

Professional

Engineering

Services

Stormwater
Quality
Management
Plan
2024-2034

Report

City of

La Crosse, WI

August 2024



Table A-1 2004 Land Use

Catch I.D.	Cemetery (acres)	Downtown Commercial (acres)	Duplex (acres)	WisDOT ROW (acres)	High Density Residential No Alleys (acres)	High Density Residential with Alleys (acres)	Hospital (acres)	High Rise Residential (acres)	Institution (acres)	Low Density Residential (acres)	Light Industrial (acres)	Medium Density Residential No Alley (acres)	Medium Density Residential (acres)with Alley	Multifamily Residential (acres)	Medium Industrial (acres)	Mobile Home (acres)	Office Park (acres)	Open (acres)	Parks (acres)	Schools (acres)	Shopping Center (acres)	Strip Commercial (acres)	Water (acres)	Grand Total (acres)	
1001																			5.79					5.79	
1002																			4.48				3.30		7.78
1003		5.91							0.00				0.00						0.31	8.82		66.03		81.08	
1004																						0.73		0.73	
1005																						0.32		0.32	
1006																						0.18		0.18	
1007																						0.39		0.39	
1008																						0.57		0.57	
1009																						0.25		0.25	
1010																						7.17		7.17	
1011																						2.61		2.61	
1012																						1.66		1.66	
1013																				0.20		0.00		0.20	
1014																				0.12				0.12	
1015																				0.08				0.08	
1016																				0.21				0.21	
1017																				0.37				0.37	
1018																				0.52				0.52	
1019																				0.60				0.60	
1020																				0.39				0.39	
1021									0.01											0.09				0.09	
1022									0.11															0.11	
1023									0.07															0.07	
1024									0.00											0.06				0.06	
1025									0.00											0.08				0.08	
1026									0.13											0.00				0.13	
1027									0.13											0.00				0.13	
1028									0.00											0.07				0.07	
1029													0.08									0.00		0.08	
1030													0.00									0.11		0.11	
1031																						0.23		0.23	
1032													0.04									0.00		0.04	
1033																						0.08		0.08	
1034													0.08									0.01		0.09	
1035																						0.02		0.02	
1036													0.05									0.00		0.05	
1037																						0.05		0.05	
1038																						0.22		0.22	
1039																						0.25		0.25	
1040													0.31											0.31	
1041	2.03	0.00						5.47	6.22			0.44	24.82	83.08			1.83		0.95	6.99		23.44		155.26	
1042														1.33										1.33	
1043														0.45										0.45	
1044														0.72										0.72	
1045														0.76								0.00		0.76	
1046														0.35								0.15		0.50	
1047														2.89										2.89	
1048														0.00								0.26		0.26	
1050														2.48					0.10			3.37		5.95	
1051														0.46										0.46	
1052														0.19										0.19	
1053																						1.54		1.54	
1054														0.61										0.61	
1055														0.40										0.40	
1056														0.18										0.18	
1057	0.22													1.91										2.12	
1058	26.16																							26.16	
1059	19.68			2.41					6.38			36.60	167.94	6.24				0.00	13.15	11.29		5.59		269.29	
1060	0.78																			5.54	0.02			6.33	
1061	0.34																			3.37				3.70	
1062	0.64												3.44							15.59	0.00			19.68	
1063																				0.56				0.56	
1064													19.86							0.35				20.21	
1065		25.28																		0.24		11.45		36.97	
1066		51.45																		1.52		5.91		60.92	
1067		0.57																						0.57	

Catch I.D.	Cemetery (acres)	Downtown Commercial (acres)	Duplex (acres)	WisDOT ROW (acres)	High Density Residential No Alleys (acres)	High Density Residential with Alleys (acres)	Hospital (acres)	High Rise Residential (acres)	Institution (acres)	Low Density Residential (acres)	Light Industrial (acres)	Medium Density Residential No Alley (acres)	Medium Density Residential (acres)with Alley	Multifamily Residential (acres)	Medium Industrial (acres)	Mobile Home (acres)	Office Park (acres)	Open (acres)	Parks (acres)	Schools (acres)	Shopping Center (acres)	Strip Commercial (acres)	Water (acres)	Grand Total (acres)
1068		0.24																						0.24
1069		0.28																						0.28
1070		3.92				2.32		3.25	3.40			4.86	32.99	6.77						16.06		24.27		97.86
1071			0.45		3.50	45.59	15.64	1.08	8.90			1.60	83.71	0.21					2.51	7.22		38.84		209.25
1072								0.46					8.26	0.50										9.22
1073								1.41	0.42				3.80							0.50			0.15	6.27
1074								0.01					0.01										1.40	1.42
1075								0.22					0.18										0.00	0.40
1076												0.01											0.36	0.37
1077												0.24											0.00	0.24
1078																							0.20	0.20
1079																							0.11	0.11
1080								0.11															0.51	0.62
1081																							0.34	0.34
1082		0.24																					0.16	0.40
1083		1.89													3.56								14.94	38.35
1084																								0.30
1085																								1.62
1086																								1.10
1087																								0.15
1088																							1.84	1.84
1089																							0.59	0.59
1090																							0.49	0.49
1091			2.42		1.09	0.41	1.37	2.23	0.28			11.94	10.28	40.87				1.34	0.97	2.95		8.68	0.02	84.87
1092												3.23						0.05						3.28
1093												0.90			0.76								0.02	1.69
1094													0.33											0.33
1095																				1.32				2.36
1096																								0.53
1097																								0.47
1098																								0.28
1099									13.08		3.48	7.89	293.67	3.49			0.01		4.61	8.86		5.49		343.68
1100													0.21											0.21
1101													0.17											0.17
1102													0.03											0.03
1103													0.08											0.08
1104	1.14					56.76			3.19			46.20	185.47	0.35						10.18	10.00	12.23		325.52
1105													0.05											0.05
1106	6.14					18.96		1.86	0.73			33.32	41.36	1.67				34.93	0.00	1.86				140.83
1107						0.06																		0.06
1108	29.17											5.55	2.75					3.70						41.17
1109	0.77			0.94					10.17		49.45	201.43	167.84	8.38	27.25	0.00	4.19	16.05	0.55	48.17	7.70	48.64		591.53
1110													0.16											0.16
1111													1.00									0.42		1.42
1112													0.02											0.02
1113													3.33											3.33
1114													0.04											0.04
1115												0.05												0.05
1116												0.03												0.03
1117																					2.09			2.09
1118																					1.13			1.13
1119									0.60															0.60
1120													0.02											0.02
1121													0.55											0.55
1122													1.30											1.30
1123											0.63													0.63
1124													1.22											1.22
1125													0.52											0.52
1126													0.02											0.30
1127													0.20							0.28				0.20
1128													0.25							0.01				0.25
1129													0.28							0.00				0.28
1130													0.00							0.18				0.18
1131		7.17	1.28		1.64					0.80	9.14	4.38	94.91	4.30	20.87		5.67	5.45	6.37			14.83		176.82
1132						35.68	38.65		0.48		19.45	0.60	36.78	7.67	5.66			4.51	2.24	0.78		3.04		155.54
1133					0.39					0.27														0.66
1134											0.66	0.19												0.85
1135																								1.18
1136														1.18	0.39									0.39

Catch I.D.	Cemetery (acres)	Downtown Commercial (acres)	Duplex (acres)	WisDOT ROW (acres)	High Density Residential No Alleys (acres)	High Density Residential with Alleys (acres)	Hospital (acres)	High Rise Residential (acres)	Institution (acres)	Low Density Residential (acres)	Light Industrial (acres)	Medium Density Residential No Alley (acres)	Medium Density Residential (acres)with Alley	Multifamily Residential (acres)	Medium Industrial (acres)	Mobile Home (acres)	Office Park (acres)	Open (acres)	Parks (acres)	Schools (acres)	Shopping Center (acres)	Strip Commercial (acres)	Water (acres)	Grand Total (acres)
1137							5.48				0.09			2.57				0.06						8.19
1138												0.03												0.03
1139							1.14																	1.14
1140					0.00														0.26					0.26
1141								0.00				0.82												0.82
1142								0.00				0.95												0.95
1143							0.00					0.41												0.41
1144							0.16					0.31												0.47
1145								0.00				0.81							0.22					1.03
1146								0.29				0.23												0.52
1147							6.54	0.42			2.99	1.20	6.16		5.57			1.43	0.17			0.20	0.00	24.69
1148															9.03			0.71						9.74
1149			0.66									5.15	2.71	12.15	9.54				2.06			0.78		33.05
1150			0.70									0.77			0.02									1.49
1151											4.53				9.00				14.72					28.25
1152											4.11													4.11
1153											2.22				41.49				8.23					51.95
1154											18.01								5.30					23.31
1155																			3.06					3.06
1156																						0.18		0.18
1157												0.10												0.10
1158							0.06																	0.06
1159							1.33																	1.33
1160							0.97																	0.97
1161							0.10																	0.10
1162							10.17							1.13				0.63		0.23				12.15
1163														4.66				1.06	3.38					9.10
1164							0.18							2.56				3.98		3.62				10.34
1165														0.13								0.35		0.48
1166														0.00				1.37		0.00				1.37
1167																		0.52						0.52
1168																		2.42						2.42
1170								1.89			2.87			13.77					1.22					19.75
1171			0.88								0.42		12.08	1.58										14.97
1172	2.31		5.47						14.16		4.74		1.01	45.47	9.56		20.06				1.46	53.05		157.29
1173																						1.69		1.69
1174															0.08							0.87		0.94
1175																						1.18		1.18
1176													2.01											2.01
1177													1.33											1.33
1178													0.82	0.26										1.08
1179													0.61						0.01					0.62
1180													1.43											1.43
1181													0.13						0.07					0.20
1182											1.09		1.11									0.00		2.20
1183	11.66												0.04				2.22					9.36		23.27
1184													0.01	0.83		0.00								0.85
1185											0.00											0.49		0.49
1186											0.01											0.31		0.33
1187											0.01											1.02		1.03
1188											0.00											0.19		0.19
1189			1.15	0.83					7.83		0.20		8.93	6.93	1.91		0.30				21.73	25.90		75.70
1190											0.02											0.38		0.40
1191											0.04											0.29		0.33
1192											0.08											0.09		0.16
1193									0.00													0.21		0.21
1195																						0.37		0.37
1196									8.18					2.80										10.98
1197			0.03									0.00									10.49			10.53
1198			0.03																		4.88			4.91
1199											0.15													0.15
1200											0.53													0.53
1201			13.24	0.83							23.95							0.17			0.02	0.20		38.40
1202			0.00								3.45													3.45
1204											5.16													5.16
1205								0.00			0.00									2.39				2.39
1206											0.66			1.65										2.31
1207			0.18								1.52			1.77							0.11			3.58
1208				1.83												21.91		2.44						26.18

Catch I.D.	Cemetery (acres)	Downtown Commercial (acres)	Duplex (acres)	WisDOT ROW (acres)	High Density Residential No Alleys (acres)	High Density Residential with Alleys (acres)	Hospital (acres)	High Rise Residential (acres)	Institution (acres)	Low Density Residential (acres)	Light Industrial (acres)	Medium Density Residential No Alley (acres)	Medium Density Residential (acres)with Alley	Multifamily Residential (acres)	Medium Industrial (acres)	Mobile Home (acres)	Office Park (acres)	Open (acres)	Parks (acres)	Schools (acres)	Shopping Center (acres)	Strip Commercial (acres)	Water (acres)	Grand Total (acres)
1209															7.43		2.88						0.00	10.31
1210													2.22					6.00					0.00	8.22
1211				0.30														0.82				2.95		4.07
1212				2.54														0.44				0.80		3.78
1213				0.22									0.09	0.50				0.01	2.02					2.83
1214				15.50						22.67		0.00	1.14	10.40				2.45	1.16			7.82		61.13
1215				0.10								1.29						5.62						7.01
1216												0.20		0.66				1.10						1.97
1217				1.88								1.50		2.38										5.77
1218												6.96						0.02						6.98
1219												0.78												0.78
1220				0.28								12.04												12.32
1221	1.54			3.77								24.53	0.00					5.40	0.00	2.90				38.13
1222				1.00																5.71				6.71
1223				1.28						1.50								11.29					0.00	14.06
1224																		0.30						0.30
1225																		0.29						0.29
1226																		0.20	0.00					0.20
1227				0.48														4.23	0.00					4.71
1228			4.38							11.86		13.52	2.20	2.12				13.75	0.14			0.31		48.29
1229			0.02							15.86		9.67	9.82	1.01				10.57	0.08					47.03
1230													0.08											0.08
1231																		3.27						3.27
1232			1.43									1.38	2.49	0.17				1.08						6.55
1233			0.60							0.00		7.49	3.89	3.89				30.14						42.11
1234												0.96						0.97						1.93
1235										1.20		104.00	0.27	34.11			0.74	94.17	18.93					253.41
1236												41.50	12.56	0.00				7.69						61.75
1237													3.04						0.62					3.66
1238												0.06												0.06
1239													1.56					0.05						1.61
1240										0.03		2.96	0.86	12.91			0.40		35.61					52.78
1241										12.81								0.00						12.81
1242										16.65								14.52						31.18
1243										4.42								10.15						14.57
1244				2.56														0.24						16.36
1245				0.10						8.46						13.56								8.56
1246									0.18	1.76								2.64						4.58
1247									3.79															3.79
1248													0.03				24.89		0.40	0.00				25.32
1249										0.30		0.00	0.29	0.11			11.99		5.33	9.60				27.62
1250																	5.24							5.24
1251																				2.33				2.33
1252				0.21						21.48		158.52	0.54	1.46				5.21	16.04			4.03		207.47
1253												0.21						0.30						0.51
1254												7.96		5.23				0.02						13.22
1255												0.04		0.58				1.18						1.80
1258												0.03												0.03
1259										0.04		82.25	16.35					4.38	11.96					114.98
1260										0.00		9.00												9.00
1261													0.04											0.04
1262																		59.36						59.36
1263				7.00						7.98		7.76						585.45	117.22					725.41
1264											10.88	3.71	0.00	2.29	24.51					1.65		13.02		56.05
1265											6.21			0.79	47.92					1.31		10.99		67.22
1266											0.82											3.72		4.54
1267															0.00							1.41		1.41
1268																						2.05		2.05
1269		0.93										11.79	68.56	3.10	0.90		1.96	8.23	2.30		9.26	26.93	0.00	133.98
1270		0.06											0.36											0.42
1271													0.02											0.02
1272													0.18											0.18
1273											65.43	3.07	10.95	22.68	5.47			3.81	2.86	3.47	8.05	13.17	0.35	139.30
1274											0.67													0.67
1275												0.08		0.07				0.39						0.54
1276											0.02	5.18	6.95					0.22	0.02					12.39
1277											6.01	2.29			5.17			1.47					1.02	15.95
1278				0.21							0.00				0.10			8.74					0.96	10.01
1279															39.81			0.04				1.47		41.33

Catch I.D.	Cemetery (acres)	Downtown Commercial (acres)	Duplex (acres)	WisDOT ROW (acres)	High Density Residential No Alleys (acres)	High Density Residential with Alleys (acres)	Hospital (acres)	High Rise Residential (acres)	Institution (acres)	Low Density Residential (acres)	Light Industrial (acres)	Medium Density Residential No Alley (acres)	Medium Density Residential (acres)with Alley	Multifamily Residential (acres)	Medium Industrial (acres)	Mobile Home (acres)	Office Park (acres)	Open (acres)	Parks (acres)	Schools (acres)	Shopping Center (acres)	Strip Commercial (acres)	Water (acres)	Grand Total (acres)
1280															3.51				18.47			2.08		24.06
1281		1.75						1.24	2.80			8.35	63.51	6.36	0.54		0.16	7.39	1.11	9.88		32.19		135.29
1282																						0.98		0.98
1283																						0.43		0.43
1284																						0.35		0.35
1285																						0.03		0.03
1286											0.27		19.63	4.29	0.46				0.05	3.17		11.60		39.47
1287												0.02	0.00						1.50			0.02		1.54
1288																						0.21		0.21
1289																						0.12		0.12
1290																			0.02			0.77		0.79
1291													46.20		0.74					3.63		0.23		50.80
1292													0.56											0.56
1293													0.59											0.59
1294													1.67											1.67
1295													0.73											0.73
1296													1.11											1.11
1297													0.51											0.51
1298													0.01		0.12			0.18				0.47		0.77
1299				0.12							14.14	3.83	32.38	4.55		7.13				2.10		18.10		82.34
1300								0.30				0.17	92.98		19.87					12.55		8.72		134.58
1301													0.14		2.64					4.58				7.35
1302													0.05											0.05
1303													0.05											0.05
1304				3.79								4.58	53.12									11.07		72.57
1305				0.27																		0.82		1.09
1306				1.06																				1.06
1307				3.12																		0.42		3.53
1308				0.58									53.95						2.96	2.86		11.99		72.34
1309				4.66																		11.14		15.80
1310													0.04						0.00			1.68		1.72
1311								0.20				67.39			0.75					1.07				69.40
1312												3.05			0.88									3.94
1313				59.64							8.62	3.61	9.42	1.66	116.57			0.49	8.61					209.33
1314				1.12					3.12			2.29	33.00	2.32	0.07							19.85		61.78
1315				8.08																		6.21		14.29
1316	6.09			2.52							180.02	0.00			17.52			6.70						212.85
1317	0.17										1.08				0.00									1.24
1318											5.45				0.02				5.34	0.16				10.98
1319											2.52				0.96			18.87						22.35
1320											86.33				26.07			1.11						113.52
1321											1.10													1.10
1322											1.73													1.73
1323											0.76													0.76
1324											1.02				2.04									3.06
1325											0.46													0.46
1326											1.81													1.81
1327			2.49	4.90							10.00	4.97		0.57									0.11	23.04
1328									7.44		3.09	0.01												10.54
1329				0.02					0.03		1.87				5.92									7.84
1330				0.00					108.80		0.01													108.81
1331									0.13		0.01													0.13
1332									0.13		0.02													0.15
1333									0.55															0.55
1334									13.90															13.90
1335									2.83															2.83
1336									31.54															31.54
1337									46.80															46.80
1338									52.77															52.77
1339									62.48															62.48
1340									23.20															23.20
1341				2.58					52.22		91.31													146.11
1342									224.36		5.17													229.53
1343									3.07															3.07
1344									1.21															1.21
1345									0.63															0.63
1346									0.81															0.81
1347									1.60		1.18													2.78
1348									6.20		0.25	0.15												6.60

Catch I.D.	Cemetery (acres)	Downtown Commercial (acres)	Duplex (acres)	WisDOT ROW (acres)	High Density Residential No Alleys (acres)	High Density Residential with Alleys (acres)	Hospital (acres)	High Rise Residential (acres)	Institution (acres)	Low Density Residential (acres)	Light Industrial (acres)	Medium Density Residential No Alley (acres)	Medium Density Residential (acres)with Alley	Multifamily Residential (acres)	Medium Industrial (acres)	Mobile Home (acres)	Office Park (acres)	Open (acres)	Parks (acres)	Schools (acres)	Shopping Center (acres)	Strip Commercial (acres)	Water (acres)	Grand Total (acres)
1349				0.52					22.54															23.06
1350				3.18					2.07			0.00												5.25
1351				10.62					0.94									0.00				0.10		11.66
1352				6.07														2.06			0.42	18.63		27.18
1353		0.00		1.26														4.48						5.74
1354																		1.20						1.20
1355				0.00														1.71						1.71
1356																		0.31						0.31
1357																		0.73						0.73
1358				0.19											0.00						30.21			30.40
1359				1.86																	23.81	2.51		28.17
1360				0.08																	6.06			6.14
1361				0.04																	0.35			0.40
1362																					0.11			0.11
1363				0.00																		0.21		0.22
1365											0.18							3.82						4.00
1366											0.00							3.12						3.12
1367				3.13							47.79							20.08						71.01
1368											4.30													4.30
1369											138.71							45.34						184.06
1370	0.24			0.01						3.91				4.94										9.10
1371	0.00			14.99					11.38	52.59		1.43		0.39	2.51			91.99	0.93	4.53		0.41		181.16
1372										6.99								0.01						7.00
1373				0.07						13.26									0.36					13.69
1374										5.04										6.77				11.81
1375										13.94								6.15						20.09
1376										2.81								0.03						2.84
1377				7.89						6.66				2.65	0.49			7.43				2.88		28.00
1378				0.05						9.72								21.71						31.49
1379										0.25														0.25
1380				0.02						0.56														0.59
1381				9.08						9.37	2.54	0.00		1.74	0.83		4.47	5.96	0.00			1.16	0.00	35.17
1383																	0.10							0.10
1384				3.72										0.00			0.09	15.18	0.00					18.98
1385		0.03														1.56						0.02		1.60
1386		0.06																				0.96		1.03
1387																						2.93		3.65
1388																								7.39
1389		3.13																				1.46	0.02	9.74
1390																			0.26					1.09
1391																			1.45					1.45
1392											0.14													0.14
1393												13.11		0.43					0.20				0.06	13.80
1394												10.42												10.42
1395				1.52																				1.52
1396		0.09																						0.09
1397											4.01			0.06										4.07
1398				1.04																				1.04
1399													0.03											0.03
1400													0.04											0.04
1401													0.05											0.05
1402												0.06												0.06
1403														0.30										0.30
1404														0.48										0.48
1405																								0.09
1406																								0.03
1407						0.03																		0.04
1508																								0.02
10018											10.84			8.11	18.37			21.11	5.95		0.35	16.11	151.90	232.74
10028	8.89			5.19					0.00	3.48	9.36	0.43	1.72	4.38	0.01		73.75	31.83	0.37	0.11	0.67	454.67	594.86	
10038				31.64							8.23	0.00					689.99	55.21			1.84	0.00	825.37	
10048	40.59			3.57						45.28				4.99	1.12		80.47	45.66			3.96		225.65	
10058				0.68					15.43	24.86							98.99	2.37					142.33	
10068				0.83						0.29														107.90
10078				1.05		0.02						4.80				4.68		97.28					72.58	99.80
10088												3.43				8.84		13.90						1.94
10098			1.03						4.85					12.24					5.32				12.10	35.54
10108																							15.63	15.63
10118																							31.36	31.36

Catch I.D.	Cemetery (acres)	Downtown Commercial (acres)	Duplex (acres)	WisDOT ROW (acres)	High Density Residential No Alleys (acres)	High Density Residential with Alleys (acres)	Hospital (acres)	High Rise Residential (acres)	Institution (acres)	Low Density Residential (acres)	Light Industrial (acres)	Medium Density Residential No Alley (acres)	Medium Density Residential (acres)with Alley	Multifamily Residential (acres)	Medium Industrial (acres)	Mobile Home (acres)	Office Park (acres)	Open (acres)	Parks (acres)	Schools (acres)	Shopping Center (acres)	Strip Commercial (acres)	Water (acres)	Grand Total (acres)
10128							0.12			2.53	0.73	4.31	1.07	1.76				10.88		0.23			0.92	22.55
10138												0.23		0.43				3.85					42.17	46.69
10148										4.91	0.05	6.34		0.28	4.69				4.65				2.94	23.86
10158											8.02				0.43				20.23				0.40	29.08
10168											3.50												0.66	4.16
10178		4.08									0.00				12.24				4.96			0.01	0.12	21.40
10188		2.04												2.48					144.35			0.58	44.21	193.65
10198														2.96					0.57				1.10	4.63
10208																0.14						2.10		2.24
10218		1.67														27.40		2.21	8.88				31.37	71.53
10228														0.45	37.97			0.00	0.00			0.05	23.51	61.99
10238															20.64			29.34					4.76	54.73
10248												1.36											0.01	1.37
10258												0.68							33.77				1.25	35.70
10268												1.69											0.31	2.00
10278												1.40												1.40
10288												0.61		0.32										0.94
10298												0.72												0.72
10308												0.66												0.66
10318												0.80												0.80
10328												0.62											0.00	0.62
10338												0.81												0.81
10348												0.74											0.00	0.75
10358												0.34												0.34
10368												1.08											0.05	1.13
10378												0.12												0.12
10388												0.20												0.20
10398												0.40											0.01	0.41
10408												0.13												0.13
10418												0.70											0.00	0.71
10428												4.25											0.85	5.10
10438												0.17												0.17
10448												0.15												0.15
10458												0.18											0.00	0.18
10468												0.21												0.21
10478												0.80											0.03	0.83
10481														0.19								0.02		0.20
10488												0.13												0.13
10498												0.29											0.00	0.29
10508												0.52												0.52
10518				3.10										2.81	2.40	0.45			8.59			4.71	8.70	30.77
10528			2.29	3.79										0.88									11.89	25.19
10538				15.42																				23.73
10548				0.07				0.18			32.39							8.05					6.36	39.00
10558				3.20				456.57			0.85								0.01	0.09			61.80	523.01
10568				0.00								14.26		2.32										16.58
10578				0.04								8.34												8.38
10588										3.57									4.26	0.03				7.86
10598																			5.22					5.22
10608																			0.55					0.55
10618																			4.44					4.44
10628										17.52		0.00							2.22					20.43
10638				0.69						2.01									511.57					514.78
10648																			11.08					11.08
10658																			12.00					12.00
10668											0.60													0.60
10678											5.99								8.02		0.04			14.05
10688				1.23				5.36		0.06									132.23					138.88
10698											8.81		0.00	0.24	26.96				107.95		21.85	1.56	9.68	177.04
10708				0.07															22.42					22.49
10718																			17.91				0.00	17.91
10728											0.00								12.00					12.00
10738				1.30				28.93				0.20												30.43
10748				0.49																				4.97
10758															0.01				4.24		2.74			6.99
10768																			0.22			0.89		1.11
10778																			15.99					16.18
10788				0.57						2.75														3.32
10798				1.86											9.13				1.45					12.54

