Summary for Subcatchment S-6: Tributary Off-Site

Runoff = 5.16 cfs @ 12.08 hrs, Volume= 0.412 af, Depth= 6.52"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Type III 24-hr 100-yr Rainfall=7.00"

	Area (sf)	CN	Description
*	28,050	98	Paved Parking
	4,125	86	<50% Grass cover, Poor, HSG C
	825	89	Gravel roads, HSG C
	33,000	96	Weighted Average
	4,950		Pervious Area
	28,050		Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, Min. Tc**

Summary for Subcatchment S-7: Tributary toward CB-7

Runoff = 2.87 cfs @ 12.08 hrs, Volume= 0.229 af, Depth= 6.52"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Type III 24-hr 100-yr Rainfall=7.00"

	Area (sf)	CN	Description
*	15,000	98	Paved Parking
	3,350	86	<50% Grass cover, Poor, HSG C
	18,350	96	Weighted Average
	3,350		Pervious Area
	15,000		Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, Min. Tc**

Summary for Subcatchment S-8: Tributary toward CB-1

Runoff = 4.84 cfs @ 12.09 hrs, Volume= 0.349 af, Depth= 4.92"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Type III 24-hr 100-yr Rainfall=7.00"

	Area (sf)	CN	Description
*	1,050	98	Paved Parking
	20,000	86	<50% Grass cover, Poor, HSG C
	16,100	77	Woods, Poor, HSG C
	37,150	82	Weighted Average
	36,100		Pervious Area
	1,050		Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, Min. Tc**

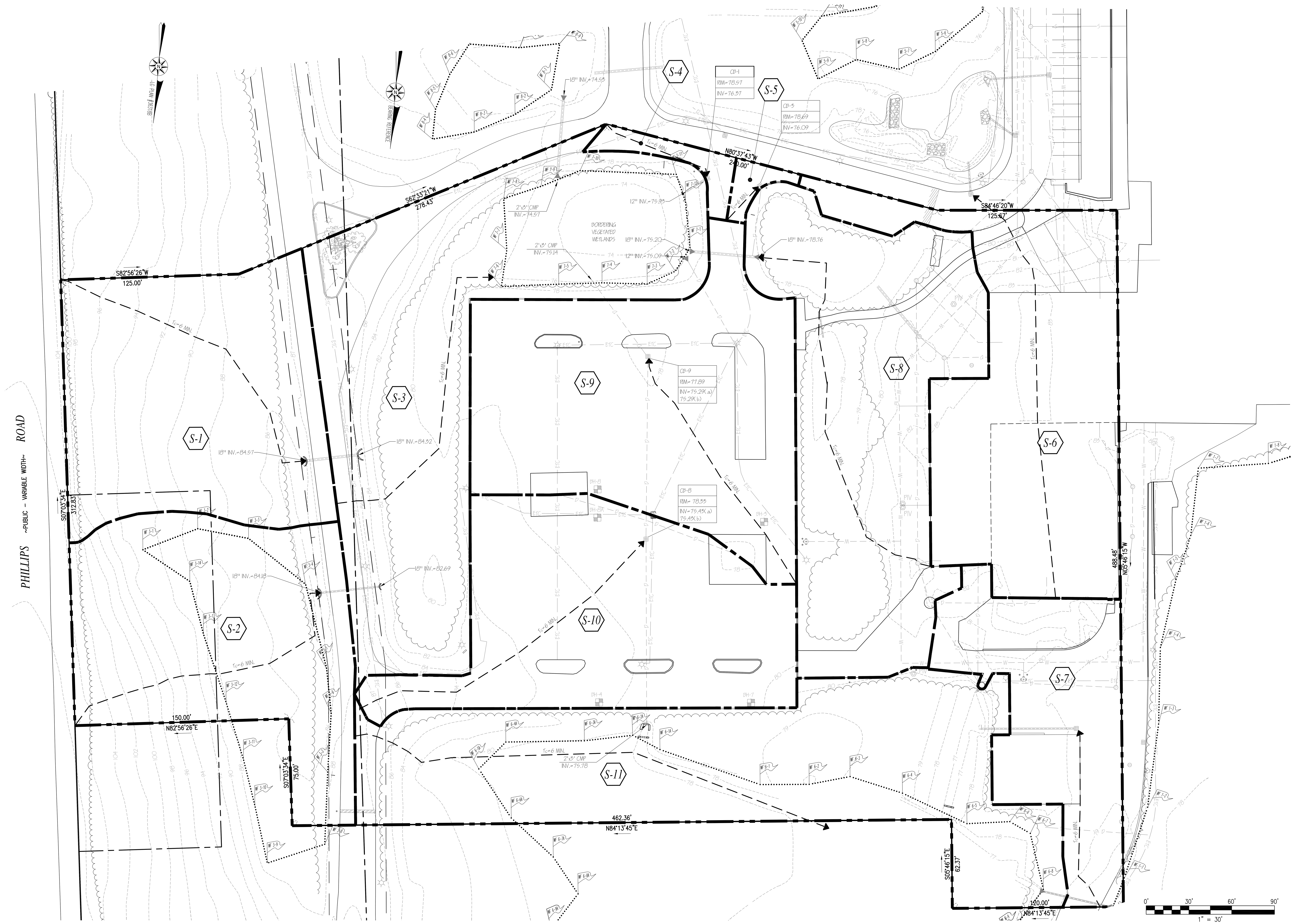
Summary for Subcatchment S-9: Tributary toward CB-9

Runoff = 5.83 cfs @ 12.08 hrs, Volume= 0.471 af, Depth= 6.64"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Type III 24-hr 100-yr Rainfall=7.00"

	Area (sf)	CN	Description
*	33,416	98	Paved Parking
	3,684	86	<50% Grass cover, Poor, HSG C
	37,100	97	Weighted Average
	3,684		Pervious Area
	33,416		Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, Min. Tc**



