surrounding sites, and the broader community in a just and equitable manner.

Applicability: It is likely that all projects, large and small, have the ability to positively impact health and/or safety in some way. Safety actions can be relative to the scale of the project, from repainting a crosswalk to preventing major chemical spills. It would therefore be difficult to demonstrate that the credit is not relevant or applicable to a project seeking an Envision award.

		Yes/No
Is this credit applicable?		Yes
Assessment Questions:		Criteria Met?
A	Does the project meet all health and safety regulations and laws for operations?	Yes
B	Has the project exceeded minimum legal health and safety requirements as established by regulations and laws?	Yes
C	Does the project include health and safety improvements for the immediate surroundings?	Yes
D	Does the project include health and safety improvements for the broader host or affected communities?	Yes
E	Can the project team demonstrate that health and safety risks and impacts are not disproportionately borne by one community over another?	-
F	Will the project provide critical infrastructure services to communities experiencing, or at risk of experiencing, imminent negative health and/or personal safety impacts?	-
Yes =		4 of 6

QL 1.3 Improve Construction Safety

5 of 14 Points

Intent: Enhance public and worker safety during construction.

Metric: Commitments and measures to monitor safety, provide feedback mechanisms, train personnel, establish security plans, and make health programs available.

Applicability: All projects that include construction have the ability to positively impact construction safety. It would therefore be difficult to demonstrate that the credit is not relevant or applicable to a project seeking an Envision award.

		Yes/No
Is this credit applicable?		Yes
Assessment Questions:		Criteria Met?
A	Have the project owner and contractor (GC/CM) made strong commitments to monitoring and improving health and safety?	Yes
B	Does the project include reliable feedback mechanisms to identify risks, conduct hazard analyses, and communicate hazards to personnel?	Yes
C	Does the project include safety or security training requirements for personnel?	Yes
D	Does the project include a comprehensive security plan to protect workers, the public, and sensitive information?	-
E	Does the project include health and/or well-being programs?	-
Yes =		3 of 5

Envision Framework Pre-Assessment Checklist

QL 1.4 Minimize Noise and Vibration

0 of 12 Points

Intent: Minimize noise and vibrations during operations to maintain and improve community livability.

Metric: The extent that operational noise and vibration is assessed and mitigated, and target levels achieved.

Applicability: Consideration is given to whether the project will have any operational noise. Noises generated by activities induced by the project, such as cars on roads, pedestrians in parks, and trucks accessing facilities, are applicable to this credit. Projects that do not include any operational noise may apply to have this credit deemed not applicable with supporting documentation.

Yes/No

Is this credit applicable?

Yes

Assessment Questions:

Criteria Met?

A	Has the project team assessed the potential for operational noise impacts on the surrounding community and/or environment?	Yes
B	Has the project mitigated noise generated as a result of the project?	-
C	Does the project set or adopt target noise levels?	Yes
D	Has the project team engaged impacted stakeholders on issues of noise and vibration impacts, mitigation strategies, and target levels?	-
E	To what extent will the project maintain or reduce existing noise levels? <u>Select one of the following:</u>	No
	None	

Yes = 2 of 5

Envision Framework Pre-Assessment Checklist

QL 1.5 Minimize Light Pollution

0 of 12 Points

Intent: Reduce backlight, uplight, and glare without jeopardizing safety during operations.

Metric: Lighting meets backlight, uplight, and glare requirements for lighting zones.

Applicability: This credit is not applicable if projects do not include any exterior lighting. Certain types of projects may be required to use lighting that is incompatible with the credit requirements. This is not considered an acceptable reason for designating the credit as not applicable. Projects that are unable to demonstrate achievement in this credit are encouraged to pursue higher performance in other credits.

Yes/No

Is this credit applicable?

Yes

Assessment Questions:

Criteria Met?

A Has the project team conducted an assessment of lighting needs and impacts for the project?

Yes

B Has the project implemented strategies to reduce light pollution?

-

C Has the project developed a lighting plan establishing lighting zones?

-

D Will luminaires prevent light emission above 90 degrees?

-

E Do all project lights meet backlight, uplight, and glare (BUG) requirements for their respective lighting zones?

-

F Does the project involve the removal or retrofitting of existing lighting so as to significantly reduce overall existing lighting?

-

Yes = 1 of 6

Envision Framework Pre-Assessment Checklist

QL 1.6 Minimize Construction Impacts

2 of 8 Points

Intent: Minimize or eliminate the temporary inconveniences associated with construction.

Metric: Extent of issues addressed through construction management plans.

Applicability: Consideration is given to whether the project includes construction activities with the potential to impact the quality of life of individuals. Projects that do not include construction impacts (e.g. an internal refurbishment of a private facility or extremely remote site) may apply to have this credit deemed not applicable with supporting documentation.

Yes/No

Is this credit applicable?

Yes

Assessment Questions:

Criteria Met?

A Has the project implemented a construction management plan or policies to address construction impacts?

Yes

B Does the construction management plan mitigate noise and/or vibrations?

-

C Does the construction management plan address safety and wayfinding for pedestrians and vehicles during construction?

Yes

D Does the construction management plan maintain access to public space and amenities during construction?

Yes

E Does the construction management plan address distracting or intrusive lighting during construction?

-

F Does the construction management plan or policies include robust feedback mechanisms and performance monitoring and reporting for construction impacts?

-

Yes =

3 of 6

Envision Framework Pre-Assessment Checklist

2. MOBILITY

QL 2.1 Improve Community Mobility and Access

0 of 0 Points

Intent: Plan the project as part of a connected network that supports all transportation modes for the efficient movement of people, goods, and services.

Metric: The extent to which the project broadens mode choices, reduces commute times, reduces vehicle distance traveled,

Applicability: Consideration is given to whether the project has any potential to impact mobility. Non-transportation projects that do not include any mobility impacts (positive or negative), and can demonstrate no potential for positively impacting mobility, may apply to have this credit deemed not applicable with supporting documentation. This credit is inherently applicable to all transportation infrastructure projects.

Yes/No

Is this credit applicable?

No

Assessment Questions:

Criteria Met?

A Is the project consistent with local transportation plans?

-

B Has the project team obtained input from the community and key stakeholders regarding issues of mobility and access?

-

C Does the project include strategies to increase capacity, manage congestion, reduce vehicle distance traveled, or lower accident rates?

-

D Has the project team worked with the community to expand mobility and access options and/or incorporate complete streets policies?

-

E Has the project team considered the long-term mobility and access needs of the community?

-

F Does the project create new or restore previous connections between communities?

-

Yes =

-

QL 2.2 Encourage Sustainable Transportation

0 of 0 Points

Intent: Expand accessibility to sustainable transportation choices including active, shared, and/or mass transportation.

Metric: The extent to which active, shared, or mass transportation options are accessible, encouraged, and supported as part of a larger integrated transportation network.

Applicability: Consideration is given to whether the project includes transportation infrastructure, or includes the frequent dependence on transportation for access to the project. This credit is applicable to all transportation infrastructure. Projects that do not include transportation infrastructure and are not accessible, unmanned, or have very small maintenance crews, may apply to have this credit deemed not applicable with supporting documentation.

Yes/No

Is this credit applicable?

No

Assessment Questions:

Criteria Met?

A Does the project provide convenient access to active, shared, or mass transportation options?

-

B Is the project configured and designed in such a way to encourage active, shared, and/or mass transportation options?

-

C Does the project include programs and facilities that support the use of active transportation and transit?

-

D Does the project contribute to a larger integrated active, shared, or mass transportation strategy for the community or region?

-

Yes =

-

Envision Framework Pre-Assessment Checklist

QL 2.3 Improve Access and Wayfinding

5 of 14 Points

Intent: Design the project to provide safe and appropriate access in and/or around the project in a way that integrates the project with the surrounding community.

Metric: Incorporating and providing clear access, safety, and wayfinding measures to accommodate emergency services and regular vehicular or pedestrian traffic.

Applicability: Consideration is given to the potential for impacting community access on or around the project site. Infrastructure that is inherently inaccessible (e.g., underground) or extremely remote (e.g., inaccessible by public roads) may apply to have this credit deemed not applicable with supporting documentation. Default restrictions on public access are not considered acceptable justification for marking the credit not applicable. This credit is automatically applicable to any project in proximity to populated areas or other development, adjacent to sensitive sites, or involving regular incoming or outgoing traffic.

Yes/No

Is this credit applicable?

Yes

Assessment Questions:

Criteria Met?

A Has the project addressed access, safety, and wayfinding for incident management including evacuation and emergency personnel?

Yes

B Does the project utilize access, safety, and signage to protect or minimize impacts on the surroundings?

Yes

C Does the project provide safe public access points for the benefit of the community?

-

D Does the project have a positive and transformative impact on community neighborhood access, safety, and/or wayfinding?

-

Yes =

2 of 4

Envision Framework Pre-Assessment Checklist

3. COMMUNITY

QL 3.1 Advance Equity and Social Justice

0 of 0 Points

Intent: Ensure that equity and social justice are fundamental considerations within project processes and decision making.

Metric: Degree to which equity and social justice are included in stakeholder engagement, project team commitments, and decision making.

Applicability: This credit can be designated as not applicable for projects that do not impact the surrounding community. For example, the installation or refurbishment of systems internal to a facility that do not impact the quality or level of service provided by the infrastructure.

Yes/No

Is this credit applicable?

No

Assessment Questions:

Criteria Met?

A	Does the stakeholder engagement process take into account the historic context of equity and social justice within affected communities?	-
B	Has the project team assessed the social impacts the project will have on the host and affected communities?	-
C	Have key members of the project team made commitments to equity and social justice within their organizations?	-
D	Has the project addressed social impacts related to equity and social justice?	-
E	Will the impacts and benefits of the project be distributed equitably throughout affected communities?	-
F	Has the project team empowered communities to engage in the development process?	-
G	Does the project positively address or correct an existing or historic injustice or imbalance?	-

Yes =

-

Envision Framework Pre-Assessment Checklist

QL 3.2 Preserve Historic and Cultural Resources

2 of 18 Points

Intent: Preserve or restore significant historical and cultural sites and related resources.

Metric: Steps taken to identify, preserve, or restore cultural resources.

Applicability: Project teams that are unable to identify any historic or cultural resources relevant to the project may apply to have this credit deemed not applicable with supporting documentation. Supporting documentation should demonstrate how stakeholder engagement activities, cultural resource studies, or equivalent, were implemented in an effort to identify possible historic or cultural resources. This credit is applicable to all infrastructure projects that impact a historic or cultural resource identified in state/provincial, national, or international registries, or identified through stakeholder engagement. This credit is also applicable, and no points achieved, for projects that cannot demonstrate a serious effort was made to identify potential historic or cultural resources.

Yes/No

Is this credit applicable?

Yes

Assessment Questions:

Criteria Met?

A Has the project team worked with the community and required regulatory and resource agencies to identify historic and cultural resources?

Yes

B Has the project team developed strategies to document, protect, or enhance historic and cultural resources to the project?

Yes

C Does the identification of historic/cultural resources extend beyond registries to identify important parts of the community culture?

-

D Has the project team worked with stakeholders to develop a sensitive design and approach?

-

E Does the project avoid all historic/cultural resources or fully preserve/protect their character-defining features?

-

F Does the project enhance or restore threatened or degraded historic/cultural resources in the community, or add a resource to a protected registry?

-

Yes = 2 of 6

Envision Framework Pre-Assessment Checklist

QL 3.3 Enhance Views and Local Character

1 of 14 Points

Intent: Preserve or enhance the physical, natural, and/or community character of the project site and its surroundings.

Metric: Steps taken to assess valued community resources, implement preservation measures, and determine overall satisfaction.

Applicability: Projects that have no public visibility or impact on views, such as underground utilities or the refurbishment of equipment within an existing facility, may submit to have this credit deemed not applicable with supporting documentation. Reviewers are unlikely to accept arguments that a publicly visible project has no impact on views or local character.

	Yes/No
Is this credit applicable?	Yes
Assessment Questions:	Criteria Met?
A Has the project team made a reasonable determination of community values and concerns regarding protection and enhancement of views and local character?	Yes
B Has the project team implemented specific strategies to preserve or enhance views and local character?	Yes
C Has the project team developed or adopted existing guidelines to preserve views and local character?	-
D Does the project include a construction management plan to protect important natural or man-made features?	-
E Does the community support actions taken to preserve or enhance views and local character?	-
F Will the project result in the restoration or enhancement of views or local character?	-
Yes =	2 of 6

QL 3.4 Enhance Public Space and Amenities

0 of 14 Points

Intent: Improve amenities and publicly accessible spaces to enhance community livability.

Metric: Plans and commitments to preserve, conserve, enhance, and/or restore the defining elements of the amenity.

Applicability: This credit is applicable to projects that are publicly accessible or that impact, adjoin, or otherwise connect to existing public spaces or amenities. This represents the large majority of infrastructure projects. Designating this credit as not applicable can be difficult. Projects that by their nature preclude the possibility of addressing public space or amenities may submit to have this credit deemed not applicable with supporting documentation (e.g., mechanical system refurbishments, offshore wind farms, etc.). Not addressing the potential for public space or amenities is not sufficient alone to designate this credit not applicable. Infrastructure projects, especially those traditionally viewed as inaccessible, are encouraged to consider how they can benefit their surrounding community through the enhancement or provision of public space and amenities.

	Yes/No
Is this credit applicable?	Yes
Assessment Questions:	Criteria Met?
A Has the project team assessed and mitigated impacts to existing public space and/or amenities?	Yes
B Does the stakeholder engagement process specifically address issues of public space and amenities?	-
C Are public stakeholders satisfied with the project plans involving public space and amenities?	-
D To what extent does the project involve significantly enhancing, creating, or restoring public space and/or amenities? <u>Select one of the following:</u>	No
None	
Yes =	1 of 4

Envision Framework Pre-Assessment Checklist



Leadership

1. COLLABORATION

LD 1.1 Provide Effective Leadership and Commitment		18 of 18 Points
<p>Intent: Provide effective leadership and commitment to achieve project sustainability goals.</p> <p>Metric: The degree to which the project owner and project team have made general, and project-specific, sustainability commitments and instituted sustainability management policies.</p> <p>Applicability: It is likely that all projects can benefit from effective leadership and strong commitments to sustainability. It would therefore be difficult to demonstrate that the credit is not relevant or applicable to a project seeking an Envision award.</p>		
		Yes/No
Is this credit applicable?		Yes
Assessment Questions:		Criteria Met?
A	Have the project owner and project team made written commitments to address the social, environmental, and economic aspects of the project?	Yes
B	Is the project supported by a sustainability management policy commensurate with the scope, scale, and complexity of the project?	Yes
C	Has the project team periodically revisited project sustainability commitments throughout project delivery?	Yes
D	Have key members of the project team made organizational commitments to sustainability?	Yes
		Yes = 4 of 4

LD 1.2 Foster Collaboration and Teamwork		18 of 18 Points
<p>Intent: Enhance project sustainability through interdisciplinary collaboration and teamwork.</p> <p>Metric: The breadth and inclusivity of interdisciplinary and collaborative meetings and the resulting sustainability performance enhancements.</p> <p>Applicability: It is likely that all projects can benefit from better collaboration and teamwork in pursuit of more sustainable projects. It would therefore be difficult to demonstrate that the credit is not relevant or applicable to a project seeking an Envision award.</p>		
		Yes/No
Is this credit applicable?		Yes
Assessment Questions:		Criteria Met?
A	Was an interdisciplinary collaborative kickoff meeting held early in the project to define sustainability goals?	Yes
B	Has project sustainability performance been enhanced as a result of the interdisciplinary collaboration?	Yes
C	Did the project team establish regular interdisciplinary and collaborative meetings to set and achieve sustainability goals?	Yes
D	Does the process include construction, operations, or maintenance stakeholders, for better incorporation of considerations in later project phases?	Yes
		Yes = 4 of 4

**Envision Framework
Pre-Assessment Checklist**

LD 1.3 Provide for Stakeholder Involvement

6 of 18 Points

Intent: Early and sustained stakeholder engagement and involvement in project decision making.

Metric: Establishment of sound and meaningful programs for stakeholder identification, early and sustained engagement, and involvement in project decision making.

Applicability: It is likely that all projects can benefit from stakeholder engagement. Although the types and scope of stakeholders may vary depending on the project, it would be difficult to demonstrate that the credit is not relevant or applicable to a project seeking an Envision award.

Yes/No

Is this credit applicable?

Yes

Assessment Questions:

Criteria Met?

A Has the project team undertaken a stakeholder mapping exercise to determine stakeholders? Were primary and secondary stakeholders identified through a stakeholder mapping process, and stakeholder concerns and specific objectives for stakeholder engagement defined?

Yes

B Has the project team analyzed, planned, and executed the engagement for key project stakeholders? Is there a proactive stakeholder engagement process established with clear objectives where: engagement moves beyond education into active dialogue; stakeholder views are monitored, and a two-way line of communication is established to reply to inquiries; and sufficient opportunities are provided for stakeholders to be involved in decision making?

Yes

C Was a lead member of the project team directly involved with stakeholder groups to understand their needs?

Yes

D Has stakeholder engagement feedback been incorporated into project plans, design, and/or decision making? Are specific cases in which public input influenced or validated project outcomes, and potentially conflicting stakeholder views were evaluated and addressed equitably during decision making?

-

E Has the project team sought feedback from stakeholders as to their satisfaction with the engagement process and the resulting decisions that were made based on their input?

-

F Has the project engaged one or more stakeholders as partners?

-

Yes = 3 of 6

**Envision Framework
Pre-Assessment Checklist**

LD 1.4 Pursue Byproduct Synergies

14 of 18 Points

Intent: Critically reconsider whether traditional waste streams can be beneficially reused.

Metric: The extent to which the project team works with external groups to find beneficial use of waste, excess resources, or capacity.

Applicability: It is likely that all projects that use materials or product waste can benefit from byproduct synergies. It would be difficult to demonstrate that the credit is not relevant or applicable to a project seeking an Envision award.