Catch I.D.	Cemetery (acres)	Downtown Commercial (acres)	Duplex (acres)	WisDOT ROW (acres)	High Density Residential No Alleys (acres)	High Density Residential with Alleys (acres)	Hospital (acres)	High Rise Residential (acres)	Institution (acres)	Low Density Residential (acres)	Light Industrial (acres)	Medium Density Residential No Alley (acres)	Medium Density Residential (acres)with Alley	Multifamily Residential (acres)	Medium Industrial (acres)	Mobile Home (acres)	Office Park (acres)	Open (acres)	Parks (acres)	Schools (acres)	Shopping Center (acres)	Strip Commercial (acres)	Water (acres)	Grand Total (acres)
10808																8.65								8.65
11099											1.45	9.00	0.57		24.82	12.38		14.42				10.69		73.33
11681																		2.56						2.56
11899											1.00	14.08												15.08
11931									0.00													0.25		0.25
12059				71.78						1100.52		42.49		2.30		40.26	0.66	1856.02	0.06					3114.09
12069												1.30												1.30
12149				3.21						0.00		0.04					17.78	0.00						21.03
12159												1.23												1.23
12169				0.00								0.86												0.86
12219												1.41												1.41
12279				4.51														13.68						18.19
12299																		5.27						5.27
12339																		1.08						1.08
12359												0.01	0.03					37.07						37.10
12409										5.59								10.94						16.53
12411																		28.06						28.06
12412																		12.14						12.14
12419																		223.80						223.80
12429																		18.95						18.95
12469																		7.25						7.25
12479																		5.26						5.26
12499										19.35														19.35
12529				5.56						2.25		20.56									1.98			30.35
12591																		120.11						120.11
12599				0.68						158.32		0.34			5.95			255.44						420.73
12639				0.50						2.34														2.84
13169											0.00	3.00						0.00						3.01
13279												1.17												1.17
13281											0.02				0.81									0.83
13289											17.22				0.02									17.24
13410												1.31												1.31
13419				1.40								7.10												8.50
13489												2.21												2.21
13499									0.09			32.32							2.07					34.48
13509											2.76	33.85												36.60
13529				1.56					5.16			21.21		1.96							16.12	2.72		48.74
13599				12.39								56.57		12.37							61.69	30.80		173.81
13679											25.99							62.32						88.31
13699											30.72							194.19						224.90
13710																		26.52						26.52
13719																		63.90						63.90
13729										0.01								6.36						6.36
13779																		4.04						4.04
13789										0.58		0.00						11.49						12.08
13811																		1.86						1.86
13812																		4.26						4.26
13813																		1.44						1.44
13814				1.35													0.32							1.68
13819				2.55						5.38	2.95				0.00			67.29						78.17
13831																	0.47							0.47
18991												0.31												0.31
18992																					0.26	3.50		3.76
20691												0.65												0.65
23391																		0.40						0.40
23591										38.10		4.27						2.21						44.58
24291																		0.75						0.75
24292																		2.05						2.05
24691											1.25							1.47						2.72
25291																			0.36					0.36
25292																			29.60					29.60
25991												1.45						0.00						1.45
26391				2.01						8.61								14.87						25.48
26392				1.76						36.93								0.06						38.74
Grand Total	158.54	110.78	38.72	388.15	6.61	163.68	83.48	15.50	1,291.63	1,746.83	1,036.77	1,310.31	1,869.00	452.61	683.62	154.38	91.09	6,352.20	759.89	235.12	219.14	750.43	993.93	18,912.40

Notes:
WisDOT=Wisconsin Department of Transportation
ROW=right-of-way

Table B-1 Baseline and Existing Conditions Annual TSS Loading

Basin	Total MS4 Area (acres)	Upstream Drainage Area (acres)	Exempt MS4 Area (acres)	Regulatory MS4 Area (acres)	Baseline Conditions		Existing Conditions		Percent Reduction	Current Practices	Reason for Exemption
					Annual TSS (lb)	Annual TSS Loading (lb/ac)	Annual TSS (lb)	Annual TSS Loading (lb/ac)			
1001	5.80	0.00		5.80	535.7	92.4	412.9	71.2	22.9%	Catchbasin Sumps	
1002	7.78	0.00		7.78	2,363.8	304.0	1,949.0	250.6	17.5%	Catchbasin Sumps	
1003	81.08	0.00		81.08	45,129.9	556.6	41,038.6	506.1	9.1%	Catchbasin Sumps	
1004	0.73	0.00		0.73	433.2	591.0	416.6	568.4	3.8%	Street Sweeping Only	
1005	0.32	0.00		0.32	187.0	590.0	179.9	567.4	3.8%	Street Sweeping Only	
1006	0.18	0.00		0.18	104.9	589.3	100.9	566.7	3.8%	Street Sweeping Only	
1007	0.39	0.00		0.39	228.1	590.9	219.4	568.3	3.8%	Street Sweeping Only	
1008	0.57	0.00		0.57	334.8	590.5	322.0	567.9	3.8%	Street Sweeping Only	
1009	0.25	0.00		0.25	143.1	572.2	143.0	571.8	0.1%	Porous Pavement	
1010	7.17	0.00		7.17	4,257.7	593.7	4,087.1	569.9	4.0%	Catchbasin Sumps	
1011	2.61	0.00		2.61	1,540.1	590.8	1,481.2	568.2	3.8%	Street Sweeping Only	
1012	1.66	0.00		1.66	982.7	590.9	422.5	254.0	57.0%	Underground Storage	
1013	0.20	0.00		0.20	75.0	382.8	4.5	23.2	94.0%	Biocell	
1014	0.13	0.00		0.13	47.9	383.2	46.6	373.0	2.7%	Street Sweeping Only	
1015	0.08	0.00		0.08	31.0	383.1	30.2	372.9	2.7%	Street Sweeping Only	
1016	0.21	0.00		0.21	80.4	382.8	78.2	372.6	2.7%	Street Sweeping Only	
1017	0.38	0.00		0.38	143.6	383.0	8.7	23.2	94.0%	Biocell	
1018	0.52	0.00		0.52	198.8	383.1	193.6	372.9	2.7%	Street Sweeping Only	
1019	0.60	0.00		0.60	229.1	383.1	13.9	23.2	94.0%	Biocell	
1020	0.40	0.00		0.40	151.3	383.1	9.2	23.2	94.0%	Biocell	
1021	0.09	0.00		0.09	36.4	387.0	2.2	23.4	94.0%	Biocell	
1022	0.11	0.00		0.11	47.2	436.7	2.9	26.4	94.0%	Biocell	
1023	0.07	0.00		0.07	30.7	439.1	1.9	26.6	94.0%	Biocell	
1024	0.06	0.00		0.06	21.7	381.1	21.1	370.9	2.7%	Street Sweeping Only	
1025	0.08	0.00		0.08	30.8	385.2	1.9	23.3	94.0%	Biocell	
1026	0.13	0.00		0.13	55.7	438.8	3.4	26.5	94.0%	Biocell	
1027	0.13	0.00		0.13	55.1	437.4	3.3	26.5	94.0%	Biocell	
1028	0.07	0.00		0.07	27.5	382.1	1.7	23.1	94.0%	Biocell	
1029	0.08	0.00		0.08	24.4	290.8	1.5	17.6	94.0%	Biocell	
1030	0.11	0.00		0.11	67.0	587.9	4.1	35.6	94.0%	Biocell	
1031	0.23	0.00		0.23	136.9	590.2	8.3	35.7	94.0%	Biocell	
1032	0.04	0.00		0.04	13.3	302.2	0.8	18.3	94.0%	Biocell	
1033	0.08	0.00		0.08	49.7	592.1	3.0	35.8	94.0%	Biocell	
1034	0.09	0.00		0.09	27.9	310.1	1.7	18.8	94.0%	Biocell	
1035	0.02	0.00		0.02	12.5	593.1	0.8	35.9	94.0%	Biocell	
1036	0.05	0.00		0.05	16.2	304.9	1.0	18.4	94.0%	Biocell	
1037	0.05	0.00		0.05	26.6	591.9	1.6	35.8	94.0%	Biocell	
1038	0.23	0.00		0.23	132.9	590.8	8.0	35.7	94.0%	Biocell	
1039	0.25	0.00		0.25	144.8	590.8	8.8	35.7	94.0%	Biocell	
1040	0.31	0.00		0.31	88.8	283.7	85.9	274.4	3.3%	Street Sweeping Only	
1041	155.26	0.00		155.26	51,788.1	333.6	43,585.2	280.7	15.8%	Catchbasin Sumps	
1042	1.33	0.00		1.33	378.6	284.0	366.3	274.8	3.3%	Street Sweeping Only	
1043	0.45	0.00		0.45	128.4	283.5	7.1	15.7	94.5%	Street Narrowing & Biocell	
1044	0.72	0.00		0.72	205.2	283.8	12.4	17.2	94.0%	Biocell	
1045	0.76	0.00		0.76	216.9	284.3	13.1	17.2	94.0%	Biocell	
1046	0.50	0.00		0.50	187.6	375.9	11.3	22.7	94.0%	Street Narrowing & Biocell	
1047	2.89	0.00		2.89	819.7	283.6	792.9	274.4	3.3%	Street Sweeping Only	
10481_1048	0.47	0.00		0.47	217.3	466.4	0.0	0.0	100.0%	Bioretention	
1050	5.95	0.00		5.95	2,702.7	454.3	2,589.4	435.3	4.2%	Catchbasin Sumps	
1051	0.46	0.00		0.46	130.4	283.4	7.9	17.1	94.0%	Biocell	
1052	0.19	0.00		0.19	54.9	283.0	17.9	92.0	67.5%	Bioretention	
1053	1.54	0.00		1.54	910.1	590.6	875.3	568.0	3.8%	Street Sweeping Only	
1054	0.61	0.00		0.61	172.4	283.6	112.3	184.7	34.9%	Bioretention	
1055	0.40	0.00		0.40	112.5	284.0	112.5	284.0	0.0%	Bioretention	
1056	0.18	0.00		0.18	49.8	282.9	37.6	213.7	24.5%	Bioretention	
1057	2.12	0.00		2.12	561.8	264.6	505.1	237.9	10.1%	Catchbasin Sumps	
1058	26.16	0.00		26.16	2,506.2	95.8	2,483.2	94.9	0.9%	Street Sweeping Only	
1059	269.29	0.00	2.41	266.88	61,112.2	229.0	50,501.8	189.2	17.4%	Catchbasin Sumps	WisDOT/County ROW
1060	6.33	0.00		6.33	593.8	93.8	299.6	47.3	49.5%	Grass Swale	
1061	3.71	0.00		3.71	343.6	92.7	20.8	5.6	94.0%	Biocell	
1062	19.68	0.00		19.68	2,296.0	116.7	1,882.0	95.6	18.0%	Catchbasin Sumps	
1063	0.56	0.00		0.56	52.1	92.5	0.0	0.0	100.0%	Bioretention	
1064	20.21	0.00		20.21	4,606.0	227.9	3,814.8	188.8	17.2%	Catchbasin Sumps	
1065	36.97	0.00		36.97	18,362.7	496.7	16,517.8	446.8	10.0%	Catchbasin Sumps	
1066	60.92	0.00		60.92	28,461.3	467.2	25,714.1	422.1	9.7%	Catchbasin Sumps	
1067	0.57	0.00		0.57	262.6	458.3	74.6	130.2	71.6%	Bioretention	
1068	0.24	0.00		0.24	109.5	458.2	5.8	24.3	94.7%	Bioretention	
1069	0.28	0.00		0.28	129.4	458.7	24.7	87.5	80.9%	Bioretention	

Basin	Total MS4 Area (acres)	Upstream Drainage Area (acres)	Exempt MS4 Area (acres)	Regulatory MS4 Area (acres)	Baseline Conditions		Existing Conditions		Percent Reduction	Current Practices	Reason for Exemption
					Annual TSS (lb)	Annual TSS Loading (lb/ac)	Annual TSS (lb)	Annual TSS Loading (lb/ac)			
1070	97.86	0.00		97.86	36,167.0	369.6	30,665.0	313.4	15.2%	Catchbasin Sumps	
1071	209.25	0.00		209.25	70,998.2	339.3	61,674.7	294.7	13.1%	Catchbasin Sumps	
1072	9.22	0.00		9.22	2,288.8	248.2	899.6	97.5	60.7%	Porous Pavement	
1073	6.27	0.00		6.27	1,912.0	304.8	100.0	15.9	94.8%	Porous Pavement	
1074	1.42	0.00		1.42	834.0	587.3	50.5	35.5	94.0%	Street Narrowing & Biocell	
1075	0.40	0.00		0.40	126.2	314.7	7.6	19.0	94.0%	Biocell	
1076	0.37	0.00		0.37	216.0	583.9	13.1	35.3	94.0%	Biocell	
1077	0.24	0.00		0.24	46.6	195.1	2.8	11.8	94.0%	Biocell	
1078	0.20	0.00		0.20	118.2	590.9	7.2	35.8	94.0%	Biocell	
1079	0.11	0.00		0.11	64.1	588.2	16.1	147.7	74.9%	Bioretention	
1080_1081_1082	1.37	0.00		1.37	753.2	549.8	712.0	519.7	5.5%	Porous Pavement	
1083	38.35	0.00		38.35	22,866.0	596.3	21,131.6	551.0	7.6%	Catchbasin Sumps	
1084	0.30	0.00		0.30	187.5	620.9	82.4	273.0	56.0%	Bioretention	
1085	1.62	0.00		1.62	1,037.4	640.0	1,037.0	639.7	0.0%	Porous Pavement	
1086	1.10	0.00		1.10	706.6	640.0	706.2	639.7	0.1%	Porous Pavement	
1087	0.15	0.00		0.15	95.8	621.8	93.2	605.5	2.6%	Porous Pavement	
1088	1.85	0.00		1.85	1,089.8	590.7	760.9	412.4	30.2%	Underground Storage	
1089	0.59	0.00		0.59	348.2	591.2	255.7	434.0	26.6%	Underground Storage	
1090	0.49	0.00		0.49	288.2	590.5	277.1	567.9	3.8%	Street Sweeping Only	
1091	84.85	0.00		84.85	27,734.2	326.9	23,487.1	276.8	15.3%	Catchbasin Sumps	
1092	3.28	0.00		3.28	2,011.0	612.5	1,730.8	527.2	13.9%	Catchbasin Sumps	
1093	1.66	0.00		1.66	990.7	595.4	970.1	583.0	2.1%	Street Sweeping Only	
1094	0.33	0.00		0.33	76.6	230.0	4.6	13.9	94.0%	Biocell	
1095	2.36	0.00		2.36	939.0	398.4	938.2	398.0	0.1%	Porous Pavement	
1096	0.53	0.00		0.53	224.2	426.3	216.2	411.0	3.6%	Street Sweeping Only	
1097	0.47	0.00		0.47	138.0	293.0	8.4	17.7	94.0%	Biocell	
1098	0.28	0.00		0.28	83.0	293.2	5.0	17.7	94.0%	Biocell	
1099	343.68	0.00		343.68	86,035.9	250.3	70,608.6	205.5	17.9%	Catchbasin Sumps	
1100	0.21	0.00		0.21	49.1	230.3	0.0	0.0	100.0%	Rain Garden	
1101	0.17	0.00		0.17	40.0	229.9	0.0	0.0	100.0%	Rain Garden	
1102	0.03	0.00		0.03	7.0	219.9	4.1	127.4	42.1%	Rain Barrel	
1103	0.08	0.00		0.08	18.3	219.9	12.4	148.9	32.3%	Rain Barrel	
1104	325.52	0.00		325.52	85,903.7	263.9	73,123.5	224.6	14.9%	Catchbasin Sumps	
1105	0.05	0.00		0.05	11.2	219.9	7.0	138.2	37.2%	Rain Barrel	
1106	140.83	0.00		140.83	26,691.6	189.5	22,760.7	161.6	14.7%	Catchbasin Sumps	
1107	0.06	0.00		0.06	17.6	293.7	0.0	0.0	100.0%	Rain Garden	
1108	41.17	0.00		41.17	4,685.2	113.8	4,235.9	102.9	9.6%	Catchbasin Sumps	
1109	591.36	73.33	0.94	590.42	185,376.0	314.0	163,000.4	276.1	12.1%	Catchbasin Sumps	WisDOT/County ROW
1110	0.16	0.00		0.16	37.7	229.7	0.0	0.0	100.0%	Bioretention	
1111	1.42	0.00		1.42	484.9	341.2	0.0	0.0	100.0%	Porous Pavement	
1112	0.02	0.00		0.02	4.6	219.9	2.1	98.7	55.1%	Rain Barrel	
1113	3.33	0.00		3.33	790.6	237.6	3.8	1.1	99.5%	Porous Pavement	
1114	0.04	0.00		0.04	8.4	219.9	5.0	131.4	40.2%	Rain Barrel	
1115	0.05	0.00		0.05	9.9	219.9	6.1	135.3	38.5%	Rain Barrel	
1116	0.03	0.00		0.03	6.2	219.9	3.5	124.3	43.5%	Rain Barrel	
1117	2.09	0.00		2.09	1,009.7	482.2	61.1	29.2	94.0%	Biocell	
1118	1.13	0.00		1.13	543.1	482.3	32.9	29.2	94.0%	Biocell	
1119	0.60	0.00		0.60	264.9	438.6	255.5	423.0	3.5%	Street Sweeping Only	
1120	0.02	0.00		0.02	4.4	219.9	2.2	112.0	49.1%	Rain Barrel	
1121	0.55	0.00		0.55	126.9	230.4	7.7	13.9	94.0%	Biocell	
1122	1.30	0.00		1.30	300.4	230.3	18.2	13.9	94.0%	Biocell	
1123	0.63	0.00		0.63	390.4	621.6	27.7	44.2	92.9%	Bioretention	
1124	1.22	0.00		1.22	280.3	230.3	17.0	13.9	94.0%	Biocell	
1125	0.52	0.00		0.52	120.4	230.2	7.3	13.9	94.0%	Biocell	
1126	0.30	0.00		0.30	111.2	374.5	6.7	22.7	94.0%	Biocell	
1127	0.20	0.00		0.20	47.4	234.8	2.9	14.2	94.0%	Biocell	
1128	0.26	0.00		0.26	59.5	233.5	3.6	14.1	94.0%	Biocell	
1129	0.28	0.00		0.28	64.0	231.0	3.9	14.0	94.0%	Biocell	
1130	0.18	0.00		0.18	70.0	382.6	4.2	23.1	94.0%	Biocell	
1131	176.82	0.00		176.82	57,627.9	325.9	48,702.5	275.4	15.5%	Catchbasin Sumps	
1132	155.54	0.00		155.54	55,711.6	358.2	48,771.3	313.6	12.5%	Catchbasin Sumps	
1133	0.66	0.00		0.66	142.2	217.1	111.6	170.4	21.5%	Catchbasin Sumps	
1134	0.85	0.00		0.85	448.5	528.3	437.5	515.4	2.5%	Street Sweeping Only	
1135	1.18	0.00		1.18	334.9	283.5	323.9	274.3	3.3%	Street Sweeping Only	
1136	0.39	0.00		0.39	111.4	283.5	107.8	274.3	3.3%	Street Sweeping Only	
1137	8.20	0.00		8.20	3,122.7	381.1	3,013.9	367.8	3.5%	Street Sweeping Only	
1138	0.03	0.00		0.03	6.4	219.9	7.0	240.1	0.0%	Rain Barrel	
1139	1.14	0.00		1.14	487.4	426.4	470.0	411.2	3.6%	Street Sweeping Only	
1140	0.26	0.00		0.26	24.6	94.1	5.5	21.0	77.7%	Underground Storage	
1141	0.82	0.00		0.82	188.4	230.4	11.4	13.9	94.0%	Biocell	
1142	0.95	0.00		0.95	218.3	230.3	13.2	13.9	94.0%	Biocell	

Basin	Total MS4 Area (acres)	Upstream Drainage Area (acres)	Exempt MS4 Area (acres)	Regulatory MS4 Area (acres)	Baseline Conditions		Existing Conditions		Percent Reduction	Current Practices	Reason for Exemption
					Annual TSS (lb)	Annual TSS Loading (lb/ac)	Annual TSS (lb)	Annual TSS Loading (lb/ac)			
1143	0.41	0.00		0.41	94.3	231.1	5.7	14.0	94.0%	Biocell	
1144	0.47	0.00		0.47	138.3	296.1	8.4	17.9	94.0%	Street Narrowing & Biocell	
1145	1.03	0.00		1.03	208.1	201.8	12.6	12.2	94.0%	Biocell	
1146	0.52	0.00		0.52	179.5	345.2	10.9	20.9	94.0%	Biocell	
1147	24.69	0.00		24.69	9,832.1	398.3	9,161.8	371.1	6.8%	Catchbasin Sumps	
1148	9.74	0.00		9.74	5,127.5	526.3	4,906.2	503.6	4.3%	Catchbasin Sumps	
1149	33.05	0.00		33.05	11,241.0	340.1	3,579.1	108.3	68.2%	Catchbasin Sumps	
1150	1.49	0.00		1.49	304.7	204.7	293.0	196.8	3.9%	Street Sweeping Only	
1151	28.25	0.00		28.25	9,255.4	327.6	9,065.0	320.9	2.1%	Street Sweeping Only	
1152	4.11	0.00		4.11	2,556.2	621.8	2,388.1	580.9	6.6%	Catchbasin Sumps	
1153	51.95	0.00		51.95	25,543.2	491.7	25,264.8	486.4	1.1%	Catchbasin	
1154	23.31	0.00		23.31	11,687.8	501.5	11,406.8	489.4	2.4%	Catchbasin Sumps	
1155	3.06	0.00		3.06	282.7	92.4	203.0	66.4	28.2%	Catchbasin Sumps	
1156	0.18	0.00		0.18	104.7	591.5	100.7	568.9	3.8%	Street Sweeping Only	
1157	0.10	0.00		0.10	23.6	229.4	0.0	0.0	100.0%	Rain Garden	
1158	0.06	0.00		0.06	25.1	425.8	24.2	410.6	3.6%	Street Sweeping Only	
1159	1.33	0.00		1.33	567.3	426.5	34.3	25.8	94.0%	Biocell	
1160	0.97	0.00		0.97	412.0	426.5	24.9	25.8	94.0%	Biocell	
1161	0.10	0.00		0.10	43.9	426.2	2.7	25.8	94.0%	Biocell	
1162	12.15	0.00		12.15	4,774.0	392.8	4,604.5	378.9	3.6%	Street Sweeping Only	
1163	9.05	0.00		9.05	1,670.6	184.5	1,616.9	178.6	3.2%	Street Sweeping Only	
1164	10.34	0.00		10.34	2,381.1	230.2	2,042.9	197.5	14.2%	Catchbasin Sumps	
1165	0.48	0.00		0.48	244.3	508.9	14.8	30.8	94.0%	Biocell	
1166	1.37	0.00		1.37	65.2	47.7	61.6	45.0	5.6%	Street Sweeping Only	
1167	0.52	0.00		0.52	24.8	47.4	23.4	44.8	5.6%	Street Sweeping Only	
1168	2.42	0.00		2.42	114.9	47.5	108.5	44.8	5.6%	Street Sweeping Only	
1170	19.75	0.00		19.75	4,820.2	244.1	4,599.0	232.9	4.6%	Catchbasin Sumps	
1171	14.97	0.00		14.97	3,494.9	233.5	2,800.4	187.1	19.9%	Catchbasin Sumps	
1172	157.29	0.00		157.29	69,990.8	445.0	67,362.3	428.3	3.8%	Catchbasin Sumps	
1173	1.69	0.00		1.69	996.3	590.9	958.2	568.3	3.8%	Street Sweeping Only	
1174	0.94	0.00		0.94	553.7	588.4	533.4	566.8	3.7%	Street Sweeping Only	
1175	1.18	0.00		1.18	698.1	590.6	118.1	99.9	83.1%	Bioretention	
1176_1177_1178	4.42	0.00		4.42	1,041.2	235.5	0.0	0.0	100.0%	Porous Pavement	
1179_1180_1182	4.24	0.00		4.24	967.2	227.9	0.0	0.0	100.0%	Porous Pavement	
1181	0.20	0.00		0.20	35.8	179.1	2.2	10.8	94.0%	Biocell	
1183	23.27	0.00		23.27	7,643.5	328.5	7,398.8	317.9	3.2%	Street Sweeping Only	
1184	0.85	0.00		0.85	473.1	559.9	464.7	549.9	1.8%	Street Sweeping Only	
1185	0.49	0.00		0.49	288.7	589.1	277.6	566.6	3.8%	Street Sweeping Only	
1186	0.33	0.00		0.33	188.5	572.9	181.3	551.0	3.8%	Street Sweeping Only	
1187	1.03	0.00		1.03	605.9	586.0	36.7	35.5	94.0%	Biocell	
1188	0.19	0.00		0.19	111.0	590.3	0.0	0.0	100.0%	Bioretention	
1189_11899_18991	75.70	19.15	0.83	74.87	34,487.3	460.6	0.0	0.0	7.0%	Catchbasin Sumps	WisDOT/County ROW
1190	0.40	0.00		0.40	229.9	569.0	10.4	25.9	95.5%	Bioretention	
1191	0.33	0.00		0.33	178.5	544.3	13.9	42.3	92.2%	Bioretention	
1192	0.16	0.00		0.16	67.0	408.7	5.3	32.2	92.1%	Bioretention	
1193_11931	0.21	0.25	0.00	0.21	268.1	1,295.2	0.0	0.0	100.0%	Bioretention	
1195	0.37	0.00		0.37	216.6	590.1	208.3	567.5	3.8%	Street Sweeping Only	
1196	10.98	0.00		10.98	4,379.9	398.9	4,226.9	384.9	3.5%	Street Sweeping Only	
1197	10.53	0.00		10.53	5,066.8	481.2	5,066.8	481.2	0.0%		
1198	4.91	0.00		4.91	2,359.4	480.2	2,334.5	475.2	1.1%	Street Sweeping Only	
1199	0.15	0.00		0.15	29.5	195.2	28.3	187.7	3.8%	Street Sweeping Only	
1200	0.53	0.00		0.53	103.7	194.9	99.7	187.4	3.8%	Street Sweeping Only	
1201	38.40	0.00	0.83	37.57	7,528.5	200.4	6,306.2	167.8	16.2%	Catchbasin Sumps	WisDOT/County ROW
1202	3.45	0.00		3.45	673.4	195.0	647.6	187.5	3.8%	Street Sweeping Only	
1204	5.16	0.00		5.16	1,005.5	194.9	807.1	156.5	19.7%	Catchbasin Sumps	
1205_12059	2.39	3112.65	0.00	2.39	915.2	383.6	884.5	370.7	3.4%	Street Sweeping Only	
1206_12069_20691	2.31	1.95	0.00	2.31	597.0	258.3	570.3	246.8	4.5%	Street Sweeping Only	
1207	3.58	0.00		3.58	888.6	248.3	858.8	240.0	3.4%	Street Sweeping Only	
1208	26.18	0.00	1.83	24.35	5,517.2	226.6	5,168.1	212.3	6.3%	Street Sweeping Only	WisDOT/County ROW
1209	10.31	0.00		10.31	1,856.3	180.0	1,844.2	178.9	0.7%	Street Sweeping Only	
1210	8.22	0.00		8.22	914.0	111.2	877.5	106.8	4.0%	Street Sweeping Only	
1211	4.08	0.00	0.30	3.77	1,781.0	472.0	1,712.1	453.8	3.9%	Street Sweeping Only	WisDOT/County ROW
1212	3.78	0.00	2.54	1.24	493.4	398.8	474.1	383.3	3.9%	Street Sweeping Only	WisDOT/County ROW
1213	2.83	0.00	0.22	2.62	347.9	133.0	337.6	129.1	3.0%	Street Sweeping Only	WisDOT/County ROW
1214_12149	61.13	21.03	15.50	45.63	10,761.0	235.8	10,308.0	225.9	4.2%	Catchbasin	WisDOT/County ROW
1215_12159	7.01	1.23	0.10	6.91	600.1	86.9	482.5	69.9	19.6%	Catchbasin Sumps	
1216_12169	1.97	0.86		1.97	324.6	165.2	310.5	158.0	4.3%	Street Sweeping Only	
1217	5.77	0.00	1.89	3.88	1,117.4	287.9	1,062.4	273.7	4.9%	Catchbasin Sumps	WisDOT/County ROW
1218	6.98	0.00		6.98	1,780.3	255.2	1,728.4	247.8	2.9%	Street Sweeping Only	
1219	0.78	0.00		0.78	199.2	254.1	160.7	205.0	19.3%	Catchbasin Sumps	
1220	12.32	0.00	0.28	12.04	3,035.1	252.2	567.7	47.2	81.3%	Catchbasin Sumps	WisDOT/County ROW