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FEBRUARY 14, 2017

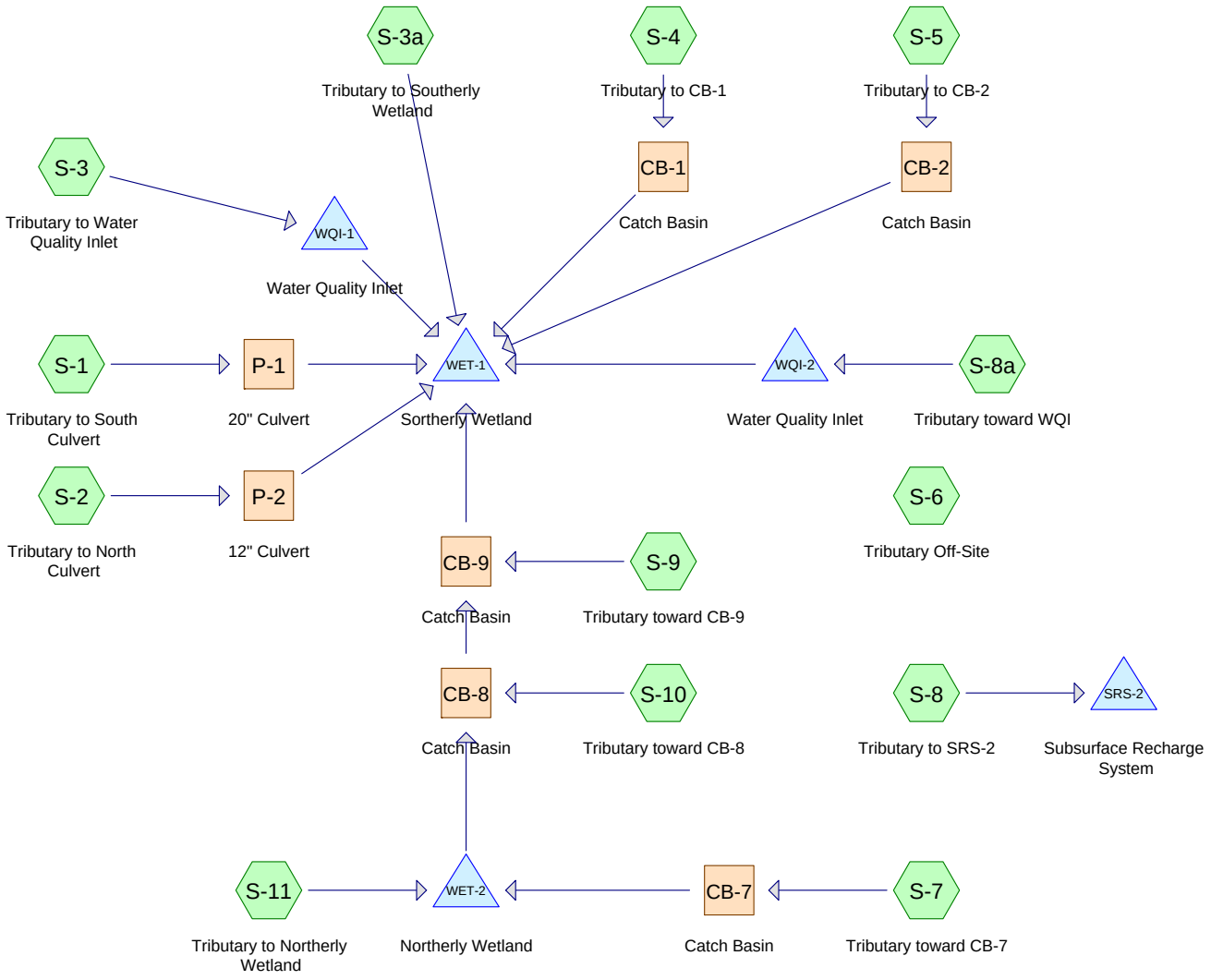
SCALE: 1"=30'

JOB NO. 15-500.1

LATEST REVISION:

PRE-SUBCATCHMENT

SHEET 5A OF 8



Subcat Reach Pond Link

Drainage Diagram for 15500.1POST

Prepared by {enter your company name here}, Printed 2/17/2017

Summary for Subcatchment S-1: Tributary to South Culvert

Runoff = 0.75 cfs @ 12.14 hrs, Volume= 0.064 af, Depth= 1.06"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Type III 24-hr 2-yr Rainfall=3.40"

	Area (sf)	CN	Description
	25,975	70	Woods, Good, HSG C
	3,300	74	>75% Grass cover, Good, HSG C
*	2,300	98	Roadway
	31,575	72	Weighted Average
	29,275		Pervious Area
	2,300		Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.6	50	0.1360	0.15		**Sheet Flow,** Woods: Light underbrush n= 0.400 P2= 3.40"
3.5	220	0.0430	1.04		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
9.1	270	Total			

Summary for Subcatchment S-10: Tributary toward CB-8

Runoff = 2.83 cfs @ 12.08 hrs, Volume= 0.226 af, Depth= 3.17"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Type III 24-hr 2-yr Rainfall=3.40"

	Area (sf)	CN	Description
*	37,250	98	Paved Parking
	37,250		Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, Min. Tc**

Summary for Subcatchment S-11: Tributary to Northerly Wetland

Runoff = 1.92 cfs @ 12.09 hrs, Volume= 0.137 af, Depth= 1.63"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Type III 24-hr 2-yr Rainfall=3.40"

	Area (sf)	CN	Description
*	1,175	98	Roadway
*	15,750	98	Wetland
	27,025	70	Woods, Good, HSG C
	43,950	81	Weighted Average
	27,025		Pervious Area
	16,925		Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.2	14	0.0200	0.96		**Sheet Flow,** Smooth surfaces n= 0.011 P2= 3.40"
4.7	36	0.1100	0.13		**Sheet Flow,** Woods: Light underbrush n= 0.400 P2= 3.40"
1.1	70	0.0420	1.02		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
6.0	120	Total			

Summary for Subcatchment S-2: Tributary to North Culvert

Runoff = 0.81 cfs @ 12.12 hrs, Volume= 0.065 af, Depth= 1.11"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Type III 24-hr 2-yr Rainfall=3.40"

	Area (sf)	CN	Description
	24,350	70	Woods, Good, HSG C
	3,875	74	>75% Grass cover, Good, HSG C
*	2,425	98	Roadway
	30,650	73	Weighted Average
	28,225		Pervious Area
	2,425		Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.1	50	0.1100	0.14		**Sheet Flow,** Woods: Light underbrush n= 0.400 P2= 3.40"
1.8	170	0.0940	1.53		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
7.9	220	Total			

Summary for Subcatchment S-3: Tributary to Water Quality Inlet

Runoff = 2.03 cfs @ 12.09 hrs, Volume= 0.145 af, Depth= 2.26"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Type III 24-hr 2-yr Rainfall=3.40"

	Area (sf)	CN	Description
*	7,500	98	Water Quality Inlet
*	14,700	98	Roadway
	11,350	70	Woods, Good, HSG C
	33,550	89	Weighted Average
	11,350		Pervious Area
	22,200		Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, Min. Tc**

Summary for Subcatchment S-3a: Tributary to Southerly Wetland

Runoff = 1.06 cfs @ 12.09 hrs, Volume= 0.076 af, Depth= 1.93"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Type III 24-hr 2-yr Rainfall=3.40"

	Area (sf)	CN	Description
*	9,465	98	Wetland
*	1,527	98	Roadway
	9,498	70	Woods, Good, HSG C
	20,490	85	Weighted Average
	9,498		Pervious Area
	10,992		Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, Min. Tc**

Summary for Subcatchment S-4: Tributary to CB-1

Runoff = 0.11 cfs @ 12.08 hrs, Volume= 0.009 af, Depth= 3.17"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Type III 24-hr 2-yr Rainfall=3.40"

	Area (sf)	CN	Description
*	1,450	98	Roadway
	1,450		Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, Min. Tc**

Summary for Subcatchment S-5: Tributary to CB-2

Runoff = 0.11 cfs @ 12.08 hrs, Volume= 0.008 af, Depth= 3.17"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Type III 24-hr 2-yr Rainfall=3.40"

Area (sf)	CN	Description
1,400	98	Paved parking & roofs
1,400		Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, Min. Tc**

Summary for Subcatchment S-6: Tributary Off-Site

Runoff = 1.12 cfs @ 12.08 hrs, Volume= 0.087 af, Depth= 3.06"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Type III 24-hr 2-yr Rainfall=3.40"

	Area (sf)	CN	Description
*	14,625	98	Paved Parking
	335	74	>75% Grass cover, Good, HSG C
	14,960	97	Weighted Average
	335		Pervious Area
	14,625		Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, Min. Tc**

Summary for Subcatchment S-7: Tributary toward CB-7

Runoff = 1.07 cfs @ 12.08 hrs, Volume= 0.086 af, Depth= 3.17"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Type III 24-hr 2-yr Rainfall=3.40"