		Yes/No
	Is this credit applicable?	Yes
Assessment Questions:		Criteria Met?
A	Has the project team assessed the availability of either internal or external excess resources or capacity?	Yes
B	Has the project team identified opportunities for byproduct synergies or reuse?	Yes
C	Has the project team actively pursued a byproduct synergy or reuse?	Yes
D	Does the project include a byproduct synergy by utilizing unwanted excess resources or finding destinations for the beneficial reuse of unwanted excess resources? <u>Select one of the following:</u>	Yes
	The project successfully includes a byproduct synergy or reuse. Execution is a long-term regularly recurring byproduct synergy/reuse throughout project operations.	
E	Is the project part of a circular economy, whereby the majority of operational byproducts are beneficially repurposed or the majority of operational resources consumed are beneficially repurposed?	-
Yes =		4 of 5

**Envision Framework
Pre-Assessment Checklist**

2. PLANNING

LD 2.1 Establish a Sustainability Management Plan

4 of 18 Points

Intent: Create a project sustainability management plan that can manage the scope, scale, and complexity of a project seeking to improve sustainable performance.

Metric: Extent of organizational policies, authorities, mechanisms, education, and business processes put in place.

Applicability: It is likely that all projects can benefit from a sustainability management plan. It would be difficult to demonstrate that the credit is not relevant or applicable to a project seeking an Envision award.

Yes/No

Is this credit applicable?

Yes

Assessment Questions:

Criteria Met?

A Are roles and responsibilities for addressing sustainability assigned to key members of the project team?

Yes

B Has a sustainability management plan been developed to assess and prioritize the environmental, economic, and social aspects of the project and set project sustainability goals, objectives, and targets?

Yes

C Does the project include a sustainability management plan that contains sufficient processes and management controls to address the sustainability goals, objectives, and targets?

-

D Was the sustainability management plan implemented and periodically revisited?

-

E Is the project sustainability management plan adaptable, flexible, and resilient enough to manage changes in the environmental, social, or economic conditions of the project over its life?

-

Yes = 2 of 5

**Envision Framework
Pre-Assessment Checklist**

LD2.2 Plan for Sustainable Communities

9 of 16 Points

Intent: Incorporate sustainability principles into project selection/identification in order to develop the most sustainable project for the community.

Metric: The degree to which project selection/identification includes sustainability performance assessments and is part of a larger sustainable development plan.

Applicability: Consideration is given to the scope and scale of the project and whether it has the potential to more broadly impact community sustainability. For example, small projects that involve the retrofitting or refurbishment of components or systems within an existing facility may contribute to improved sustainability performance but may struggle to demonstrate an impact beyond the project site. Small projects that do not impact the broader community sustainability, and do not have the potential to impact community sustainability, may apply to have this credit deemed not applicable with supporting documentation.

		Yes/No
Is this credit applicable?		Yes
Assessment Questions:		Criteria Met?
A	Was sustainability considered during project selection/identification?	Yes
B	Were alternative analyses conducted on sustainability performance during project identification?	Yes
C	Was an assessment conducted of the project's impacts to broader long-term community or regional sustainability?	Yes
D	Is the project part of a comprehensive sustainable development plan?	-
E	Does the project address an inherently unsustainable condition within the community or region?	-
Yes =		3 of 5

LD2.3 Plan for Long-Term Monitoring and Maintenance

8 of 12 Points

Intent: Put in place plans, processes, and personnel sufficient to ensure that long-term sustainable protection, mitigation, and enhancement measures are incorporated into the project.

Metric: Comprehensiveness of long-term monitoring and maintenance plans, implementation goals, and commitment of resources to fund the activities.

Applicability: This credit is applicable to all projects that include ongoing monitoring and maintenance. In rare cases where projects do not include operation or maintenance activities, projects may apply to have this credit deemed not applicable with supporting documentation.

		Yes/No
Is this credit applicable?		Yes
Assessment Questions:		Criteria Met?
A	Has the project team considered how to reduce ongoing operational impacts?	Yes
B	Is there a clear and comprehensive plan in place for long-term monitoring and maintenance of the completed project?	Yes
C	Has the monitoring and maintenance plan been communicated with operations and maintenance staff?	Yes
D	Have sufficient resources been allocated for long-term monitoring and maintenance of the completed project and appropriate training been conducted?	Yes
E	Is there a plan in place to re-evaluate and modify the maintenance plan based on monitored data?	-
Yes =		4 of 5

**Envision Framework
Pre-Assessment Checklist**

LD2.4 Plan for End-of-Life	0 of 14 Points
<p>Intent: Ensure that the project team is informed by an understanding of the full impacts and costs of the project's end-of-life.</p> <p>Metric: The degree to which the project team analyzes, and communicates with stakeholders, the end-of-life impacts, cost, and value.</p> <p>Applicability: It is likely that all projects can benefit from end-of-life planning. It would be difficult to demonstrate that the credit is not relevant or applicable to a project seeking an Envision award.</p>	
Yes/No	

Is this credit applicable?

Yes

Assessment Questions:	Criteria Met?
A Has the project team developed an end-of-life plan?	-
B Has the project team evaluated opportunities to extend the project's useful life or beneficially repurpose the project after end-of-life?	-
C Has the project team assessed potential social, environmental, and economic end-of-life impacts?	-
D Has the project team evaluated the costs and salvage value of the project's deconstruction, decommissioning, or replacement?	-
E Has the project team proactively engaged stakeholders in end-of-life planning?	-
Yes =	0 of 5

3. ECONOMY

LD3.1 Stimulate Economic Prosperity and Development	20 of 20 Points
<p>Intent: Support economic prosperity and sustainable development, including job growth, capacity building, productivity, business attractiveness, and livability.</p> <p>Metric: The extent of job creation, increased operating capacity, access, quality, and/or improved socioeconomic conditions.</p> <p>Applicability: The scope of this credit is broad, covering commercial, industrial, cultural, and recreational aspects of community development. In determining whether this credit is applicable to a project assessment, it is likely that all projects have the ability to support and stimulate economic prosperity and sustainable development. It would therefore be difficult to demonstrate that the credit is not relevant or applicable to a project seeking an Envision award.</p>	
Yes/No	

Is this credit applicable?

Yes

Assessment Questions:	Criteria Met?
A Does the project create a significant number of new jobs during its design, construction, and operation?	Yes
B Does the project provide new operating capacity for business, industry, or the public?	Yes
C Does the project provide additional access, increase the number of choices, and/or increase the quality of infrastructure services for business, industry, or the public?	Yes
D Does the project improve community attractiveness for business, industry, or the public by generally improving the socioeconomic conditions of the community?	Yes
E Will the project stimulate economic prosperity and further economic development?	Yes
Yes =	5 of 5

**Envision Framework
Pre-Assessment Checklist**

LD3.2 Develop Local Skills and Capabilities	0 of 16 Points
<p>Intent: Expand the knowledge, skills, and capacity of the community workforce to improve their ability to grow and develop.</p> <p>Metric: The inclusion of current and future training programs, informed by skill or capability gaps, and targeted to economically depressed or underemployed communities.</p> <p>Applicability: For this credit, an alternative compliance path is provided in the Evaluation Criteria and Documentation Guidance for projects that are too small to include independent training and skill development. It is therefore unlikely that a project could demonstrate no opportunity for education at any point during its planning, design, or construction. When organizational-level training programs are referenced, project teams must demonstrate a relevance to the project.</p>	
Yes/No	

Is this credit applicable?

Yes

Assessment Questions:	Criteria Met?
A Will the project include training programs for local skill development?	-
B Has the project team identified skill or capability gaps in the local workforce and targeted training programs to address them? <u>Select one of the following:</u>	No
None	
C Will training, education, or skill development programs continue after project delivery?	-
D Will training and skill development programs specifically target economically depressed, underemployed, or disadvantaged communities?	-
Yes =	0 of 4

LD3.3 Conduct a Life-Cycle Economic Evaluation	0 of 14 Points
<p>Intent: Utilize economic analyses to identify the full economic implications and the broader social and environmental benefits of the project.</p> <p>Metric: The comprehensiveness of the economic analyses used to determine the net impacts of the project, and their use in assessing alternatives to inform decision making.</p> <p>Applicability: It would be difficult to demonstrate that this credit is not relevant or applicable to a project seeking an Envision award.</p>	
Yes/No	

Is this credit applicable?

Yes

Assessment Questions:	Criteria Met?
A Has a life-cycle cost analysis been conducted to identify the financial impacts of the whole project?	-
B Have life-cycle cost analyses been used to compare alternatives for at least one major project component?	Yes
C Has the project team mapped the social, environmental, and financial costs and benefits of the project?	-
D Has a cost benefit analysis been conducted to identify the financial, social, and environmental impacts of the whole project?	-
E Have cost benefit analyses, including financial, environmental, and social benefits, been used to compare the alternatives for at least one major project component?	-
Yes =	1 of 5



Resource Allocation

1. MATERIALS

RA1.1 Support Sustainable Procurement Practices		0 of 12 Points
<p>Intent: Develop sustainable procurement policies and programs to source materials and equipment from manufacturers and suppliers that implement sustainable practices.</p> <p>Metric: The extent of sustainable procurement programs, and the percentage of materials sourced from manufacturers and/or suppliers that implement sustainable practices.</p> <p>Applicability: This credit is applicable to all projects that include the use or consumption of physical materials in construction or operation.</p>		
		Yes/No
Is this credit applicable?		Yes
Assessment Questions:		Criteria Met?
A	Has the project team implemented a sustainable procurement policy or program?	-
B	To what extent do materials, supplies, equipment, manufacturers, and suppliers meet sustainable procurement policy/program requirements? <u>Select one of the following:</u>	No
	None	
		Yes = 0 of 2

RA1.2 Use Recycled Materials		0 of 16 Points
<p>Intent: Reduce the use of virgin natural resources and avoid sending useful materials to landfills by specifying reused materials, including structures, and material with recycled content.</p> <p>Metric: Percentage of project materials that are reused or recycled. Plants, soil, rock, and water are not included in this credit.</p> <p>Applicability: This credit is applicable to all projects that include the use or consumption of physical materials in construction or operation.</p>		
		Yes/No
Is this credit applicable?		Yes
Assessment Questions:		Criteria Met?
A	To what extent has the project team used recycled materials, including materials with recycled content and/or reused existing structures or materials? <u>Select one of the following:</u>	No
	None	
		Yes = 0 of 1

**Envision Framework
Pre-Assessment Checklist**

RA1.3 Reduce Operational Waste	0 of 0 Points
<p>Intent: Reduce operational waste and divert waste streams from disposal to recycling and reuse.</p> <p>Metric: Percentage of total operational waste or byproducts diverted from disposal.</p> <p>Applicability: This credit is applicable to all projects that produce operational waste or byproducts. Projects that do not include any operational waste may apply to have this credit deemed not applicable with supporting documentation.</p>	
Yes/No	

Is this credit applicable?

No

Assessment Questions:	Criteria Met?
A Has the project team developed a waste management plan to decrease project waste and divert waste from landfills during operation?	-
B To what extent has the project team reduced waste or diverted waste from landfills? <u>Select one of the following:</u> 2	No
None	

Yes = -

RA1.4 Reduce Construction Waste	0 of 16 Points
<p>Intent: Divert construction and demolition waste streams from disposal to recycling and reuse.</p> <p>Metric: Percentage of total waste diverted from disposal.</p> <p>Applicability: This credit is applicable to all projects that produce construction waste. Projects that do not include any construction waste may apply to have this credit deemed not applicable with supporting documentation.</p>	
Yes/No	

Is this credit applicable?

Yes

Assessment Questions:	Criteria Met?
A Has the project team developed a comprehensive waste management plan to decrease project waste and divert waste from landfills during construction?	-
B To what extent has construction waste been diverted from landfills? <u>Select one of the following:</u>	No
None	

Yes = 0 of 2

**Envision Framework
Pre-Assessment Checklist**

RA1.5 Balance Earthwork On Site	2 of 8 Points
<p>Intent: Minimize the movement of soils and other excavated materials off site to reduce transportation and environmental impacts.</p> <p>Metric: Percentage of excavated material retained on site or nearby.</p> <p>Applicability: This credit is applicable to all projects that involve the excavation of qualifying earthwork. Projects that do not include any earthwork, or only involve the excavation of excluded material considered contaminated or hazardous, may apply to have this credit deemed not applicable with supporting documentation. In rare cases, where the amount of excavated soil is insignificant in comparison to the scale of the project, teams may apply to have this credit deemed not applicable with supporting documentation. However, the reviewer may exercise his/her discretion in determining what constitutes an insignificant quantity of excavated material in the context of the project.</p>	
Yes/No	

Is this credit applicable?

Yes

Assessment Questions:	Criteria Met?
<p>A To what extent has the project team designed the project to balance cut and fill to reduce the excavated material taken off site? <u>Select one of the following:</u></p>	Yes
<p>Excavated material moved off site and/or fill brought onto the site does not exceed 70% of total site soil handling. OR 100% of fill and excavated materials are sourced or reused within 25 mi/40 km of the site.</p>	
Yes = 1 of 1	

2. ENERGY

RA2.1 Reduce Operational Energy Consumption	0 of 26 Points
<p>Intent: Conserve energy by reducing overall operational energy consumption throughout the project life.</p> <p>Metric: Percentage of operational energy reductions achieved.</p> <p>Applicability: This credit is applicable to all projects that consume energy during their operation. Projects that do not include operational energy may apply to have this credit deemed not applicable with supporting documentation. In rare cases, where the amount of operational energy use is insignificant in comparison to the scale of the project, teams may apply to have this credit deemed not applicable with supporting documentation. However, the reviewer may exercise his/her discretion in determining what constitutes an insignificant quantity of operational energy use in the context of the project.</p>	
Yes/No	
Is this credit applicable?	Yes
Assessment Questions:	Criteria Met?
A Has the project team determined the estimated annual energy consumption of the project during operations?	-
B To what extent has the project reduced operational energy consumption? <u>Select one of the following:</u>	No
None	
Yes = 0 of 2	

**Envision Framework
Pre-Assessment Checklist**

RA2.2 Reduce Construction Energy Consumption 0 of 12 Points

Intent: Conserve resources and reduce greenhouse gases and air pollutant emissions by reducing energy consumption during construction.

Metric: The number of strategies implemented on the project during construction that reduce energy consumption and emissions.

Applicability: This credit is applicable to all projects that consume energy during construction. It would therefore be difficult to demonstrate that the credit is not relevant or applicable to a project seeking an Envision award. In rare cases, where the amount of energy used during construction is insignificant in comparison to the scale of the project, teams may apply to have this credit deemed not applicable with supporting documentation. However, the reviewer may exercise his/her discretion in determining what constitutes an insignificant quantity of construction energy use in the context of the project.

	Yes/No
Is this credit applicable?	Yes

Assessment Questions: **Criteria Met?**

A	Has the project team conducted planning reviews to reduce energy consumption during construction?	-
B	To what extent have energy conservation strategies been implemented during construction? (strategies are listed in the Envision Guidance Manual) <u>Select one of the following:</u>	No
	None	
		Yes = 0 of 2

RA2.3 Use Renewable Energy 0 of 24 Points

Intent: Meet operational energy needs through renewable energy sources.

Metric: Extent to which renewable energy sources are incorporated.

Applicability: This credit is applicable to all projects that consume energy (fuel or electricity) during their operation. Projects that do not include operational energy may apply to have this credit deemed not applicable with supporting documentation. In rare cases, where the amount of operational energy use is insignificant in comparison to the scale of the project, teams may apply to have this credit deemed not applicable with supporting documentation. However, the reviewer may exercise his/her discretion in determining what constitutes an insignificant quantity of operational energy use in the context of the project.

	Yes/No
Is this credit applicable?	Yes

Assessment Questions: **Criteria Met?**

A	To what extent does the project meet electricity or fuel needs from renewable sources? <u>Select one of the following:</u>	No
	None	
		Yes = 0 of 1

**Envision Framework
Pre-Assessment Checklist**

RA2.4 Commission and Monitor Energy Systems

0 of 14 Points

Intent: Ensure efficient functioning and extend useful life by specifying commissioning and monitoring of energy systems.

Metric: The inclusion of monitoring equipment and software, the extent of commissioning, and the commissioning agent's independence from the project.

Applicability: This credit is applicable to all projects that consume energy during their operation. Projects that do not include operational energy may apply to have this credit deemed not applicable with supporting documentation. In rare cases, where the amount of operational energy use is insignificant in comparison to the scale of the project, teams may apply to have this credit deemed not applicable with supporting documentation. However, the reviewer may exercise his/her discretion in determining what constitutes an insignificant quantity of operational energy use in the context of the project.

Yes/No

Is this credit applicable?

Yes

Assessment Questions:

Criteria Met?

A Does the design incorporate advanced integrated monitoring systems in order to enable more efficient operations? Select one of the following:

No

None

B To what extent has a commissioning been conducted? Select one of the following:

No

None

C Is there a plan for ongoing commissioning of the energy systems throughout the project's life?

-

Yes = 0 of 3

**Envision Framework
Pre-Assessment Checklist**

RA3.1 Preserve Water Resources

0 of 0 Points

Intent: Assess and reduce the negative net impact on fresh water availability, quantity, and quality at a watershed scale to positively impact the region's water resources.

Metric: The extent to which the project considers and contributes to positively addressing broader watershed issues.

Applicability: This credit is applicable to all projects that consume water or impact receiving waters. Projects that do not include any impacts to water quantity or quality may apply to have this credit deemed not applicable with supporting documentation. In rare cases, where the impact to water quantity or quality is insignificant in comparison to the scale of the project, teams may apply to have this credit deemed not applicable with supporting documentation. However, the reviewer may exercise his/her discretion in determining what constitutes an insignificant impact to water quantity or quality use in the context of the project.

Yes/No

Is this credit applicable?

No

Assessment Questions:

Criteria Met?

A Has the project team conducted a watershed assessment?

-

B Has the project team estimated the water usage and wastewater generation over the life of the project?

-

C Does the project include features to minimize the negative impacts of water usage, and/or watershed-scale issues?

-

D Does the project have a net-zero impact on the quantity and availability of fresh surface water and groundwater supplies without compromising water quality?

-

E Is the project part of a watershed-level or regional plan?

-

F Does the project make a direct net-positive improvement to the watershed?