Basin	Total MS4 Area (acres)	Upstream Drainage Area (acres)	Exempt MS4 Area (acres)	Regulatory MS4 Area (acres)	Baseline Conditions		Existing Conditions		Percent Reduction	Current Practices	Reason for Exemption
					Annual TSS (lb)	Annual TSS Loading (lb/ac)	Annual TSS (lb)	Annual TSS Loading (lb/ac)			
1221_12219	38.13	1.41	3.77	34.36	6,378.7	185.6	5481.1	159.5	14.1%	Catchbasin Sumps	WisDOT/County ROW
1222	6.71	0.00	1.00	5.71	2,189.3	383.4	2,131.1	373.2	2.7%	Street Sweeping Only	WisDOT/County ROW
1223	14.06	0.00	1.28	12.79	724.8	56.7	687.2	53.7	5.2%	Street Sweeping Only	WisDOT/County ROW
1224	0.30	0.00		0.30	14.0	47.5	13.2	44.9	5.6%	Street Sweeping Only	
1225	0.29	0.00		0.29	13.7	47.5	12.9	44.8	5.6%	Street Sweeping Only	
1226	0.20	0.00		0.20	9.6	48.1	9.0	45.4	5.5%	Street Sweeping Only	
1227_12279	4.71	18.19	0.48	4.23	200.9	47.5	185.5	43.9	7.6%	Street Sweeping Only	WisDOT/County ROW
1228	48.29	0.00		48.29	8,149.8	168.8	7,364.9	152.5	9.6%	Catchbasin Sumps	
1229_12299	47.03	5.27		47.03	7,325.0	155.8	6,425.5	136.6	12.3%	Catchbasin Sumps	
1230	0.08	0.00		0.08	18.0	219.9	12.2	148.6	32.4%	Rain Barrel	
1231	3.27	0.00		3.27	171.6	52.5	162.9	49.9	5.1%	Street Sweeping Only	
1232	6.55	0.00		6.55	1,239.9	189.2	1,126.6	171.9	9.1%	Catchbasin Sumps	
1233_12339_23391	42.11	1.49		42.11	4,330.3	102.8	2,251.2	53.5	48.0%	Catchbasin Sumps	
1234	1.93	0.00		1.93	233.7	120.8	178.1	92.1	23.8%	Catchbasin Sumps	
1235_12359_23591	253.45	81.66		253.45	38,039.1	150.1	32,125.3	126.8	15.5%	Catchbasin Sumps	
1236	61.75	0.00		61.75	11,348.5	183.8	9,379.5	151.9	17.4%	Catchbasin Sumps	
1237	3.66	0.00		3.66	920.0	251.4	890.3	243.3	3.2%	Street Sweeping Only	
1238	0.06	0.00		0.06	13.0	219.9	7.4	125.5	42.9%	Rain Barrel	
1239	1.61	0.00		1.61	444.6	276.7	388.5	241.7	12.6%	Catchbasin Sumps	
1240_12409	49.82	16.53		49.82	9,499.7	190.7	9,200.6	184.7	3.1%	Street Sweeping Only	
1241_1242_12429_24291_24292_12411_12412_12419	84.20	245.55		84.20	8,168.4	97.0	4,088.8	48.6	49.9%	Catchbasin Sumps	
1243	14.57	0.00		14.57	1,331.1	91.3	1,121.2	76.9	15.8%	Catchbasin Sumps	
1244	16.36	0.00	2.56	13.80	4,131.8	299.5	3,662.2	265.5	11.4%	Street Sweeping Only	WisDOT/County ROW
1245	8.56	0.00	0.10	8.46	1,543.0	182.5	1,260.3	149.0	18.3%	Catchbasin Sumps	WisDOT/County ROW
1246_12469_24691	4.58	9.97		4.58	558.8	122.0	467.9	102.2	16.3%	Catchbasin Sumps	
1247_12479	3.79	5.26		3.79	1,764.1	465.1	1,689.7	445.5	4.2%	Street Sweeping Only	
1248	25.32	0.00		25.32	11,334.5	447.7	11,080.1	437.7	2.2%	Street Sweeping Only	
1249_12499	27.62	19.35		27.62	9,892.1	358.1	9,107.5	329.7	7.9%	Catchbasin Sumps	
1250	5.24	0.00		5.24	2,334.5	445.2	2,281.1	435.0	2.3%	Street Sweeping Only	
1251	2.33	0.00		2.33	892.8	383.3	869.1	373.2	2.7%	Street Sweeping Only	
1252_12529_25291_25292	207.47	60.31	0.21	207.26	41,392.9	199.7	34,467.9	166.3	18.8%	Catchbasin Sumps	WisDOT/County ROW
1253	0.51	0.00		0.51	55.4	108.3	53.1	103.7	4.3%	Street Sweeping Only	
1254	13.22	0.00		13.22	3,036.3	229.8	2,755.0	208.5	9.3%	Catchbasin Sumps	
1255	1.80	0.00		1.80	227.9	126.8	219.1	121.9	3.9%	Street Sweeping Only	
1258	0.03	0.00		0.03	6.2	219.9	4.3	155.1	29.5%	Rain Barrel	
1259_12599_25991_12591	114.98	542.28		114.98	28,978.0	252.0	23,516.2	204.5	18.6%	Catchbasin Sumps	
1260	9.00	0.00		9.00	2,162.0	240.4	1,695.5	188.5	21.6%	Catchbasin Sumps	
1261	0.04	0.00		0.04	8.1	219.9	4.8	130.8	40.5%	Rain Barrel	
1262	59.36	0.00		59.36	3,134.3	52.8	2,976.1	50.1	5.0%	Street Sweeping Only	
1263_12639_26391_26392	725.41	67.07	592.45	725.41	20,384.3	153.3	19,914.7	149.8	2.3%	Street Sweeping Only	
1264	56.05	0.00		56.05	30,285.7	540.3	28,111.2	501.5	7.2%	Catchbasin Sumps	
1265	67.22	0.00		67.22	38,104.4	566.9	36,558.4	543.9	4.1%	Catchbasin Sumps	
1266	4.54	0.00		4.54	2,706.9	596.5	2,610.9	575.4	3.5%	Street Sweeping Only	
1267	1.41	0.00		1.41	834.5	590.6	802.6	568.0	3.8%	Street Sweeping Only	
1268	2.06	0.00		2.06	1,214.0	590.8	1,167.6	568.2	3.8%	Street Sweeping Only	
1269	133.97	0.00		133.97	41,758.2	311.7	37,265.5	278.2	10.8%	Catchbasin Sumps	
1270	0.42	0.00		0.42	108.9	260.6	0.0	0.0	100.0%	Rain Garden	
1271	0.02	0.00		0.02	4.8	219.9	2.6	118.9	45.9%	Rain Barrel	
1272	0.18	0.00		0.18	40.5	230.2	0.0	0.0	100.0%	Rain Garden	
1273	138.95	0.00		138.95	66,760.5	480.5	63,599.9	457.7	4.7%	Catchbasin Sumps	
1274	0.67	0.00		0.67	417.1	621.6	170.1	253.4	59.2%	Underground Storage	
1275	0.54	0.00		0.54	55.0	101.1	3.3	6.1	94.0%	Biocell	
1276	12.39	0.00		12.39	2,636.4	212.8	2,142.4	172.9	18.7%	Catchbasin Sumps	
1277	14.93	0.00		14.93	7,165.9	479.9	6,941.5	464.9	3.1%	Catchbasin Sumps	
1278	9.05	0.00	0.22	8.84	524.3	59.3	443.7	50.2	15.4%	Catchbasin Sumps	WisDOT/County ROW
1279	41.33	0.00		41.33	23,351.0	565.0	22,666.9	548.4	2.9%	Catchbasin Sumps	
1280	24.06	0.00		24.06	4,915.7	204.3	4,802.6	199.6	2.3%	Catchbasin Sumps	
1281	135.29	0.00		135.29	44,195.9	326.7	37,341.5	276.0	15.5%	Catchbasin Sumps	
1282	0.98	0.00		0.98	562.0	572.3	561.6	571.9	0.1%	Porous Pavement	
1283	0.43	0.00		0.43	255.2	590.7	77.8	180.1	69.5%	Bioretention	
1284	0.35	0.00		0.35	204.6	591.4	37.6	108.6	81.6%	Bioretention	
1285	0.03	0.00		0.03	5.9	196.1	3.4	113.6	42.1%	Rain Barrel	
1286	39.47	0.00		39.47	14,237.7	360.7	11,675.3	295.8	18.0%	Catchbasin Sumps	
1287	1.54	0.00		1.54	154.4	100.5	9.3	6.1	94.0%	Biocell	
1288	0.21	0.00		0.21	124.8	591.6	7.6	35.8	94.0%	Biocell	
1289	0.12	0.00		0.12	73.0	593.1	4.4	35.9	94.0%	Biocell	
1290	0.79	0.00		0.79	459.2	581.3	441.7	559.1	3.8%	Street Sweeping Only	
1291	50.80	0.00		50.80	12,586.3	247.8	10,041.1	197.7	20.2%	Catchbasin Sumps	
1292	0.56	0.00		0.56	128.7	230.2	7.8	13.9	94.0%	Biocell	
1293	0.59	0.00		0.59	136.1	230.4	8.2	13.9	94.0%	Biocell	
1294	1.67	0.00		1.67	384.9	230.3	23.3	13.9	94.0%	Biocell	

Basin	Total MS4 Area (acres)	Upstream Drainage Area (acres)	Exempt MS4 Area (acres)	Regulatory MS4 Area (acres)	Baseline Conditions		Existing Conditions		Percent Reduction	Current Practices	Reason for Exemption
					Annual TSS (lb)	Annual TSS Loading (lb/ac)	Annual TSS (lb)	Annual TSS Loading (lb/ac)			
1295	0.73	0.00		0.73	169.1	230.3	10.2	13.9	94.0%	Biocell	
1296	1.11	0.00		1.11	255.8	230.2	15.5	13.9	94.0%	Biocell	
1297	0.51	0.00		0.51	118.0	230.5	7.1	13.9	94.0%	Biocell	
1298	0.77	0.00		0.77	356.3	460.9	300.1	388.2	15.8%	Catchbasin Sumps	
1299	82.34	0.00	0.12	82.23	31,435.3	382.3	27,286.3	331.8	13.2%	Catchbasin Sumps	WisDOT/County ROW
1300	134.58	0.00		134.58	42,745.4	317.6	38,198.5	283.8	10.6%	Catchbasin Sumps	
1301	7.35	0.00		7.35	3,273.9	445.4	826.1	112.4	74.8%	Dry Pond	
1302	0.05	0.00		0.05	12.3	228.5	0.0	0.0	100.0%	Rain Garden	
1303	0.05	0.00		0.05	10.5	228.7	0.0	0.0	100.0%	Rain Garden	
1304	72.57	0.00	3.79	68.77	19,665.9	286.0	16,408.7	238.6	16.6%	Catchbasin Sumps	WisDOT/County ROW
1305	1.09	0.00	0.27	0.82	482.6	590.7	397.8	486.9	17.6%	Catchbasin Sumps	WisDOT/County ROW
1306	1.06	0.00	1.06	0.00	NA	NA	NA	NA	0.0%		WisDOT/County ROW
1307	3.54	0.00	3.12	0.42	245.5	590.1	227.0	545.7	7.5%	Catchbasin Sumps	WisDOT/County ROW
1308	72.34	0.00	0.58	71.76	20,876.6	290.9	18,465.8	257.3	11.5%	Catchbasin Sumps	WisDOT/County ROW
1309	15.80	0.00	4.66	11.14	6,582.9	590.8	6,331.0	568.2	3.8%	Street Sweeping Only	
1310	1.72	0.00		1.72	1,002.9	582.4	0.0	0.0	100.0%	Bioretention	
1311	69.40	0.00		69.40	16,439.7	236.9	13,146.5	189.4	20.0%	Catchbasin Sumps	
1312	3.94	0.00		3.94	1,201.7	305.2	1,033.2	262.4	14.0%	Catchbasin Sumps	
1313	209.33	0.00	59.64	149.70	77,159.1	515.4	75,698.4	505.7	1.9%	Street Sweeping Only	WisDOT/County ROW
1314	61.78	0.00	1.12	60.67	21,847.1	360.1	20,449.8	337.1	6.4%	Catchbasin Sumps	WisDOT/County ROW
1315	14.29	0.00	8.08	6.21	3,666.1	590.7	3,525.8	568.1	3.8%	Street Sweeping Only	WisDOT/County ROW
1316_13169	212.86	3.00	2.52	210.34	122,718.7	583.4	117,875.9	560.4	3.9%	Catchbasin Sumps	WisDOT/County ROW
1317	1.25	0.00		1.25	685.8	550.8	0.2	0.1	100.0%	Grass Swale	
1318	10.98	0.00		10.98	3,670.8	334.4	3,576.9	325.8	2.6%	Street Sweeping Only	
1319	22.35	0.00		22.35	3,006.1	134.5	2,495.6	111.6	17.0%	Catchbasin Sumps	
1320	113.52	0.00		113.52	68,520.7	603.6	66,001.6	581.4	3.7%	Catchbasin Sumps	
1321	1.10	0.00		1.10	683.5	621.9	667.6	607.4	2.3%	Street Sweeping Only	
1322	1.73	0.00		1.73	1,075.2	621.9	1,050.1	607.3	2.3%	Street Sweeping Only	
1323	0.76	0.00		0.76	471.2	621.6	460.2	607.1	2.3%	Street Sweeping Only	
1324	3.06	0.00		3.06	1,783.3	583.2	107.9	35.3	94.0%	Catchbasin Sumps, Biocell	
1325	0.46	0.00		0.46	286.4	621.2	17.3	37.6	94.0%	Biocell	
1326	1.81	0.00		1.81	1,126.6	621.8	117.1	64.6	89.6%	Grass Swale	
1327_13279	22.93	1.17	4.90	18.03	7,958.3	441.4	7,674.0	425.6	3.6%	Catchbasin Sumps	WisDOT/County ROW
1328_13289_13281	10.55	18.07		10.55	5,654.1	536.2	4,802.9	455.5	15.1%	Catchbasin Sumps	
1329	7.84	0.00	0.02	7.82	4,265.7	545.5	4,183.0	534.9	1.9%	Street Sweeping Only	
1330	108.81	0.00		108.81	47,699.3	438.4	46,009.6	422.9	3.5%	Street Sweeping Only	
1331	0.13	0.00		0.13	59.8	449.8	0.0	0.0	100.0%	Grass Swale	
1332	0.15	0.00		0.15	70.7	462.0	0.0	0.0	100.0%	Grass Swale	
1333	0.55	0.00		0.55	239.9	438.6	0.0	0.0	100.0%	Grass Swale	
1334	13.90	0.00		13.90	6,093.7	438.4	5,877.8	422.8	3.5%	Street Sweeping Only	
1335	2.83	0.00		2.83	1,239.2	438.3	1,069.9	378.5	13.7%	Catchbasin Sumps	
1336	31.54	0.00		31.54	13,824.1	438.4	13,334.4	422.8	3.5%	Street Sweeping Only	
1337	46.80	0.00		46.80	20,515.7	438.4	19,788.9	422.8	3.5%	Street Sweeping Only	
1338	52.01	0.00		52.01	22,801.1	438.4	21,993.4	422.8	3.5%	Street Sweeping Only	
1339	62.05	0.00		62.05	27,201.7	438.4	0.0	0.0	100.0%	Dry Pond	
1340_1341_1342_1343_1344_1345_1346_1347_1348_13489_1349_13499_13419_13410	438.06	45.01	4.50	433.56	207,944.6	479.6	85,194.6	196.5	59.0%	Wet Pond, Dry Pond, Catchbasin Sumps, Biocells	WisDOT/County ROW
1350_13509	5.26	36.60	3.18	2.08	908.8	437.6	868.2	418.0	4.5%	Street Sweeping Only	WisDOT/County ROW
1351	11.66	0.00	10.62	1.04	470.8	453.2	454.0	437.0	3.6%	Street Sweeping Only	WisDOT/County ROW
1352_13529	27.17	48.74	6.07	21.10	11,304.1	535.7	10,463.4	495.9	7.4%	Catchbasin Sumps	WisDOT/County ROW
1353	5.74	0.00	1.26	4.48	241.2	53.8	229.2	51.2	4.9%	Street Sweeping Only	WisDOT/County ROW
1354	1.21	0.00		1.21	64.9	53.8	61.7	51.2	4.9%	Street Sweeping Only	
1355	1.71	0.00	0.00	1.71	91.9	53.8	87.3	51.1	5.0%	Street Sweeping Only	
1356	0.31	0.00		0.31	16.6	53.9	15.8	51.2	4.9%	Street Sweeping Only	
1357	0.73	0.00		0.73	36.8	50.1	34.8	47.4	5.3%	Street Sweeping Only	
1358	30.40	0.00	0.19	30.21	14,563.9	482.2	14,411.5	477.1	1.0%	Street Sweeping Only	WisDOT/County ROW
1359_13599	27.37	173.81	1.89	25.48	12,570.0	493.4	12,316.8	483.5	2.0%	Street Sweeping Only	WisDOT/County ROW
1360	6.14	0.00	0.08	6.06	2,922.0	482.2	1,645.0	271.5	43.7%	Bioretention	WisDOT/County ROW
1361	0.40	0.00	0.04	0.36	171.0	481.7	10.3	29.1	94.0%	Biocell	WisDOT/County ROW
1362	0.11	0.00		0.11	51.5	481.4	3.1	29.1	94.0%	Biocell	
1363	0.22	0.00	0.00	0.21	126.5	590.9	7.7	35.8	94.0%	Biocell	
1365	4.00	0.00		4.00	315.1	78.7	302.3	75.5	4.1%	Street Sweeping Only	
1366	3.12	0.00		3.12	163.0	52.3	154.7	49.6	5.1%	Street Sweeping Only	
1367_13679	71.01	88.31	3.13	67.87	31,283.8	460.9	13,301.3	196.0	57.5%	Catchbasin Sumps	WisDOT/County ROW
1368	4.30	0.00		4.30	2,752.5	640.4	2,690.2	625.9	2.3%	Street Sweeping Only	
1369_13699	184.06	224.90		184.06	89,879.6	488.3	87,556.0	475.7	2.6%	Catchbasin Sumps	
1370	9.10	0.00	0.01	9.09	2,285.2	251.4	2,219.4	244.2	2.9%	Street Sweeping Only	
1371_13710_13719	181.16	90.42	14.99	166.17	23,746.1	142.9	22,238.4	133.8	6.3%	Catchbasin Sumps	WisDOT/County ROW
1372_13729	7.01	6.36		7.01	1,277.7	182.4	1,036.9	148.0	18.9%	Catchbasin Sumps	
1373	13.69	0.00	0.07	13.62	2,506.0	184.0	2,438.4	179.0	2.7%	Street Sweeping Only	
1374	11.81	0.00		11.81	3,717.1	314.7	3,622.7	306.7	2.5%	Street Sweeping Only	WisDOT/County ROW

Basin	Total MS4 Area (acres)	Upstream Drainage Area (acres)	Exempt MS4 Area (acres)	Regulatory MS4 Area (acres)	Baseline Conditions		Existing Conditions		Percent Reduction	Current Practices	Reason for Exemption
					Annual TSS (lb)	Annual TSS Loading (lb/ac)	Annual TSS (lb)	Annual TSS Loading (lb/ac)			
1375	20.09	0.00		20.09	2,431.8	121.1	1,876.4	93.4	22.8%	Catchbasin Sumps	
1376	2.84	0.00		2.84	509.1	179.0	494.8	174.0	2.8%	Street Sweeping Only	
1377_13779	28.00	4.04	7.89	20.11	4,429.3	220.3	4,229.3	210.3	4.5%	Street Sweeping Only	WisDOT/County ROW
1378_13789	43.56	0.00	0.05	43.51	2,893.7	66.5	2,571.6	59.1	11.1%	Dry Pond	WisDOT/County ROW
1379	0.25	0.00		0.25	45.3	180.5	22.1	88.0	51.2%	Bioretention	
1380	0.59	0.00	0.02	0.56	101.6	180.4	78.5	139.5	22.7%	Bioretention	
1381_13811_13812_13813_13814_13819	44.34	78.17	10.36	33.97	7,913.2	232.9	7,636.1	224.8	3.5%	Street Sweeping Only	WisDOT/County ROW
1383	0.10	0.00		0.10	47.6	461.9	46.5	451.8	2.2%	Street Sweeping Only	
1384	18.98	0.00	3.72	15.26	837.0	54.8	734.3	48.1	12.3%	Catchbasin Sumps	WisDOT/County ROW
1385	1.60	0.00		1.60	404.3	253.0	402.6	251.9	0.4%	Street Sweeping Only	
1386	1.03	0.00		1.03	598.2	580.8	575.3	558.5	3.8%	Street Sweeping Only	
1387	3.65	0.00		3.65	1,935.4	529.7	1,862.5	509.7	3.8%	Street Sweeping Only	
1388	7.39	0.00		7.39	2,095.8	283.6	2,027.2	274.3	3.3%	Street Sweeping Only	
1389	9.64	0.00		9.64	3,794.5	393.7	3,627.0	376.3	4.4%	Catchbasin Sumps	
1390	1.03	0.00		1.03	256.2	249.2	202.8	197.2	20.9%	Catchbasin Sumps	
1391	1.45	0.00		1.45	133.8	92.4	0.0	0.0	100.0%	Bioretention	
1392	0.14	0.00		0.14	84.6	622.4	82.7	607.9	2.3%	Street Sweeping Only	
1393	13.65	0.00		13.65	2,678.0	196.2	2,452.1	179.6	8.4%	Catchbasin Sumps	
1394	10.42	0.00		10.42	2,030.7	194.9	1,696.5	162.9	16.5%	Catchbasin Sumps	
1395	1.53	0.00	1.53	0.00	NA	NA	NA	NA	0.0%		WisDOT/County ROW
1396	0.09	0.00		0.09	39.1	460.0	37.6	442.4	3.8%	Street Sweeping Only	
1397	4.07	0.00		4.07	2,585.7	635.0	2,527.0	620.6	2.3%	Street Sweeping Only	
1398	1.04	0.00	1.04	0.00	NA	NA	NA	NA	0.0%		WisDOT/County ROW
1399	0.03	0.00		0.03	6.6	219.9	3.6	120.8	45.1%	Rain Barrel	
1400	0.04	0.00		0.04	9.2	219.9	5.6	133.7	39.2%	Rain Barrel	
1401	0.05	0.00		0.05	10.8	219.9	7.2	147.4	33.0%	Rain Barrel	
1402	0.07	0.00		0.07	14.3	219.9	9.3	143.6	34.7%	Rain Barrel	
1403	0.30	0.00		0.30	86.0	283.9	18.1	59.8	79.0%	Bioretention	
1404	0.48	0.00		0.48	135.0	283.5	73.3	154.0	45.7%	Bioretention	
1405	0.09	0.00		0.09	21.4	230.2	0.3	3.6	98.4%	Rain Garden	
1406	0.03	0.00		0.03	5.9	219.9	3.5	130.1	40.8%	Rain Barrel	
1407	0.05	0.00		0.05	10.3	228.4	0.0	0.0	100.0%	Rain Garden	
1508	0.02	0.00		0.02	4.4	219.9	2.3	116.8	46.9%	Rain Barrel	
10018	232.74	0.00	232.74								Riparian
10028	594.89	0.00	594.89								Riparian
10038	826.29	0.00	826.29								Riparian
10048	227.04	0.00	227.04								Riparian
10058	142.35	0.00	142.35								Riparian
10068	107.93	0.00	107.93								Riparian
10078	99.82	0.00	99.82								Riparian
10088	1.94	0.00	1.94								Riparian
10098	35.54	0.00	35.54								Riparian
10128	22.55	0.00	22.55								Riparian
10138	46.76	0.00	46.76								Riparian
10148	23.87	0.00	23.87								Riparian
10158	29.08	0.00	29.08								Riparian
10168	4.16	0.00	4.16								Riparian
10178	21.40	0.00	21.40								Riparian
10188	193.65	0.00	193.65								Riparian
10198	4.63	0.00	4.63								Riparian
10208	2.24	0.00	2.24								Riparian
10218	71.53	0.00	71.53								Riparian
10228	61.99	0.00	61.99								Riparian
10238	54.83	0.00	54.83								Riparian
10248	1.37	0.00	1.37								Riparian
10258	35.70	0.00	35.70								Riparian
10268	2.00	0.00	2.00								Riparian
10278	1.40	0.00	1.40								Riparian
10288	0.94	0.00	0.94								Riparian
10298	0.72	0.00	0.72								Riparian
10308	0.66	0.00	0.66								Riparian
10318	0.80	0.00	0.80								Riparian
10328	0.62	0.00	0.62								Riparian
10338	0.82	0.00	0.82								Riparian
10348	0.75	0.00	0.75								Riparian
10358	0.34	0.00	0.34								Riparian
10368	1.13	0.00	1.13								Riparian
10378	0.12	0.00	0.12								Riparian
10388	0.20	0.00	0.20								Riparian
10398	0.41	0.00	0.41								Riparian
10408	0.13	0.00	0.13								Riparian