	Area (sf)	CN	Description
*	14,125	98	Paved Parking
	14,125		Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, Min. Tc**

Summary for Subcatchment S-8: Tributary to SRS-2

Runoff = 2.12 cfs @ 12.08 hrs, Volume= 0.170 af, Depth= 3.17"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Type III 24-hr 2-yr Rainfall=3.40"

	Area (sf)	CN	Description
*	28,000	98	Rooftop
	28,000		Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, Min. Tc**

Summary for Subcatchment S-8a: Tributary toward WQI

Runoff = 0.99 cfs @ 12.08 hrs, Volume= 0.076 af, Depth= 2.95"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Type III 24-hr 2-yr Rainfall=3.40"

	Area (sf)	CN	Description
*	10,000	98	Paved Parking
	940	74	>75% Grass cover, Good, HSG C
*	2,535	98	Water Quality Inlet
	13,475	96	Weighted Average
	940		Pervious Area
	12,535		Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, Min. Tc**

Summary for Subcatchment S-9: Tributary toward CB-9

Runoff = 3.46 cfs @ 12.08 hrs, Volume= 0.276 af, Depth= 3.17"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Type III 24-hr 2-yr Rainfall=3.40"

	Area (sf)	CN	Description
*	45,550	98	Paved Parking
	45,550		Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, Min. Tc**

Summary for Subcatchment S-1: Tributary to South Culvert

Runoff = 1.54 cfs @ 12.13 hrs, Volume= 0.124 af, Depth= 2.05"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Type III 24-hr 10-yr Rainfall=4.80"

	Area (sf)	CN	Description
	25,975	70	Woods, Good, HSG C
	3,300	74	>75% Grass cover, Good, HSG C
*	2,300	98	Roadway
	31,575	72	Weighted Average
	29,275		Pervious Area
	2,300		Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.6	50	0.1360	0.15		**Sheet Flow,** Woods: Light underbrush n= 0.400 P2= 3.40"
3.5	220	0.0430	1.04		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
9.1	270	Total			

Summary for Subcatchment S-10: Tributary toward CB-8

Runoff = 4.01 cfs @ 12.08 hrs, Volume= 0.325 af, Depth= 4.56"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Type III 24-hr 10-yr Rainfall=4.80"

	Area (sf)	CN	Description
*	37,250	98	Paved Parking
	37,250		Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, Min. Tc**

Summary for Subcatchment S-11: Tributary to Northerly Wetland

Runoff = 3.32 cfs @ 12.09 hrs, Volume= 0.236 af, Depth= 2.81"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Type III 24-hr 10-yr Rainfall=4.80"

	Area (sf)	CN	Description
*	1,175	98	Roadway
*	15,750	98	Wetland
	27,025	70	Woods, Good, HSG C
	43,950	81	Weighted Average
	27,025		Pervious Area
	16,925		Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.2	14	0.0200	0.96		**Sheet Flow,** Smooth surfaces n= 0.011 P2= 3.40"
4.7	36	0.1100	0.13		**Sheet Flow,** Woods: Light underbrush n= 0.400 P2= 3.40"
1.1	70	0.0420	1.02		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
6.0	120	Total			

Summary for Subcatchment S-2: Tributary to North Culvert

Runoff = 1.62 cfs @ 12.12 hrs, Volume= 0.125 af, Depth= 2.12"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Type III 24-hr 10-yr Rainfall=4.80"

	Area (sf)	CN	Description
	24,350	70	Woods, Good, HSG C
	3,875	74	>75% Grass cover, Good, HSG C
*	2,425	98	Roadway
	30,650	73	Weighted Average
	28,225		Pervious Area
	2,425		Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.1	50	0.1100	0.14		**Sheet Flow,** Woods: Light underbrush n= 0.400 P2= 3.40"
1.8	170	0.0940	1.53		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
7.9	220	Total			

Summary for Subcatchment S-3: Tributary to Water Quality Inlet

Runoff = 3.15 cfs @ 12.09 hrs, Volume= 0.230 af, Depth= 3.58"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Type III 24-hr 10-yr Rainfall=4.80"

	Area (sf)	CN	Description
*	7,500	98	Water Quality Inlet
*	14,700	98	Roadway
	11,350	70	Woods, Good, HSG C
	33,550	89	Weighted Average
	11,350		Pervious Area
	22,200		Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, Min. Tc**

Summary for Subcatchment S-3a: Tributary to Southerly Wetland

Runoff = 1.74 cfs @ 12.09 hrs, Volume= 0.125 af, Depth= 3.18"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Type III 24-hr 10-yr Rainfall=4.80"

	Area (sf)	CN	Description
*	9,465	98	Wetland
*	1,527	98	Roadway
	9,498	70	Woods, Good, HSG C
	20,490	85	Weighted Average
	9,498		Pervious Area
	10,992		Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, Min. Tc**

Summary for Subcatchment S-4: Tributary to CB-1

Runoff = 0.16 cfs @ 12.08 hrs, Volume= 0.013 af, Depth= 4.56"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Type III 24-hr 10-yr Rainfall=4.80"

	Area (sf)	CN	Description
*	1,450	98	Roadway
	1,450		Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, Min. Tc**

Summary for Subcatchment S-5: Tributary to CB-2

Runoff = 0.15 cfs @ 12.08 hrs, Volume= 0.012 af, Depth= 4.56"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Type III 24-hr 10-yr Rainfall=4.80"

Area (sf)	CN	Description
1,400	98	Paved parking & roofs
1,400		Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, Min. Tc**

Summary for Subcatchment S-6: Tributary Off-Site

Runoff = 1.60 cfs @ 12.08 hrs, Volume= 0.127 af, Depth= 4.45"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Type III 24-hr 10-yr Rainfall=4.80"

	Area (sf)	CN	Description
*	14,625	98	Paved Parking
	335	74	>75% Grass cover, Good, HSG C
	14,960	97	Weighted Average
	335		Pervious Area
	14,625		Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, Min. Tc**

Summary for Subcatchment S-7: Tributary toward CB-7

Runoff = 1.52 cfs @ 12.08 hrs, Volume= 0.123 af, Depth= 4.56"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Type III 24-hr 10-yr Rainfall=4.80"

	Area (sf)	CN	Description
*	14,125	98	Paved Parking
	14,125		Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, Min. Tc**

Summary for Subcatchment S-8: Tributary to SRS-2

Runoff = 3.02 cfs @ 12.08 hrs, Volume= 0.244 af, Depth= 4.56"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Type III 24-hr 10-yr Rainfall=4.80"

	Area (sf)	CN	Description
*	28,000	98	Rooftop
	28,000		Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, Min. Tc**

Summary for Subcatchment S-8a: Tributary toward WQI

Runoff = 1.43 cfs @ 12.08 hrs, Volume= 0.112 af, Depth= 4.33"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Type III 24-hr 10-yr Rainfall=4.80"

	Area (sf)	CN	Description
*	10,000	98	Paved Parking
	940	74	>75% Grass cover, Good, HSG C
*	2,535	98	Water Quality Inlet
	13,475	96	Weighted Average
	940		Pervious Area
	12,535		Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, Min. Tc**

Summary for Subcatchment S-9: Tributary toward CB-9

Runoff = 4.91 cfs @ 12.08 hrs, Volume= 0.398 af, Depth= 4.56"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Type III 24-hr 10-yr Rainfall=4.80"