Yes

Yes =

-

**Envision Framework
Pre-Assessment Checklist**

RA3.2 Reduce Operational Water Consumption	0 of 0 Points
<p>Intent: Reduce overall water consumption while encouraging the use of greywater, recycled water, and stormwater to meet water needs.</p> <p>Metric: Percentage reduction in potable water use and overall water use.</p> <p>Applicability: This credit is applicable to all projects that consume water during operations. Projects that do not include any operational water consumption may apply to have this credit deemed not applicable with supporting documentation. In rare cases, where the amount of water consumption is insignificant in comparison to the scale of the project, teams may apply to have this credit deemed not applicable with supporting documentation. However, the reviewer may exercise his/her discretion in determining what constitutes an insignificant quantity of operational water use in the context of the project.</p>	
Yes/No	

Is this credit applicable?

No

Assessment Questions:	Criteria Met?
A Has the project team conducted planning and design reviews to identify potable water reduction strategies during operation of the project?	-
B To what extent has the project reduced potable water use? <u>Select one of the following:</u> 2	No
None	
C To what extent has the project reduced overall water use (including potable and nonpotable water)? <u>Select one of the following:</u> 2	No
None	
D Does the project have a net positive impact on water use?	-
Yes =	-

RA3.3 Reduce Construction Water Consumption	0 of 0 Points
<p>Intent: Reduce potable water consumption during construction.</p> <p>Metric: The number of strategies implemented during construction that reduce potable water consumption.</p> <p>Applicability: This credit is applicable to all projects that consume water during construction. Projects that do not include any operational water consumption may apply to have this credit deemed not applicable with supporting documentation. In cases where the amount of water consumption during operations is insignificant in comparison to the scale of the project, teams may apply to have this credit deemed not applicable with supporting documentation. However, the reviewer may exercise his/her discretion in determining what constitutes an insignificant quantity of operational energy use in the context of the project.</p>	
Yes/No	

Is this credit applicable?

No

Assessment Questions:	Criteria Met?
A Has the project team conducted planning reviews to reduce water consumption during construction?	-
B To what extent have water conservation strategies been implemented during construction? <u>Select one of the following:</u> 2	No
None	
Yes =	-

**Envision Framework
Pre-Assessment Checklist**

RA3.4 Monitor Water Systems

0 of 0 Points

Intent: Improve operational performance by including monitoring capabilities.

Metric: Extent and capability of water monitoring equipment and inclusion of response plans.

Applicability: This credit is applicable to all projects that consume water during their operation or include the conveyance of large quantities of water. Projects that do not include operational water use or water conveyance may apply to have this credit deemed not applicable with supporting documentation. In rare cases, where the amount of operational water use, or conveyance, is insignificant in comparison to the scale of the project, teams may apply to have this credit deemed not applicable with supporting documentation. However, the reviewer may exercise his/her discretion in determining what constitutes an insignificant quantity of water use in the context of the project.

Yes/No

Is this credit applicable?

No

Assessment Questions:

Criteria Met?

A Does the design incorporate advanced integrated monitoring systems in order to improve performance? Select one of the following:

2

No

None

B Does the project include real-time water monitoring?

-

Yes =

-



Natural World

1. SITING

NW1.1 Preserve Sites of High Ecological Value

12 of 22 Points

Intent: Avoid placing the project and temporary works on a site that has been identified as being of high ecological value.

Metric: Avoidance of high ecological value sites and establishment of protective buffer zones.

Applicability: Projects that do not contain areas of high ecological value, and cannot demonstrate they actively avoided areas of high ecological value, may apply to have this credit deemed not applicable with supporting documentation.

	Yes/No
Is this credit applicable?	Yes

Assessment Questions:	Criteria Met?
-----------------------	---------------

A	Has the project team identified whether the site contains areas of high ecological value?	Yes
B	Has the project mitigated any areas of high ecological value that are disturbed? <u>Select one of the following:</u>	No
	None	
C	Does the project avoid developing or disturbing areas of high ecological value on site?	Yes
D	Does the project preserve an effective protective buffer zone around areas of high ecological value?	-
E	Was the project intentionally sited to avoid areas of high ecological value?	-
F	Does the project significantly increase the area of high ecological value?	-

Yes = 2 of 6

**Envision Framework
Pre-Assessment Checklist**

NW1.2 Provide Wetland and Surface Water Buffers	16 of 20 Points
<p>Intent: Protect, buffer, enhance, and restore wetlands, shorelines, and waterbodies by providing natural buffer zones, vegetation, and soil-protection zones.</p> <p>Metric: Type and quality of natural buffer zone established around all wetlands, shorelines, and waterbodies.</p> <p>Applicability: Projects that do not contain wetlands or surface waters, and for which no siting options containing wetlands or surface waters were possible or seriously considered, may apply to have this credit deemed not applicable with supporting documentation.</p>	
	Yes/No

Is this credit applicable?

Yes

Assessment Questions:	Criteria Met?
A Has the project team identified wetlands and surface waters on or near the site?	Yes
B Has the project team determined the type and width of buffer zones necessary to protect wetlands and surface waters?	-
C To what extent has the project implemented protective buffer zones around wetlands and surface waters? <u>Select one of the following:</u>	No
None	
D Was the project intentionally sited to avoid wetlands and surface waters?	Yes
E Will the project involve returning previously developed or disturbed sites within the buffer zone to a natural state?	-

Yes = 2 of 5

NW1.3 Preserve Prime Farmland	0 of 0 Points
<p>Intent: Identify and protect soils designated as prime farmland, unique farmland, or farmland of importance.</p> <p>Metric: Percentage of farmland avoided or preserved during development.</p> <p>Applicability: Projects that do not contain prime farmland, and for which no siting options containing prime farmland were possible or seriously considered, may apply to have this credit deemed not applicable with supporting documentation.</p>	
	Yes/No

Is this credit applicable?

No

Assessment Questions:	Criteria Met?
A Has the project team assessed the project site for soils identified as prime farmland, unique farmland, or farmland of importance?	-
B To what extent will the project protect or preserve prime farmland, unique farmland, or farmland of importance? <u>Select one of the following:</u>	No
None	
C Has the project team mitigated any damage or disturbance to prime farmland, unique farmland, or farmland of importance?	-
D Was the project intentionally sited to avoid prime farmland?	-
E Does the project preserve existing farmland for posterity or restore previously disturbed farmland?	-

Yes = -

**Envision Framework
Pre-Assessment Checklist**

NW1.4 Preserve Undeveloped Land	12 of 24 Points
--	------------------------

Intent: Conserve undeveloped land by locating projects on previously developed land.

Metric: Percentage of project development that is located on previously developed land.

Applicability: Assessment of this credit is determined by the extent to which the project is located on previously developed land or previously undeveloped land. As all land falls within these two classifications, it would be difficult to demonstrate that the credit is not applicable. Inability to locate the project on developed land is not sufficient justification to remove this credit from consideration.

Yes/No

Is this credit applicable?

Yes

Assessment Questions:

Criteria Met?

A To what extent is the project located on previously developed land? Select one of the following:

Yes

At least 75% of the developed area of the project is located on previously developed land.

B Has the project returned developed areas to a condition that supports natural open space, habitat, or natural hydrology?

No

Yes = 1 of 2

**Envision Framework
Pre-Assessment Checklist**

2. CONSERVATION

NW2.1 Reclaim Brownfields

0 of 0 Points

Intent: Locate projects on sites classified as brownfields.

Metric: The extent of remediation of the brownfield site.

Applicability: Project teams that were unable to identify a suitable site may apply to have this credit deemed not applicable with supporting documentation that efforts were made. If no evidence is provided that any consideration was given to locating the project on a brownfield, the credit is considered applicable and no points achieved.

Yes/No

Is this credit applicable?

No

Assessment Questions:

Criteria Met?

A Is the project located on a site currently identified as a closed brownfield?

-

B Is the project located on a site currently identified as an active brownfield?

-

C To what extent has the project mitigated or remediated the site? Select one of the following:

2

No

None

D Has the brownfield site been closed or deregulated?

-

Yes =

-

**Envision Framework
Pre-Assessment Checklist**

NW2.2 Manage Stormwater	2 of 24 Points
<p>Intent: Minimize the impact of development on stormwater runoff quantity, rate, and quality.</p> <p>Metric: Degree to which the project infiltrates, evapotranspirates, reuses, and/or treats stormwater while not exceeding rate or quantity runoff targets.</p> <p>Applicability: This credit is applicable to all projects that impact stormwater runoff. In rare cases, where the impact on stormwater runoff is insignificant in comparison to the scale of the project, teams may apply to have this credit deemed not applicable with supporting documentation. However, the reviewer may exercise his/her discretion in determining what constitutes an insignificant impact on stormwater runoff in the context of the project.</p>	
Yes/No	

Is this credit applicable?	Yes
----------------------------	-----

Assessment Questions:	Criteria Met?
A To what extent does the project infiltrate, evapotranspire, reuse, and/or treat stormwater on site? <u>Select one of the following:</u>	Yes
<div style="background-color: #fff9c4; padding: 5px;">Detain and treat 100% of the 85th percentile local 24-hour event. Ensure compliance with local requirements if stricter.</div>	
B To what extent does the completed project limit rate or quantity of runoff compared to existing conditions? <u>Select one of the following:</u>	Yes
<div style="background-color: #fff9c4; padding: 5px;">Do not exceed rate or quantity of runoff for the 2-, 5-, and 10-year 24-hour rainfall event relative to the existing condition (greenfield, greyfield, or brownfield).</div>	
C Does the project include an erosion, sedimentation, and pollution control plan for all construction activities?	Yes
D Does the project treat stormwater from other sites or does it function as part of a larger stormwater management plan?	-
Yes =	3 of 4

NW2.3 Reduce Pesticide and Fertilizer Impacts	1 of 12 Points
<p>Intent: Reduce non-point-source pollution by reducing the quantity, toxicity, bioavailability, and persistence of pesticides and fertilizers.</p> <p>Metric: Reductions in quantity, toxicity, bioavailability, and persistence of pesticides and fertilizers used on site, selection of plant species, and use of integrated pest management techniques.</p> <p>Applicability: Consideration is given as to whether the scope of the project includes exterior vegetated areas. Projects that do not include exterior vegetated areas may apply to have this credit deemed not applicable with supporting documentation.</p>	
Yes/No	

Is this credit applicable?	Yes
----------------------------	-----

Assessment Questions:	Criteria Met?
A Have operational policies and programs been put in place to control the application of fertilizers and pesticides?	Yes
B Have runoff controls been put in place to minimize contamination of groundwater and surface water?	Yes
C To what extent has the project team designed landscaping to require fewer pesticides and fertilizers? <u>Select one of the following:</u>	No
<div style="background-color: #fff9c4; padding: 5px;">None</div>	
D Has the project team selected pesticides and fertilizers that have lower toxicity, persistence, and bioavailability?	-
Yes =	2 of 4

**Envision Framework
Pre-Assessment Checklist**

NW2.4 Protect Surface and Groundwater Quality

20 of 20 Points

Intent: Preserve water resources by preventing pollutants from contaminating surface water and groundwater and monitoring impacts during construction and operations.

Metric: Designs, plans, and programs instituted to prevent and monitor surface water and groundwater contamination during construction and operations.

Applicability: This credit is applicable to all projects that contain or use hazardous and/or potentially polluting substances with the potential to contaminate water sources. In addition to chemical use, project teams should consider how chemical leaching from materials may be a source of contamination.

Yes/No

Is this credit applicable?

Yes

Assessment Questions:

Criteria Met?

A	Has project team determined the potential for surface water and/or groundwater contamination during construction and operations?	Yes
B	Does the project include spill and leak prevention and response plans, and avoid creating new pathways for contamination during construction and operations?	Yes
C	Based on the types of impacts identified in criterion A, does the project reduces the risk of quality degradation to surface water and/or groundwater? This should include water temperature.	Yes
D	Have adequate and responsive surface water and/or groundwater quality monitoring and reporting systems been incorporated into the project?	Yes
E	Has the project actively eliminated at least one source of hazardous and/or potentially polluting substances, or replaced them with nonhazardous or nonpolluting substances or materials?	Yes
F	Does the project improve surface water and/or groundwater quality?	Yes

Yes = 6 of 6

**Envision Framework
Pre-Assessment Checklist**

2. ECOLOGY

NW3.1 Enhance Functional Habitats 0 of 0 Points

Intent: Preserve and improve the functionality of terrestrial (land) habitats.

Metric: The number of habitat functions addressed in order to preserve or enhance the net area and quality of functional habitat.

Applicability: Consideration is given to whether the project contains or impacts natural habitat. Projects that do not contain or impact natural habitat may apply to have this credit deemed not applicable with supporting documentation.

Yes/No

Is this credit applicable?

No

Assessment Questions:		Criteria Met?
A	Has the project team identified existing terrestrial habitats and sited the project to minimize impact?	-
B	Does the project mitigate all disturbances to functional terrestrial (land) habitats? <u>Select one of the following:</u>	No
	None	
C	Does the project increase the quantity of terrestrial habitat?	-
D	Does the project improve the quality of any existing or proposed new terrestrial habitat?	-
E	Does the project facilitate movement between terrestrial habitats, provide new connections, or remove barriers, in order to improve habitat connectivity?	-
F	Does the project return developed land to natural habitat, or set aside existing habitat for permanent conservation and protection?	-
Yes =		-

**Envision Framework
Pre-Assessment Checklist**

NW3.2 Enhance Wetland and Surface Water Functions	12 of 20 Points
--	------------------------

Intent: Maintain and restore the ecosystem functions of streams, wetlands, waterbodies, and their riparian areas.

Metric: Number of functions maintained and restored.

Applicability: Consideration is given to whether the project contains or impacts wetlands or surface waters. This includes direct, indirect, and/or cumulative impacts. Projects that do not contain or impact natural wetlands or surface waters may apply to have this credit deemed not applicable with supporting documentation

	Yes/No
Is this credit applicable?	Yes

Assessment Questions:	Criteria Met?
-----------------------	---------------

A Has the project team identified impacts to wetland and surface water functions?	Yes
B Does the project minimize and mitigate disturbance to wetland and surface water functions? <u>Select one of the following:</u>	Yes
The project ensures that no existing wetlands or surface water functions are disturbed or damaged as a result of the project.	
C Does the project protect or restore hydrologic connection?	-
D Does the project protect or restore water quality?	Yes
E Does the project protect or restore aquatic habitat?	Yes
F(1) Does the project protect sediment transport and reduce sedimentation?	Yes
F(2) In addition to protecting all existing wetland and surface water functions, can the project demonstrate it has restored at least one previously degraded wetlands and/or surface water function?	-

Yes = 5 of 7

**Envision Framework
Pre-Assessment Checklist**

NW3.3 Maintain Floodplain Functions **0 of 0 Points**

Intent: Preserve floodplain functions by limiting development and impacts of development in the floodplain.

Metric: Efforts to avoid floodplains or maintain natural-acting floodplain functions.

Applicability: Projects that are not within the floodplain and do not impact floodplain functions, may apply to have this credit deemed not applicable with supporting documentation. Some projects that are not directly within the floodplain may still have an impact on flooding and floodplain functions through their handling of stormwater runoff. These projects may also pursue achievement in this credit if they can demonstrate a direct connection to the floodplain. There are strong links between this credit and NW2.2 Manage Stormwater, and some project components and strategies may apply to both credits.

Yes/No

Is this credit applicable?

No

Assessment Questions:	Criteria Met?
A Has the project team identified the 100-year or design frequency floodplain in relation to the project location?	-
B To what extent does the project preserve vegetated zones within the floodplain? <u>Select one of the following:</u> 2	No
None	
C Does the project mitigate impacts to floodplain functions?	-
D Was the project intentionally sited to avoid floodplains?	-
E Does the project remove structures from the floodplain or return previously developed areas to a vegetated state?	-
Yes =	-

NW3.4 Control Invasive Species **0 of 0 Points**

Intent: Use appropriate noninvasive species, and control or eliminate existing invasive species.

Metric: Degree to which invasive species have been reduced or eliminated.

Applicability: This credit is applicable to all projects with sites that contain invasive species. Project teams that conduct site investigations and do not identify existing invasive species may apply to have this credit deemed not applicable with supporting documentation.

Yes/No

Is this credit applicable?

No

Assessment Questions:	Criteria Met?
A Does the project avoid introducing invasive species to the site?	-
B Has the project team conducted a site assessment to determine if invasive species are present?	-
C Does the project implement controls for existing infestations of invasive species before, during and post-construction?	-
D Does the project guard against future infestations by supporting the establishment of native and/or noninvasive species?	-
E Does the project provide long-term controls to prevent the reintroduction of invasive species?	-
F Does the project include the ongoing control, suppression, or containment of major infestations of invasive species after construction?	-
Yes =	-

**Envision Framework
Pre-Assessment Checklist**

NW3.5 Protect Soil Health	4 of 8 Points
----------------------------------	----------------------

Intent: Preserve the composition, structure and function of site soils.

Metric: Degree to which the disruption of soil health has been minimized and restored.

Applicability: This credit is applicable to all projects that impact soils during construction. Projects that do not impact soil (e.g. the internal refurbishment of an existing facility) may apply to have this credit deemed not applicable with supporting documentation.

Yes/No

Is this credit applicable?

Yes

Assessment Questions:

Criteria Met?

A Has the project team limited the area that is disturbed by development activities?

Yes

B Have vegetated areas disturbed by development activities been restored for appropriate soil type, structure, and function to support healthy plant and tree growth?

Yes

C Has the project team implemented a soil protection plan or policies? Select one of the following:

Yes

A soil protection plan, or policies, are prepared and implemented. The plan/policies specifically include any special landscape features.

D Has the project restored appropriate soil type, structure, and function to vegetated areas disturbed by previous development?