Basin	Total MS4 Area (acres)	Upstream Drainage Area (acres)	Exempt MS4 Area (acres)	Regulatory MS4 Area (acres)	Baseline Conditions		Existing Conditions		Percent Reduction	Current Practices	Reason for Exemption
					Annual TSS (lb)	Annual TSS Loading (lb/ac)	Annual TSS (lb)	Annual TSS Loading (lb/ac)			
10418	0.71	0.00	0.71								Riparian
10428	5.11	0.00	5.11								Riparian
10438	0.17	0.00	0.17								Riparian
10448	0.15	0.00	0.15								Riparian
10458	0.18	0.00	0.18								Riparian
10468	0.21	0.00	0.21								Riparian
10478	0.83	0.00	0.83								Riparian
10481	0.20	0.00	0.20								Riparian
10488	0.13	0.00	0.13								Riparian
10498	0.29	0.00	0.29								Riparian
10508	0.52	0.00	0.52								Riparian
10518	30.77	0.00	30.77								Riparian
10528	25.20	0.00	25.20								Riparian
10538	23.75	0.00	23.75								Riparian
10548	39.06	0.00	39.06								Riparian
10558	523.06	0.00	523.06								Riparian
10568	16.58	0.00	16.58								Riparian
10578	8.38	0.00	8.38								Riparian
10588	7.86	0.00	7.86								Riparian
10598	5.22	0.00	5.22								Riparian
10608	0.55	0.00	0.55								Riparian
10618	4.44	0.00	4.44								Riparian
10628	20.43	0.00	20.43								Riparian
10638	514.96	0.00	514.96								Riparian
10648	11.11	0.00	11.11								Riparian
10658	12.01	0.00	12.01								Riparian
10668	0.60	0.00	0.60								Riparian
10678	14.07	0.00	14.07								Riparian
10688	136.31	0.00	136.31								Riparian
10698	177.04	0.00	177.04								Riparian
10708	22.49	0.00	22.49								Riparian
10718	17.91	0.00	17.91								Riparian
10728	12.00	0.00	12.00								Riparian
10738	30.43	0.00	30.43								Riparian
10748	4.97	0.00	4.97								Riparian
10758	7.01	0.00	7.01								Riparian
10768	1.11	0.00	1.11								Riparian
10778	16.20	0.00	16.20								Riparian
10788	3.33	0.00	3.33								Riparian
10798	12.54	0.00	12.54								Riparian
10808	8.65	0.00	8.65								Riparian
	13,729.7	5,123.4	5,360.1	8,369.6	2,768,335.5	330.8	2,291,458.2	273.8	17.23%		

Abbreviation	Name
lb	pounds
lb/ac	pounds per acre
ROW	right-of-way
BC	Biocell
BR	Bioretention
BF	Biofilter
CB	Catch Basin (Number per Acre)
GS	Grass Swale
HS	Hydrodynamic Separator
DP	Dry Detention Pond
WP	Wet Detention Pond
PP	Porous Pavement
RB	Rain Barrel
RG	Rain Garden
SN	Street Narrowing
SS	Street Sweeping
US	Underground Storage

Table B-2 Baseline and Existing Conditions Annual TP Loading

Basin	Total MS4 Area (acres)	Upstream Drainage Area (acres)	Exempt MS4 Area (acres)	Regulatory MS4 Area (acres)	Annual Particulate Phosphorus			Annual Filterable Phosphorus			Annual Total Phosphorus			Current Practices	Reason for Exemption
					Baseline Particulate Phosphorus (lb)	Existing Particulate Phosphorus (lb)	Percent Reduction	Baseline Dissolved Phosphorus (lb)	Existing Dissolved Phosphorus (lb)	Percent Reduction	Baseline Total Phosphorus (lb)	Existing Total Phosphorus (lb)	Percent Reduction		
1001	5.80	0.00		5.80	1.26	0.98	22.6%	0.41	0.41	0.0%	1.67	1.39	17.0%	Catchbasin Sumps	
1002	7.78	0.00		7.78	4.52	3.74	17.2%	0.86	0.86	0.0%	5.38	4.60	14.5%	Catchbasin Sumps	
1003	81.08	0.00		81.08	84.27	76.83	8.8%	13.56	13.56	0.0%	97.83	90.39	7.6%	Catchbasin Sumps	
1004	0.73	0.00		0.73	0.79	0.76	3.3%	0.12	0.12	0.0%	0.91	0.88	2.8%	Street Sweeping Only	
1005	0.32	0.00		0.32	0.34	0.33	3.3%	0.05	0.05	0.0%	0.39	0.38	2.8%	Street Sweeping Only	
1006	0.18	0.00		0.18	0.19	0.18	3.3%	0.03	0.03	0.0%	0.22	0.21	2.8%	Street Sweeping Only	
1007	0.39	0.00		0.39	0.41	0.40	3.3%	0.06	0.06	0.0%	0.48	0.46	2.8%	Street Sweeping Only	
1008	0.57	0.00		0.57	0.61	0.59	3.3%	0.09	0.09	0.0%	0.70	0.68	2.8%	Street Sweeping Only	
1009	0.25	0.00		0.25	0.27	0.27	0.1%	0.05	0.05	0.0%	0.31	0.31	0.1%	Porous Pavement	
1010	7.17	0.00		7.17	7.78	7.47	3.9%	1.21	1.21	0.0%	8.98	8.68	3.4%	Catchbasin Sumps	
1011	2.61	0.00		2.61	2.80	2.71	3.3%	0.43	0.43	0.0%	3.23	3.13	2.8%	Street Sweeping Only	
1012	1.66	0.00		1.66	1.79	0.77	56.7%	0.27	0.27	1.5%	2.06	1.04	49.4%	Underground Storage	
1013	0.20	0.00		0.20	0.16	0.01	93.7%	0.04	0.00	93.7%	0.20	0.01	93.7%	Biocell	
1014	0.13	0.00		0.13	0.10	0.10	1.9%	0.02	0.02	0.0%	0.13	0.13	1.6%	Street Sweeping Only	
1015	0.08	0.00		0.08	0.07	0.07	1.9%	0.02	0.02	0.0%	0.08	0.08	1.6%	Street Sweeping Only	
1016	0.21	0.00		0.21	0.17	0.17	1.9%	0.04	0.04	0.0%	0.21	0.21	1.6%	Street Sweeping Only	
1017	0.38	0.00		0.38	0.31	0.02	93.7%	0.07	0.00	93.7%	0.38	0.02	93.7%	Biocell	
1018	0.52	0.00		0.52	0.43	0.42	1.9%	0.10	0.10	0.0%	0.53	0.52	1.6%	Street Sweeping Only	
1019	0.60	0.00		0.60	0.50	0.03	93.7%	0.11	0.01	93.7%	0.61	0.04	93.7%	Biocell	
1020	0.40	0.00		0.40	0.33	0.02	93.7%	0.07	0.00	93.7%	0.40	0.03	93.7%	Biocell	
1021	0.09	0.00		0.09	0.08	0.00	93.7%	0.02	0.00	93.7%	0.10	0.01	93.7%	Biocell	
1022	0.11	0.00		0.11	0.09	0.01	93.7%	0.01	0.00	93.7%	0.10	0.01	93.7%	Biocell	
1023	0.07	0.00		0.07	0.06	0.00	93.7%	0.01	0.00	93.7%	0.07	0.00	93.7%	Biocell	
1024	0.06	0.00		0.06	0.05	0.05	1.9%	0.01	0.01	0.0%	0.06	0.06	1.6%	Street Sweeping Only	
1025	0.08	0.00		0.08	0.07	0.00	93.7%	0.02	0.00	93.7%	0.08	0.01	93.7%	Biocell	
1026	0.13	0.00		0.13	0.10	0.01	93.7%	0.02	0.00	93.7%	0.12	0.01	93.7%	Biocell	
1027	0.13	0.00		0.13	0.10	0.01	93.7%	0.02	0.00	93.7%	0.12	0.01	93.7%	Biocell	
1028	0.07	0.00		0.07	0.06	0.00	93.7%	0.01	0.00	93.7%	0.07	0.00	93.7%	Biocell	
1029	0.08	0.00		0.08	0.06	0.00	93.7%	0.02	0.00	93.7%	0.07	0.00	93.7%	Biocell	
1030	0.11	0.00		0.11	0.12	0.01	93.7%	0.02	0.00	93.7%	0.14	0.01	93.7%	Biocell	
1031	0.23	0.00		0.23	0.25	0.02	93.7%	0.04	0.00	93.7%	0.29	0.02	93.7%	Biocell	
1032	0.04	0.00		0.04	0.03	0.00	93.7%	0.01	0.00	93.7%	0.04	0.00	93.7%	Biocell	
1033	0.08	0.00		0.08	0.09	0.01	93.7%	0.01	0.00	93.7%	0.10	0.01	93.7%	Biocell	
1034	0.09	0.00		0.09	0.06	0.00	93.7%	0.02	0.00	93.7%	0.08	0.00	93.7%	Biocell	
1035	0.02	0.00		0.02	0.02	0.00	93.7%	0.00	0.00	93.7%	0.03	0.00	93.7%	Biocell	
1036	0.05	0.00		0.05	0.04	0.00	93.7%	0.01	0.00	93.7%	0.05	0.00	93.7%	Biocell	
1037	0.05	0.00		0.05	0.05	0.00	93.7%	0.01	0.00	93.7%	0.06	0.00	93.7%	Biocell	
1038	0.23	0.00		0.23	0.24	0.02	93.7%	0.04	0.00	93.7%	0.28	0.02	93.7%	Biocell	
1039	0.25	0.00		0.25	0.26	0.02	93.7%	0.04	0.00	93.7%	0.30	0.02	93.7%	Biocell	
1040	0.31	0.00		0.31	0.20	0.20	3.3%	0.06	0.06	0.0%	0.26	0.26	2.5%	Street Sweeping Only	
1041	155.26	0.00		155.26	110.55	93.23	15.7%	27.46	27.44	0.1%	138.01	120.67	12.6%	Catchbasin Sumps	
1042	1.33	0.00		1.33	0.87	0.84	3.3%	0.26	0.26	0.0%	1.13	1.10	2.5%	Street Sweeping Only	
1043	0.45	0.00		0.45	0.29	0.02	94.4%	0.09	0.01	94.0%	0.38	0.02	94.3%	Street Narrowing & Biocell	
1044	0.72	0.00		0.72	0.47	0.03	93.7%	0.14	0.01	93.7%	0.61	0.04	93.7%	Biocell	
1045	0.76	0.00		0.76	0.50	0.03	93.7%	0.15	0.01	93.7%	0.64	0.04	93.7%	Biocell	
1046	0.50	0.00		0.50	0.39	0.02	93.7%	0.09	0.01	93.7%	0.48	0.03	93.7%	Street Narrowing & Biocell	
1047	2.89	0.00		2.89	1.88	1.82	3.3%	0.55	0.55	0.0%	2.43	2.37	2.5%	Street Sweeping Only	
10481_1048	0.47	0.00		0.47	0.42	0.00	100.0%	0.08	0.00	100.0%	0.50	0.00	100.0%	Bioretention	
1050	5.95	0.00		5.95	5.25	5.04	4.1%	1.03	1.03	0.0%	6.28	6.07	3.4%	Catchbasin Sumps	
1051	0.46	0.00		0.46	0.30	0.02	93.7%	0.09	0.01	93.7%	0.39	0.02	93.7%	Biocell	
1052	0.19	0.00		0.19	0.13	0.04	67.4%	0.04	0.01	63.0%	0.16	0.05	66.4%	Bioretention	
1053	1.54	0.00		1.54	1.66	1.60	3.3%	0.25	0.25	0.0%	1.91	1.85	2.8%	Street Sweeping Only	
1054	0.61	0.00		0.61	0.39	0.26	34.8%	0.12	0.08	32.4%	0.51	0.34	34.3%	Bioretention	
1055	0.40	0.00		0.40	0.26	0.26	0.0%	0.08	0.08	0.0%	0.33	0.33	0.0%	Bioretention	
1056	0.18	0.00		0.18	0.11	0.09	24.4%	0.03	0.03	23.4%	0.15	0.11	24.2%	Bioretention	
1057	2.12	0.00		2.12	1.29	1.16	10.1%	0.38	0.38	0.0%	1.68	1.55	7.8%	Catchbasin Sumps	
1058	26.16	0.00		26.16	6.37	6.32	0.8%	2.32	2.32	0.0%	8.69	8.64	0.6%	Street Sweeping Only	
1059	269.29	0.00	2.41	266.88	143.22	118.61	17.2%	39.35	39.28	0.2%	182.57	157.88	13.5%	Catchbasin Sumps	WisDOT/County ROW
1060	6.33	0.00		6.33	1.41	0.72	48.7%	0.47	0.30	35.7%	1.88	1.02	45.4%	Grass Swale	
1061	3.71	0.00		3.71	0.81	0.05	93.7%	0.27	0.02	93.7%	1.08	0.07	93.7%	Biocell	
1062	19.68	0.00		19.68	5.46	4.49	17.8%	1.70	1.70	0.0%	7.16	6.19	13.6%	Catchbasin Sumps	
1063	0.56	0.00		0.56	0.12	0.00	100.0%	0.04	0.00	100.0%	0.16	0.00	100.0%	Bioretention	
1064	20.21	0.00		20.21	11.10	9.21	17.1%	3.10	3.10	0.0%	14.20	12.31	13.3%	Catchbasin Sumps	
1065	36.97	0.00		36.97	37.59	33.94	9.7%	6.55	6.55	0.0%	44.14	40.49	8.3%	Catchbasin Sumps	

Basin	Total MS4 Area (acres)	Upstream Drainage Area (acres)	Exempt MS4 Area (acres)	Regulatory MS4 Area (acres)	Annual Particulate Phosphorus			Annual Filterable Phosphorus			Annual Total Phosphorus			Current Practices	Reason for Exemption
					Baseline Particulate Phosphorus (lb)	Existing Particulate Phosphorus (lb)	Percent Reduction	Baseline Dissolved Phosphorus (lb)	Existing Dissolved Phosphorus (lb)	Percent Reduction	Baseline Total Phosphorus (lb)	Existing Total Phosphorus (lb)	Percent Reduction		
1066	60.92	0.00		60.92	59.55	54.01	9.3%	11.18	11.18	0.0%	70.73	65.19	7.8%	Catchbasin Sumps	
1067	0.57	0.00		0.57	0.57	0.18	69.0%	0.11	0.04	62.7%	0.68	0.22	68.1%	Bioretention	
1068	0.24	0.00		0.24	0.24	0.01	94.1%	0.04	0.00	92.6%	0.28	0.02	93.9%	Bioretention	
1069	0.28	0.00		0.28	0.28	0.06	78.9%	0.05	0.01	73.7%	0.33	0.07	78.1%	Bioretention	
1070	97.86	0.00		97.86	75.50	64.24	14.9%	16.49	16.48	0.1%	91.99	80.72	12.3%	Catchbasin Sumps	
1071	209.25	0.00		209.25	153.98	134.20	12.8%	35.02	34.86	0.5%	189.00	169.06	10.6%	Catchbasin Sumps	
1072	9.22	0.00		9.22	5.45	2.15	60.4%	1.48	0.65	55.8%	6.93	2.81	59.4%	Porous Pavement	
1073	6.27	0.00		6.27	4.25	0.23	94.7%	1.07	0.08	92.8%	5.32	0.30	94.3%	Porous Pavement	
1074	1.42	0.00		1.42	1.52	0.10	93.7%	0.23	0.01	93.7%	1.75	0.11	93.7%	Street Narrowing & Biocell	
1075	0.40	0.00		0.40	0.28	0.02	93.7%	0.08	0.00	93.7%	0.35	0.02	93.7%	Biocell	
1076	0.37	0.00		0.37	0.39	0.02	93.7%	0.06	0.00	93.7%	0.45	0.03	93.7%	Biocell	
1077	0.24	0.00		0.24	0.12	0.01	93.7%	0.04	0.00	93.7%	0.15	0.01	93.7%	Biocell	
1078	0.20	0.00		0.20	0.21	0.01	93.7%	0.03	0.00	93.7%	0.25	0.02	93.7%	Biocell	
1079	0.11	0.00		0.11	0.12	0.03	73.8%	0.02	0.01	66.8%	0.13	0.04	72.9%	Bioretention	
1080 1081 1082	1.37	0.00		1.37	1.42	1.36	4.6%	0.23	0.23	0.0%	1.66	1.59	3.9%	Porous Pavement	
1083	38.35	0.00		38.35	33.55	31.03	7.5%	9.00	9.00	0.0%	42.55	40.03	5.9%	Catchbasin Sumps	
1084	0.30	0.00		0.30	0.22	0.10	55.7%	0.09	0.05	49.6%	0.31	0.14	53.9%	Bioretention	
1085	1.62	0.00		1.62	1.24	1.24	0.0%	0.55	0.55	0.0%	1.79	1.79	0.0%	Porous Pavement	
1086	1.10	0.00		1.10	0.84	0.84	0.0%	0.38	0.38	0.0%	1.22	1.22	0.0%	Porous Pavement	
1087	0.15	0.00		0.15	0.11	0.11	2.5%	0.05	0.05	0.0%	0.16	0.16	1.8%	Porous Pavement	
1088	1.85	0.00		1.85	1.98	1.39	30.0%	0.30	0.29	2.3%	2.28	1.68	26.3%	Underground Storage	
1089	0.59	0.00		0.59	0.63	0.47	26.5%	0.10	0.09	8.5%	0.73	0.55	24.1%	Underground Storage	
1090	0.49	0.00		0.49	0.52	0.51	3.3%	0.08	0.08	0.0%	0.60	0.59	2.8%	Street Sweeping Only	
1091	84.85	0.00		84.85	54.24	46.02	15.1%	15.09	15.07	0.1%	69.33	61.10	11.9%	Catchbasin Sumps	
1092	3.28	0.00		3.28	2.40	2.06	13.9%	0.98	0.98	0.0%	3.37	3.04	9.8%	Catchbasin Sumps	
1093	1.66	0.00		1.66	1.16	1.14	2.0%	0.44	0.44	0.0%	1.61	1.59	1.5%	Street Sweeping Only	
1094	0.33	0.00		0.33	0.18	0.01	93.7%	0.05	0.00	93.7%	0.24	0.01	93.7%	Biocell	
1095	2.36	0.00		2.36	2.14	2.14	0.1%	0.47	0.47	0.0%	2.61	2.60	0.1%	Porous Pavement	
1096	0.53	0.00		0.53	0.50	0.48	2.5%	0.08	0.08	0.0%	0.58	0.57	2.2%	Street Sweeping Only	
1097	0.47	0.00		0.47	0.34	0.02	93.7%	0.09	0.01	93.7%	0.43	0.03	93.7%	Biocell	
1098	0.28	0.00		0.28	0.20	0.01	93.7%	0.06	0.00	93.7%	0.26	0.02	93.7%	Biocell	
1099	343.68	0.00		343.68	198.85	163.51	17.8%	53.64	53.64	0.0%	252.49	217.14	14.0%	Catchbasin Sumps	
1100	0.21	0.00		0.21	0.12	0.00	100.0%	0.03	0.00	100.0%	0.15	0.00	100.0%	Rain Garden	
1101	0.17	0.00		0.17	0.10	0.00	100.0%	0.03	0.00	100.0%	0.12	0.00	100.0%	Rain Garden	
1102	0.03	0.00		0.03	0.02	0.01	42.1%	0.01	0.01	0.0%	0.03	0.02	31.7%	Rain Barrel	
1103	0.08	0.00		0.08	0.06	0.04	32.3%	0.02	0.02	0.0%	0.08	0.06	24.3%	Rain Barrel	
1104	325.52	0.00		325.52	199.46	170.09	14.7%	53.14	53.12	0.0%	252.60	223.21	11.6%	Catchbasin Sumps	
1105	0.05	0.00		0.05	0.04	0.02	37.2%	0.01	0.01	0.0%	0.05	0.04	28.0%	Rain Barrel	
1106	140.83	0.00		140.83	65.20	55.73	14.5%	26.45	26.45	0.0%	91.65	82.17	10.3%	Catchbasin Sumps	
1107	0.06	0.00		0.06	0.04	0.00	100.0%	0.01	0.00	100.0%	0.06	0.00	100.0%	Rain Garden	
1108	41.17	0.00		41.17	11.71	10.60	9.5%	4.10	4.10	0.0%	15.81	14.70	7.0%	Catchbasin Sumps	
1109	591.36	73.33	0.94	590.42	364.60	321.20	11.9%	100.70	100.70	0.0%	465.20	421.80	9.3%	Catchbasin Sumps	WisDOT/County ROW
1110	0.16	0.00		0.16	0.09	0.00	100.0%	0.03	0.00	100.0%	0.12	0.00	100.0%	Bioretention	
1111	1.42	0.00		1.42	1.02	0.00	100.0%	0.22	0.00	100.0%	1.25	0.00	100.0%	Porous Pavement	
1112	0.02	0.00		0.02	0.02	0.01	55.1%	0.00	0.00	0.0%	0.02	0.01	41.5%	Rain Barrel	
1113	3.33	0.00		3.33	1.91	0.01	99.5%	0.52	0.01	98.9%	2.42	0.02	99.4%	Porous Pavement	
1114	0.04	0.00		0.04	0.03	0.02	40.2%	0.01	0.01	0.0%	0.04	0.03	30.3%	Rain Barrel	
1115	0.05	0.00		0.05	0.03	0.02	38.5%	0.01	0.01	0.0%	0.04	0.03	28.9%	Rain Barrel	
1116	0.03	0.00		0.03	0.02	0.01	43.5%	0.01	0.01	0.0%	0.03	0.02	32.7%	Rain Barrel	
1117	2.09	0.00		2.09	1.81	0.11	93.7%	0.31	0.02	93.7%	2.11	0.13	93.7%	Biocell	
1118	1.13	0.00		1.13	0.97	0.06	93.7%	0.16	0.01	93.7%	1.14	0.07	93.7%	Biocell	
1119	0.60	0.00		0.60	0.49	0.48	3.0%	0.08	0.08	0.0%	0.57	0.56	2.6%	Street Sweeping Only	
1120	0.02	0.00		0.02	0.01	0.01	49.1%	0.00	0.00	0.0%	0.02	0.01	36.9%	Rain Barrel	
1121	0.55	0.00		0.55	0.31	0.02	93.7%	0.09	0.01	93.7%	0.39	0.02	93.7%	Biocell	
1122	1.30	0.00		1.30	0.72	0.05	93.7%	0.20	0.01	93.7%	0.93	0.06	93.7%	Biocell	
1123	0.63	0.00		0.63	0.46	0.03	92.8%	0.19	0.02	91.5%	0.65	0.05	92.4%	Bioretention	
1124	1.22	0.00		1.22	0.68	0.04	93.7%	0.19	0.01	93.7%	0.86	0.05	93.7%	Biocell	
1125	0.52	0.00		0.52	0.29	0.02	93.7%	0.08	0.01	93.7%	0.37	0.02	93.7%	Biocell	
1126	0.30	0.00		0.30	0.24	0.02	93.7%	0.06	0.00	93.7%	0.30	0.02	93.7%	Biocell	
1127	0.20	0.00		0.20	0.11	0.01	93.7%	0.03	0.00	93.7%	0.15	0.01	93.7%	Biocell	
1128	0.26	0.00		0.26	0.14	0.01	93.7%	0.04	0.00	93.7%	0.18	0.01	93.7%	Biocell	
1129	0.28	0.00		0.28	0.15	0.01	93.7%	0.04	0.00	93.7%	0.20	0.01	93.7%	Biocell	
1130	0.18	0.00		0.18	0.15	0.01	93.7%	0.03	0.00	93.7%	0.19	0.01	93.7%	Biocell	
1131	176.82	0.00		176.82	109.58	92.76	15.4%	29.67	29.67	0.0%	139.25	122.43	12.1%	Catchbasin Sumps	
1132	155.54	0.00		155.54	111.17	97.58	12.2%	28.84	28.84	0.0%	140.02	126.42	9.7%	Catchbasin Sumps	
1133	0.66	0.00		0.66	0.36	0.28	21.4%	0.11	0.11	0.0%	0.47	0.39	16.3%	Catchbasin Sumps	
1134	0.85	0.00		0.85	0.58	0.57	2.5%	0.23	0.23	0.0%	0.81	0.79	1.8%	Street Sweeping Only	
1135	1.18	0.00		1.18	0.77	0.74	3.3%	0.23	0.23	0.0%	0.99	0.97	2.5%	Street Sweeping Only	