	Area (sf)	CN	Description
*	45,550	98	Paved Parking
	45,550		Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, Min. Tc**

Summary for Subcatchment S-1: Tributary to South Culvert

Runoff = 2.93 cfs @ 12.13 hrs, Volume= 0.231 af, Depth= 3.83"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Type III 24-hr 100-yr Rainfall=7.00"

	Area (sf)	CN	Description
	25,975	70	Woods, Good, HSG C
	3,300	74	>75% Grass cover, Good, HSG C
*	2,300	98	Roadway
	31,575	72	Weighted Average
	29,275		Pervious Area
	2,300		Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.6	50	0.1360	0.15		**Sheet Flow,** Woods: Light underbrush n= 0.400 P2= 3.40"
3.5	220	0.0430	1.04		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
9.1	270	Total			

Summary for Subcatchment S-10: Tributary toward CB-8

Runoff = 5.87 cfs @ 12.08 hrs, Volume= 0.482 af, Depth= 6.76"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Type III 24-hr 100-yr Rainfall=7.00"

	Area (sf)	CN	Description
*	37,250	98	Paved Parking
	37,250		Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, Min. Tc**

Summary for Subcatchment S-11: Tributary to Northerly Wetland

Runoff = 5.61 cfs @ 12.09 hrs, Volume= 0.404 af, Depth= 4.81"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Type III 24-hr 100-yr Rainfall=7.00"

	Area (sf)	CN	Description
*	1,175	98	Roadway
*	15,750	98	Wetland
	27,025	70	Woods, Good, HSG C
	43,950	81	Weighted Average
	27,025		Pervious Area
	16,925		Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.2	14	0.0200	0.96		**Sheet Flow,** Smooth surfaces n= 0.011 P2= 3.40"
4.7	36	0.1100	0.13		**Sheet Flow,** Woods: Light underbrush n= 0.400 P2= 3.40"
1.1	70	0.0420	1.02		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
6.0	120	Total			

Summary for Subcatchment S-2: Tributary to North Culvert

Runoff = 3.04 cfs @ 12.11 hrs, Volume= 0.231 af, Depth= 3.94"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Type III 24-hr 100-yr Rainfall=7.00"

	Area (sf)	CN	Description
	24,350	70	Woods, Good, HSG C
	3,875	74	>75% Grass cover, Good, HSG C
*	2,425	98	Roadway
	30,650	73	Weighted Average
	28,225		Pervious Area
	2,425		Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.1	50	0.1100	0.14		**Sheet Flow,** Woods: Light underbrush n= 0.400 P2= 3.40"
1.8	170	0.0940	1.53		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
7.9	220	Total			

Summary for Subcatchment S-3: Tributary to Water Quality Inlet

Runoff = 4.90 cfs @ 12.08 hrs, Volume= 0.366 af, Depth= 5.71"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Type III 24-hr 100-yr Rainfall=7.00"

	Area (sf)	CN	Description
*	7,500	98	Water Quality Inlet
*	14,700	98	Roadway
	11,350	70	Woods, Good, HSG C
	33,550	89	Weighted Average
	11,350		Pervious Area
	22,200		Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, Min. Tc**

Summary for Subcatchment S-3a: Tributary to Southerly Wetland

Runoff = 2.82 cfs @ 12.09 hrs, Volume= 0.206 af, Depth= 5.25"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Type III 24-hr 100-yr Rainfall=7.00"

	Area (sf)	CN	Description
*	9,465	98	Wetland
*	1,527	98	Roadway
	9,498	70	Woods, Good, HSG C
	20,490	85	Weighted Average
	9,498		Pervious Area
	10,992		Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, Min. Tc**

Summary for Subcatchment S-4: Tributary to CB-1

Runoff = 0.23 cfs @ 12.08 hrs, Volume= 0.019 af, Depth= 6.76"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Type III 24-hr 100-yr Rainfall=7.00"

	Area (sf)	CN	Description
*	1,450	98	Roadway
	1,450		Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, Min. Tc**

Summary for Subcatchment S-5: Tributary to CB-2

Runoff = 0.22 cfs @ 12.08 hrs, Volume= 0.018 af, Depth= 6.76"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Type III 24-hr 100-yr Rainfall=7.00"

Area (sf)	CN	Description
1,400	98	Paved parking & roofs
1,400		Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, Min. Tc**

Summary for Subcatchment S-6: Tributary Off-Site

Runoff = 2.35 cfs @ 12.08 hrs, Volume= 0.190 af, Depth= 6.64"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Type III 24-hr 100-yr Rainfall=7.00"

	Area (sf)	CN	Description
*	14,625	98	Paved Parking
	335	74	>75% Grass cover, Good, HSG C
	14,960	97	Weighted Average
	335		Pervious Area
	14,625		Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, Min. Tc**

Summary for Subcatchment S-7: Tributary toward CB-7

Runoff = 2.23 cfs @ 12.08 hrs, Volume= 0.183 af, Depth= 6.76"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Type III 24-hr 100-yr Rainfall=7.00"

	Area (sf)	CN	Description
*	14,125	98	Paved Parking
	14,125		Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, Min. Tc**

Summary for Subcatchment S-8: Tributary to SRS-2

Runoff = 4.41 cfs @ 12.08 hrs, Volume= 0.362 af, Depth= 6.76"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Type III 24-hr 100-yr Rainfall=7.00"

	Area (sf)	CN	Description
*	28,000	98	Rooftop
	28,000		Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, Min. Tc**

Summary for Subcatchment S-8a: Tributary toward WQI

Runoff = 2.11 cfs @ 12.08 hrs, Volume= 0.168 af, Depth= 6.52"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Type III 24-hr 100-yr Rainfall=7.00"

	Area (sf)	CN	Description
*	10,000	98	Paved Parking
	940	74	>75% Grass cover, Good, HSG C
*	2,535	98	Water Quality Inlet
	13,475	96	Weighted Average
	940		Pervious Area
	12,535		Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, Min. Tc**

Summary for Subcatchment S-9: Tributary toward CB-9

Runoff = 7.18 cfs @ 12.08 hrs, Volume= 0.589 af, Depth= 6.76"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Type III 24-hr 100-yr Rainfall=7.00"

	Area (sf)	CN	Description
*	45,550	98	Paved Parking
	45,550		Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, Min. Tc**

PHILLIPS ROAD ~PUBLIC - VARIABLE WIDTH~

S-1 S-2 S-3 S-3a S-4 S-5 S-7 S-8 S-8a S-9 S-10 S-11

S82°56'26"W 125.00'
TC=9.1 MIN.
S07°03'34"E 312.83'
S82°33'21"W 278.43'
N80°37'43"W 240.00'
S84°46'20"W 125.67'
TC=9.1 MIN.
S05°46'15"W 486.48'
S05°46'15"E 62.37'
120.00' N84°13'45"E
TC=6.0 MIN. 462.36' N84°13'45"E
TC=7.9 MIN. 150.00' N82°56'26"E
S07°03'34"E 75.00'

BORDERING VEGETATED WETLANDS

CB-1 RIM=78.57 INV=76.37
CB-2 RIM=78.65 INV=CAPACITY
CB-3 RIM=78.69 INV=76.09
CB-4 RIM=78.48 INV=CAPACITY
CB-5 RIM=78.09 INV=76.08(a) 75.99(b)
CB-6 RIM=78.54 INV=CAPACITY
CB-7 RIM=78.71 INV=CAPACITY
CB-8 RIM=78.33 INV=75.43(a) 75.43(b)
CB-9 RIM=77.89 INV=75.29(a) 75.29(b)
MH-1 RIM=79.00 INV=77.62
MH-2 RIM=78.98 INV=SEALED
MH-3 RIM=78.98 INV=SEALED