-

Yes =

3 of 4



Climate And Resilience

1. Emissions

CR1.1 Reduce Net Embodied Carbon		0 of 20 Points
Intent: Reduce the impacts of material extraction, refinement/manufacture, and transport over the project life.		
Metric: Percentage of reduction in net embodied carbon of materials.		
Applicability: This credit is applicable to all projects that include the use or consumption of physical materials in construction or operation.		
		Yes/No
Is this credit applicable?		Yes
Assessment Questions:		Criteria Met?
A	Has the project team determined materials that are the primary contributors to embodied carbon for the project during construction and operation?	-
B	Has the project team calculated the primary contributors to overall embodied carbon?	-
C	To what extent does the project reduce the net embodied carbon of materials used in construction and operation? <u>Select one of the following:</u>	No
None		
		Yes = 0 of 3

CR1.2 Reduce Greenhouse Gas Emissions		0 of 26 Points
Intent: Reduce greenhouse gas emissions during the operation of the project, reducing project contribution to climate change.		
Metric: Percentage of reduction in operational greenhouse gas emissions.		
Applicability: This credit is applicable to all projects that consume energy, fuel, or otherwise produce greenhouse gas emissions during their operation. Projects that do not include greenhouse gas emissions during operations may apply to have this credit deemed not applicable with supporting documentation. However, projects that do not produce greenhouse gas emissions because of intentional planning decisions may apply for the Conserving level with supporting documentation.		
		Yes/No
Is this credit applicable?		Yes
Assessment Questions:		Criteria Met?
A	To what extent does the project reduce greenhouse gas emissions during its operational life? <u>Select one of the following:</u>	No
None		
B	Has the project team calculated and reported the annual greenhouse gas emissions of the project?	-
		Yes = 0 of 2

**Envision Framework
Pre-Assessment Checklist**

CR1.3 Reduce Air Pollutant Emissions

0 of 0 Points

Intent: Reduce emissions of air pollutants: particulate matter (including dust), ground-level ozone, carbon monoxide, sulfur oxides, nitrogen oxides, lead, and volatile organic compounds.

Metric: Reduction of air pollutants compared to baseline.

Applicability: This credit is applicable to all projects that directly produce any of the criteria pollutants. Projects that do not include air pollutant emissions may apply to have this credit deemed not applicable with supporting documentation. However, projects that do not produce air pollutant emissions because of intentional planning decisions to choose non-polluting alternatives may apply for the Conserving level with supporting documentation.

Yes/No

Is this credit applicable?

No

Assessment Questions:

Criteria Met?

A Does the project meet all relevant minimum air quality standards and regulations?

-

B To what extent does the project reduce air pollutant emissions during operations? Select one of the following:

2

No

None

C Does the project include the ongoing monitoring and management of direct air pollutant emissions?

-

D Has the project team assessed the materiality of volatile organic compounds to the health of construction workers and the project operators?

-

E Does the project remove existing air pollutant sources?

-

Yes =

-

**Envision Framework
Pre-Assessment Checklist**

2. RESILIENCE

CR2.1 Avoid Unsuitable Development	0 of 0 Points
---	----------------------

Intent: Minimize or avoid development on sites prone to hazards.

Metric: The degree to which the project is designed and/or sited to avoid or mitigate site-related risks.

Applicability: Projects that are not located within regions at risk of site hazards, and therefore cannot demonstrate they actively avoided site hazards, may apply to have this credit deemed not applicable with supporting documentation.

Yes/No

Is this credit applicable?

No

Assessment Questions:	Criteria Met?
------------------------------	----------------------

A	Has the project team identified potential siting hazards, the vulnerability of the project to the hazard, and the potential for the project to exacerbate the hazard?	-
B	Can the project team demonstrate that siting and project alternatives were seriously considered in order to minimize exposure to risk?	-
C	Has the project team implemented strategies to mitigate the impact of site hazards?	-
D	Can the project team demonstrate that the chosen project and site resulted in the lowest exposure to site hazards while still meeting project requirements?	-
E	Was the site chosen to intentionally avoid known site hazards?	-
F	Does the project remove or modify structures subject to frequent damage?	-

Yes = -

CR2.2 Assess Climate Change Vulnerability	0 of 20 Points
--	-----------------------

Intent: Develop a comprehensive climate change vulnerability assessment.

Metric: Scope and comprehensiveness of climate change vulnerability assessment.

Applicability: This credit is applicable to all projects potentially impacted by climate change, which is the vast majority of infrastructure.

Yes/No

Is this credit applicable?

Yes

Assessment Questions:	Criteria Met?
------------------------------	----------------------

A	Has the project team determined climate change threats to the project and its surroundings?	-
B	Has the project team determined the vulnerability of the project to climate change threats?	-
C	Has the project team determined the vulnerability of the infrastructure system to climate change threats?	-
D	Has the project team determined the vulnerability of the community to climate change threats?	-
E	Has the project team or owner shared their climate threat findings?	-

Yes = 0 of 5

**Envision Framework
Pre-Assessment Checklist**

CR2.3 Evaluate Risk and Resilience	18 of 26 Points
<p>Intent: Conduct a comprehensive, multihazard risk and resilience evaluation.</p> <p>Metric: Scope and comprehensiveness of the multihazard risk and resilience evaluation.</p> <p>Applicability: It is likely that all projects would benefit from a thorough investigation of potential risks. It would, therefore, be difficult to demonstrate that the credit is not relevant or applicable to a project seeking an Envision award. Risks are not always major catastrophic events; small and large projects alike may consider how crime/vandalism or personal injury are also potential risks with associated impacts.</p>	
Yes/No	

Is this credit applicable?

Yes

Assessment Questions:	Criteria Met?
<p>A To what extent does the project team's risk assessment include the project, infrastructure system, and community? <u>Select one of the following:</u></p> <p style="background-color: #FFF2CC; padding: 2px;">The project team draws the assessment boundary for subsequent criteria (B, C, D, and E) around the interdependencies of the project and its associated/connected infrastructure system/network.</p>	Yes
<p>B Has the project team identified the critical functions and dependencies of the infrastructure asset and its primary components?</p>	Yes
<p>C Has the project team identified the threats or hazards to the project and its surroundings?</p>	Yes
<p>D Has the project team identified the vulnerabilities of the critical functions and dependencies of the infrastructure asset?</p>	Yes
<p>E Has the project team evaluated risks by determining the probability of a threat or hazard occurring and the associated impacts?</p>	Yes
<p>F Did the risk evaluation conducted by the project include the participation of the owner and a diverse and integrated team of key stakeholders?</p>	Yes
Yes =	6 of 6

CR2.4 Establish Resilience Goals and Strategies	20 of 20 Points
<p>Intent: To support increased project and community resilience through the establishment of clear objectives and goals.</p> <p>Metric: The degree to which resilience goals expand from initial commitments to quantifiable project objectives, long-term operating plans, and community-wide development plans.</p> <p>Applicability: All projects that are exposed to risks would benefit from establishing resilience goals and strategies. It would therefore be difficult to demonstrate that the credit is not relevant or applicable to a project seeking an Envision award.</p>	
Yes/No	

Is this credit applicable?

Yes

Assessment Questions:	Criteria Met?
<p>A Has the project team identified the project performance goals and risk appetite of the owner?</p>	Yes
<p>B Has the project team developed risk management strategies based on a comprehensive risk evaluation?</p>	Yes
<p>C Have key stakeholders been engaged in developing resilience goals?</p>	Yes
<p>D Is the project part of, or does it support, larger community resilience or climate change adaptation goals?</p>	Yes
Yes =	4 of 4

**Envision Framework
Pre-Assessment Checklist**

CR2.5 Maximize Resilience	20 of 26 Points
<p>Intent: Increase resilience, life-cycle system performance, and the ability to withstand hazards by maximizing durability.</p> <p>Metric: The degree to which the project incorporates elements that increase durability, the ability to withstand hazards, and extend useful life.</p> <p>Applicability: All projects that are exposed to risks would benefit from increased resilience. It would therefore be difficult to demonstrate that the credit is not relevant or applicable to a project seeking an Envision award.</p>	
Yes/No	

Is this credit applicable?	Yes
----------------------------	-----

Assessment Questions:	Criteria Met?
A Has the project team developed resilience goals and strategies based on a comprehensive risk evaluation?	Yes
B Has the project team implemented resilience strategies sufficient to address major project risks and improve project resilience?	Yes
C Has the project team periodically monitored the implementation of project resilience strategies and reviewed their continued effectiveness throughout project delivery?	Yes
D Will resilience goals and strategies be incorporated into the ongoing operations and maintenance of the project?	Yes
E Does the project include methods for measuring or quantifying resilience performance targets?	No
Yes =	4 of 5

CR2.6 Improve Infrastructure Integration	18 of 18 Points
<p>Intent: Enhance the operational relationships and strengthen the functional integration of the project into connected, efficient, and diverse infrastructure systems.</p> <p>Metric: The degree to which the project is integrated into other connected systems, where beneficial and appropriate, in order to increase resilience and systems performance.</p> <p>Applicability: It is likely that all infrastructure would, and should, benefit from the application of an integrated systems approach. It would therefore be difficult to demonstrate that the credit is not relevant or applicable to a project seeking an Envision award.</p>	
Yes/No	

Is this credit applicable?	Yes
----------------------------	-----

Assessment Questions:	Criteria Met?
A Does the project increase internal systems integration?	Yes
B Will the infrastructure integration reduce the risk of systemic or cascading failures?	Yes
C Does the project increase external systems integration?	Yes
D Does the project integrate infrastructure networks?	Yes
E Does the project integrate data or monitoring systems in order to improve performance?	Yes
Yes =	5 of 5

ATTACHMENT A

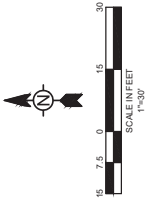
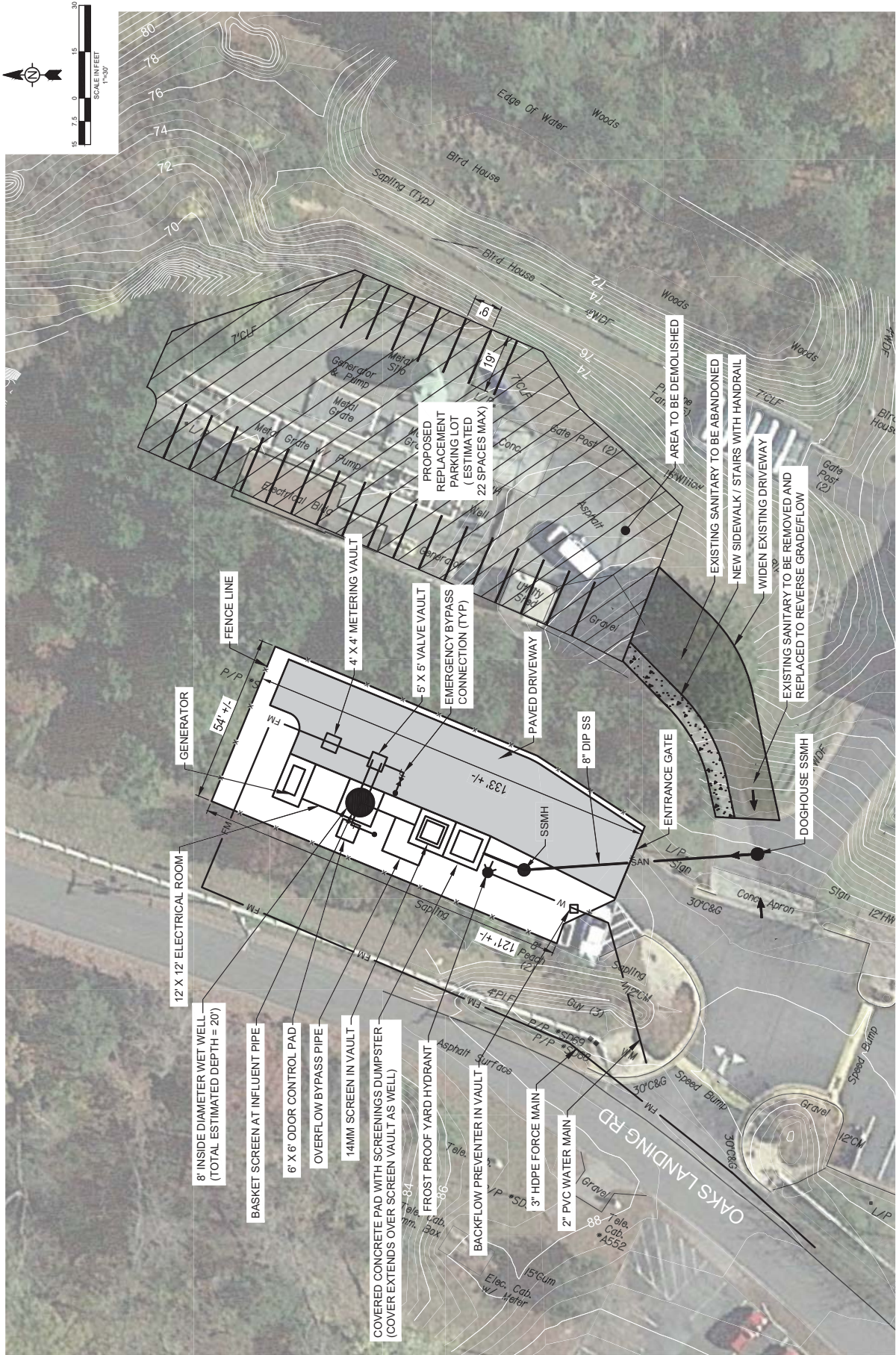
Category	Credit	Level	Points	Justification
Quality of Life	QL1.1 Improve Community Quality of Life	Restorative	26	This project improves community quality of life by providing connection points for areas of future development to stimulate growth. Additionally, it improves water quality and lessens environmental impacts by eliminating 2 discharge points. Other items for justification include providing trenchless crossings to minimize impacts to traffic and wooded areas and coordination with the Middlesex Water System improvements to support community needs. Ongoing stakeholder coordination will be necessary to ensure those affected are satisfied the project addresses their needs and goals.
	QL1.2 Enhance Public Health & Safety	Superior	12	This project provides reliable sewer infrastructure to adjacent communities. Health and safety requirements will be exceeded through plan and spec requirements. In addition, health and safety improvements are provided to the adjacent communities by improving water quality through the elimination of 2 WWTP discharge points.
	QL1.3 Improve Construction Safety	Enhanced	5	Public and worker safety is addressed through HRSD's safety programs. The Contractor's commitment to health and safety will need to be verified.
	QL1.4 Minimize Noise & Vibration		0	Noise and vibration impacts will be evaluated by performing a Preconstruction Assessment per Section 12 of HRSD's Design and Construction Standards. Noise and/or vibration mitigation is not anticipated at this time but may be necessary following the Preconstruction Assessment.
	QL1.5 Minimize Light Pollution		0	The pump station sites will include lighting. Strategies to reduce light pollution are not anticipated.
	QL1.6 Minimize Construction Impacts	Enhanced	2	Maintenance of Traffic plans will address safety and wayfinding for pedestrians and vehicles during construction while maintaining access to public space. Noise and/or vibration mitigation is not anticipated at this time but may be necessary following the Preconstruction Assessment.
	QL2.1 Improve Community Mobility Access		N/A	
	QL2.2 Encourage Sustainable Transportation		N/A	
	QL2.3 Improve Access & Wayfinding	Enhanced	5	Accesses will be designed to address safety and minimize impacts on the surroundings.
	QL3.1 Advance Equity & Social Justice		N/A	
	QL3.2 Preserve Historic & Cultural Resources	Enhanced	2	A Phase IA Cultural Resources Assessment (due diligence study) has been prepared for this project. The proposed force main alignment has been selected to avoid impacts to the identified historic and cultural resources.
	QL3.3 Enhance Views & Local Character	Improved	1	The architectural features of the pump stations and screening for the pump station sites will be provided to preserve views and local character.
	QL3.4 Enhance Public Space & Amenities		0	The alignment has been selected to minimize impacts to public spaces.
		Wellbeing		
	Mobility			
	Community			