Basin	Total MS4 Area (acres)	Upstream Drainage Area (acres)	Exempt MS4 Area (acres)	Regulatory MS4 Area (acres)	Annual Particulate Phosphorus			Annual Filterable Phosphorus			Annual Total Phosphorus			Current Practices	Reason for Exemption
					Baseline Particulate Phosphorus (lb)	Existing Particulate Phosphorus (lb)	Percent Reduction	Baseline Dissolved Phosphorus (lb)	Existing Dissolved Phosphorus (lb)	Percent Reduction	Baseline Total Phosphorus (lb)	Existing Total Phosphorus (lb)	Percent Reduction		
1136	0.39	0.00		0.39	0.26	0.25	3.3%	0.08	0.08	0.0%	0.33	0.32	2.5%	Street Sweeping Only	
1137	8.20	0.00		8.20	6.91	6.72	2.7%	1.39	1.39	0.0%	8.30	8.11	2.3%	Street Sweeping Only	
1138	0.03	0.00		0.03	0.02	0.02	0.0%	0.01	0.01	0.0%	0.04	0.04	0.0%	Rain Barrel	
1139	1.14	0.00		1.14	1.08	1.05	2.5%	0.18	0.18	0.0%	1.26	1.23	2.2%	Street Sweeping Only	
1140	0.26	0.00		0.26	0.06	0.01	77.3%	0.02	0.02	0.2%	0.08	0.03	58.3%	Underground Storage	
1141	0.82	0.00		0.82	0.45	0.03	93.7%	0.13	0.01	93.7%	0.58	0.04	93.7%	Biocell	
1142	0.95	0.00		0.95	0.53	0.03	93.7%	0.15	0.01	93.7%	0.67	0.04	93.7%	Biocell	
1143	0.41	0.00		0.41	0.23	0.01	93.7%	0.06	0.00	93.7%	0.29	0.02	93.7%	Biocell	
1144	0.47	0.00		0.47	0.32	0.02	93.7%	0.07	0.00	93.7%	0.39	0.02	93.7%	Street Narrowing & Biocell	
1145	1.03	0.00		1.03	0.50	0.03	93.7%	0.14	0.01	93.7%	0.64	0.04	93.7%	Biocell	
1146	0.52	0.00		0.52	0.36	0.02	93.7%	0.07	0.00	93.7%	0.44	0.03	93.7%	Biocell	
1147	24.69	0.00		24.69	16.77	15.64	6.7%	4.53	4.53	0.0%	21.30	20.17	5.3%	Catchbasin Sumps	
1148	9.74	0.00		9.74	5.97	5.71	4.3%	2.10	2.10	0.0%	8.07	7.81	3.2%	Catchbasin Sumps	
1149	33.05	0.00		33.05	19.73	6.31	68.0%	6.08	6.09	-0.2%	25.81	12.40	51.9%	Catchbasin Sumps	
1150	1.49	0.00		1.49	0.74	0.71	3.6%	0.24	0.24	0.0%	0.98	0.95	2.7%	Street Sweeping Only	
1151	28.25	0.00		28.25	12.43	12.17	2.1%	4.46	4.46	0.0%	16.89	16.63	1.5%	Street Sweeping Only	
1152	4.11	0.00		4.11	3.04	2.84	6.5%	1.24	1.24	0.0%	4.28	4.08	4.7%	Catchbasin Sumps	
1153	51.95	0.00		51.95	30.51	30.18	1.1%	10.68	10.68	0.0%	41.19	40.86	0.8%	Catchbasin	
1154	23.31	0.00		23.31	14.48	14.14	2.4%	5.80	5.80	0.0%	20.28	19.93	1.7%	Catchbasin Sumps	
1155	3.06	0.00		3.06	0.67	0.48	27.8%	0.22	0.22	0.0%	0.88	0.70	20.9%	Catchbasin Sumps	
1156	0.18	0.00		0.18	0.19	0.18	3.3%	0.03	0.03	0.0%	0.22	0.21	2.8%	Street Sweeping Only	
1157	0.10	0.00		0.10	0.06	0.00	100.0%	0.02	0.00	100.0%	0.07	0.00	100.0%	Rain Garden	
1158	0.06	0.00		0.06	0.06	0.05	2.5%	0.01	0.01	0.0%	0.06	0.06	2.2%	Street Sweeping Only	
1159	1.33	0.00		1.33	1.25	0.08	93.7%	0.21	0.01	93.7%	1.46	0.09	93.7%	Biocell	
1160	0.97	0.00		0.97	0.91	0.06	93.7%	0.15	0.01	93.7%	1.06	0.07	93.7%	Biocell	
1161	0.10	0.00		0.10	0.10	0.01	93.7%	0.02	0.00	93.7%	0.11	0.01	93.7%	Biocell	
1162	12.15	0.00		12.15	10.58	10.31	2.6%	1.91	1.91	0.0%	12.49	12.22	2.2%	Street Sweeping Only	
1163	9.05	0.00		9.05	3.85	3.72	3.2%	1.19	1.19	0.0%	5.04	4.91	2.5%	Street Sweeping Only	
1164	10.34	0.00		10.34	5.29	4.55	13.9%	1.46	1.46	0.0%	6.75	6.01	10.9%	Catchbasin Sumps	
1165	0.48	0.00		0.48	0.46	0.03	93.7%	0.08	0.01	93.7%	0.54	0.03	93.7%	Biocell	
1166	1.37	0.00		1.37	0.15	0.14	5.6%	0.09	0.09	0.0%	0.24	0.23	3.5%	Street Sweeping Only	
1167	0.52	0.00		0.52	0.06	0.05	5.6%	0.03	0.03	0.0%	0.09	0.09	3.6%	Street Sweeping Only	
1168	2.42	0.00		2.42	0.26	0.25	5.6%	0.15	0.15	0.0%	0.42	0.40	3.6%	Street Sweeping Only	
1170	19.75	0.00		19.75	11.22	10.70	4.6%	3.36	3.36	0.0%	14.57	14.06	3.5%	Catchbasin Sumps	
1171	14.97	0.00		14.97	8.39	6.73	19.8%	2.39	2.39	0.0%	10.78	9.12	15.4%	Catchbasin Sumps	
1172	157.29	0.00		157.29	128.77	124.02	3.7%	27.14	27.14	0.0%	155.91	151.16	3.0%	Catchbasin Sumps	
1173	1.69	0.00		1.69	1.81	1.75	3.3%	0.28	0.28	0.0%	2.09	2.03	2.8%	Street Sweeping Only	
1174	0.94	0.00		0.94	0.98	0.95	3.2%	0.16	0.16	0.0%	1.14	1.11	2.8%	Street Sweeping Only	
1175	1.18	0.00		1.18	1.27	0.22	82.3%	0.19	0.04	77.4%	1.46	0.27	81.6%	Bioretention	
1176_1177_1178	4.42	0.00		4.42	2.51	0.00	100.0%	0.69	0.00	100.0%	3.20	0.00	100.0%	Porous Pavement	
1179_1180_1182	4.24	0.00		4.24	2.35	0.00	100.0%	0.66	0.00	100.0%	3.00	0.00	100.0%	Porous Pavement	
1181	0.20	0.00		0.20	0.09	0.01	93.7%	0.02	0.00	93.7%	0.11	0.01	93.7%	Biocell	
1183	23.27	0.00		23.27	14.67	14.28	2.7%	2.88	2.88	0.0%	17.55	17.16	2.2%	Street Sweeping Only	
1184	0.85	0.00		0.85	0.55	0.54	1.8%	0.19	0.19	0.0%	0.74	0.73	1.3%	Street Sweeping Only	
1185	0.49	0.00		0.49	0.53	0.51	3.3%	0.08	0.08	0.0%	0.61	0.59	2.8%	Street Sweeping Only	
1186	0.33	0.00		0.33	0.34	0.33	3.3%	0.05	0.05	0.0%	0.40	0.39	2.8%	Street Sweeping Only	
1187	1.03	0.00		1.03	1.10	0.07	93.7%	0.17	0.01	93.7%	1.27	0.08	93.7%	Biocell	
1188	0.19	0.00		0.19	0.20	0.00	100.0%	0.03	0.00	100.0%	0.23	0.00	100.0%	Bioretention	
1189_11899_18991	75.70	19.15	0.83	74.87	63.97	0.00	100.0%	11.86	0.00	100.0%	75.82	0.00	100.0%	Catchbasin Sumps	WisDOT/County ROW
1190	0.40	0.00		0.40	0.42	0.02	95.2%	0.07	0.00	93.4%	0.49	0.02	94.9%	Bioretention	
1191	0.33	0.00		0.33	0.33	0.03	91.8%	0.05	0.01	89.0%	0.38	0.03	91.4%	Bioretention	
1192	0.16	0.00		0.16	0.13	0.01	91.7%	0.03	0.00	89.2%	0.16	0.01	91.3%	Bioretention	
1193_11931	0.21	0.25	0.00	0.21	0.49	0.00	100.0%	0.07	0.00	100.0%	0.56	0.00	100.0%	Bioretention	
1195	0.37	0.00		0.37	0.39	0.38	3.3%	0.06	0.06	0.0%	0.45	0.44	2.8%	Street Sweeping Only	
1196	10.98	0.00		10.98	8.47	8.21	3.0%	1.62	1.62	0.0%	10.09	9.83	2.6%	Street Sweeping Only	
1197	10.53	0.00		10.53	9.07	9.07	0.0%	1.54	1.54	0.0%	10.61	10.61	0.0%		
1198	4.91	0.00		4.91	4.23	4.19	0.9%	0.72	0.72	0.0%	4.95	4.91	0.8%	Street Sweeping Only	
1199	0.15	0.00		0.15	0.07	0.07	3.6%	0.02	0.02	0.0%	0.10	0.09	2.7%	Street Sweeping Only	
1200	0.53	0.00		0.53	0.26	0.25	3.6%	0.08	0.08	0.0%	0.34	0.33	2.7%	Street Sweeping Only	
1201	38.40	0.00	0.83	37.57	18.56	15.57	16.1%	5.95	5.95	0.0%	24.51	21.52	12.2%	Catchbasin Sumps	WisDOT/County ROW
1202	3.45	0.00		3.45	1.67	1.61	3.6%	0.53	0.53	0.0%	2.19	2.13	2.7%	Street Sweeping Only	
1204	5.16	0.00		5.16	2.49	2.00	19.6%	0.79	0.79	0.0%	3.28	2.79	14.9%	Catchbasin Sumps	
1205_12059	2.39	3112.65	0.00	2.39	1.99	1.94	2.4%	0.45	0.45	0.0%	2.44	2.40	2.0%	Street Sweeping Only	
1206_12069_20691	2.31	1.95	0.00	2.31	1.39	1.33	4.4%	0.42	0.42	0.0%	1.81	1.75	3.4%	Street Sweeping Only	
1207	3.58	0.00		3.58	2.07	2.00	3.3%	0.62	0.62	0.0%	2.69	2.62	2.5%	Street Sweeping Only	
1208	26.18	0.00	1.83	24.35	11.66	11.61	0.4%	4.01	4.01	0.0%	15.67	15.62	0.3%	Street Sweeping Only	WisDOT/County ROW
1209	10.31	0.00		10.31	4.18	4.15	0.7%	1.49	1.49	0.0%	5.67	5.64	0.5%	Street Sweeping Only	

Basin	Total MS4 Area (acres)	Upstream Drainage Area (acres)	Exempt MS4 Area (acres)	Regulatory MS4 Area (acres)	Annual Particulate Phosphorus			Annual Filterable Phosphorus			Annual Total Phosphorus			Current Practices	Reason for Exemption
					Baseline Particulate Phosphorus (lb)	Existing Particulate Phosphorus (lb)	Percent Reduction	Baseline Dissolved Phosphorus (lb)	Existing Dissolved Phosphorus (lb)	Percent Reduction	Baseline Total Phosphorus (lb)	Existing Total Phosphorus (lb)	Percent Reduction		
1210	8.22	0.00		8.22	2.10	2.01	4.0%	0.81	0.81	0.0%	2.90	2.82	2.9%	Street Sweeping Only	
1211	4.08	0.00	0.30	3.77	3.26	3.15	3.3%	0.53	0.53	0.0%	3.79	3.68	2.9%	Street Sweeping Only	WisDOT/County ROW
1212	3.78	0.00	2.54	1.24	0.91	0.88	3.4%	0.16	0.16	0.0%	1.07	1.03	2.9%	Street Sweeping Only	WisDOT/County ROW
1213	2.83	0.00	0.22	2.62	0.81	0.79	2.9%	0.25	0.25	0.0%	1.06	1.04	2.2%	Street Sweeping Only	WisDOT/County ROW
1214_12149	61.13	21.03	15.50	45.63	25.17	24.15	4.1%	7.44	7.44	0.0%	32.62	31.60	3.1%	Catchbasin	
1215_12159	7.01	1.23	0.10	6.91	1.54	1.24	19.2%	1.28	1.28	0.0%	2.82	2.52	10.5%	Catchbasin Sumps	
1216_12169	1.97	0.86		1.97	0.82	0.79	4.0%	0.58	0.58	0.0%	1.40	1.36	2.3%	Street Sweeping Only	
1217	5.77	0.00	1.89	3.88	2.93	2.79	4.8%	1.09	1.09	0.0%	4.02	3.88	3.5%	Catchbasin Sumps	WisDOT/County ROW
1218	6.98	0.00		6.98	5.19	5.07	2.3%	2.12	2.12	0.0%	7.31	7.19	1.6%	Street Sweeping Only	
1219	0.78	0.00		0.78	0.58	0.47	18.7%	0.24	0.24	0.0%	0.81	0.71	13.3%	Catchbasin Sumps	
1220	12.32	0.00	0.28	12.04	8.80	1.78	79.7%	3.57	3.48	2.6%	12.37	5.26	57.5%	Catchbasin Sumps	WisDOT/County ROW
1221_12219	38.13	1.41	3.77	34.36	15.57	13.41	13.9%	5.12	5.12	0.0%	20.69	18.53	10.4%	Catchbasin Sumps	WisDOT/County ROW
1222	6.71	0.00	1.00	5.71	4.76	4.67	1.9%	1.08	1.08	0.0%	5.85	5.75	1.6%	Street Sweeping Only	WisDOT/County ROW
1223	14.06	0.00	1.28	12.79	1.71	1.62	5.1%	0.87	0.87	0.0%	2.58	2.49	3.4%	Street Sweeping Only	WisDOT/County ROW
1224	0.30	0.00		0.30	0.03	0.03	5.6%	0.02	0.02	0.0%	0.05	0.05	3.6%	Street Sweeping Only	
1225	0.29	0.00		0.29	0.03	0.03	5.6%	0.02	0.02	0.0%	0.05	0.05	3.6%	Street Sweeping Only	
1226	0.20	0.00		0.20	0.02	0.02	5.5%	0.01	0.01	0.0%	0.03	0.03	3.5%	Street Sweeping Only	
1227_12279	4.71	18.19	0.48	4.23	0.46	0.43	7.7%	0.27	0.27	0.0%	0.73	0.70	4.8%	Street Sweeping Only	WisDOT/County ROW
1228	48.29	0.00		48.29	21.91	19.87	9.3%	11.06	11.06	0.0%	32.97	30.93	6.2%	Catchbasin Sumps	
1229_12299	47.03	5.27		47.03	18.51	16.28	12.0%	8.15	8.15	0.0%	26.66	24.43	8.3%	Catchbasin Sumps	
1230	0.08	0.00		0.08	0.06	0.04	32.4%	0.02	0.02	0.0%	0.08	0.06	24.4%	Rain Barrel	
1231	3.27	0.00		3.27	0.37	0.35	5.5%	0.79	0.79	0.0%	1.16	1.14	1.7%	Street Sweeping Only	
1232	6.55	0.00		6.55	3.02	2.75	9.1%	0.95	0.95	0.0%	3.97	3.69	6.9%	Catchbasin Sumps	
1233_12339_23391	42.11	1.49		42.11	10.48	5.48	47.8%	6.24	6.25	-0.2%	16.72	11.73	29.9%	Catchbasin Sumps	
1234	1.93	0.00		1.93	0.57	0.44	23.7%	0.21	0.21	0.0%	0.78	0.64	17.3%	Catchbasin Sumps	
1235_12359_23591	253.45	81.66		253.45	92.01	77.83	15.4%	48.82	48.82	0.0%	140.83	126.65	10.1%	Catchbasin Sumps	
1236	61.75	0.00		61.75	27.85	23.05	17.2%	8.75	8.75	0.0%	36.60	31.80	13.1%	Catchbasin Sumps	
1237	3.66	0.00		3.66	2.11	2.04	3.2%	0.63	0.63	0.0%	2.74	2.67	2.5%	Street Sweeping Only	
1238	0.06	0.00		0.06	0.04	0.02	42.9%	0.01	0.01	0.0%	0.06	0.04	32.3%	Rain Barrel	
1239	1.61	0.00		1.61	1.02	0.89	12.6%	0.30	0.30	0.0%	1.32	1.19	9.7%	Catchbasin Sumps	
1240_12409	49.82	16.53		49.82	26.00	25.31	2.6%	10.33	10.33	0.0%	36.33	35.64	1.9%	Street Sweeping Only	
1241_1242_12429_24291_24292_12411_12412_12419	84.20	245.55		84.20	22.72	11.81	48.0%	19.51	19.53	-0.1%	42.23	31.34	25.8%	Catchbasin Sumps	
1243	14.57	0.00		14.57	3.63	3.08	15.2%	3.56	3.56	0.0%	7.19	6.64	7.7%	Catchbasin Sumps	
1244	16.36	0.00	2.56	13.80	9.91	9.37	5.4%	3.97	3.97	0.0%	13.88	13.34	3.9%	Street Sweeping Only	WisDOT/County ROW
1245	8.56	0.00	0.10	8.46	4.82	3.98	17.4%	2.15	2.15	0.0%	6.98	6.14	12.1%	Catchbasin Sumps	WisDOT/County ROW
1246_12469_24691	4.58	9.97		4.58	1.54	1.30	15.5%	1.19	1.19	0.0%	2.72	2.48	8.8%	Catchbasin Sumps	
1247_12479	3.79	5.26		3.79	3.53	3.41	3.3%	0.77	0.77	0.0%	4.30	4.19	2.7%	Street Sweeping Only	
1248	25.32	0.00		25.32	20.67	20.27	1.9%	4.06	4.06	0.0%	24.73	24.33	1.6%	Street Sweeping Only	
1249_12499	27.62	19.35		27.62	20.05	18.51	7.7%	4.63	4.63	0.0%	24.69	23.15	6.2%	Catchbasin Sumps	
1250	5.24	0.00		5.24	4.14	4.06	2.0%	0.74	0.74	0.0%	4.88	4.80	1.7%	Street Sweeping Only	
1251	2.33	0.00		2.33	1.94	1.90	1.9%	0.44	0.44	0.0%	2.38	2.35	1.6%	Street Sweeping Only	
1252_12529_25291_25292	207.47	60.31	0.21	207.26	106.96	89.45	16.4%	37.15	37.15	0.0%	144.11	126.60	12.2%	Catchbasin Sumps	WisDOT/County ROW
1253	0.51	0.00		0.51	0.13	0.13	4.1%	0.05	0.05	0.0%	0.19	0.18	2.9%	Street Sweeping Only	
1254	13.22	0.00		13.22	7.24	6.58	9.2%	2.21	2.21	0.0%	9.46	8.79	7.1%	Catchbasin Sumps	
1255	1.80	0.00		1.80	0.52	0.50	3.9%	0.19	0.19	0.0%	0.72	0.70	2.8%	Street Sweeping Only	
1258	0.03	0.00		0.03	0.02	0.01	29.5%	0.01	0.01	0.0%	0.03	0.02	22.2%	Rain Barrel	
1259_12599_25991_12591	114.98	542.28		114.98	72.22	58.80	18.6%	49.89	49.90	0.0%	122.11	108.70	11.0%	Catchbasin Sumps	
1260	9.00	0.00		9.00	6.15	4.87	20.8%	2.44	2.11	13.4%	8.59	6.98	18.7%	Catchbasin Sumps	
1261	0.04	0.00		0.04	0.03	0.02	40.5%	0.01	0.01	0.0%	0.04	0.02	30.5%	Rain Barrel	
1262	59.36	0.00		59.36	6.70	6.33	5.4%	14.96	14.96	0.0%	21.65	21.29	1.7%	Street Sweeping Only	
1263_12639_26391_26392	725.41	67.07	592.45	132.96	63.05	61.97	1.7%	28.87	28.87	0.0%	91.92	90.84	1.2%	Street Sweeping Only	
1264	56.05	0.00		56.05	42.69	39.64	7.1%	12.29	12.29	0.0%	54.98	51.93	5.5%	Catchbasin Sumps	
1265	67.22	0.00		67.22	49.28	47.29	4.0%	14.95	14.95	0.0%	64.23	62.23	3.1%	Catchbasin Sumps	
1266	4.54	0.00		4.54	4.60	4.46	3.1%	0.85	0.85	0.0%	5.46	5.31	2.7%	Street Sweeping Only	
1267	1.41	0.00		1.41	1.52	1.47	3.3%	0.23	0.23	0.0%	1.75	1.70	2.8%	Street Sweeping Only	
1268	2.06	0.00		2.06	2.21	2.14	3.3%	0.34	0.34	0.0%	2.54	2.47	2.8%	Street Sweeping Only	
1269	133.97	0.00		133.97	87.15	77.90	10.6%	20.10	20.10	0.0%	107.25	98.00	8.6%	Catchbasin Sumps	
1270	0.42	0.00		0.42	0.26	0.00	100.0%	0.07	0.00	100.0%	0.32	0.00	100.0%	Rain Garden	
1271	0.02	0.00		0.02	0.02	0.01	45.9%	0.01	0.01	0.0%	0.02	0.01	34.6%	Rain Barrel	
1272	0.18	0.00		0.18	0.10	0.00	100.0%	0.03	0.00	100.0%	0.12	0.00	100.0%	Rain Garden	
1273	138.95	0.00		138.95	99.31	94.66	4.7%	31.88	31.88	0.0%	131.20	126.54	3.5%	Catchbasin Sumps	