18" INV.=74.65
18" INV.=84.57
18" INV.=84.52
18" INV.=84.18
18" INV.=82.69
12" INV.=75.85
2'x3' CMP INV.=74.57
2'x3' CMP INV.=75.14
2'x3' CMP INV.=75.78

+79.00 +79.50 +79.75 +79.90

0' 30' 60' 90'
1" = 30'

REVISIONS

CHRISTIAN ALBERT FARLAND No. 47544 CIVIL
COMMONWEALTH OF MASSACHUSETTS

FARLAND CORP.
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401 COUNTY STREET
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P.508.717.3479
OFFICES IN:
- TAUNTON
- MARLBOROUGH
- WARWICK, RI

DRAWN BY: MJW
DESIGNED BY: CAF
CHECKED BY: CAF

SITE PLAN
100 DUCHAINE BOULEVARD
ASSESSORS MAP 134 LOT 5
NEW BEDFORD, MASSACHUSETTS

PREPARED FOR: PARALLEL PRODUCTS OF NEW ENGLAND
401 INDUSTRY ROAD
LOUISVILLE, KY 40208

FEBRUARY 14, 2017
SCALE: 1"=30'
JOB NO. 15-500.1
LATEST REVISION:

POST-SUBCATCHMENT

SHEET 5B OF 8

GROUNDWATER RECHARGE CALCULATIONS

RECHARGE CALCULATIONS
SITE PLAN – 100 DUCHAINE BOULEVARD

REQUIRED:

Recharge Volume Required ("C" Soils) = [Impervious Area x (Recharge Depth/12)]
= [174,501 sf x (0.25"/12)]
= 3,635 cf (Required Volume)

Total Required Recharge Volume = 3,635 cf

STATIC METHOD:

- Assume the entire Required Recharge Volume is discharged to the infiltration device before infiltration begins.

PROVIDED:

Subsurface Recharge System:

- Cumulative Volume below the lowest outlet (elev=78.0) = 3,702 c.f.

Water Quality Basin #1:

- Cumulative Volume below the lowest outlet (elev=79.0) = 5,890 c.f.

Water Quality Basin #2:

- Cumulative Volume below the lowest outlet (elev=77.9) = 1,963 c.f.

Total Recharge Volume Provided = 11,555 cf

DRAWDOWN CALCULATIONS

$$Time_{drawdown} = \frac{Rv}{(K)(Bottom\ Area)}$$

Where:

Rv = Required Storage Volume = (F)(impervious area)

K = Saturated Hydraulic Conductivity For "Static" and "Simple Dynamic" Methods, use Rawls Rate (see Table 2.3.3).

For "Dynamic Field" Method, use 50% of the in-situ saturated hydraulic conductivity.

$$Time_{drawdown} = \frac{Rv}{(K)(Bottom\ Area)} = 20.71 \text{ hours}$$

Rv = 3,635 C.F.
K = 0.27 inch/hr.
BA = 7,802 S.F.

A	sand	**0.6-inch**
B	loam	**0.35-inch**
C	silty loam	**0.25-inch**
D	clay	**0.1-inch**

Texture Class	NRCS Hydrologic Soil Group (HSG)	Infiltration Rate Inches/Hour
Sand	A	8.27
Loamy Sand	A	2.41
Sandy Loam	B	1.02
Loam	B	0.52
Silt Loam	C	0.27
Sandy Clay Loam	C	0.17
Clay Loam	D	0.09
Silty Clay Loam	D	0.06
Sandy Clay	D	0.05
Silty Clay	D	0.04
Clay	D	0.02

EXHIBIT "H"

WATER QUALITY VOLUME CALCULATIONS

WATER QUALITY VOLUME CALCULATIONS
SITE PLAN – 100 DUCHAINE BOULEVARD

REQUIRED VOLUME:

*Water Quality Volume Required = (0.5”/12) x (Total Impervious Area)
*Water Quality Volume Required = (0.5”/12) x (174,501 sf) = 7,271 c.f.

PROVIDED:

Subsurface Recharge System:

- Cumulative Volume below the lowest outlet (elev=78.0) = 3,702 c.f.

Water Quality Basin #1:

- Cumulative Volume below the lowest outlet (elev=79.0) = 5,890 c.f.

Water Quality Basin #2:

- Cumulative Volume below the lowest outlet (elev=77.9) = 1,963 c.f.

Total Water Quality Volume Provided = 11,555 c.f.

11,555 c.f. (Provided) >>> 7,271 c.f. (Required)

EXHIBIT "I"

TSS REMOVAL CALCULATIONS

INSTRUCTIONS:

Version 1, Automated: Mar. 4, 2008

1. In BMP Column, click on Blue Cell to Activate Drop Down Menu
2. Select BMP from Drop Down Menu
3. After BMP is selected, TSS Removal and other Columns are automatically completed.

Location: Infiltration Basin (Same for all infiltration basins)

TSS Removal Calculation Worksheet

B BMP[1]	C TSS Removal Rate[1]	D Starting TSS Load*	E Amount Removed (C*D)	F Remaining Load (D-E)
Sediment Forebay	**0.25**	**1.00**	**0.25**	**0.75**
Infiltration Basin	**0.80**	**0.75**	**0.60**	**0.15**
	0.00	**0.15**	**0.00**	**0.15**
	0.00	**0.15**	**0.00**	**0.15**
	0.00	**0.15**	**0.00**	**0.15**

Total TSS Removal = **85%**

Separate Form Needs to be Completed for Each Outlet or BMP Train

Project: **Nstar Energy Company**

Prepared By: **Christian A. Farland, P.E.**

Date: **2/14/2017**

*Equals remaining load from previous BMP (E) which enters the BMP

Non-automated TSS Calculation Sheet must be used if Proprietary BMP Proposed

1. From MassDEP Stormwater Handbook Vol. 1

INSTRUCTIONS:

Version 1, Automated: Mar. 4, 2008

1. In BMP Column, click on Blue Cell to Activate Drop Down Menu
2. Select BMP from Drop Down Menu
3. After BMP is selected, TSS Removal and other Columns are automatically completed.

Location: Subsurface Recharge System

TSS Removal Calculation Worksheet

B BMP[1]	C TSS Removal Rate[1]	D Starting TSS Load*	E Amount Removed (C*D)	F Remaining Load (D-E)
Dry Well	0.80	1.00	0.80	0.20
	0.00	0.20	0.00	0.20
	0.00	0.20	0.00	0.20
	0.00	0.20	0.00	0.20
	0.00	0.20	0.00	0.20

Total TSS Removal = 80%

Separate Form Needs to be Completed for Each Outlet or BMP Train

Project: Nstar Energy Company

Prepared By: Christian A. Farland, P.E.

Date: 2/14/2017

*Equals remaining load from previous BMP (E) which enters the BMP

Non-automated TSS Calculation Sheet must be used if Proprietary BMP Proposed

1. From MassDEP Stormwater Handbook Vol. 1

EXHIBIT "J"

SEDIMENT FOREBAY SIZING CALCULATIONS

(MAIN OFFICE) 401 COUNTY STREET, NEW BEDFORD, MA 02740 **P** 508.717.3479 **F** 508.717.3481
ADDITIONAL OFFICES IN: TAUNTON ● MARLBOROUGH ● WARWICK, RI
WWW.FARLANDCORP.COM

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SEDIMENT FOREBAY SIZING CALCULATIONS

CONTRIBUTING AREA TO FOREBAY AT WATER QUALITY BASIN #1

Impervious Area = 14,700 s.f.