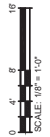
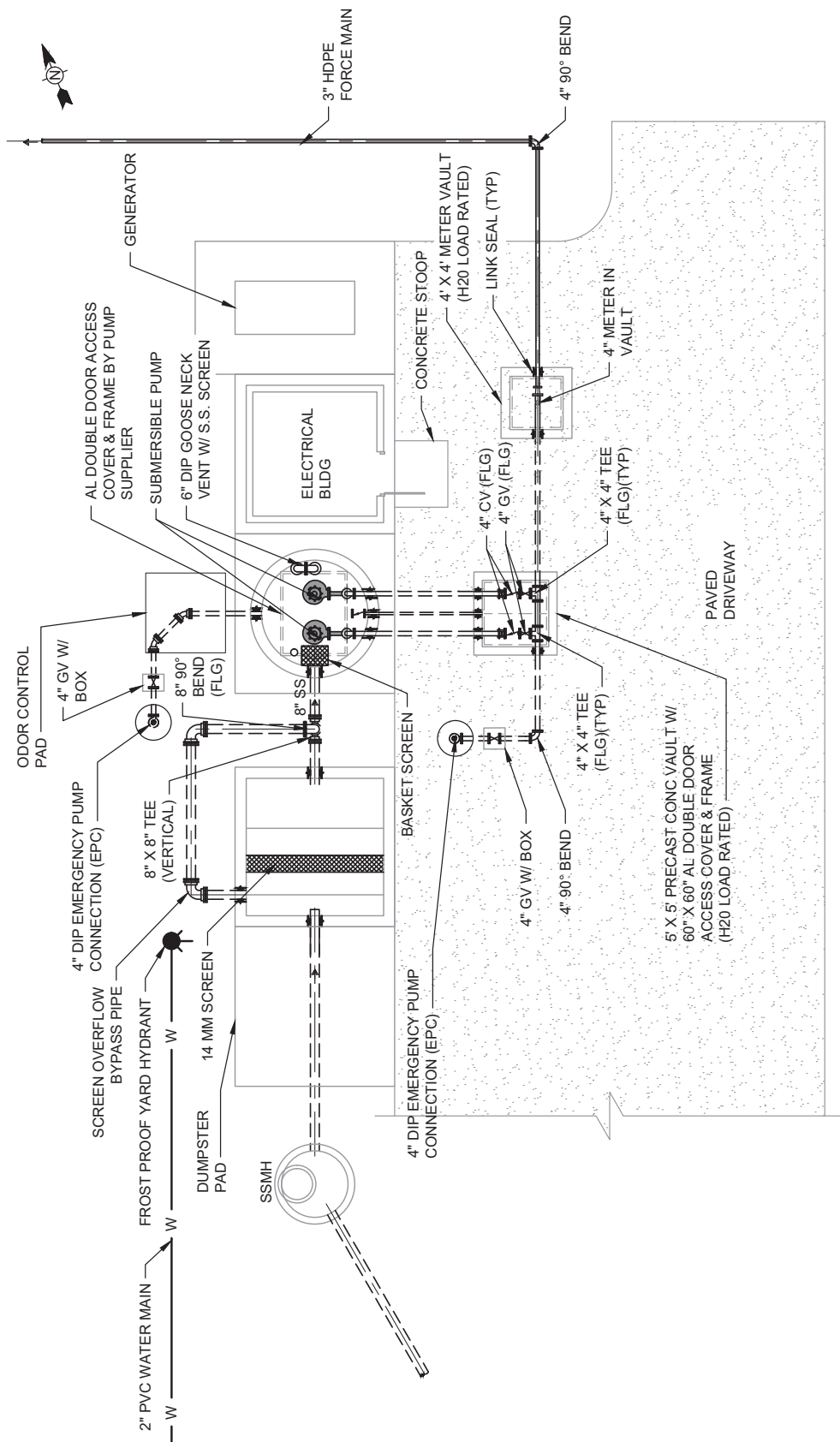
Resource Allocation	Energy	RA2.1 Reduce Operational Energy Consumption			0	Determination of the estimated annual energy consumption of the project during operations is not anticipated.
		RA2.2 Reduce Construction Energy Consumption			0	The evaluation of energy consumption during construction is not anticipated.
		RA2.3 Use Renewable Energy			0	Renewable energy sources are not anticipated.
		RA2.4 Commission & Monitor Energy Systems			0	Detailed monitoring of energy performance during operation is not anticipated at the pump station sites.
	Water	RA3.1 Preserve Water Resources			N/A	
		RA3.2 Reduce Operational Water Consumption			N/A	
		RA3.3 Reduce Construction Water Consumption			N/A	
		RA3.4 Monitor Water Systems			N/A	
	Siting	NW1.1 Preserve Sites of High Ecological Value	Superior		12	Sites with high ecological value have been identified and the project has been sited to avoid these areas.
		NW1.2 Provide Wetland & Surface Water Buffers	Conserving		16	Wetland areas will be avoided by trenchless crossings.
		NW1.3 Preserve Prime Farmland			N/A	
		NW1.4 Preserve Undeveloped Land	Superior		12	The majority of the project is aligned within the right-of-way on previously developed land.
	Conservation	NW2.1 Reclaim Brownfields			N/A	
		NW2.2 Manage Stormwater	Improved		2	Stormwater quality and quantity measures will be provided at the pump station sites.
		NW2.3 Reduce Pesticide & Fertilizer Impacts	Improved		1	The construction plans and specifications will address the use of fertilizers and runoff control measures.
		NW2.4 Protect Surface & Groundwater Quality	Restorative		20	The project plans will address spill and leak prevention. Additionally, the project eliminates two WWTP discharge points, improving surface water quality.
		NW3.1 Enhance Functional Habitats			N/A	
		NW3.2 Enhance Wetland & Surface Water Functions	Superior		12	Trenchless construction is proposed at water crossings, protecting water quality and aquatic habitat. E&SC measures are provided to prevent sediment transport and reduce sedimentation.
	Ecology	NW3.3 Maintain Floodplain Functions			N/A	
		NW3.4 Control Invasive Species			N/A	
		NW3.5 Protect Soil Health	Superior		4	The plans and specifications will be designed to minimize land disturbance and restore vegetated areas disturbed during construction.
		CR1.1 Reduce Net Embodied Carbon			0	The materials that are the primary contributors to embodied carbon have not been determined.
		CR1.2 Reduce Greenhouse Gas Emissions			0	Greenhouse gas emissions have not been evaluated.
	Emissions	CR1.3 Reduce Air Pollutant Emissions			N/A	
CR2.1 Avoid Unsuitable Development				N/A		
CR2.2 Assess Climate Change Vulnerability				0	Vulnerability of the project to climate change threats has not been evaluated.	
	CR2.3 Evaluate Risk and Resilience	Enhanced		18	The project will be designed considering the interdependencies between the new and connected force main, pumps, and equalization tanks, considering different weather events and the possibility of equipment failure.	

Climate and Resilience	Resilience	<p>CR2.4 Establish Resilience Goals and Strategies</p> <p>CR2.5 Maximize Resilience</p> <p>CR2.6 Improve Infrastructure Integration</p>	<p>Conserving</p> <p>Superior</p> <p>Restorative</p>	<p>20</p> <p>20</p> <p>18</p>	<p>Performance objectives and risks have been identified. The project design will include a safety factor to reduce the risk potential. The project supports larger community resilience by providing reliable sewer infrastructure to neighboring areas.</p> <p>Equalization tanks will be provided to prevent overflows and increase resilience. Additionally, pump stations will be designed to handle a wide range of flows with redundancy. The design of the tanks and pump stations will be evaluated throughout project delivery. Operations staff will monitor and perform maintenance as needed at the pump stations and on the tanks following construction.</p> <p>The improvements expand HRSD's existing system and provide reliable sewer infrastructure to new areas through proposed connection points. Additionally, the system's performance is increased by eliminating two WWTP discharge points while providing increased resilience through equalization tanks. Monitoring systems will be provided throughout the project (flow, pressure, etc.).</p>
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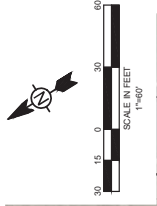
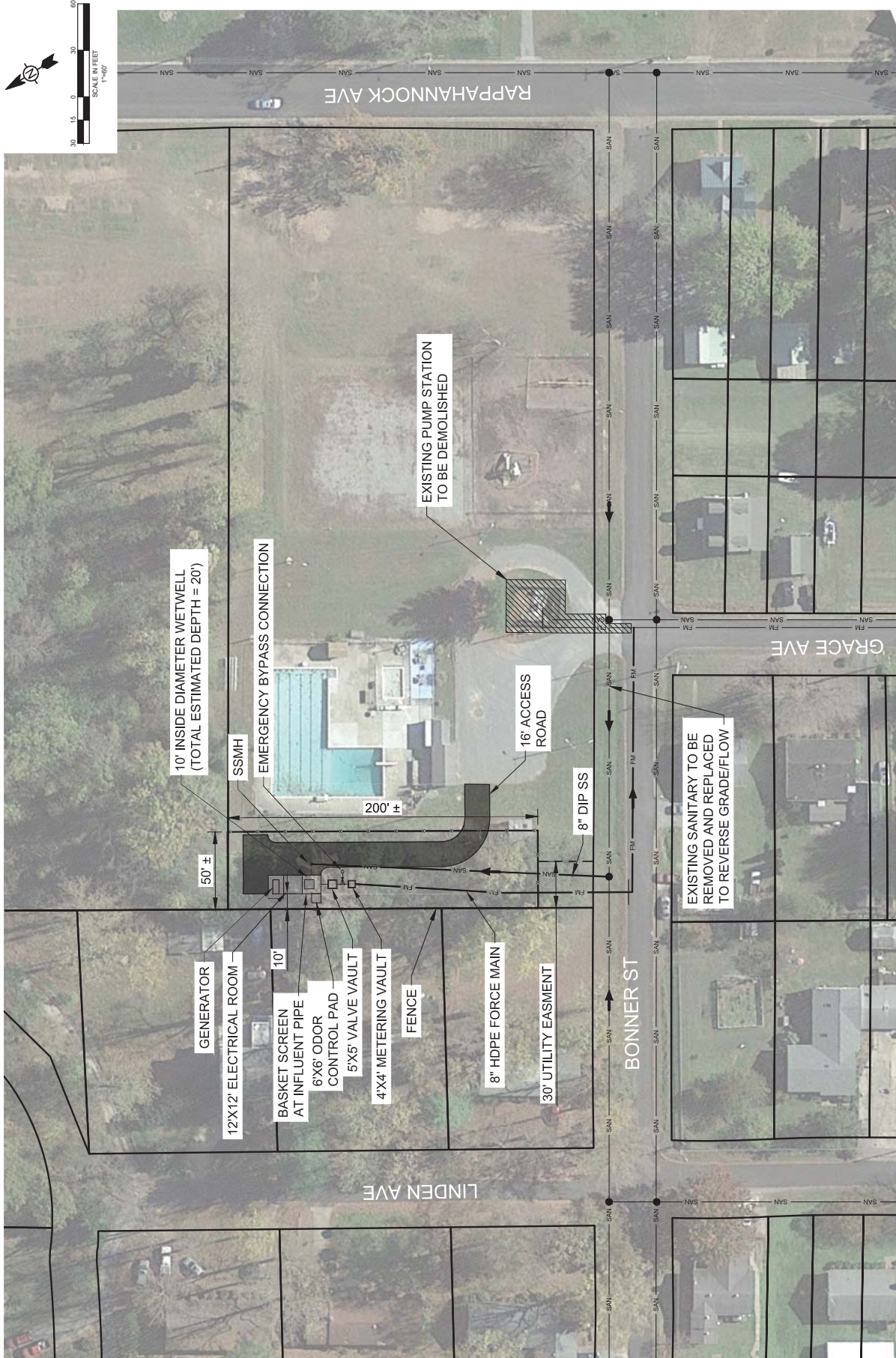
Appendix N: Project Schedule