Basin	Total MS4 Area (acres)	Upstream Drainage Area (acres)	Exempt MS4 Area (acres)	Regulatory MS4 Area (acres)	Annual Particulate Phosphorus			Annual Filterable Phosphorus			Annual Total Phosphorus			Current Practices	Reason for Exemption
					Baseline Particulate Phosphorus (lb)	Existing Particulate Phosphorus (lb)	Percent Reduction	Baseline Dissolved Phosphorus (lb)	Existing Dissolved Phosphorus (lb)	Percent Reduction	Baseline Total Phosphorus (lb)	Existing Total Phosphorus (lb)	Percent Reduction		
1274	0.67	0.00		0.67	0.50	0.20	59.0%	0.20	0.20	0.0%	0.70	0.41	42.0%	Underground Storage	
1275	0.54	0.00		0.54	0.13	0.01	93.7%	0.05	0.00	93.7%	0.18	0.01	93.7%	Biocell	
1276	12.39	0.00		12.39	6.40	5.21	18.6%	1.89	1.89	0.0%	8.29	7.10	14.4%	Catchbasin Sumps	
1277	14.93	0.00		14.93	9.08	8.80	3.1%	3.42	3.42	0.0%	12.51	12.23	2.3%	Catchbasin Sumps	
1278	9.05	0.00	0.22	8.84	1.06	0.89	15.8%	2.46	2.46	0.0%	3.52	3.35	4.7%	Catchbasin Sumps	WisDOT/County ROW
1279	41.33	0.00		41.33	27.65	26.84	2.9%	9.34	9.34	0.0%	36.99	36.18	2.2%	Catchbasin Sumps	
1280	24.06	0.00		24.06	8.54	8.35	2.2%	2.45	2.45	0.0%	11.00	10.80	1.7%	Catchbasin Sumps	
1281	135.29	0.00		135.29	92.80	78.65	15.2%	21.11	21.11	0.0%	113.90	99.75	12.4%	Catchbasin Sumps	
1282	0.98	0.00		0.98	1.05	1.05	0.1%	0.18	0.18	0.0%	1.23	1.23	0.1%	Porous Pavement	
1283	0.43	0.00		0.43	0.46	0.15	68.0%	0.07	0.03	58.4%	0.53	0.18	66.7%	Bioretention	
1284	0.35	0.00		0.35	0.37	0.07	80.5%	0.06	0.02	73.3%	0.43	0.09	79.6%	Bioretention	
1285	0.03	0.00		0.03	0.03	0.02	42.1%	0.01	0.01	0.0%	0.04	0.02	36.2%	Rain Barrel	
1286	39.47	0.00		39.47	29.30	24.11	17.7%	6.54	6.52	0.4%	35.85	30.62	14.6%	Catchbasin Sumps	
1287	1.54	0.00		1.54	0.36	0.02	93.7%	0.11	0.01	93.7%	0.47	0.03	93.7%	Biocell	
1288	0.21	0.00		0.21	0.23	0.01	93.7%	0.03	0.00	93.7%	0.26	0.02	93.7%	Biocell	
1289	0.12	0.00		0.12	0.13	0.01	93.7%	0.02	0.00	93.7%	0.15	0.01	93.7%	Biocell	
1290	0.79	0.00		0.79	0.84	0.81	3.3%	0.13	0.13	0.0%	0.96	0.94	2.8%	Street Sweeping Only	
1291	50.80	0.00		50.80	29.41	23.51	20.1%	8.05	8.05	0.0%	37.46	31.56	15.7%	Catchbasin Sumps	
1292	0.56	0.00		0.56	0.31	0.02	93.7%	0.09	0.01	93.7%	0.40	0.02	93.7%	Biocell	
1293	0.59	0.00		0.59	0.33	0.02	93.7%	0.09	0.01	93.7%	0.42	0.03	93.7%	Biocell	
1294	1.67	0.00		1.67	0.93	0.06	93.7%	0.26	0.02	93.7%	1.19	0.07	93.7%	Biocell	
1295	0.73	0.00		0.73	0.41	0.03	93.7%	0.11	0.01	93.7%	0.52	0.03	93.7%	Biocell	
1296	1.11	0.00		1.11	0.62	0.04	93.7%	0.17	0.01	93.7%	0.79	0.05	93.7%	Biocell	
1297	0.51	0.00		0.51	0.28	0.02	93.7%	0.08	0.00	93.7%	0.36	0.02	93.7%	Biocell	
1298	0.77	0.00		0.77	0.61	0.51	15.6%	0.12	0.12	0.0%	0.72	0.63	13.1%	Catchbasin Sumps	
1299	82.34	0.00	0.12	82.23	58.15	50.59	13.0%	15.33	15.28	0.3%	73.48	65.87	10.3%	Catchbasin Sumps	WisDOT/County ROW
1300	134.58	0.00		134.58	84.74	75.82	10.5%	22.78	22.66	0.5%	107.52	98.48	8.4%	Catchbasin Sumps	
1301	7.35	0.00		7.35	5.61	1.42	74.6%	1.49	0.39	74.1%	7.10	1.81	74.5%	Dry Pond	
1302	0.05	0.00		0.05	0.03	0.00	100.0%	0.01	0.00	100.0%	0.04	0.00	100.0%	Rain Garden	
1303	0.05	0.00		0.05	0.03	0.00	100.0%	0.01	0.00	100.0%	0.03	0.00	100.0%	Rain Garden	
1304	72.57	0.00	3.79	68.77	43.59	36.46	16.4%	10.73	10.73	0.0%	54.32	47.19	13.1%	Catchbasin Sumps	WisDOT/County ROW
1305	1.09	0.00	0.27	0.82	0.88	0.73	17.3%	0.13	0.13	0.0%	1.01	0.86	15.0%	Catchbasin Sumps	WisDOT/County ROW
1306	1.06	0.00	1.06	0.00	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		WisDOT/County ROW
1307	3.54	0.00	3.12	0.42	0.45	0.41	7.2%	0.07	0.07	0.0%	0.51	0.48	6.3%	Catchbasin Sumps	WisDOT/County ROW
1308	72.34	0.00	0.58	71.76	45.86	40.64	11.4%	11.06	11.06	0.0%	56.92	51.70	9.2%	Catchbasin Sumps	WisDOT/County ROW
1309	15.80	0.00	4.66	11.14	11.97	11.58	3.3%	1.82	1.82	0.0%	13.79	13.40	2.8%	Street Sweeping Only	
1310	1.72	0.00		1.72	1.83	0.00	100.0%	0.28	0.00	100.0%	2.11	0.00	100.0%	Bioretention	
1311	69.40	0.00		69.40	38.95	31.21	19.9%	10.83	10.66	1.6%	49.79	41.86	15.9%	Catchbasin Sumps	
1312	3.94	0.00		3.94	2.27	1.95	14.0%	0.67	0.67	0.0%	2.95	2.63	10.8%	Catchbasin Sumps	
1313	209.33	0.00	59.64	149.70	98.90	97.03	1.9%	35.86	35.86	0.0%	134.76	132.89	1.4%	Street Sweeping Only	WisDOT/County ROW
1314	61.78	0.00	1.12	60.67	44.86	42.04	6.3%	9.58	9.58	0.0%	54.43	51.62	5.2%	Catchbasin Sumps	WisDOT/County ROW
1315	14.29	0.00	8.08	6.21	6.67	6.45	3.3%	1.01	1.01	0.0%	7.68	7.46	2.8%	Street Sweeping Only	WisDOT/County ROW
1316_13169	212.86	3.00	2.52	210.34	146.87	141.10	3.9%	59.14	59.14	0.0%	206.01	200.24	2.8%	Catchbasin Sumps	
1317	1.25	0.00		1.25	0.84	0.00	100.0%	0.34	0.00	100.0%	1.18	0.00	100.0%	Grass Swale	
1318	10.98	0.00		10.98	4.67	4.54	2.7%	2.00	2.00	0.0%	6.67	6.54	1.9%	Street Sweeping Only	
1319	22.35	0.00		22.35	4.55	3.78	17.0%	2.18	2.18	0.0%	6.73	5.96	11.5%	Catchbasin Sumps	
1320	113.52	0.00		113.52	81.35	78.37	3.7%	32.24	32.24	0.0%	113.58	110.61	2.6%	Catchbasin Sumps	
1321	1.10	0.00		1.10	0.81	0.80	2.3%	0.33	0.33	0.0%	1.14	1.13	1.6%	Street Sweeping Only	
1322	1.73	0.00		1.73	1.28	1.25	2.3%	0.52	0.52	0.0%	1.80	1.77	1.6%	Street Sweeping Only	
1323	0.76	0.00		0.76	0.56	0.55	2.3%	0.23	0.23	0.0%	0.79	0.78	1.6%	Street Sweeping Only	
1324	3.06	0.00		3.06	2.08	0.13	93.7%	0.77	0.05	93.7%	2.85	0.18	93.7%	Catchbasin Sumps, Biocell	
1325	0.46	0.00		0.46	0.34	0.02	93.7%	0.14	0.01	93.7%	0.48	0.03	93.7%	Biocell	
1326	1.81	0.00		1.81	1.34	0.14	89.5%	0.55	0.08	86.2%	1.89	0.22	88.6%	Grass Swale	
1327_13279	22.93	1.17	4.90	18.03	11.87	11.45	3.5%	4.55	4.55	0.0%	16.42	16.01	2.5%	Catchbasin Sumps	WisDOT/County ROW
1328_13289_13281	10.55	18.07		10.55	8.88	7.56	14.9%	2.10	2.10	0.0%	10.99	9.66	12.1%	Catchbasin Sumps	
1329	7.84	0.00	0.02	7.82	5.20	5.10	2.0%	1.83	1.83	0.0%	7.04	6.93	1.5%	Street Sweeping Only	
1330	108.81	0.00		108.81	88.47	85.84	3.0%	14.37	14.37	0.0%	102.84	100.21	2.6%	Street Sweeping Only	
1331	0.13	0.00		0.13	0.11	0.00	100.0%	0.02	0.00	100.0%	0.13	0.00	100.0%	Grass Swale	
1332	0.15	0.00		0.15	0.12	0.00	100.0%	0.02	0.00	100.0%	0.15	0.00	100.0%	Grass Swale	
1333	0.55	0.00		0.55	0.44	0.00	100.0%	0.07	0.00	100.0%	0.52	0.00	100.0%	Grass Swale	
1334	13.90	0.00		13.90	11.30	10.97	3.0%	1.84	1.84	0.0%	13.14	12.80	2.6%	Street Sweeping Only	
1335	2.83	0.00		2.83	2.30	1.99	13.3%	0.37	0.37	0.0%	2.67	2.37	11.5%	Catchbasin Sumps	
1336	31.54	0.00		31.54	25.64	24.88	3.0%	4.16	4.16	0.0%	29.81	29.04	2.6%	Street Sweeping Only	
1337	46.80	0.00		46.80	38.05	36.92	3.0%	6.18	6.18	0.0%	44.23	43.10	2.6%	Street Sweeping Only	
1338	52.01	0.00		52.01	42.29	41.03	3.0%	6.87	6.87	0.0%	49.16	47.90	2.6%	Street Sweeping Only	
1339	62.05	0.00		62.05	50.46	0.00	100.0%	8.19	0.00	100.0%	58.65	0.00	100.0%	Dry Pond	

Basin	Total MS4 Area (acres)	Upstream Drainage Area (acres)	Exempt MS4 Area (acres)	Regulatory MS4 Area (acres)	Annual Particulate Phosphorus			Annual Filterable Phosphorus			Annual Total Phosphorus			Current Practices	Reason for Exemption
					Baseline Particulate Phosphorus (lb)	Existing Particulate Phosphorus (lb)	Percent Reduction	Baseline Dissolved Phosphorus (lb)	Existing Dissolved Phosphorus (lb)	Percent Reduction	Baseline Total Phosphorus (lb)	Existing Total Phosphorus (lb)	Percent Reduction		
1340_1341_1342_1343_1344_1345_1346_1347_1348_13489_1349_13499_13419_13410	438.06	45.01	4.50	433.56	345.27	127.70	63.0%	73.78	42.20	42.8%	419.04	169.90	59.5%	Wet Pond, Dry Pond, Catchbasin Sumps, Biocells	WisDOT/County ROW
1350_13509	5.26	36.60	3.18	2.08	1.69	1.62	3.8%	0.27	0.27	0.0%	1.96	1.90	3.2%	Street Sweeping Only	WisDOT/County ROW
1351	11.66	0.00	10.62	1.04	0.87	0.84	3.0%	0.14	0.14	0.0%	1.01	0.99	2.6%	Street Sweeping Only	WisDOT/County ROW
1352_13529	27.17	48.74	6.07	21.10	20.60	19.10	7.3%	3.23	3.23	0.0%	23.83	22.34	6.3%	Catchbasin Sumps	WisDOT/County ROW
1353	5.74	0.00	1.26	4.48	0.51	0.48	5.4%	1.29	1.29	0.0%	1.80	1.77	1.5%	Street Sweeping Only	WisDOT/County ROW
1354	1.21	0.00		1.21	0.14	0.13	5.4%	0.35	0.35	0.0%	0.48	0.48	1.5%	Street Sweeping Only	
1355	1.71	0.00	0.00	1.71	0.19	0.18	5.4%	0.49	0.49	0.0%	0.68	0.67	1.5%	Street Sweeping Only	
1356	0.31	0.00		0.31	0.04	0.03	5.4%	0.09	0.09	0.0%	0.12	0.12	1.5%	Street Sweeping Only	
1357	0.73	0.00		0.73	0.08	0.08	5.5%	0.12	0.12	0.0%	0.20	0.19	2.3%	Street Sweeping Only	
1358	30.40	0.00	0.19	30.21	26.06	25.82	0.9%	4.42	4.42	0.0%	30.48	30.24	0.8%	Street Sweeping Only	WisDOT/County ROW
1359_13599	27.37	173.81	1.89	25.48	22.53	22.14	1.8%	3.78	3.78	0.0%	26.31	25.92	1.5%	Street Sweeping Only	WisDOT/County ROW
1360	6.14	0.00	0.08	6.06	5.23	2.97	43.2%	0.89	0.53	40.6%	6.11	3.50	42.8%	Bioretention	WisDOT/County ROW
1361	0.40	0.00	0.04	0.36	0.31	0.02	93.7%	0.05	0.00	93.7%	0.36	0.02	93.7%	Biocell	WisDOT/County ROW
1362	0.11	0.00		0.11	0.09	0.01	93.7%	0.02	0.00	93.7%	0.11	0.01	93.7%	Biocell	WisDOT/County ROW
1363	0.22	0.00	0.00	0.22	0.23	0.01	93.7%	0.03	0.00	93.7%	0.26	0.02	93.7%	Biocell	
1365	4.00	0.00		4.00	0.57	0.55	4.6%	0.99	0.99	0.0%	1.56	1.53	1.7%	Street Sweeping Only	
1366	3.12	0.00		3.12	0.35	0.33	5.5%	0.70	0.70	0.0%	1.05	1.03	1.8%	Street Sweeping Only	
1367_13679	71.01	88.31	3.13	67.87	39.79	17.18	56.8%	19.50	19.44	0.3%	59.29	36.62	38.2%	Catchbasin Sumps	WisDOT/County ROW
1368	4.30	0.00		4.30	3.50	3.43	2.1%	1.52	1.52	0.0%	5.02	4.94	1.4%	Street Sweeping Only	
1369_13699	184.06	224.90		184.06	115.02	112.10	2.5%	56.93	56.93	0.0%	171.96	169.03	1.7%	Catchbasin Sumps	
1370	9.10	0.00	0.01	9.09	6.13	5.98	2.5%	2.36	2.36	0.0%	8.49	8.34	1.8%	Street Sweeping Only	
1371_13710_13719	181.16	90.42	14.99	166.17	58.54	55.03	6.0%	40.77	40.77	0.0%	99.30	95.80	3.5%	Catchbasin Sumps	WisDOT/County ROW
1372_13729	7.01	6.36		7.01	4.00	3.28	17.9%	1.79	1.79	0.0%	5.78	5.07	12.4%	Catchbasin Sumps	
1373	13.69	0.00	0.07	13.62	7.88	7.72	2.0%	3.55	3.55	0.0%	11.43	11.27	1.4%	Street Sweeping Only	
1374	11.81	0.00		11.81	9.36	9.19	1.8%	3.06	3.06	0.0%	12.42	12.25	1.3%	Street Sweeping Only	WisDOT/County ROW
1375	20.09	0.00		20.09	6.71	5.23	22.1%	3.82	3.82	0.0%	10.53	9.04	14.1%	Catchbasin Sumps	
1376	2.84	0.00		2.84	1.58	1.55	2.1%	0.71	0.71	0.0%	2.29	2.26	1.4%	Street Sweeping Only	
1377_13779	28.00	4.04	7.89	20.11	10.18	9.80	3.8%	4.84	4.84	0.0%	15.02	14.63	2.6%	Street Sweeping Only	WisDOT/County ROW
1378_13789	43.56	0.00	0.05	43.51	7.90	7.12	9.8%	7.67	7.43	3.2%	15.58	14.55	6.6%	Dry Pond	WisDOT/County ROW
1379	0.25	0.00		0.25	0.14	0.07	48.6%	0.06	0.03	44.2%	0.20	0.11	47.2%	Bioretention	
1380	0.59	0.00	0.02	0.56	0.32	0.25	21.8%	0.14	0.12	15.6%	0.46	0.37	19.9%	Bioretention	
1381_13811_13812_13813_13814_13819	44.34	78.17	10.36	33.97	16.04	15.53	3.2%	8.12	8.12	0.0%	24.16	23.66	2.1%	Street Sweeping Only	WisDOT/County ROW
1383	0.10	0.00		0.10	0.09	0.09	1.8%	0.02	0.02	0.0%	0.11	0.11	1.5%	Street Sweeping Only	
1384	18.98	0.00	3.72	15.26	1.78	1.56	12.6%	3.69	3.69	0.0%	5.48	5.25	4.1%	Catchbasin Sumps	WisDOT/County ROW
1385	1.60	0.00		1.60	0.95	0.95	0.4%	0.35	0.35	0.0%	1.30	1.30	0.3%	Street Sweeping Only	
1386	1.03	0.00		1.03	1.10	1.06	3.2%	0.17	0.17	0.0%	1.27	1.23	2.8%	Street Sweeping Only	
1387	3.65	0.00		3.65	3.62	3.50	3.3%	0.62	0.62	0.0%	4.23	4.12	2.8%	Street Sweeping Only	
1388	7.39	0.00		7.39	4.80	4.64	3.3%	1.41	1.41	0.0%	6.21	6.05	2.5%	Street Sweeping Only	
1389	9.64	0.00		9.64	8.25	7.90	4.3%	1.95	1.95	0.0%	10.20	9.85	3.5%	Catchbasin Sumps	
1390	1.03	0.00		1.03	0.61	0.49	20.7%	0.20	0.20	0.0%	0.81	0.69	15.6%	Catchbasin Sumps	
1391	1.45	0.00		1.45	0.31	0.00	100.0%	0.10	0.00	100.0%	0.42	0.00	100.0%	Bioretention	
1392	0.14	0.00		0.14	0.10	0.10	2.3%	0.04	0.04	0.0%	0.14	0.14	1.6%	Street Sweeping Only	
1393	13.65	0.00		13.65	6.61	6.06	8.4%	2.08	2.08	0.0%	8.69	8.13	6.4%	Catchbasin Sumps	
1394	10.42	0.00		10.42	5.03	4.21	16.3%	1.59	1.59	0.0%	6.62	5.79	12.4%	Catchbasin Sumps	
1395	1.53	0.00	1.53	0.00	0.00	0.00	0.0%	0.00	0.00	0.0%	0.00	0.00	0.0%		WisDOT/County ROW
1396	0.09	0.00		0.09	0.09	0.08	2.7%	0.02	0.02	0.0%	0.10	0.10	2.3%	Street Sweeping Only	
1397	4.07	0.00		4.07	3.30	3.24	2.1%	1.42	1.42	0.0%	4.73	4.66	1.4%	Street Sweeping Only	
1398	1.04	0.00	1.04	0.00	0.00	0.00	0.0%	0.00	0.00	0.0%	0.0%	0.0%	0.0%		WisDOT/County ROW
1399	0.03	0.00		0.03	0.02	0.01	45.1%	0.01	0.01	0.0%	0.03	0.02	33.9%	Rain Barrel	
1400	0.04	0.00		0.04	0.03	0.02	39.2%	0.01	0.01	0.0%	0.04	0.03	29.5%	Rain Barrel	
1401	0.05	0.00		0.05	0.04	0.02	33.0%	0.01	0.01	0.0%	0.05	0.04	24.8%	Rain Barrel	
1402	0.07	0.00		0.07	0.05	0.03	34.7%	0.02	0.02	0.0%	0.06	0.05	26.1%	Rain Barrel	
1403	0.30	0.00		0.30	0.20	0.04	78.9%	0.06	0.01	76.2%	0.26	0.06	78.3%	Bioretention	
1404	0.48	0.00		0.48	0.31	0.17	45.7%	0.09	0.08	9.0%	0.40	0.25	37.3%	Bioretention	
1405	0.09	0.00		0.09	0.05	0.00	98.4%	0.01	0.00	97.5%	0.07	0.00	98.2%	Rain Garden	
1406	0.03	0.00		0.03	0.02	0.01	40.8%	0.01	0.01	0.0%	0.03	0.02	30.7%	Rain Barrel	
1407	0.05	0.00		0.05	0.02	0.00	100.0%	0.01	0.00	100.0%	0.03	0.00	100.0%	Rain Garden	
1508	0.02	0.00		0.02	0.01	0.01	46.9%	0.00	0.00	0.0%	0.02	0.01	35.3%	Rain Barrel	
10018	232.74	0.00	232.74												Riparian
10028	594.89	0.00	594.89												Riparian
10038	826.29	0.00	826.29												Riparian

Basin	Total MS4 Area (acres)	Upstream Drainage Area (acres)	Exempt MS4 Area (acres)	Regulatory MS4 Area (acres)	Annual Particulate Phosphorus			Annual Filterable Phosphorus			Annual Total Phosphorus			Current Practices	Reason for Exemption
					Baseline Particulate Phosphorus (lb)	Existing Particulate Phosphorus (lb)	Percent Reduction	Baseline Dissolved Phosphorus (lb)	Existing Dissolved Phosphorus (lb)	Percent Reduction	Baseline Total Phosphorus (lb)	Existing Total Phosphorus (lb)	Percent Reduction		
10048	227.04	0.00	227.04											Riparian	
10058	142.35	0.00	142.35											Riparian	
10068	107.93	0.00	107.93											Riparian	
10078	99.82	0.00	99.82											Riparian	
10088	1.94	0.00	1.94											Riparian	
10098	35.54	0.00	35.54											Riparian	
10128	22.55	0.00	22.55											Riparian	
10138	46.76	0.00	46.76											Riparian	
10148	23.87	0.00	23.87											Riparian	
10158	29.08	0.00	29.08											Riparian	
10168	4.16	0.00	4.16											Riparian	
10178	21.40	0.00	21.40											Riparian	
10188	193.65	0.00	193.65											Riparian	
10198	4.63	0.00	4.63											Riparian	
10208	2.24	0.00	2.24											Riparian	
10218	71.53	0.00	71.53											Riparian	
10228	61.99	0.00	61.99											Riparian	
10238	54.83	0.00	54.83											Riparian	
10248	1.37	0.00	1.37											Riparian	
10258	35.70	0.00	35.70											Riparian	
10268	2.00	0.00	2.00											Riparian	
10278	1.40	0.00	1.40											Riparian	
10288	0.94	0.00	0.94											Riparian	
10298	0.72	0.00	0.72											Riparian	
10308	0.66	0.00	0.66											Riparian	
10318	0.80	0.00	0.80											Riparian	
10328	0.62	0.00	0.62											Riparian	
10338	0.82	0.00	0.82											Riparian	
10348	0.75	0.00	0.75											Riparian	
10358	0.34	0.00	0.34											Riparian	
10368	1.13	0.00	1.13											Riparian	
10378	0.12	0.00	0.12											Riparian	
10388	0.20	0.00	0.20											Riparian	
10398	0.41	0.00	0.41											Riparian	
10408	0.13	0.00	0.13											Riparian	
10418	0.71	0.00	0.71											Riparian	
10428	5.11	0.00	5.11											Riparian	
10438	0.17	0.00	0.17											Riparian	
10448	0.15	0.00	0.15											Riparian	
10458	0.18	0.00	0.18											Riparian	
10468	0.21	0.00	0.21											Riparian	
10478	0.83	0.00	0.83											Riparian	
10481	0.20	0.00	0.20											Riparian	
10488	0.13	0.00	0.13											Riparian	
10498	0.29	0.00	0.29											Riparian	
10508	0.52	0.00	0.52											Riparian	
10518	30.77	0.00	30.77											Riparian	
10528	25.20	0.00	25.20											Riparian	
10538	23.75	0.00	23.75											Riparian	
10548	39.06	0.00	39.06											Riparian	
10558	523.06	0.00	523.06											Riparian	
10568	16.58	0.00	16.58											Riparian	
10578	8.38	0.00	8.38											Riparian	
10588	7.86	0.00	7.86											Riparian	
10598	5.22	0.00	5.22											Riparian	
10608	0.55	0.00	0.55											Riparian	
10618	4.44	0.00	4.44											Riparian	
10628	20.43	0.00	20.43											Riparian	
10638	514.96	0.00	514.96											Riparian	
10648	11.11	0.00	11.11											Riparian	
10658	12.01	0.00	12.01											Riparian	
10668	0.60	0.00	0.60											Riparian	
10678	14.07	0.00	14.07											Riparian	
10688	136.31	0.00	136.31											Riparian	
10698	177.04	0.00	177.04											Riparian	
10708	22.49	0.00	22.49											Riparian	
10718	17.91	0.00	17.91											Riparian	
10728	12.00	0.00	12.00											Riparian	
10738	30.43	0.00	30.43											Riparian	

Basin	Total MS4 Area (acres)	Upstream Drainage Area (acres)	Exempt MS4 Area (acres)	Regulatory MS4 Area (acres)	Annual Particulate Phosphorus			Annual Filterable Phosphorus			Annual Total Phosphorus			Current Practices	Reason for Exemption
					Baseline Particulate Phosphorus (lb)	Existing Particulate Phosphorus (lb)	Percent Reduction	Baseline Dissolved Phosphorus (lb)	Existing Dissolved Phosphorus (lb)	Percent Reduction	Baseline Total Phosphorus (lb)	Existing Total Phosphorus (lb)	Percent Reduction		
10748	4.97	0.00	4.97												Riparian
10758	7.01	0.00	7.01												Riparian
10768	1.11	0.00	1.11												Riparian
10778	16.20	0.00	16.20												Riparian
10788	3.33	0.00	3.33												Riparian
10798	12.54	0.00	12.54												Riparian
10808	8.65	0.00	8.65												Riparian
	13,729.7	5,123.4	5,360.1	8,369.6	5,218.7	4,304.1	17.5%	1,574.1	1,506.7	4.3%	6,792.7	5,810.6	14.5%		Reason for Exemption

C.01 WQT AND WAM

WQT and WAM are both only available once an MS4 has met permit requirements and is under jurisdiction of a TMDL. Until a TMDL is in place, the sections herein are not applicable, but should be kept in mind for the future.