REQUIRED VOLUME OF SEDIMENT FOREBAY = VOLUME PRODUCED BY 0.25" RUNOFF/IMPERVIOUS ACRE

= 0.25 "/ACRE x $\frac{1 \text{ ACRE}}{43{,}560 \text{ S.F.}}$ X 14,700 S.F.

= 0.084 INCHES OF RUNOFF

TOTAL VOLUME PRODUCED = 0.084 INCHES X $\frac{1 \text{ FT}}{12 \text{ IN}}$ X 14,700 S.F.

= 103 C.F.

PROVIDED VOLUME OF SEDIMENT FOREBAY

BOTTOM FOREBAY EL. =	78.00	AREA =	423 S.F.
FOREBAY BERM EL. =	79.00	AREA =	797 S.F.

VOLUME PROVIDED = 610 C.F.

CONTRIBUTING AREA TO FOREBAY AT WATER QUALITY BASIN #2

Impervious Area = 10,000 s.f.

REQUIRED VOLUME OF SEDIMENT FOREBAY = VOLUME PRODUCED BY 0.25" RUNOFF/IMPERVIOUS ACRE

= 0.25 "/ACRE x $\frac{1 \text{ ACRE}}{43{,}560 \text{ S.F.}}$ X 10,000 S.F.

= 0.057 INCHES OF RUNOFF

TOTAL VOLUME PRODUCED = 0.057 INCHES X $\frac{1 \text{ FT}}{12 \text{ IN}}$ X 10,000 S.F.

= 48 C.F.

PROVIDED VOLUME OF SEDIMENT FOREBAY

BOTTOM FOREBAY EL. =	77.00	AREA =	510 S.F.
FOREBAY BERM EL. =	78.00	AREA =	826 S.F.

VOLUME PROVIDED = 668 C.F.

EXHIBIT "K"

LONG TERM OPERATION & MAINTENANCE PLAN

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Long Term Operation and Maintenance Plan

Site Plan
100 Duchaine Boulevard
New Bedford, MA 02745

February 14, 2017

Owner:

LOGAL, LLC
c/o Eric Decosta
100 Duchaine Boulevard
New Bedford, MA 02745

Prepared For:

Eric Decosta
LOGAL, LLC
100 Duchaine Boulevard
New Bedford, MA 02745

Prepared By:

Christian A. Farland, P.E.
Farland Corp.
Project No. 15-500.1

Street Sweeping

The parking lot will be inspected and maintained by the owner.

It shall be the responsibility of the owner to:

Inspections:

Inspect sediment deposit accumulations on the parking lots quarterly.

Maintenance:

Sweep parking lots at least annually.

Dispose of the accumulated sediment and hydrocarbons in accordance with local, state, and federal guidelines and regulations.

Stone/ Rip Rap Areas

The owner of the rip rap areas shall be the owner.

The rip rap areas are to be inspected and maintained by the owner.

It shall be the responsibility of the owner to:

Inspections:

Inspect the rip rapped areas quarterly.

Maintenance:

Remove accumulated sediment, trash, leaves and debris at least annually. Check for signs of erosion and repair as need. Replace any damaged areas with new rip rap of the same size.

Dispose of the accumulated sediment and hydrocarbons in accordance with local, state, and federal guidelines and regulations.

Infiltration Basin

The owner of the basins shall be the owner.

The basins are to be inspected and maintained by the owner.

It shall be the responsibility of the owner to:

Inspections:

Inspect to basins quarterly and after major storms (>3.2" of rain in 24 hours)

Inspect fore-bay quarterly.

Inspect basins for settlement, subsidence, erosion, cracking or tree growth on the embankment, condition of stone; sediment accumulation around the outlet or within the basin; and erosion within the basin and banks.

Inspect outlet structures and/ or outlet pipes for evidence of clogging, sediment deposits or signs of erosion around the structure/ pipe.

Ensure that the basins are operating as designed. If inspection shows that a basin fails to fully drain within 72 hours following a storm event, then the responsible party shall retain a Registered Professional Civil Engineer licensed in the state of Massachusetts to assess the reason for infiltration/ detention failure and recommend corrective action for restoring the intended functions. For a wet pond, fully drained means that the ponding level in the basin is at or below the lowest elevation of the outlet structure. For an infiltration basin, fully drained means that there is no ponding occurring in the infiltration basin.

Inspect emergency spillways for signs of erosion.

Maintenance:

When mowing the basin and forebay, mow the buffer area, side slopes, and basin bottom. Remove grass clippings and accumulated debris. Mow three times per year in May, July and September.

Remove accumulated trash, leaves, debris in basin and forebay every month between April and November of each year. Inspect areas in February of each year, if possible, to determine whether the aforementioned services are required.

If the infiltration basin is ponding in areas or not infiltrating as designed, use deep tilling to break up clogged surfaces, and re-vegetate immediately.

Replace stone in forebay and at all pipe ends once every five (5) years or when sediment depth is excessive.

Do not store snow in basin area.

Remove sediment from the basin and forebay as necessary and at least once every 5 years but wait until the floor of the basin is thoroughly dry. After removing sediment, replace any vegetation damaged during clean-out by either re-seeding or re-sodding.

Dispose of the accumulated sediment and hydrocarbons in accordance with local, state, and federal guidelines and regulations.

Drain Lines

After construction, the drain lines shall be inspected after every major storm for the first few months to ensure proper functions. Presence of accumulated sand and silt would indicate more frequent maintenance of the pre-treatment devices is required. Thereafter, the drain lines shall be inspected at least once per year. Accumulated silt shall be removed by a vactor truck or other method preferred.

EXHIBIT "L"

LONG TERM POLLUTION PREVENTION PLAN

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Long Term Pollution Prevention Plan

Site Plan
100 Duchaine Boulevard
New Bedford, MA 02745

February 14, 2017

Owner:

LOGAL, LLC
c/o Eric Decosta
100 Duchaine Boulevard
New Bedford, MA 02745

Prepared For:

Eric Decosta
LOGAL, LLC
100 Duchaine Boulevard
New Bedford, MA 02745

Prepared By:

Christian A. Farland, P.E.
Farland Corp.
Project No. 15-500.1

Long Term Pollution Prevention Plan

This Long Term Pollution Prevention Plan serves to outline good housekeeping practices in order to prevent pollution of the wetland resource areas and surrounding environment. The Long Term Operation & Maintenance Plan shall be taken as part of this document as it is a critical part of this plan and shall be adhered to. Proper operation and maintenance records shall be kept on file at all times.

Snow disposal shall be carried out by the owner. The owner should follow DEP guideline #BRPG 01-01 for all snow removal requirements.

The following areas shall be avoided for snow disposal:

- Avoid dumping the snow in the bordering vegetated wetlands.
- Avoid dumping of snow on top of storm drain catch basins or in stormwater drainage swales or ditches. Snow combined with sand and debris may block a storm drainage system, causing localized flooding. A high volume of sand, sediment, and litter released from melting snow also may be quickly transported through the system into surface water.