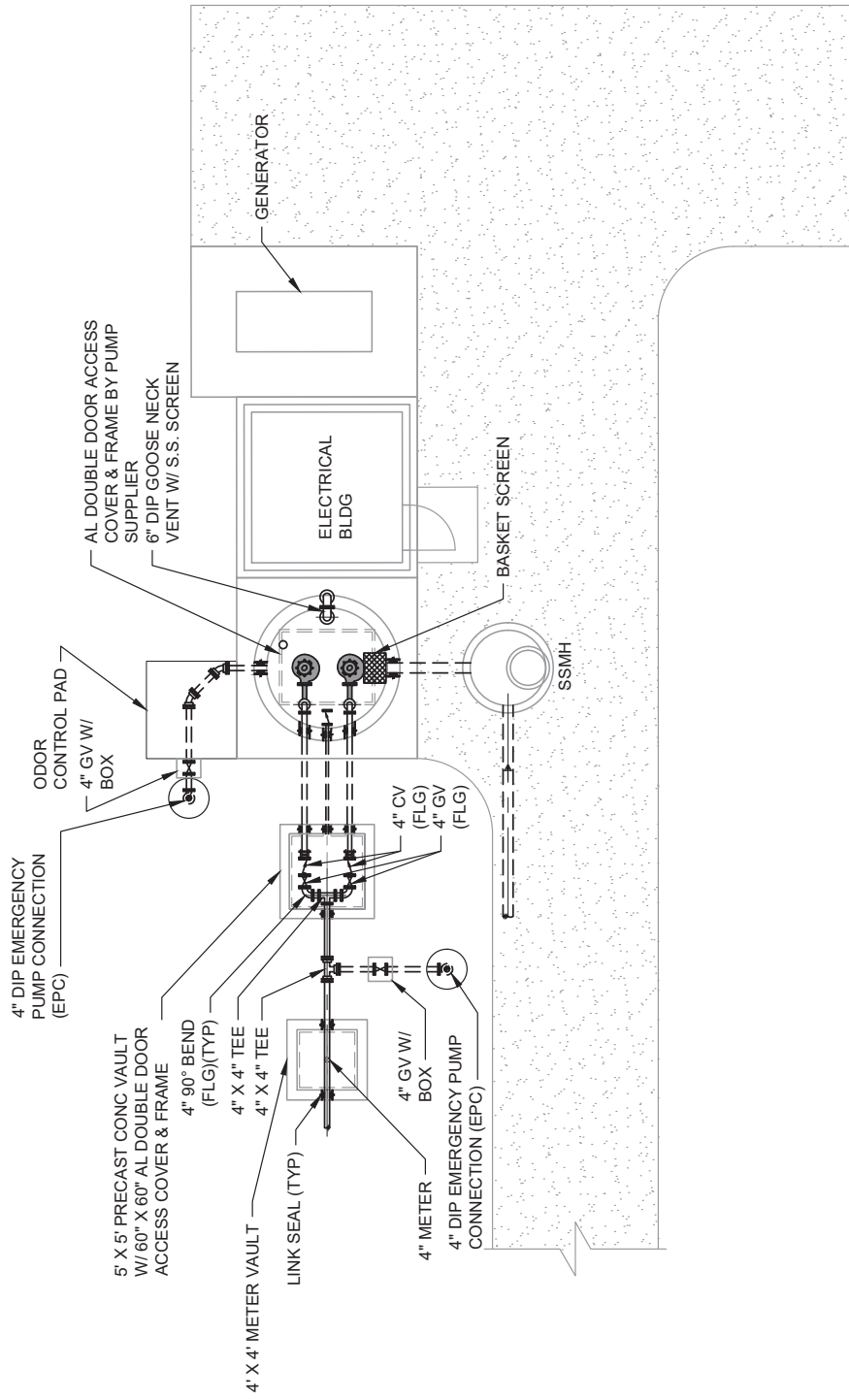
Appendix C: Pump Station Layouts

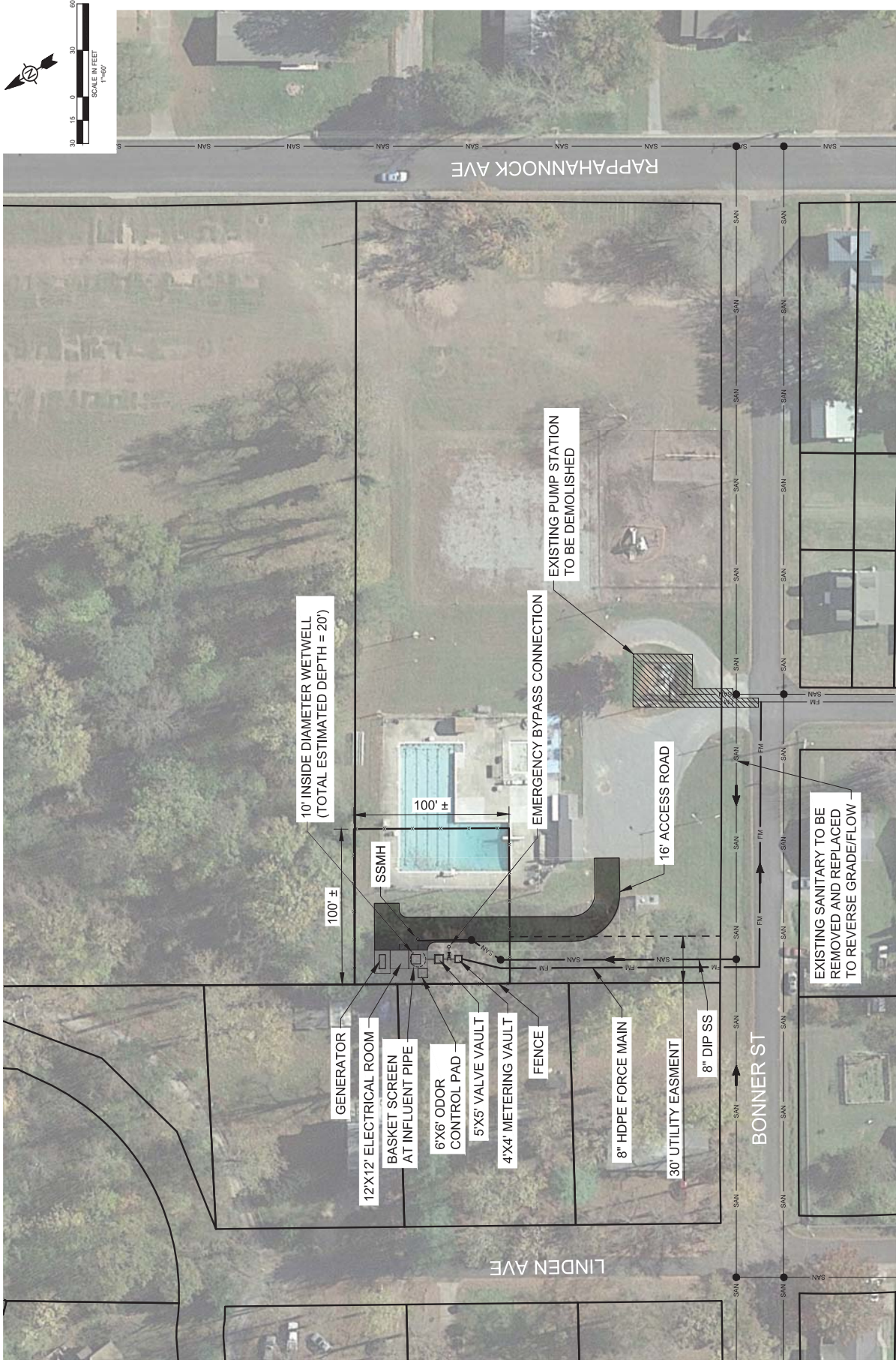


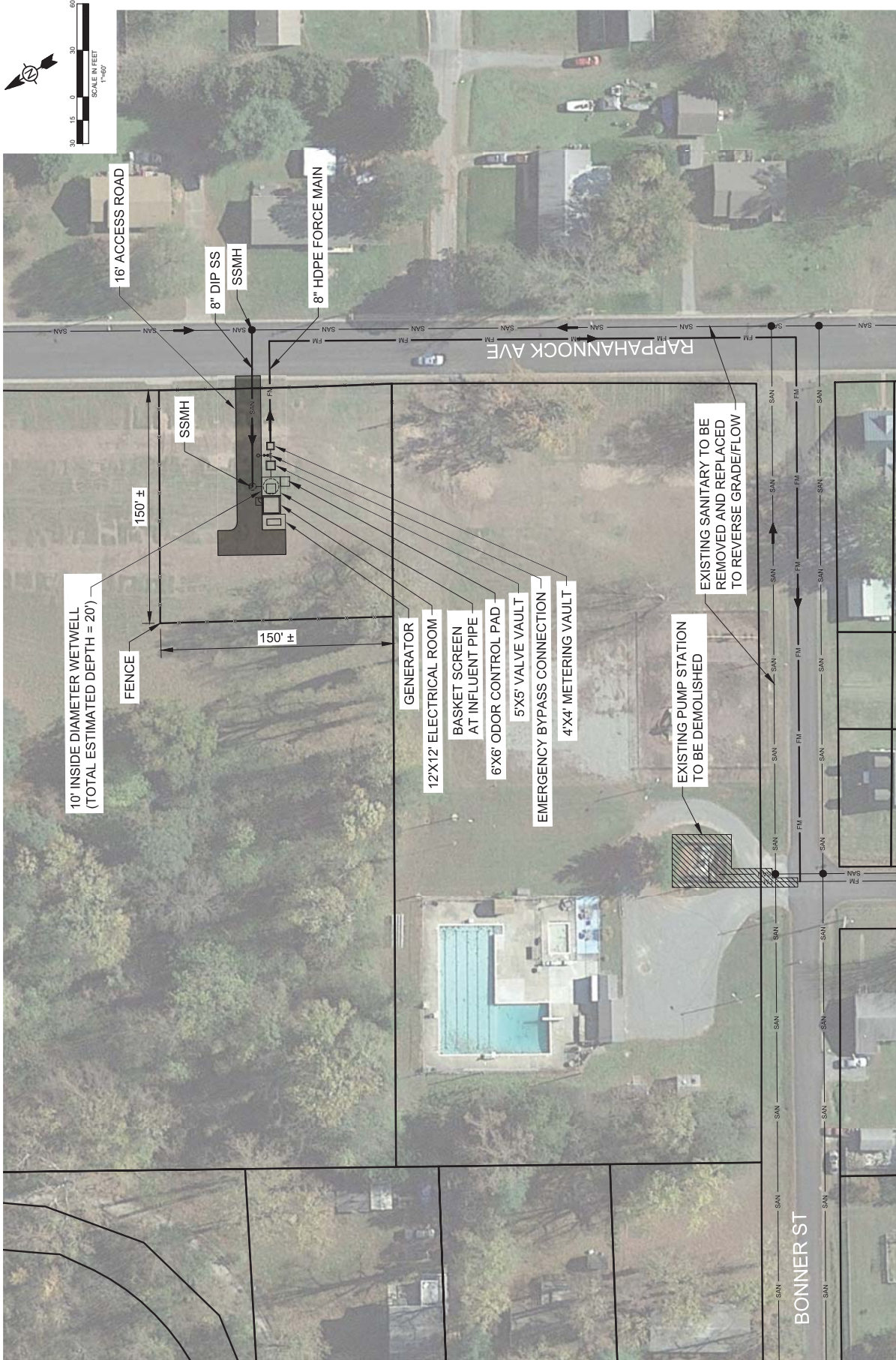


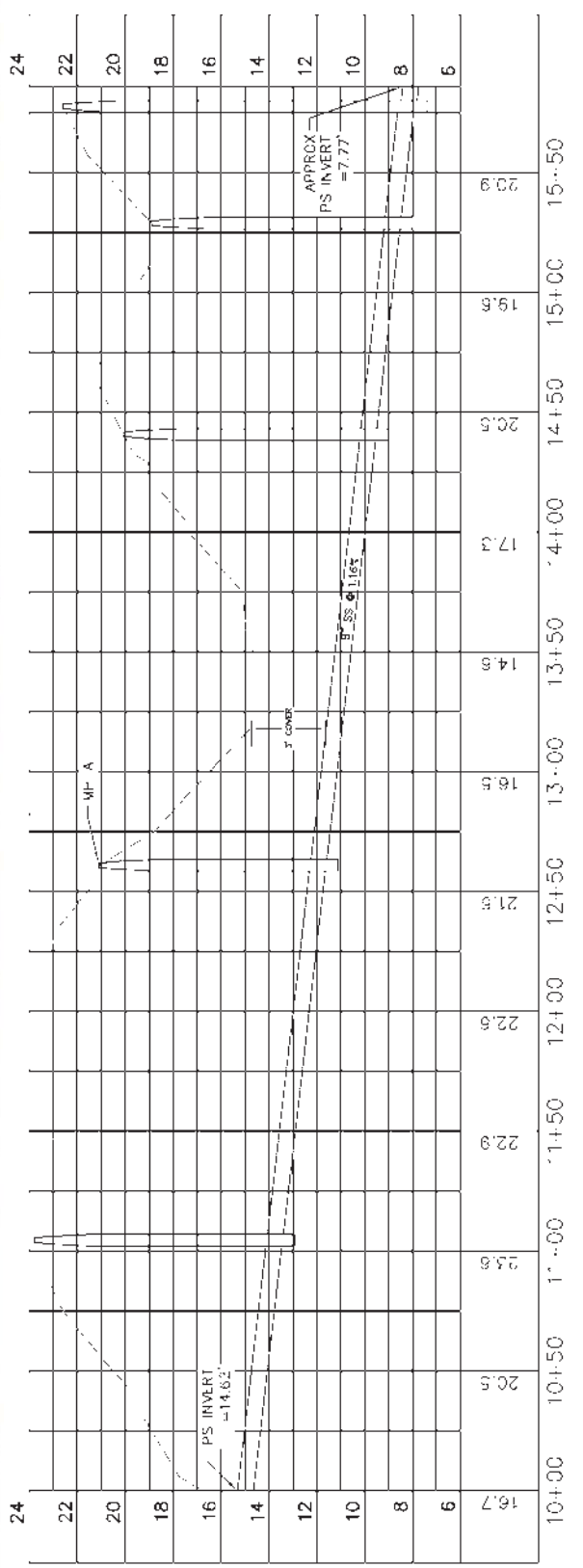
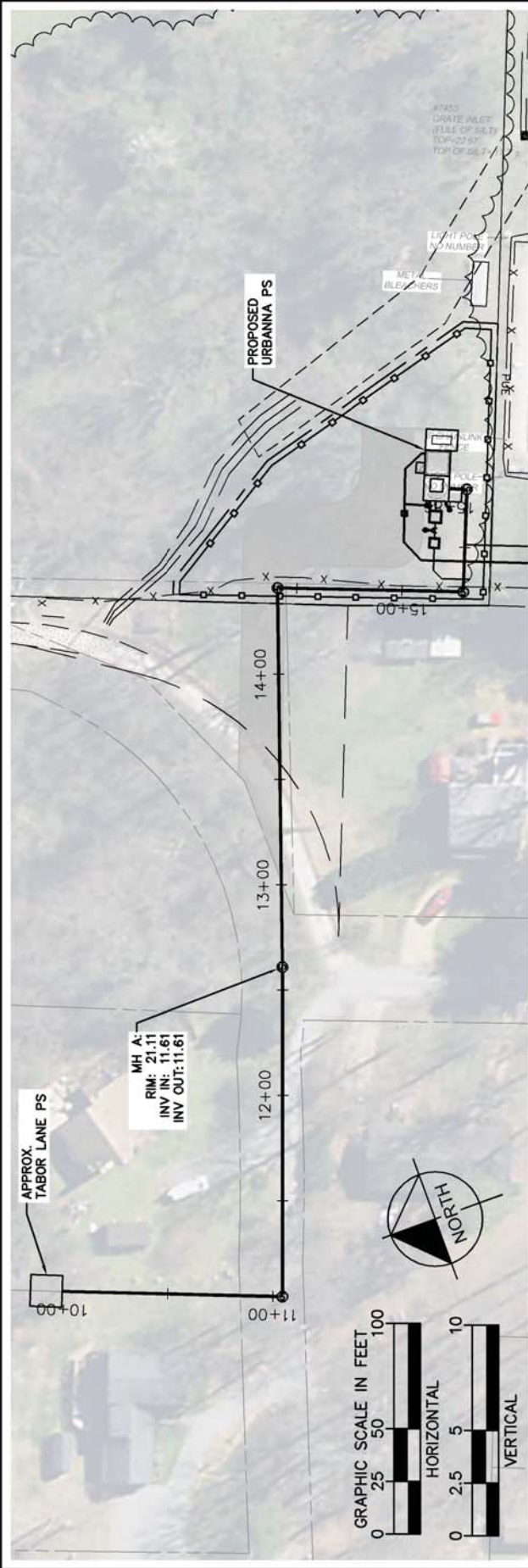
- NOTES:
1. DUMPSTER PAD AND SCREEN VAULT SHALL BE COVERED
 2. BASKET SCREEN SHALL SERVE AS BACKUP FOR THE 14MM SCREEN INCLUDING OVERFLOW THRU THE BYPASS PIPE

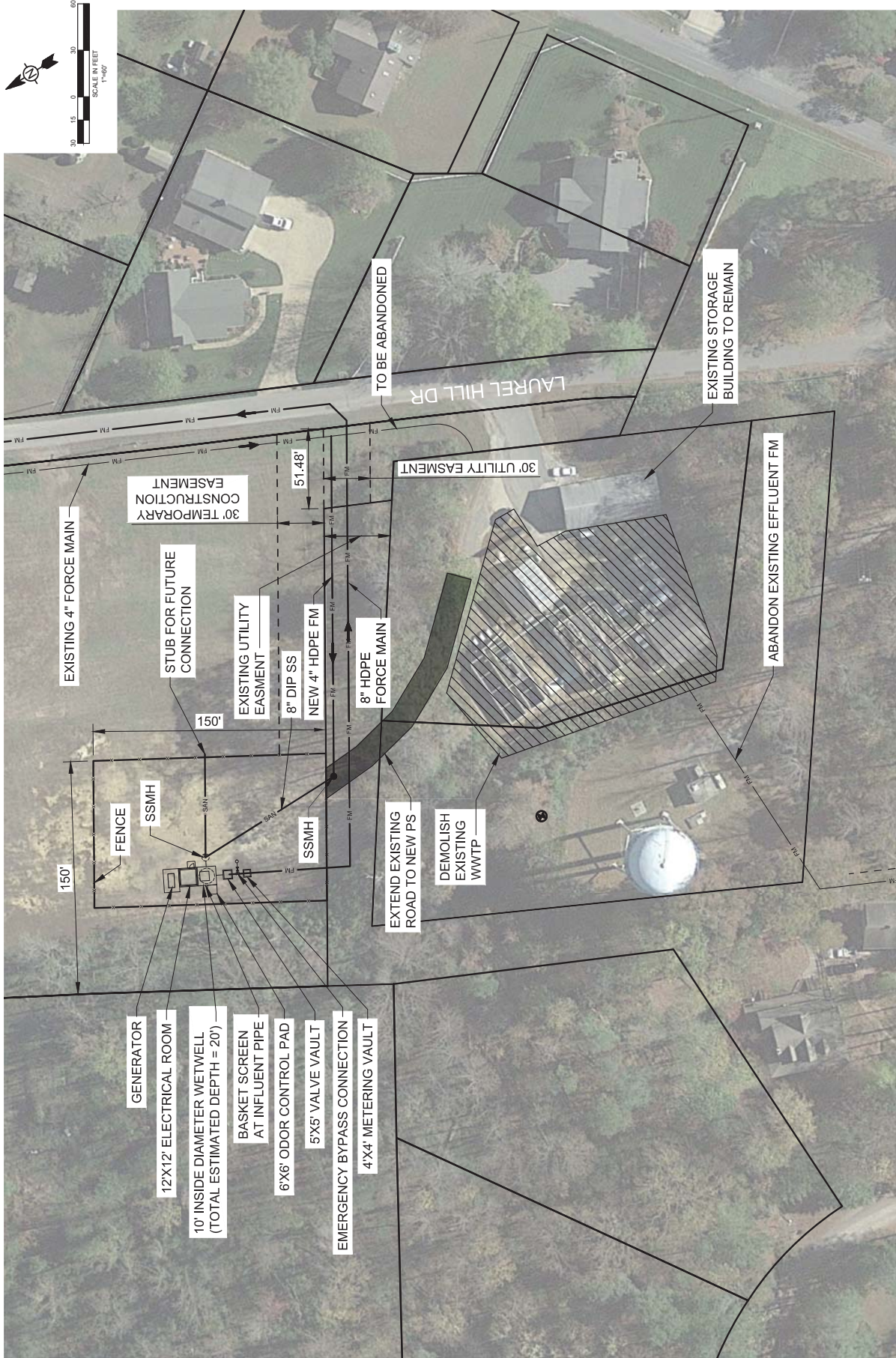












EXISTING 4" FORCE MAIN

GENERATOR

12'X12' ELECTRICAL ROOM

10' INSIDE DIAMETER WETWELL
(TOTAL ESTIMATED DEPTH = 20')