A. WQT

WQT (or pollutant trading) is a method for municipalities and industrial WPDES permit holders (point sources) to establish compliance with water quality-based effluent limitations (WQBELs) and TMDLs. WQT generally involves a point source facing relatively high pollutant reduction costs compensating another party to achieve less costly pollutant reduction with the same or greater water quality benefit. WQT thresholds also apply. For example, in a TMDL watershed, credit generators need to meet their own load (NPS) or wasteload (point) allocation before generating long-term credits. However, interim credits may be generated if the credit threshold is not yet met. The duration of interim credits equals the lifespan of the management practice employed to reduce pollutant loads, or 5 years, whichever is less. Once interim credits have expired, new interim credits or long-term credits need to be used. Overall, WQT provides point sources with the flexibility to acquire pollutant reductions from other sources in the watershed to offset their point source load so that they will comply with their own permit requirements. WQT is not a mandatory program or a regulatory requirement, but instead, is a market-based option that may enable some industrial and municipal facilities to meet regulatory requirements more cost-effectively. A WPDES permit holder can be a WQT credit generator or user.

As stated in the WDNR's *A Water Quality Trading How To Manual*, a few benefits to WQT include:

1. Permit compliance through WQT may be economically preferable to other compliance options.
2. New and expanding point source discharges can use WQT to develop new economic opportunities in a region while still meeting water quality goals.
3. Permittees, and the point sources and NPSs that work cooperatively with them, can demonstrate their commitment to the community and to the environment by working together to protect and restore local water resources.

Internal MS4 WQT (from upstream to downstream reach) has been used across the state to help achieve TMDL compliance. MS4s can trade excess pollutant reduction from upstream to downstream reaches within their own MS4 when a MS4 is both a TSS or TP credit generator and TSS or TP credit user. A formal trade agreement is not required by the WDNR for the MS4 to use the credit. The concept of internal MS4 pollutant sharing between MS4s on a 1:1 basis (i.e., no trade ratio is applied) is allowed under Chapter NR 151.13(2)(b)3.b WAC, and the WDNR has elected to not require a minimum credit adjustment for MS4s sharing.

It should also be noted that the 2019 Wisconsin Act 151 created the framework for a third-party WQT clearinghouse. The clearinghouse is touted as removing some impediments to WQT under the current framework. In March 2023, Wisconsin Clearinghouse, LLC, a subsidiary of Resource Environmental Solutions (RES), released the Wisconsin WQT Clearinghouse through a contract with the Wisconsin Department of Administration (WDOA) with oversight by the WDNR. More information is available on the wiclearinghouse.org Web site. Wisconsin Clearinghouse, LLC will allow for a streamlined system to buy and sell water quality credits. The credits are generated from agricultural BMP installation (such as filter strips) and natural restoration projects (such as streambank restoration). The municipality can submit a request through Wisconsin Clearinghouse, LLC and will provide a package of projects that will provide the credits and the cost to buy them.

B. WAM

WAM is a phosphorus and TSS compliance option available to WWTPs and their partners. It may be used to meet a WQBEL developed, in accordance with WAC Chapter NR 217.13, or a WQBEL resulting from an approved TMDL, in accordance with Wisconsin Statute 283.13(7). Overall, WAM focuses on compliance with phosphorus criteria (meeting an acceptable in-stream phosphorus concentration) as determined by in-stream monitoring, modeling, or other appropriate information. WAM initiatives must be led by a WWTP, in accordance with WAC NR 217.18; otherwise, it is not a compliance option for MS4s.

As stated in the WDNR's *Adaptive Management Technical Handbook*, benefits to WAM include:

1. Permit compliance through WAM may be economically preferable to other compliance options.
2. Point sources, and the NPSs that work cooperatively with them, can demonstrate their commitment to the community and to the environment by protecting and restoring local water resources.
3. Dischargers are given less restrictive interim phosphorus limits while they work to improve water quality under WAM; these less restrictive phosphorus limits can be permanent if WAM is successful (water quality criteria is met).
4. WAM provides flexibility for permittees and their partners to learn from each other and adapt as experience is gained. The WAM option can extend during a 15-year time frame (up to three 5-year permit terms). This time is given so the permittee can install phosphorus reduction practices, create new partnerships, and measure success.

In the City's case, WAM could have multiple benefits such as improving the Mississippi River's, Black River's, and La Crosse River's water quality.

C. WQT versus WAM

WQT and WAM are similar but are not the same. WQT is used to comply with WQBELs and TMDLs for a range of pollutants and focuses on offsetting phosphorus and TSS from a discharge to comply with a permit limit. WAM focuses on achieving a water quality criterion for phosphorus and TSS in the surface water. In-stream monitoring and annual reports are usually required with WAM, although modeling can be used instead of monitoring in some cases. WQT requires the practices used to generate reductions to be established before the phosphorus limit takes effect and a relatively short (3 to 4 years) compliance schedule is typically granted for this. WAM allows permittees to reduce phosphorus and TSS during three terms (15 years) of the permit. WQT and WAM take credit for phosphorus and TSS reductions within the watershed. Both also allow point source dischargers (including WWTPs and MS4s) to work with NPS dischargers (i.e., the agricultural community). WQT can be difficult in TMDL watersheds because the credit threshold for point sources and NPSs (agricultural) can be low, making it difficult to find long-term credits.

D. WPDES Permit Requirements and General Conditions for WQT

Before WQT can occur, the trade must be formalized through a written agreement (trade agreement) between trading partners, in accordance with s.283.84(1) Wisconsin Statutes as stated in ss.283.84 (3r) and (4), Wisconsin Statutes, the credit user's WPDES discharge permit and, if one is required, the credit generator's WPDES discharge permit, must be issued, reissued, or modified to incorporate appropriate language and enable trading to be implemented (see Figure C.01-1). The permit must include terms and conditions related to the trade agreement before trading of credits may occur. Every trade will have a trade ratio, which is based on the uncertainties associated with WQT due to several factors relating to site-specific conditions of the trade and the trade location. It is ideal for trade ratios to be as small as possible to make WQT economically efficient. The approach on how to calculate and reduce trade ratios is provided in the WDNR guidance document (*Guidance for Implementing WQT in WPDES Permits*, June 1, 2020) and appears to be continually evolving as trades are developed and reviewed by the WDNR.

Guidance documents also require submittal of a WQT Notice of Intent (NOI) and management practice registration. There may be a possibility to trade at a trade ratio as low as 1.1:1, if within the same TMDL reach and trading occurs between point sources.

Figure C.01-1 Timeline and Process to Begin Using WQT to Demonstrate Compliances with WQBELs

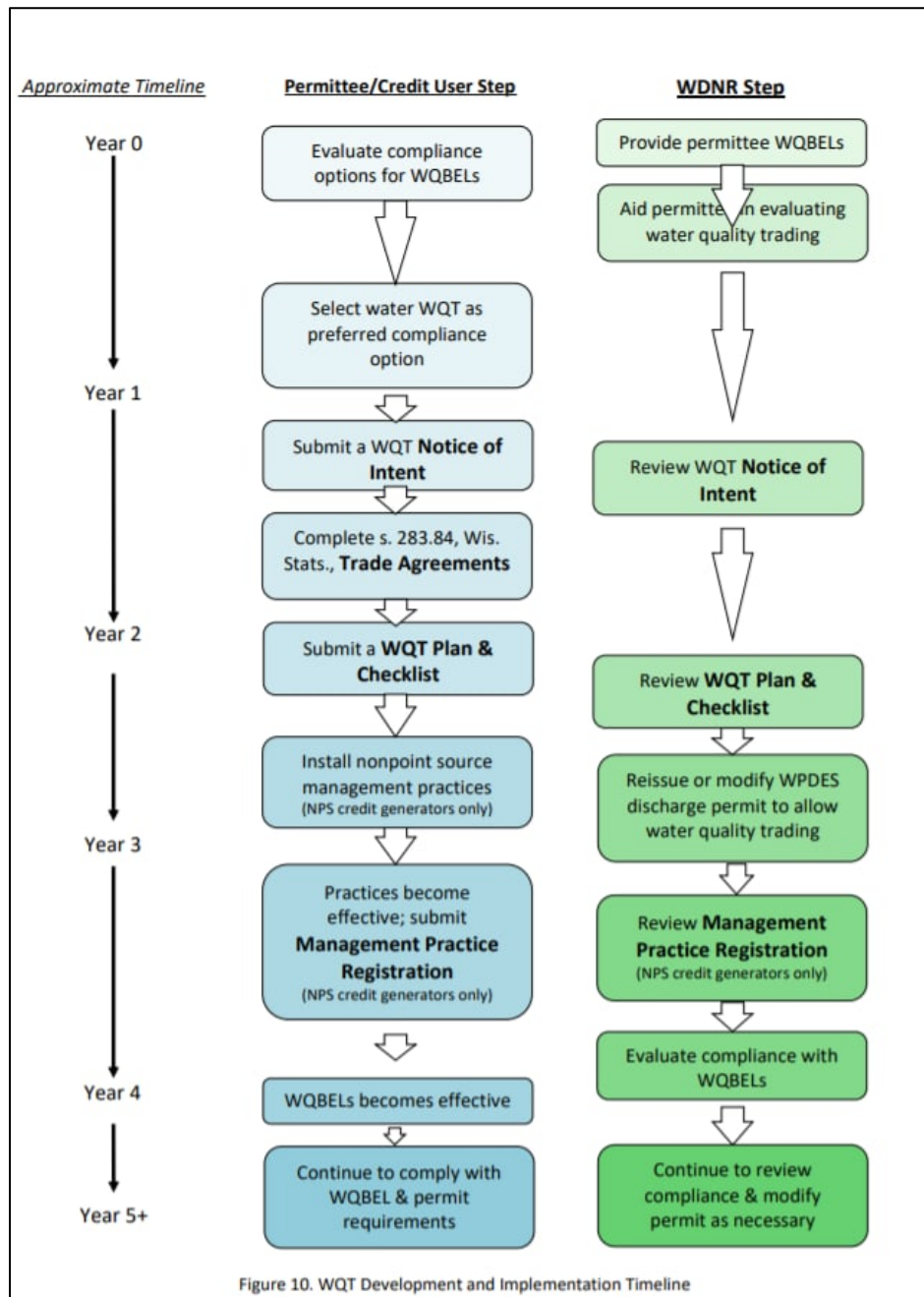


Figure 10. WQT Development and Implementation Timeline

Source: Figure 10, *Guidance for Implementing WQT in WPDES Permits*, WDNR, 2020

C.02 IDENTIFICATION OF POTENTIAL WQT PARTNERS

WQT may occur with MS4s or point dischargers downstream or upstream if they are in the City’s Hydrologic Unit Code (HUC) 12 (070400060103, 070400060403, 070400060502, 070600010501, and 070600010504) area as shown in Figure C.02-1. Potential nearby MS4 and point source trading partners that may be able to generate credits are listed in Table C.02-1.

Facility	HUC 12	Available TSS or TP for WQT (lb)
MS4s		
Village of West Salem	070400060402 070400060310	To Be Determined
Town of Campbell	070400060103 070400060502	To Be Determined
La Crosse County	To Be Determined	To Be Determined
Town of Medary	070400060403	To Be Determined
City of Onalaska	070400060403 070400060103 070400060502	To Be Determined
Town of Shelby	070400060502 070600010501	To Be Determined
WWTPs		
La Crosse WWTF	070400060502	To Be Determined
Others To Be Determined		To Be Determined
Private Point Dischargers		
To Be Determined	Varies	To Be Determined

Table C.02-1 Potential Trading Partners

C.03 CITY WWTP WQT POTENTIAL

As of June 2024, the WWTP has designed and nearly completed construction of a cloth disc filter configured with chemical addition to aid in phosphorus removal to the WWTP’s 0.10-milligram per liter (mg/L) effluent standard. Commissioning of this WWTP will occur during the third quarter of 2024 with optimization to follow. Full-scale testing performed during the planning phase demonstrated that the 0.10-mg/L effluent phosphorus limit was achievable and, therefore, the WWTP does not have immediate plans to supplement treatment through WQTs. WWTP staff did recognize, however, that future conditions might differ from pilot conditions and/or there could be reasons such as periodic treatment issues or chemical costs where trades could be valuable with the WWTP being a potential buyer. For context, if the WWTP staff were able to more easily or efficiently reach a typical effluent quality of 0.12 mg/L, staff may then find value in pursuing a trade to represent the 0.02 mg/L that staff may discharge above the limit. In this scenario, WWTP staff would be looking for approximately 1.7 pounds of phosphorus per day or approximately 610 lb of phosphorus per year based on typical flows of 10 MGD. This hypothetical situation is offered for approximate scale and does not reflect trade ratios that would need to be accounted for if trades were to be identified. At the time of this report, WWTP staff believe that the on-going capital improvements would satisfy the necessary phosphorus

removal and staff would prefer to avoid the need to incorporate trades into their compliance options; therefore, greater detail is not merited at this time.

WWTP staff do not believe that there is a situation where the WWTP would become a seller in a phosphorus trade because capital improvements were planned around the 0.10-mg/L limit; therefore, achieving an effluent quality considerably lower to create tradeable phosphorus quantities is not considered a viable option.

C.04 AGRICULTURAL LANDS WQT POTENTIAL

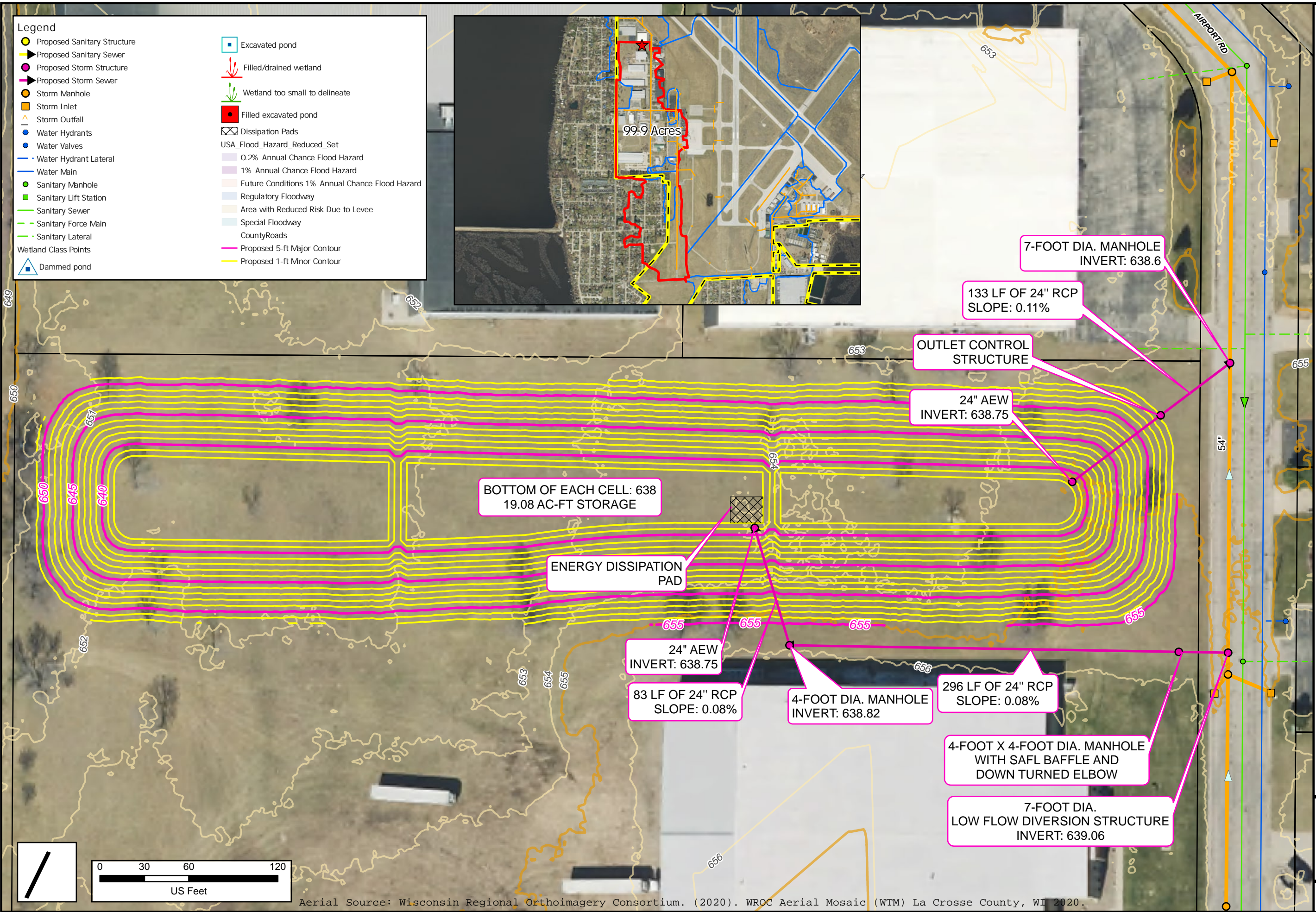
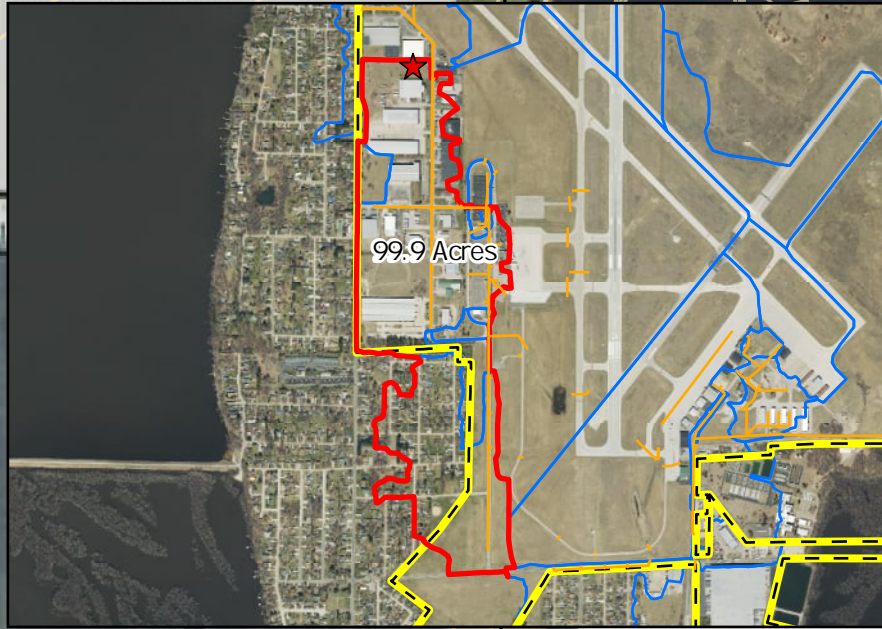
WQT may also occur with agricultural producers upstream of the City, as described previously and shown in Figure C.02-1. There appear to be significant opportunities for agricultural WQT using buffer strips, cover crops, cropping, tillage, and in-field practices. The cost for agricultural WQT is approximately \$150 per pound TP on a 20-year present worth basis. This is the cost that was used in the generation of the alternative analysis cost for this study.

C.05 WAM POTENTIAL

WAM does not require a trade ratio, and TMDL credit thresholds do not apply. The goal is to meet water quality standards at the outlet of the HUC 12 or TMDL reach, so surface water monitoring for TP would be required in the Mississippi River. The cost of WAM can be budgeted at approximately \$73.50 to \$136.50/lb TP reduced on a 20-year present worth basis. This assumes some cost-share (grant) dollars would be available from the United States Department of Agriculture, Natural Resources Conservation Service, and other programs, and that the City will provide some technical and outreach assistance. Again, a WAM program would need to be led by one or more local WWTPs. At this time, Strand is not aware of WAM being pursued by the City's WWTP.

APPENDIX D
ALTERNATIVES ANALYSIS FIGURES

- Legend**
- Proposed Sanitary Structure
 - Proposed Sanitary Sewer
 - Proposed Storm Structure
 - Proposed Storm Sewer
 - Storm Manhole
 - Storm Inlet
 - Storm Outfall
 - Water Hydrants
 - Water Valves
 - Water Hydrant Lateral
 - Water Main
 - Sanitary Manhole
 - Sanitary Lift Station
 - Sanitary Sewer
 - Sanitary Force Main
 - Sanitary Lateral
 - Wetland Class Points
 - Dammed pond
 - Excavated pond
 - Filled/drained wetland
 - Wetland too small to delineate
 - Filled excavated pond
 - Dissipation Pads
 - USA_Flood_Hazard_Reduced_Set
 - 0.2% Annual Chance Flood Hazard
 - 1% Annual Chance Flood Hazard
 - Future Conditions 1% Annual Chance Flood Hazard
 - Regulatory Floodway
 - Area with Reduced Risk Due to Levee
 - Special Floodway
 - CountyRoads
 - Proposed 5-ft Major Contour
 - Proposed 1-ft Minor Contour



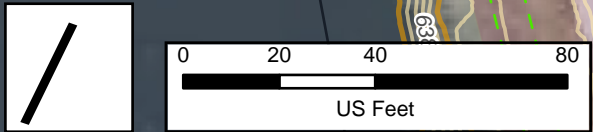
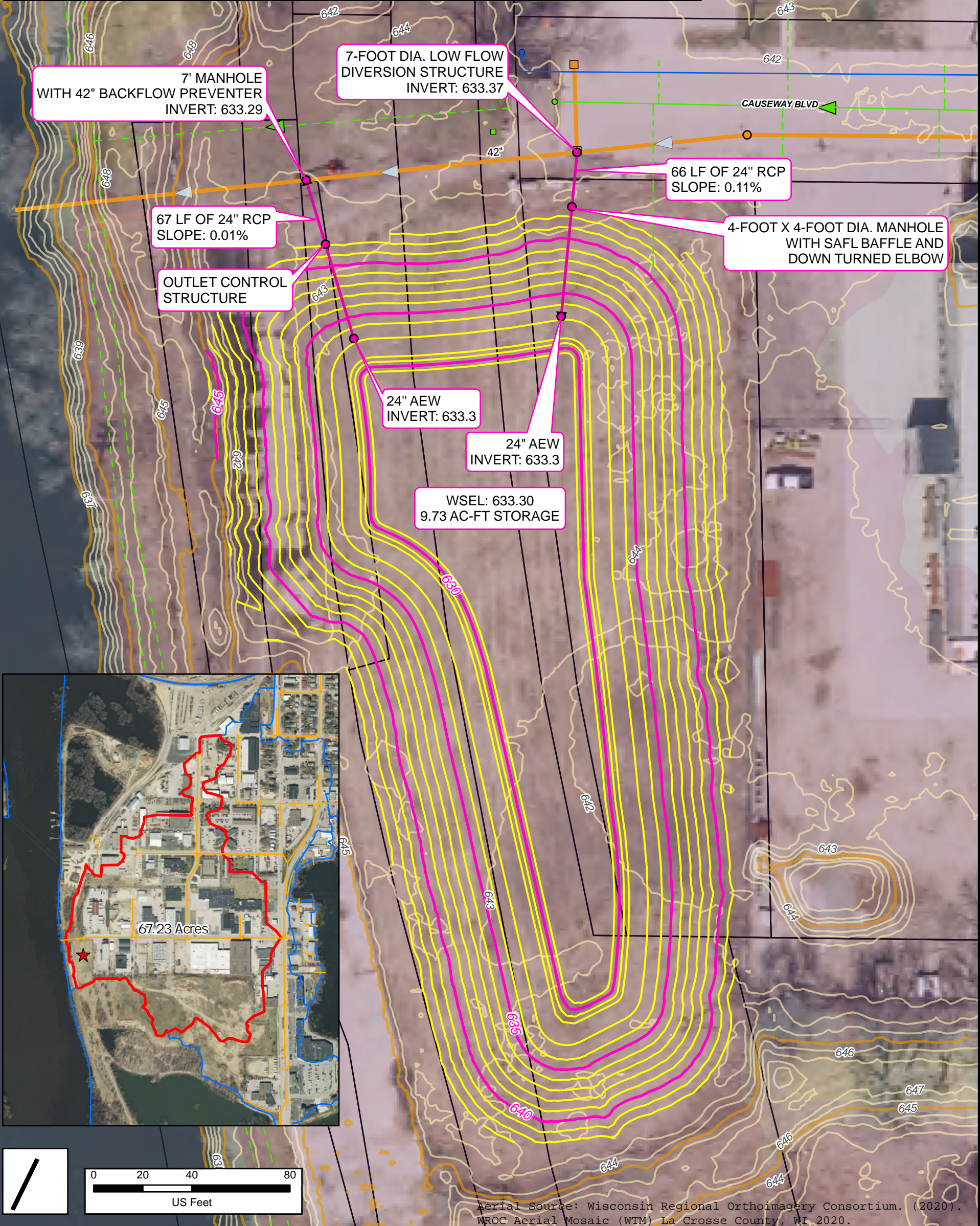
AIRPORT ROAD BIORETENTION BASIN
 STORMWATER MANAGEMENT PLAN UPDATE
 CITY OF LA CROSSE
 LA CROSSE COUNTY, WISCONSIN



FIGURE D-1
4638.002

Aerial Source: Wisconsin Regional Orthoimagery Consortium. (2020). WROC Aerial Mosaic (WTM) La Crosse County, WI 2020.