In order to prevent or minimize the potential for a spill of hazardous substances or oils to contaminate stormwater, a spill control and containment kit, including spill berm, absorbent materials, rags, gloves, and trash containers, shall be readily available. All product manufacturers recommended spill cleanup methods shall be known by maintenance personnel, who shall be trained regarding these procedures and the location of the cleanup procedure information and supplies. In the event of oil, gasoline or other hazardous waste spill on-site, the City of New Bedford Fire Department, DEP and the Conservation Agent shall be notified immediately. For spills of less than ¼ gallon, clean-up with absorbent materials or other appropriate means, unless circumstances dictate that the spill should be treated by a professional emergency response contractor. Spills which exceed the reportable quantities of substances mentioned in 40 CFR 110, 40 CFR 117, or 40 CFG 302 must be immediately reported to the EPA National Response Center (800) 242-8802. Any catch basin that may be affected by the spill shall be covered immediately with a spill protector drain cover or similar product, or a spill berm placed around the perimeter of the opening to prevent any contamination into the drainage system. Proper cleanup and disposal of hazardous wastes must follow all applicable local and state regulations and must be carried out by a qualified contractor.

The maintenance of all individual lawns, gardens and landscaped areas shall be performed by the owner. The site is not located within or near an Area of Critical Environmental Concern. However, good housekeeping practices should include proper storage and minimal use of cleaning products and fertilizers.

ILLICIT DISCHARGE STATEMENT

FARLAND CORP.

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February 14, 2017

New Bedford Conservation Commission
John Radcliffe, Chairman
City Hall, Room 304
133 William Street
New Bedford, MA 02740

RE: Illicit Discharge Compliance Statement (IDCS)
Site Plan - 100 Duchaine Boulevard

Dear Mr. Radcliffe,

As required, we are submitting this Illicit Discharge Compliance Statement verifying that no illicit discharges exist on the site or are proposed. We have included in the pollution prevention plan measures to prevent illicit discharges to the stormwater management system, including wastewater discharges and discharges of stormwater contaminated by contact with process wastes, raw materials, toxic pollutants, hazardous substances, oil, or grease.

The site plan identifies the location of any systems for conveying wastewater and/or groundwater on the site and show that there are no connections between the stormwater and wastewater management systems and the location of any measures taken to prevent the entry of illicit discharges into the stormwater management system.

Please feel free to contact us if you should need any further information.

Very Truly Yours,

FARLAND CORP.

Christian A. Farland

Christian A. Farland , P.E., LEED AP
Principal Engineer and President

City of New Bedford

REQUEST *for a* CERTIFIED ABUTTERS LIST

This information is needed so that an official abutters list as required by MA General Law may be created and used in notifying abutters. You, as applicant, are responsible for picking up and paying for the certified abutters list from the assessor's office (city hall, room #109).

SUBJECT PROPERTY			
MAP #	134	LOT(S)#	5
ADDRESS: 100 Duchaine Boulevard			
OWNER INFORMATION			
NAME: SM Real Estate, LLC			
MAILING ADDRESS: 401 Industry Road, Suite 100 - Louisville, KY 40208			
APPLICANT/CONTACT PERSON INFORMATION			
NAME (IF DIFFERENT): Matthew J. White, Farland Corp.			
MAILING ADDRESS (IF DIFFERENT): 401 County Street - New Bedford, MA 02740			
TELEPHONE #	(508) 717-3479		
EMAIL ADDRESS:	mwhite@farlandcorp.com		

REASON FOR THIS REQUEST: *Check appropriate*	
	ZONING BOARD OF APPEALS APPLICATION
	PLANNING BOARD APPLICATION
✓	CONSERVATION COMMISSION APPLICATION
	LICENSING BOARD APPLICATION
	OTHER (*Please explain*):

PLANNING DEPARTMENT NOV 15 2016

Once obtained, the Certified List of Abutters must be attached to this Certification Letter.

Submit this form to the Planning Division Room 303 in City Hall, 133 William Street. You, as applicant, are responsible for picking up and paying for the certified abutters list from the assessor's office (city hall, room #109).

Official Use Only:

As Administrative Assistant to the City of New Bedford's Board of Assessors, I do hereby certify that the names and addresses as identified on the attached "abutters list" are duly recorded and appear on the most recent tax.

Carlos Amado	Carlos Amado	11/16/2016
Printed Name	Signature	Date

November 15, 2016
Dear Applicant,

Please find below the List of Abutters within 100 feet of the property known as 100 Duchanie Boulevard (134-5). The current ownership listed herein must be checked and verified by the City of New Bedford Assessor's Office. Following said verification, the list shall be considered a Certified List of Abutters.

Please note that multiple listed properties with identical owner name and mailing address shall be considered duplicates, and shall require only 1 mailing. Additionally, City of New Bedford-Owned properties shall not require mailed notice.

Parcel	Location	Owner and Mailing Address
134E-6	107 RIDGEWOOD RD	DUBOIS RAYMOND, DUBOIS DIANE C 107 RIDGEWOOD ROAD NEW BEDFORD, MA 02745
134E-7	115 RIDGEWOOD RD	CATOJO LENNY, 115 RIDGEWOOD ROAD NEW BEDFORD, MA 02745
134E-8	125 RIDGEWOOD RD	DEVLIN ROBERT, 125 RIDGEWOOD RD NEW BEDFORD, MA 02745
134F-29	109 BIRCHWOOD DR	TAYLOR BRUCE M, 109 BIRCHWOOD DR NEW BEDFORD, MA 02745
134F-31	97 IVY RD	BARBOSA LUISA P, 97 IVY RD NEW BEDFORD, MA 02745
134F-30	99 IVY RD	TAVARES JOSE, 99 IVY ROAD NEW BEDFORD, MA 02745
134E-9	993 PINE HILL DR	BATES GAIL A, 993 PINE HILL DRIVE NEW BEDFORD, MA 02745
134-455	107 DUCHAINE BLVD	CITY OF NEW BEDFORD, 133 WILLIAM STREET NEW BEDFORD, MA 02740
134E-5	99 RIDGEWOOD RD	SEIFERT JEFFREY A, SEIFERT LORIE A 99 RIDGEWOOD ROAD NEW BEDFORD, MA 02745
134-406	1844 PHILLIPS RD	CRAPO VICTORIA J, CRAPO DENNIS S 1844 PHILLIPS ROAD NEW BEDFORD, MA 02745
134F-32	95 IVY RD	BOUCHARD DENNIS P, BOUCHARD WANDA M 95 IVY ROAD NEW BEDFORD, MA 02745
134-342	1784 PHILLIPS RD	HATHAWAY ROBERT, C/O ROBERT J HATHAWAY 1784 PHILLIPS ROAD NEW BEDFORD, MA 02745
134F-68	112 BIRCHWOOD DR	LORANTOS GEORGE G JR, LORANTOS CHERYL 112 BIRCHWOOD DRIVE NEW BEDFORD, MA 02745