BASKET SCREEN
AT INFLUENT PIPE

6'X6' ODOR CONTROL PAD

5'X5' VALVE VAULT

EMERGENCY BYPASS CONNECTION

4'X4' METERING VAULT

STUB FOR FUTURE
CONNECTION

30' TEMPORARY
CONSTRUCTION
EASEMENT

EXISTING UTILITY
EASEMENT

8" DIP SS

NEW 4" HDPE FM

8" HDPE
FORCE MAIN

EXTEND EXISTING
ROAD TO NEW PS

DEMOLISH
EXISTING
WWTP

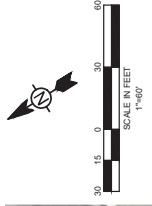
TO BE ABANDONED

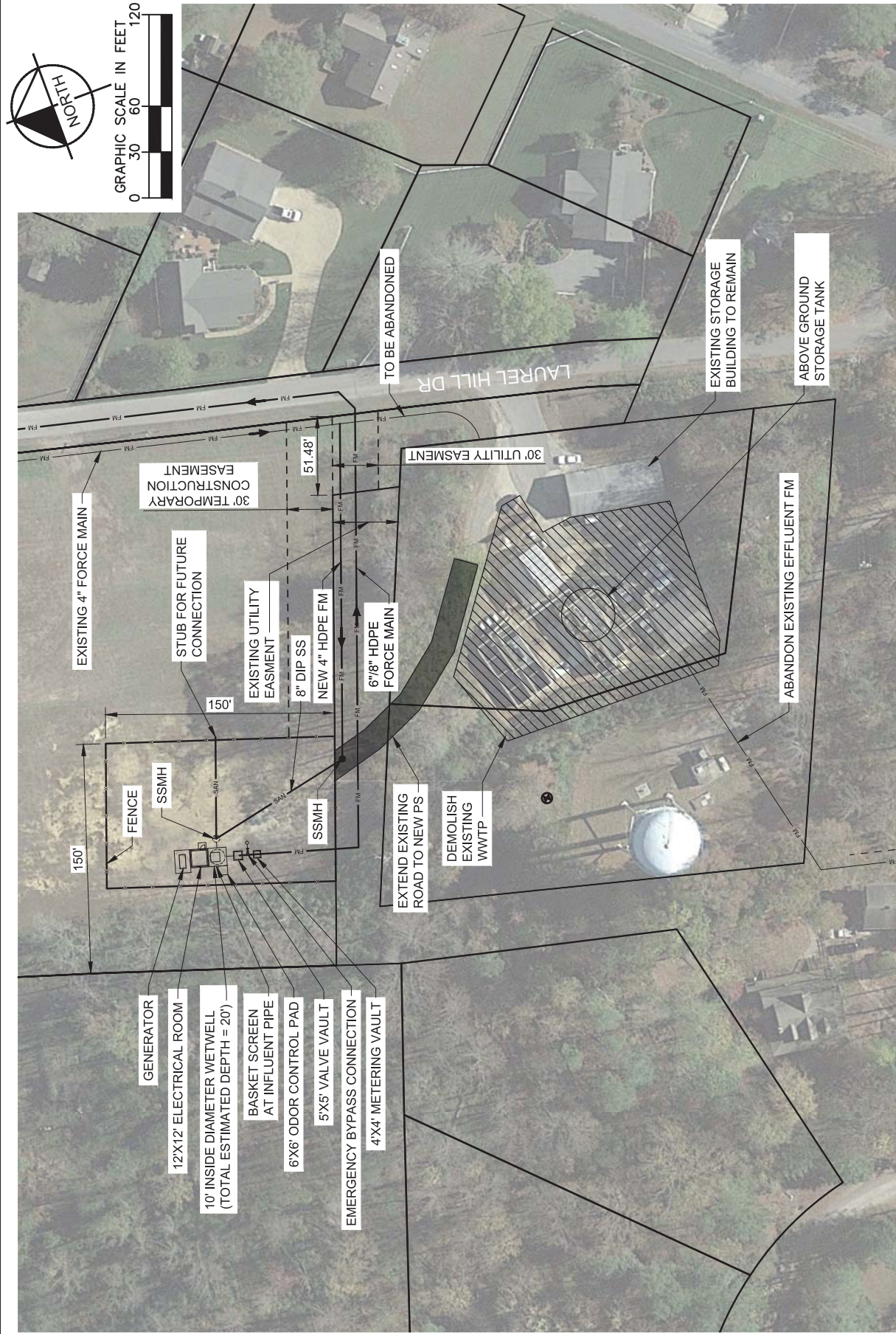
LAUREL HILL DR

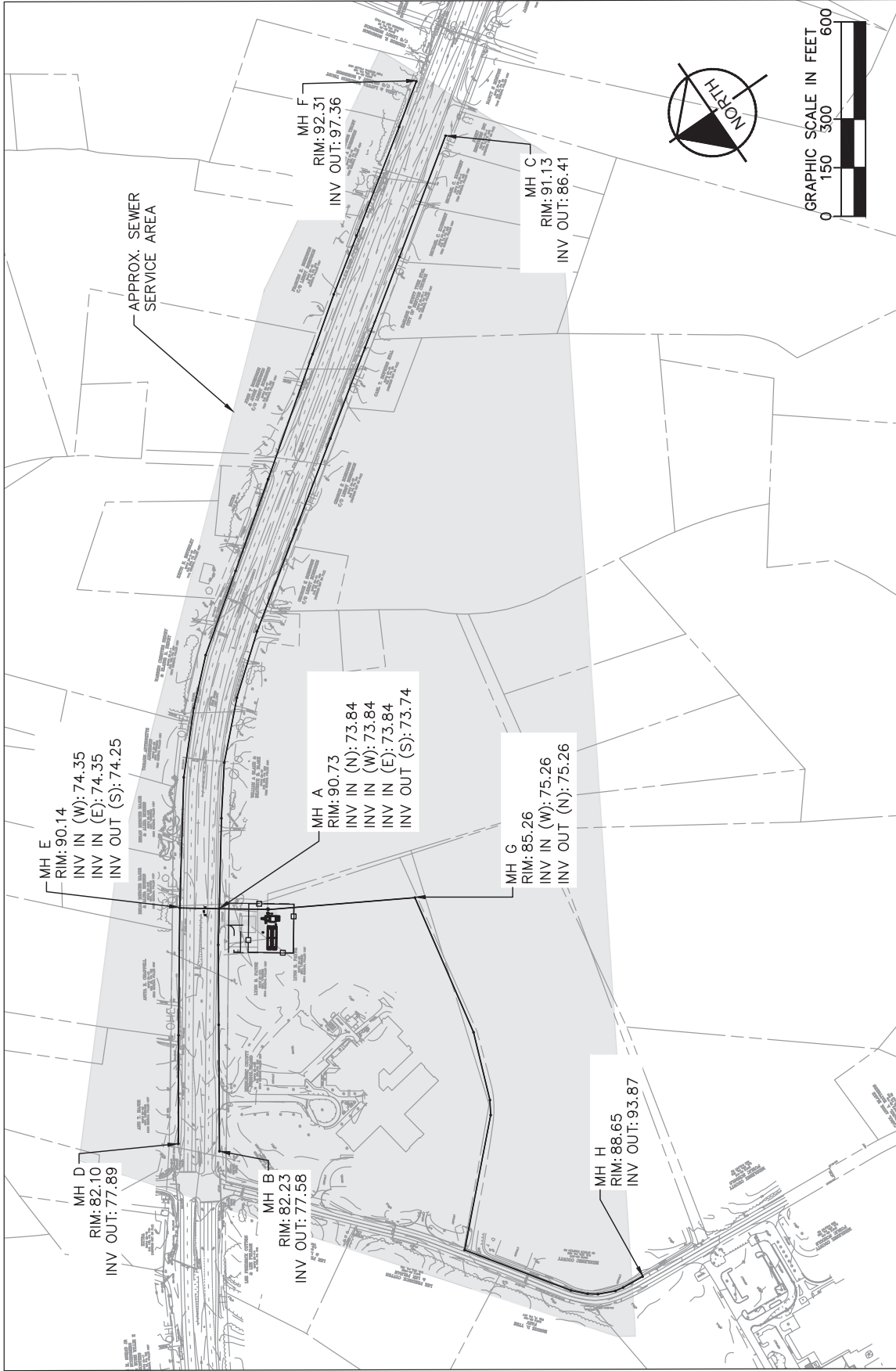
30' UTILITY EASEMENT

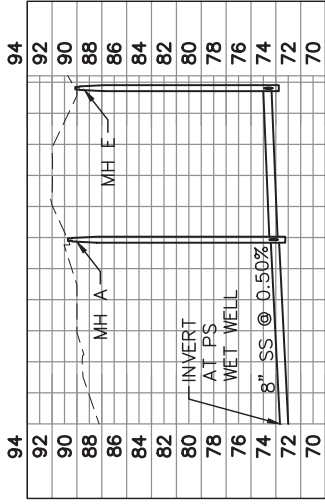
EXISTING STORAGE
BUILDING TO REMAIN

ABANDON EXISTING EFFLUENT FM



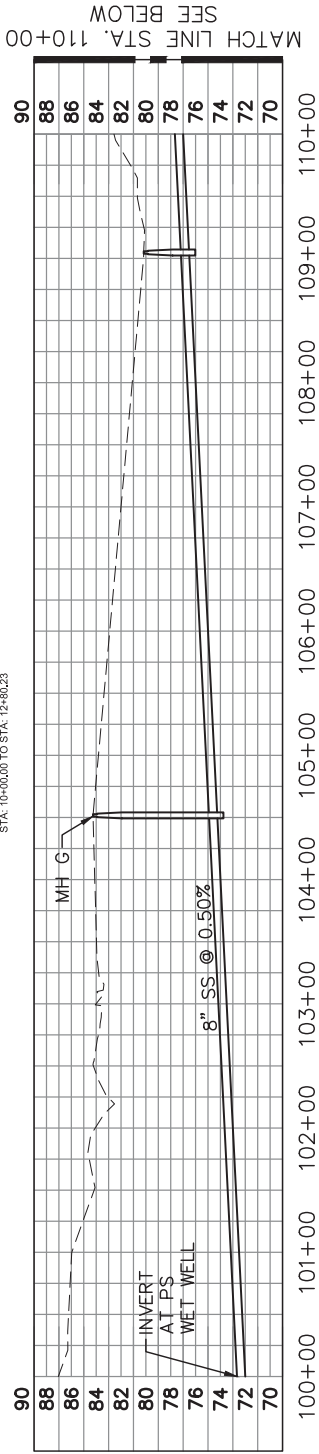






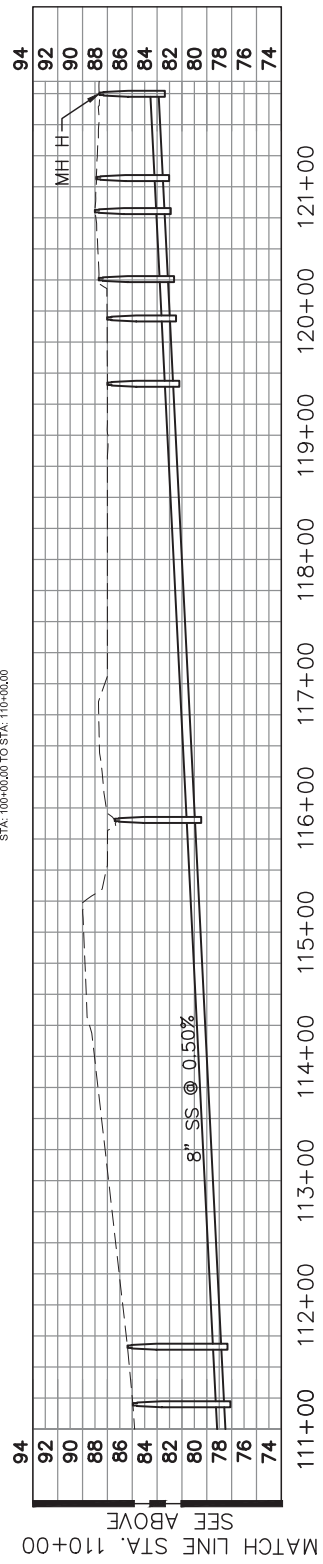
LOCUST HILL GRAVITY SEWER CONNECTION NORTH

STA: 10+00.00 TO STA: 12+86.23



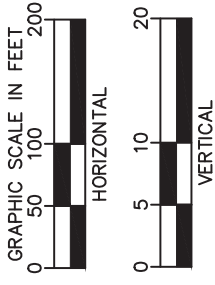
LOCUST HILL GRAVITY SEWER CONNECTION SOUTH

STA: 100+00.00 TO STA: 110+00.00



LOCUST HILL GRAVITY SEWER CONNECTION SOUTH

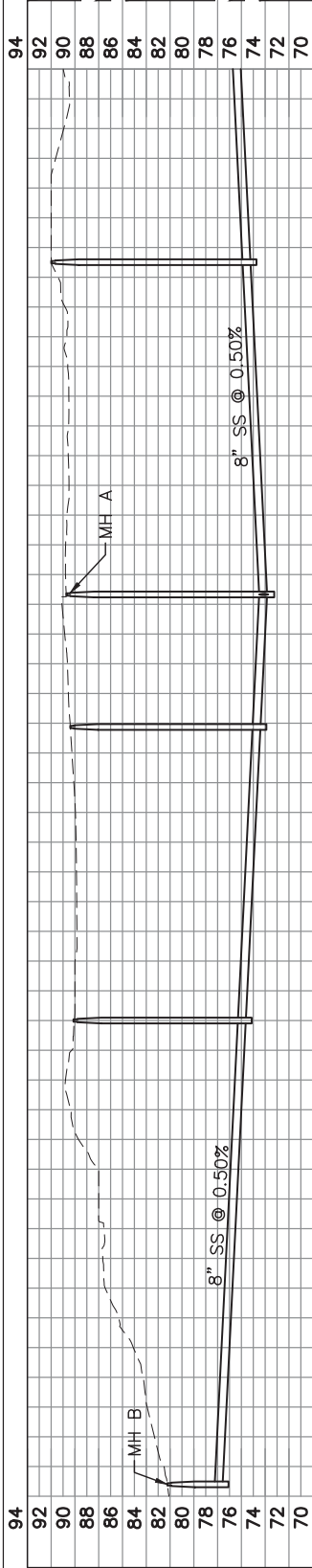
STA: 111+00.00 TO STA: 121+86.82



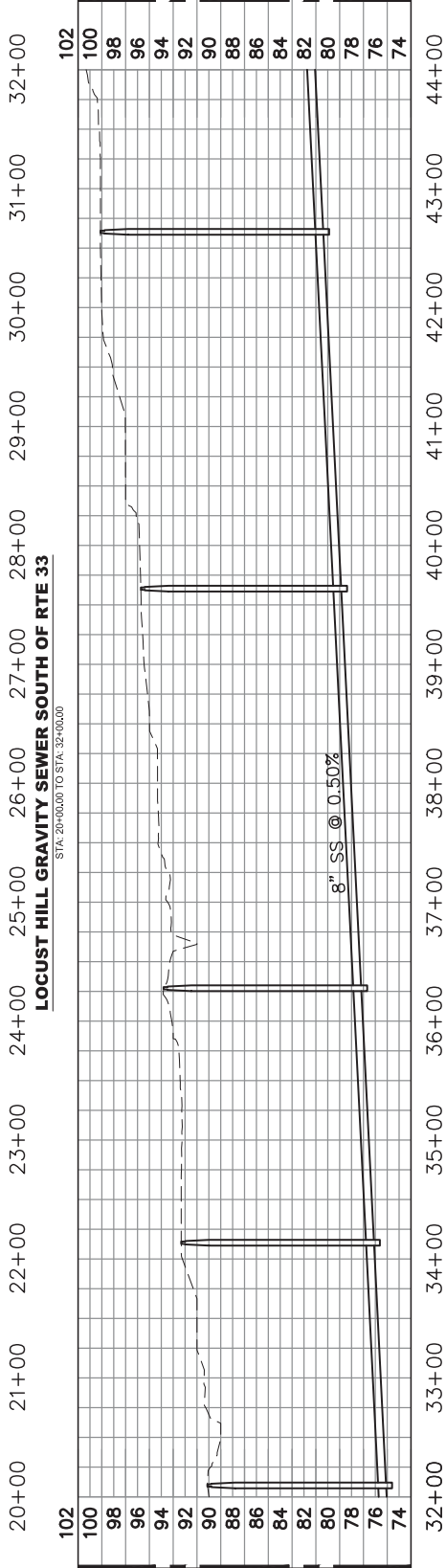
MATCH LINE STA. 110+00
SEE BELOW

MATCH LINE STA. 110+00
SEE ABOVE

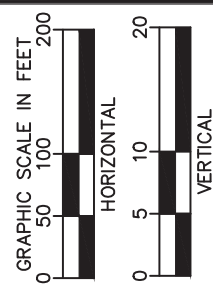
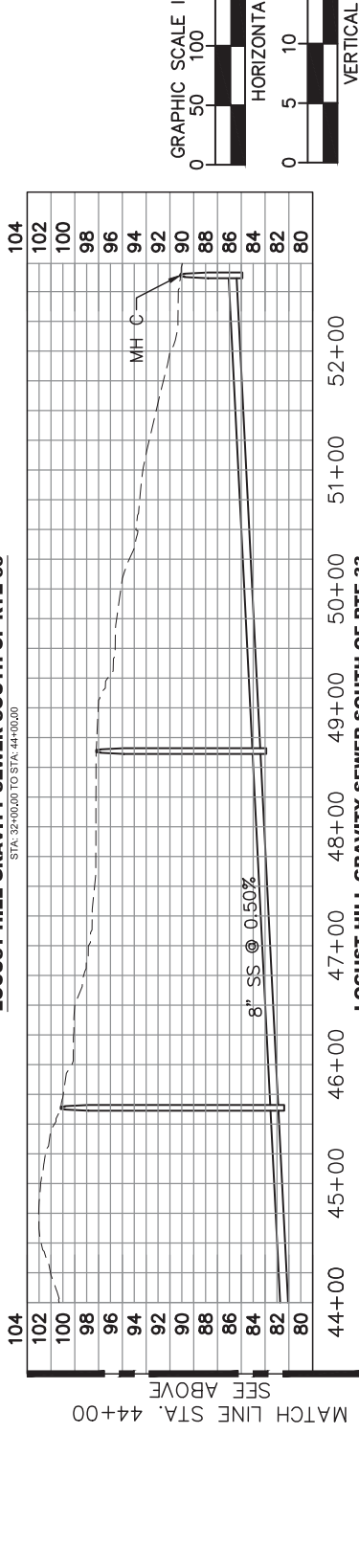
MATCH LINE STA. 32+00
SEE BELOW



MATCH LINE STA. 44+00
SEE ABOVE



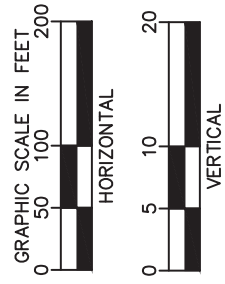
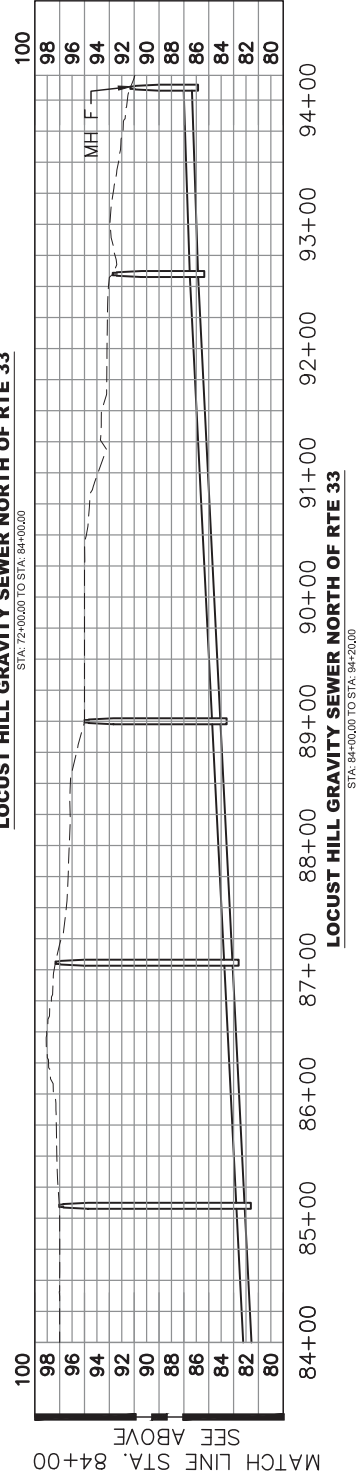
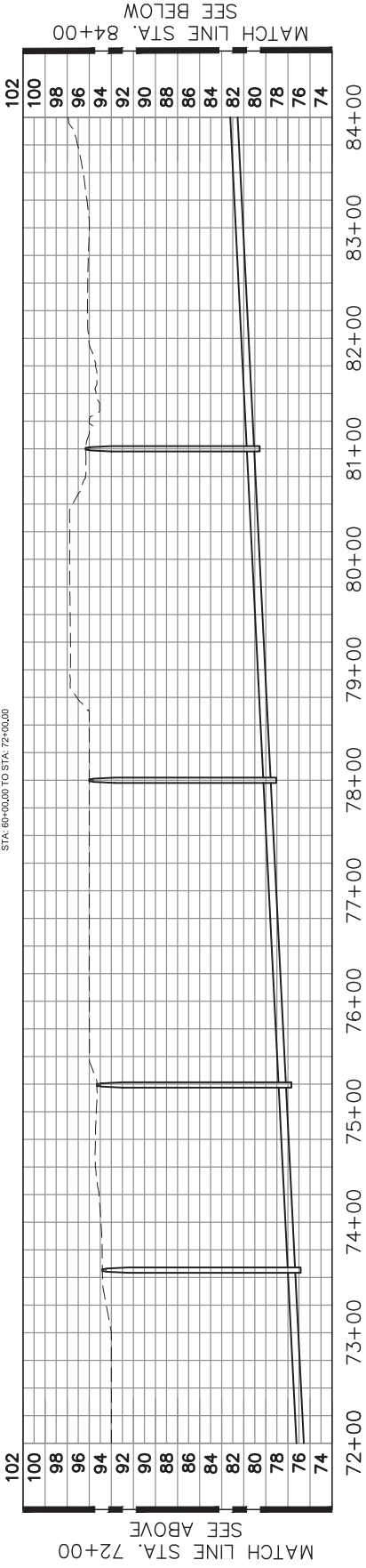
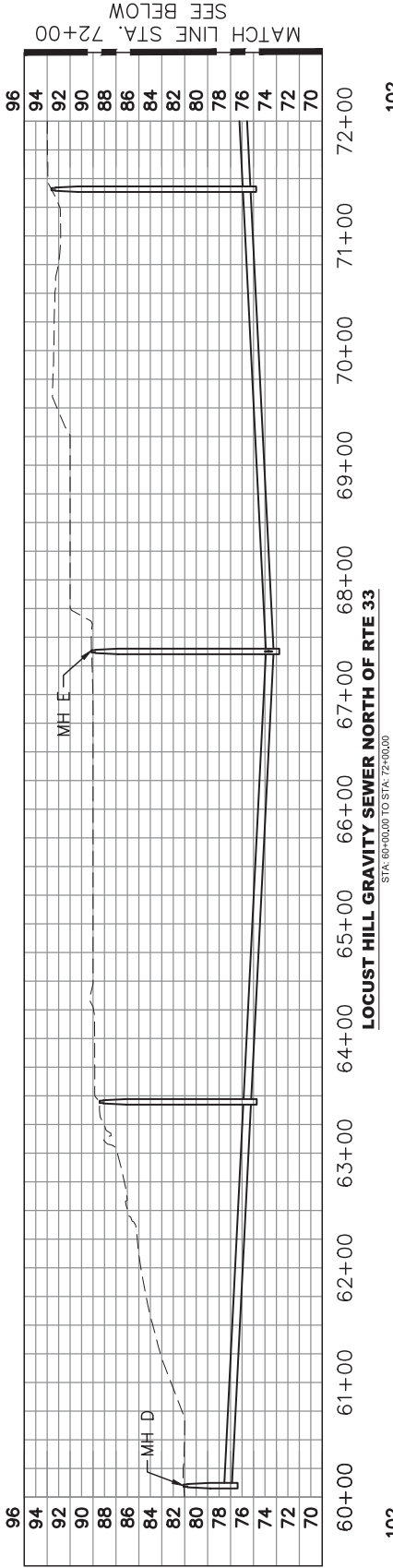
MATCH LINE STA. 44+00
SEE ABOVE