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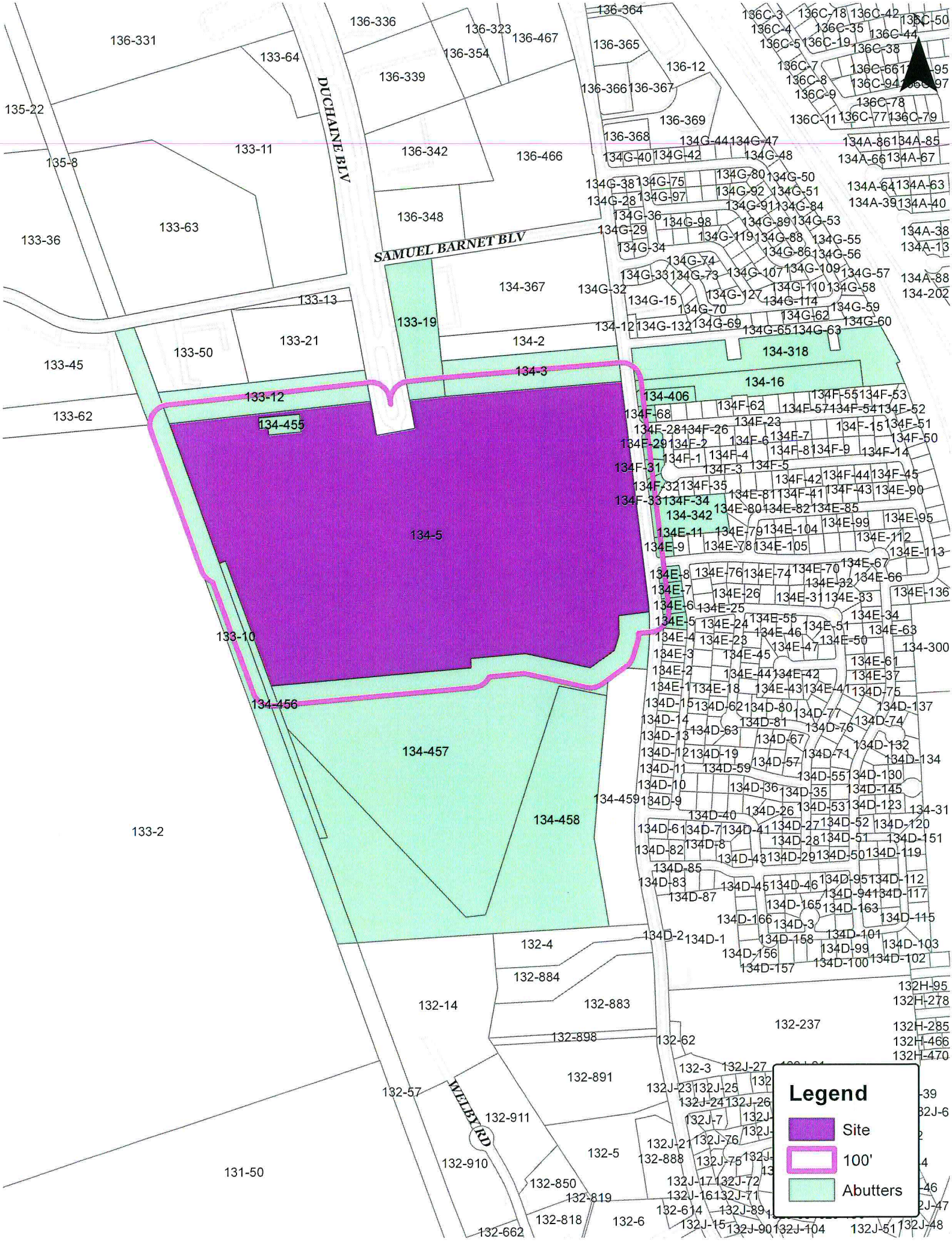
Parcel	Location	Owner and Mailing Address
133-12 R-ES	SAMUEL BARNETT BLVD	GREATER NEW BEDFORD, INDUSTRIAL FOUNDATION ~~227 UNION ST RM 607~~ 1213 Purchase St. Unit 2 NEW BEDFORD, MA 02740
134-16 ES	PHILLIPS RD	ABREU JOSEPH L, 759 BELLEVILLE AVE NEW BEDFORD, MA 02745
133-10	RIGHT OF WAY	PENN CENTRAL CO, CONSOLIDATED RAIL CORP ~~P O BOX 8097~~ 500 Water St. Dept J910 ~~PHILADELPHIA, PA 19101~~ Jacksonville, FL 32202
134-5	100 DUCHAINE BLVD	LOGAL LLC, C/O ERIC DECOSTA ~~89 BLACKMER STREET~~ 100 Duchaine Blvd. NEW BEDFORD, MA ~~02744~~ 02745
134-456 R-WS	DUCHAINE BLVD	~~MULTILAYER COATING TECHNOLOGIES LLC,~~ SM Real Estate LLC ~~1 CRANBERRY HILL SUITE 401~~ 401 Industry Road Ste 100 ~~LEXINGTON, MA 02421-7397~~ Louisville, KY 40208
134-457	50 DUCHAINE BLVD	~~MULTILAYER COATING TECHNOLOGIES LLC,~~ SM Real Estate LLC ~~1 CRANBERRY HILL~~ 401 Industry Road Ste 100 ~~LEXINGTON, MA 0242~~1 Louisville, KY 40208
134-458	PHILLIPS RD	~~MULTILAYER COATING TECHNOLOGIES~~ LLC, ~~1 CRANBERRY HILL SUITE 401~~ ~~LEXINGTON, MA 02421-7397~~ Same as above
133-19	126 DUCHAINE BLVD	N E PLASTICS CORP, 310 SALEM ST WOBURN, MA 01801
134-3	1885 PHILLIPS RD	COMMONWEALTH ELECTRIC CO, C/O PROPERTY TAX DEPARTMENT P O BOX 270 HARTFORD, CT 06141
134-318 ES	PHILLIPS RD	COMMONWEALTH ELECTRIC CO, C/O PROPERTY TAX DEPARTMENT P O BOX 270 HARTFORD, CT 06141


DUCHAINE BLV
SAMUEL BARNET BLV
WELBY RD
134-455
134-456
134-457
134-458
134-459
134-5
Legend
Site
100'
Abutters

Notification to Abutters Under the Massachusetts Wetlands Protection Act

In accordance with the second paragraph of Massachusetts General Laws Chapter 131, Section 40, you are hereby notified of the following:

A. The name of the applicant is LOGAL, LLC (c/o Eric Decosta).

B. The applicant has filed a Notice of Intent with the Conservation Commission for the municipality of New Bedford seeking permission to remove, fill, dredge or alter an Area Subject to Protection Under the Wetlands Protection Act (General Laws Chapter 131, Section 40).

C. The address of the lot where the activity is proposed is 100 Duchaine Boulevard (Map 134 Lot 5).

D. Copies of the Notice of Intent may be examined at the New Bedford Conservation Commission office at 133 William Street - New Bedford, MA 02740 between the hours of M-F 8:00 AM - 4:00 PM.

E. Copies of the Notice of Intent may also be obtained from the applicant's representative FOR A REASONABLE FEE by calling: Farland Corp. at (508) 717-3479 between the hours of 8:00 am and 4:00 pm on Monday – Friday.

F. Information regarding the date, time and place of the public hearing may be obtained from the New Bedford CONSERVATION COMMISSION by calling: (508) 991-6188.

NOTE: Notice of the public hearing, including its date, time, and place, will be published at least five (5) days in advance in a publication with general circulation in the Community.

NOTE: Notice of the public hearing, including its date, time, and place, will be posted in the City or Town Hall not less than forty-eight (48) hours in advance.

NOTE: You also may contact the nearest Department of Environmental Protection Regional Office for more information about this application or the Wetlands Protection Act. To contact DEP, call: (508) 946-2700

SITE PLAN