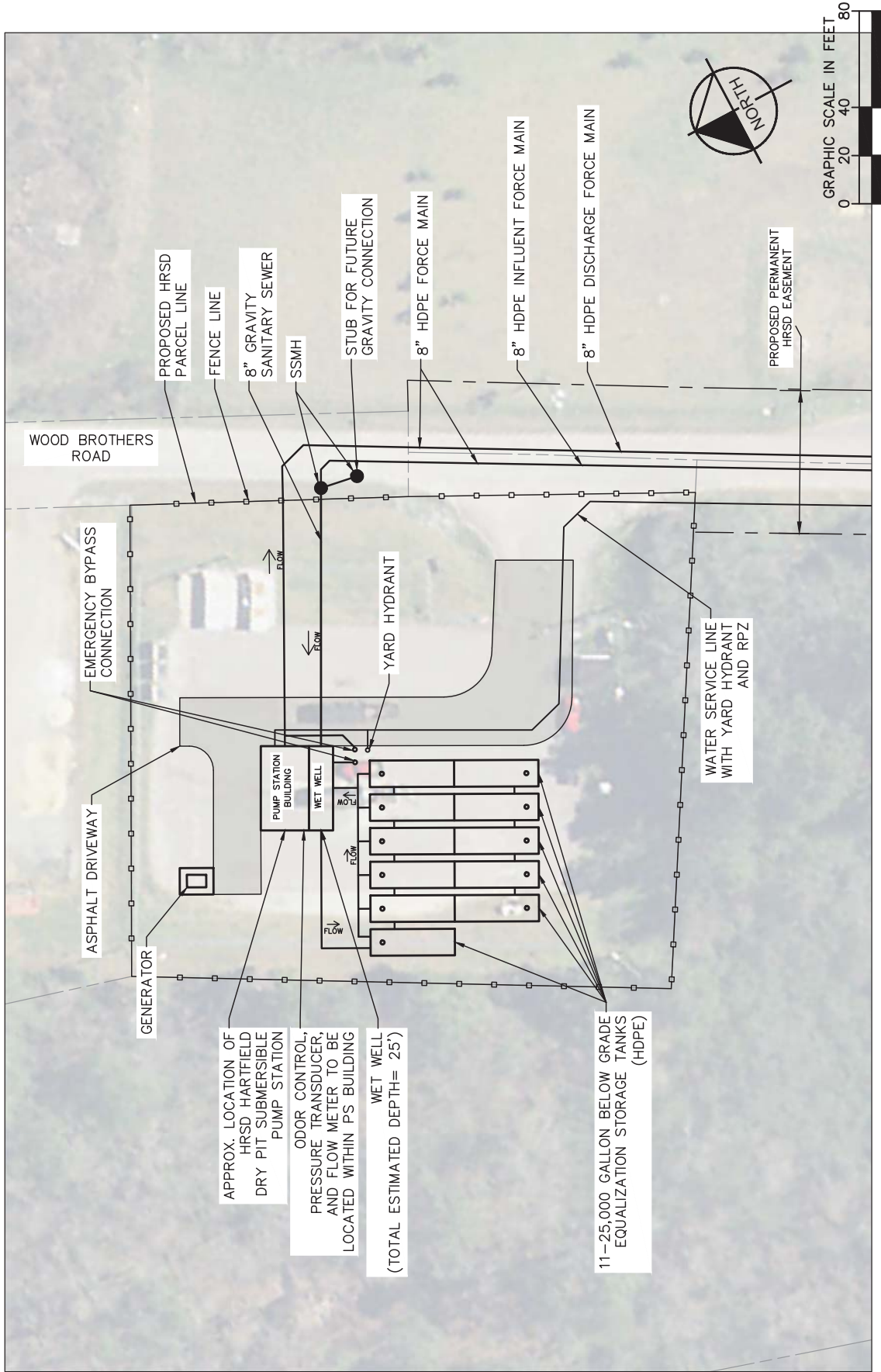


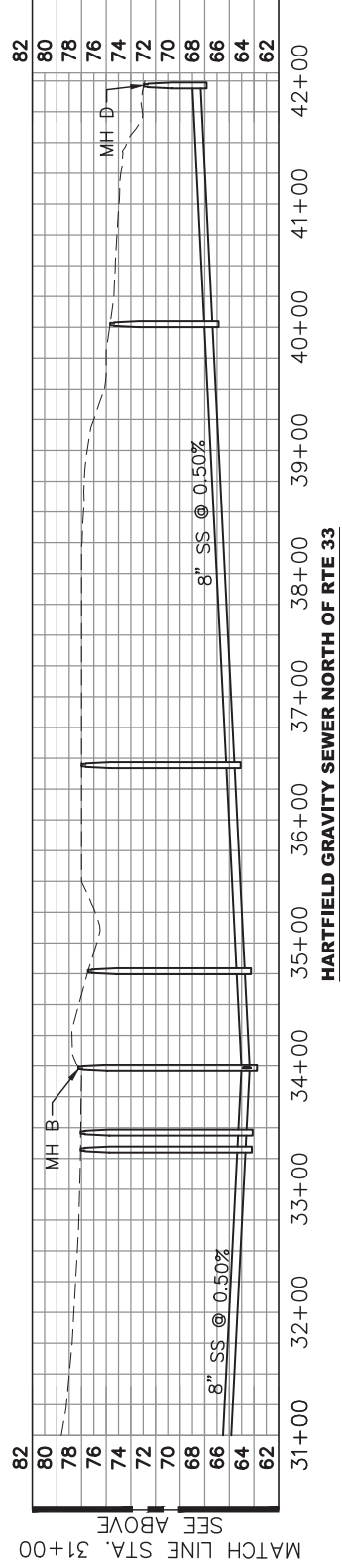
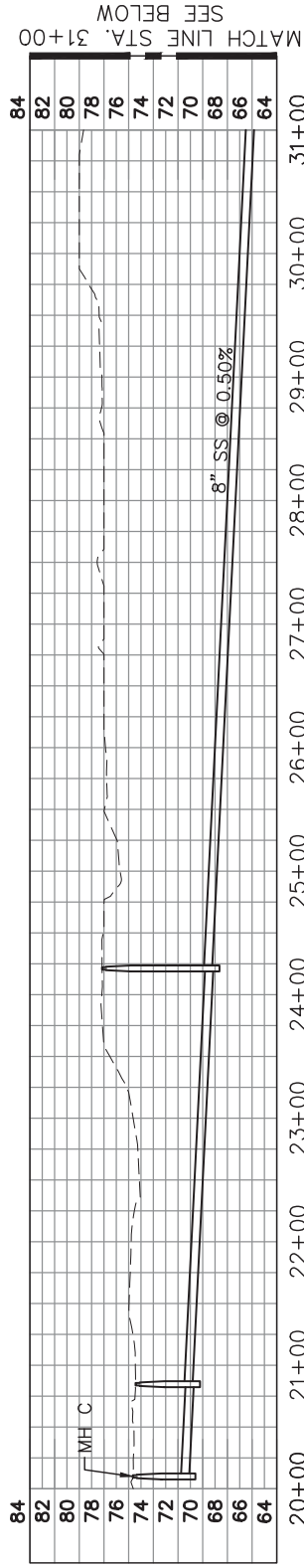
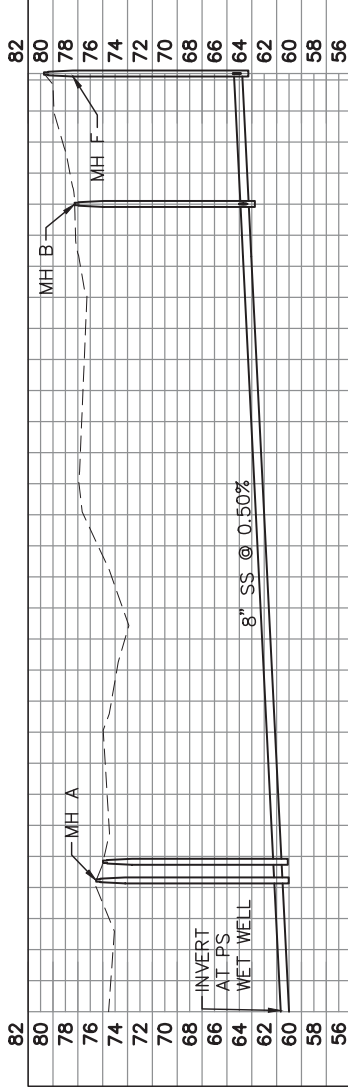
LOCUST HILL GRAVITY SEWER SOUTH OF RTE 33
STA. 20+00.00 TO STA. 32+00.00

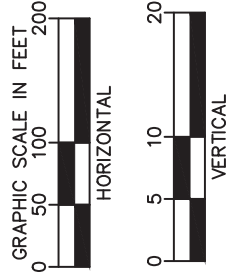
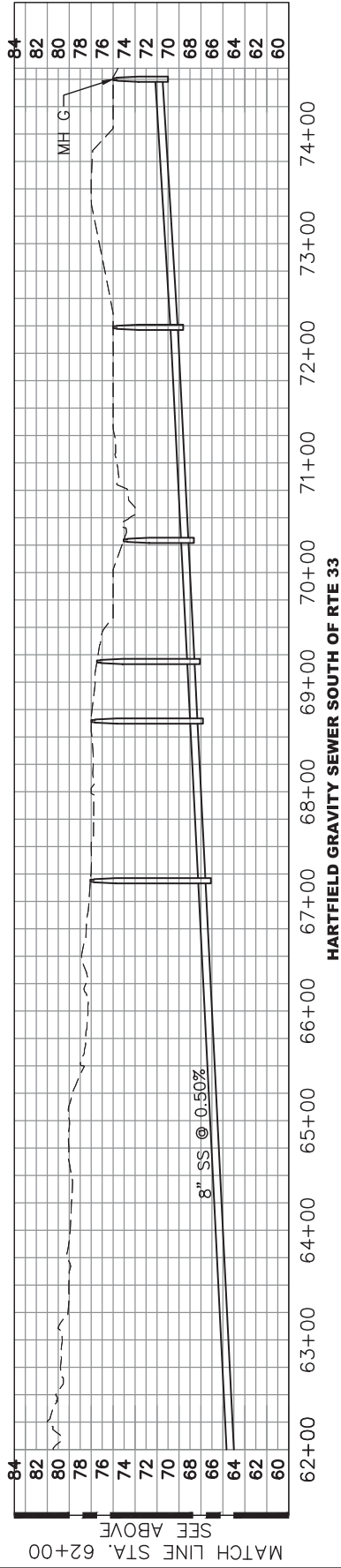
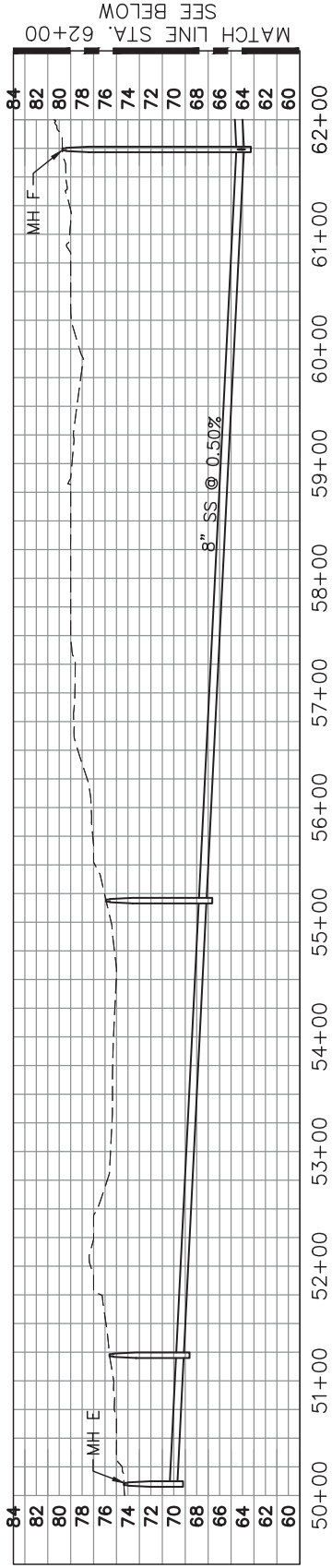
LOCUST HILL GRAVITY SEWER SOUTH OF RTE 33
STA. 32+00.00 TO STA. 44+00.00

LOCUST HILL GRAVITY SEWER SOUTH OF RTE 33
STA. 44+00.00 TO STA. 52+73.21









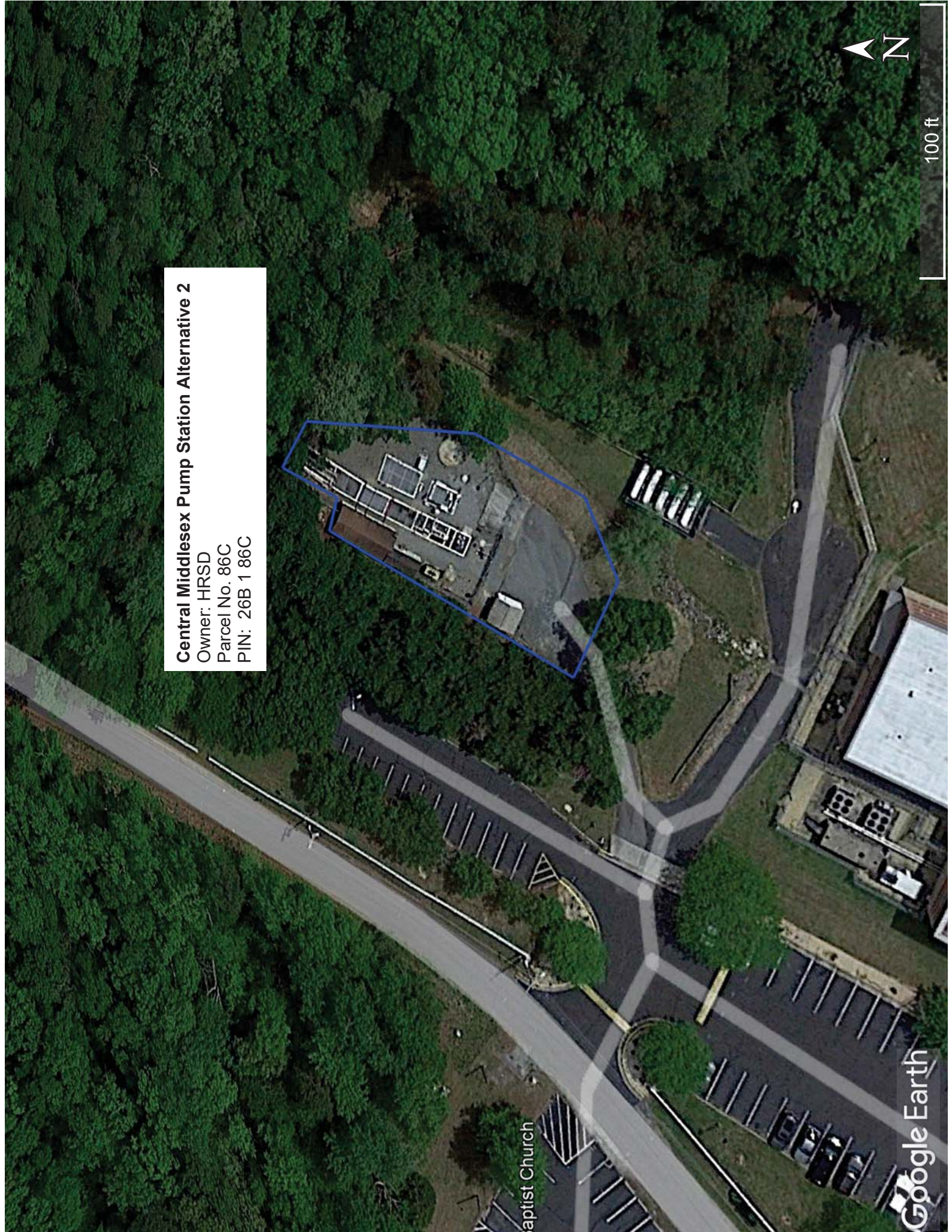
Central Middlesex Pump Station Alternative 2
Owner: HRSD
Parcel No. 86C
PIN: 26B 1 86C



100 ft

Google Earth

Baptist Church





X

Urbanna PS
215 LINDEN STREET
Owner:
RPC:
Tax Map Number: 20A-31-5

Linden St

Linden St

L



X
Gloucester PS Alternative 1
 9375 JOHN CLYTON MEMORIAL
 HWY
 Owner: RFD FARMS LLC C/O
 RAYMOND R RILEE
 RPC: 30990
 Tax Map Number: 26-107

694

694

14



X

Gloucester PS Alternative 2
9316 JOHN CLAYTON MEMORIAL
HWY
Owner: HARRIS, JONATHAN R
RPC: 11707
Tax Map Number: 26-22P



Clayton Memorial Hwy

14

X

Gloucester PS Alternative 3

JOHN CLAYTON MEMORIAL HWY

Owner: FLETCHER, ANDREW &
FLETCHER, ELIZABETH

RPC: 18598

Tax Map Number: 26-22

Bad Dog Landscaping

Gloucester Pump Station Alternative 4
Owner: Tobe, Brenda H
RPC: 22356
Tax Map Number: 26-117B



200 ft

14



Gloucester Pump Station Alternative 5
Owner: Cash, Timmy Martin
RPC: 31011
Tax ID: 26-109



500 ft

Emily Ln
John Clayton Memorial

Waverley Ln

694

694

14