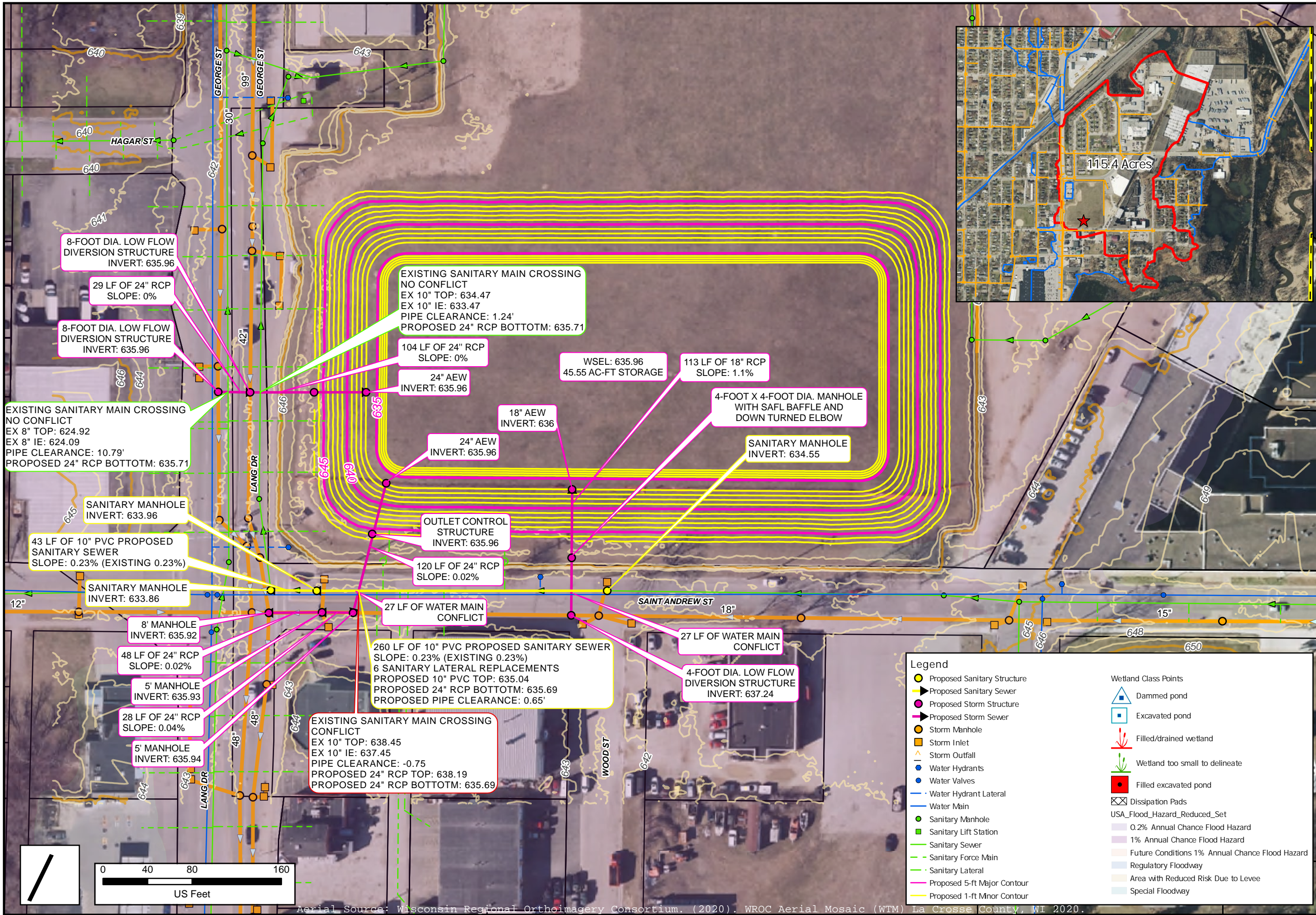
Legend					
	Proposed Sanitary Structure		Sanitary Lift Station		Wetland too small to delineate
	Proposed Sanitary Sewer		Sanitary Sewer		Filled excavated pond
	Proposed Storm Structure		Sanitary Force Main		Dissipation Pads
	Proposed Storm Sewer		Sanitary Lateral		USA_Flood_Hazard_Reduced_Set
	Storm Manhole		Proposed 5-ft Major Contour		0.2% Annual Chance Flood Hazard
	Storm Inlet		Proposed 1-ft Minor Contour		1% Annual Chance Flood Hazard
	Storm Outfall		Wetland Class Points		Future Conditions 1% Annual Chance Flood Hazard
	Water Hydrants		Dammed pond		Regulatory Floodway
	Water Valves		Excavated pond		Area with Reduced Risk Due to Levee
	Water Hydrant Lateral		Filled/draind wetland		Special Floodway
	Water Main				
	Sanitary Manhole				



Aerial Source: Wisconsin Regional Orthoimagery Consortium. (2020). WROC Aerial Mosaic (WTM) La Crosse County, WI 2020.

CAUSEWAY BOULEVARD WET DETENTION BASIN

STORMWATER MANAGEMENT PLAN UPDATE
CITY OF LA CROSSE
LA CROSSE COUNTY, WISCONSIN



SAINT ANDREW STREET WET DETENTION BASIN

STORMWATER MANAGEMENT PLAN UPDATE
CITY OF LA CROSSE
LA CROSSE COUNTY, WISCONSIN

Legend

- Proposed Sanitary Structure
- ▶ Proposed Sanitary Sewer
- Proposed Storm Structure
- ▶ Proposed Storm Sewer
- Storm Manhole
- Storm Inlet
- ▲ Storm Outfall
- Water Hydrants
- Water Valves
- Water Hydrant Lateral
- Water Main
- Sanitary Manhole
- Sanitary Lift Station
- Sanitary Sewer
- Sanitary Force Main
- Sanitary Lateral
- Proposed 5-ft Major Contour
- Proposed 1-ft Minor Contour

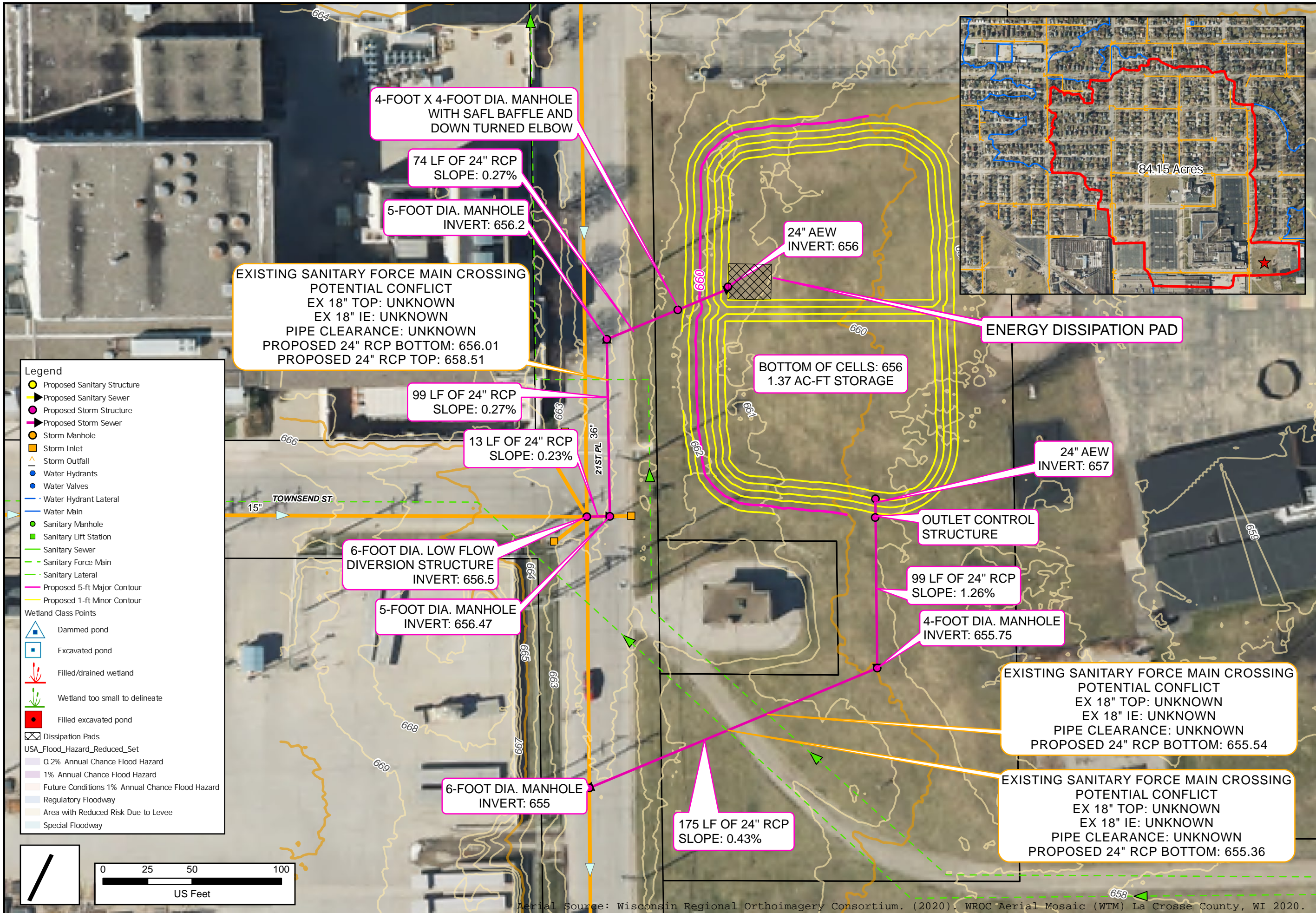
Wetland Class Points

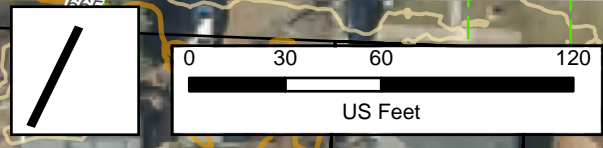
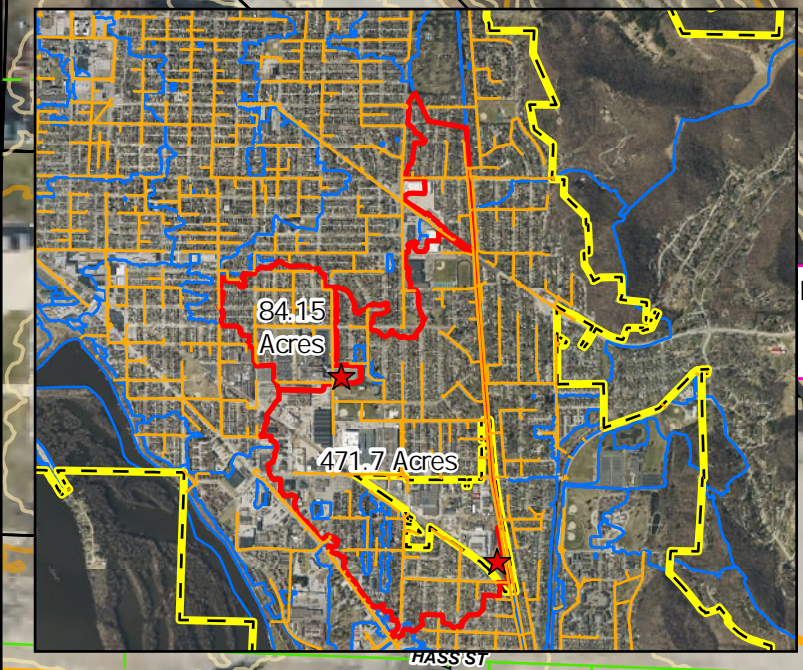
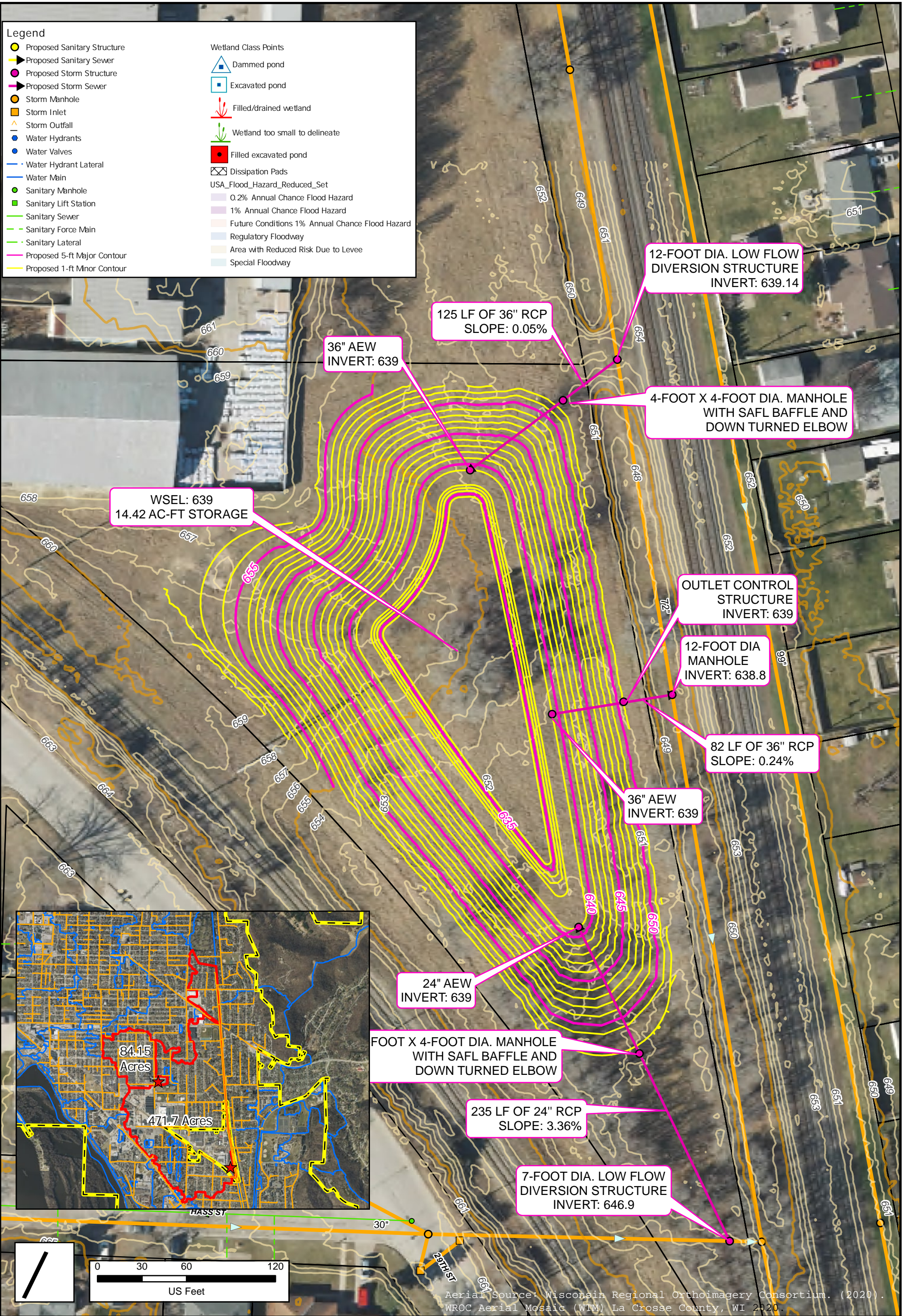
- ▲ Dammed pond
- Excavated pond
- Filled/draind wetland
- Wetland too small to delineate
- Filled excavated pond
- Dissipation Pads

USA_Flood_Hazard_Reduced_Set

- 0.2% Annual Chance Flood Hazard
- 1% Annual Chance Flood Hazard
- Future Conditions 1% Annual Chance Flood Hazard
- Regulatory Floodway
- Area with Reduced Risk Due to Levee
- Special Floodway

FIGURE D-3
4638.002





Aerial Source: Wisconsin Regional Orthoimagery Consortium. (2020).
 WROC Aerial Mosaic (WIM) La Crosse County, WI 2020.

- Legend**
- Proposed Sanitary Structure
 - ▶ Proposed Sanitary Sewer
 - Proposed Storm Structure
 - ▶ Proposed Storm Sewer
 - Storm Manhole
 - Storm Inlet
 - ▲ Storm Outfall
 - Water Hydrants
 - Water Valves
 - Water Hydrant Lateral
 - Water Main
 - Sanitary Manhole
 - Sanitary Lift Station
 - Sanitary Sewer
 - Sanitary Force Main
 - Sanitary Lateral
 - Proposed 5-ft Major Contour
 - Proposed 1-ft Minor Contour
- Wetland Class Points**
- ▲ Dammed pond
 - Excavated pond
 - ▲ Filled/draind wetland
 - ▲ Wetland too small to delineate
 - Filled excavated pond
 - Dissipation Pads
- USA_Flood_Hazard_Reduced_Set**
- 0.2% Annual Chance Flood Hazard
 - 1% Annual Chance Flood Hazard
 - Future Conditions 1% Annual Chance Flood Hazard
 - Regulatory Floodway
 - Area with Reduced Risk Due to Levee
 - Special Floodway

EXISTING SANITARY MAIN CROSSING
NO CONFLICT
EX 18" TOP: 640.26
EX 18" IE: 638.59
PIPE CLEARANCE: 2.66'
PROPOSED 24" RCP BOTTOM: 642.92

4-FOOT X 4-FOOT DIA. MANHOLE
WITH SAFL BAFFLE AND
DOWN TURNED ELBOW

6-FOOT DIA. LOW FLOW
DIVERSION STRUCTURE
INVERT: 643.37

113 LF OF 24" RCP
SLOPE: 0.33%

EXISTING SANITARY MAIN CROSSING
NO CONFLICT
EX 18" TOP: 639.91
EX 18" IE: 638.25
PIPE CLEARANCE: 2.48'
PROPOSED 24" RCP BOTTOM: 642.39

6-FOOT DIA. MANHOLE
INVERT: 642.17

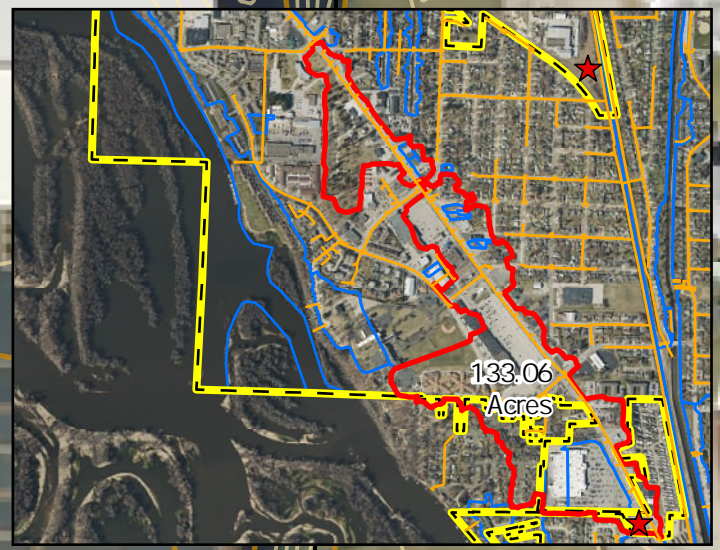
106 LF OF 24" RCP
SLOPE: 0.78%

24" AEW
INVERT: 643

WSEL: 643
2.94 AC-FT STORAGE

24" AEW
INVERT: 643

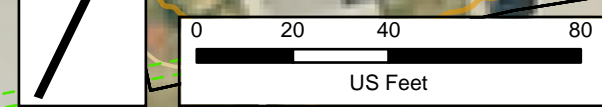
OUTLET CONTROL
STRUCTURE
INVERT: 643



LAKOTA COURT WET DETENTION BASIN
STORMWATER MANAGEMENT PLAN UPDATE
CITY OF LA CROSSE
LA CROSSE COUNTY, WISCONSIN



FIGURE D-6
4638.002



Aerial Source: Wisconsin Regional Orthoimagery Consortium. (2020). WROC Aerial Mosaic (WTM) La Crosse County, WI 2020.

**ALTERNATIVE : AIRPORT ROAD BIORETENTION BASIN
LA CROSSE, WISCONSIN
ENGINEER'S OPINION OF PROBABLE CONSTRUCTION COST: PLANNING-LEVEL**

Item No.	Description	Quantity	Unit	Unit Price	Total Price
1	Mobilization/Demobilization	1	LS	\$ 56,600.00	\$ 56,600.00
2	Construction Layout	1	LS	\$ 5,300.00	\$ 5,300.00
3	Traffic Control	1	LS	\$ 5,300.00	\$ 5,300.00
4	Dewatering	1	LS	\$ 30,000.00	\$ 30,000.00
5	Dust Control	1	LS	\$ 3,100.00	\$ 3,100.00
6	Tree Removal	0.25	AC	\$ 12,900.00	\$ 3,250.00
7	Stone Tracking Pad	1	EA	\$ 2,800.00	\$ 2,800.00
8	Inlet Protection	2	EA	\$ 210.00	\$ 400.00
9	Silt Fence	1783	LF	\$ 3.00	\$ 5,350.00
10	Straw Wattle/Silt Sock (Around Perimeter of Pond)	1485	LF	\$ 10.00	\$ 14,850.00
11	Stone Weeper at Outfall	1	EA	\$ 290.00	\$ 300.00
12	Outlet Control Structure	1	EA	\$ 10,500.00	\$ 10,500.00
13	24-IN RCP	512	LF	\$ 150.00	\$ 76,800.00
14	24-IN RCP Apron Endwall	2	LF	\$ 2,500.00	\$ 5,000.00
15	48-IN DIA Manhole	1	EA	\$ 3,500.00	\$ 3,500.00
16	86-IN DIA Manhole	2	EA	\$ 12,600.00	\$ 25,200.00
17	48-IN X 48-IN Manhole with SAFL Baffle and Downturned Elbow	1	EA	\$ 16,400.00	\$ 16,400.00
18	Asphalt Utility Trench Patch	1	LS	\$ 1,511.11	\$ 1,500.00
19	Energy Dissipation Pad	4	SY	\$ 72.00	\$ 250.00
20	Rip Rap at Basin Outlet Structure	120	SY	\$ 72.00	\$ 8,650.00
21	Common Excavation and Grading (Hauled out)	44,915	CY	\$ 22.00	\$ 988,150.00
22	Bioretention Basin Plantings (1 per square foot)	26,442	SF	\$ 20.00	\$ 528,850.00
23	Bioretention Basin Clear Stone	979	CY	\$ 64.00	\$ 62,700.00
24	Bioretention Basin Engineered Soil Media	1,959	CY	\$ 160.00	\$ 313,400.00
25	Erosion Control Mat for Turf Restoration	1,982	SY	\$ 3.00	\$ 5,950.00
26	Turf Reinforcement Mat for Emergency Spillway	292	SY	\$ 28.00	\$ 8,150.00
27	6-IN Salvaged Topsoil Placement (50%)	4,753	SY	\$ 5.00	\$ 23,750.00
28	6-IN Hauled-in Topsoil Placement (50%)	4,753	SY	\$ 10.00	\$ 47,550.00
29	Detention Basin Native Mix	7,525	SY	\$ 3.00	\$ 22,550.00
30	Erosion Control Mat at Native Restoration	7,525	SY	\$ 3.00	\$ 22,550.00
31	Turf Restoration - Seed and Fertilizer	1,982	SY	\$ 3.00	\$ 5,950.00
32	Native Vegetation Maintenance (3 Years)	0.61	AC	\$ 25,200.00	\$ 15,300.00
Subtotal					\$ 2,319,900
35% Contingency and Technical Services Allowance					\$ 811,965
Construction Cost					\$ 3,131,865
Land Purchase (3.37 acres)					\$ 272,418
Geotechnical Services					\$ 25,000
Grand Total					\$ 3,429,300
Notes	This planning level opinion of probable construction cost is based on limited data and assumptions, herein. It should be revisited in the future with site specific information.				
	Groundwater from the Mississippi River could influence infiltration rates of the basin				
	Potential PFAS contamination and other contamination from the airport may be present but is not accounted for in the OPCC				

**ALTERNATIVE : AIRPORT ROAD BIORETENTION BASIN
LA CROSSE, WISCONSIN
ENGINEER'S OPINION OF PROBABLE CONSTRUCTION COST: PLANNING-LEVEL**

Item No.	Description	Quantity	Unit	Unit Price	Total Price
1	Mobilization/Demobilization	1	LS	\$ 56,600.00	\$ 56,600.00
2	Construction Layout	1	LS	\$ 5,300.00	\$ 5,300.00
3	Traffic Control	1	LS	\$ 5,300.00	\$ 5,300.00
4	Dewatering	1	LS	\$ 30,000.00	\$ 30,000.00
5	Dust Control	1	LS	\$ 3,100.00	\$ 3,100.00
6	Tree Removal	0.25	AC	\$ 12,900.00	\$ 3,250.00
7	Stone Tracking Pad	1	EA	\$ 2,800.00	\$ 2,800.00
8	Inlet Protection	2	EA	\$ 210.00	\$ 400.00
9	Silt Fence	1783	LF	\$ 3.00	\$ 5,350.00
10	Straw Wattle/Silt Sock (Around Perimeter of Pond)	1485	LF	\$ 10.00	\$ 14,850.00
11	Stone Weeper at Outfall	1	EA	\$ 290.00	\$ 300.00
12	Outlet Control Structure	1	EA	\$ 10,500.00	\$ 10,500.00
13	24-IN RCP	512	LF	\$ 150.00	\$ 76,800.00
14	24-IN RCP Apron Endwall	2	LF	\$ 2,500.00	\$ 5,000.00
15	48-IN DIA Manhole	1	EA	\$ 3,500.00	\$ 3,500.00
16	86-IN DIA Manhole	2	EA	\$ 12,600.00	\$ 25,200.00
17	48-IN X 48-IN Manhole with SAFL Baffle and Downturned Elbow	1	EA	\$ 16,400.00	\$ 16,400.00
18	Asphalt Utility Trench Patch	1	LS	\$ 1,511.11	\$ 1,500.00
19	Energy Dissipation Pad	4	SY	\$ 72.00	\$ 250.00
20	Rip Rap at Basin Outlet Structure	120	SY	\$ 72.00	\$ 8,650.00
21	Common Excavation and Grading (Hauled out)	44,915	CY	\$ 22.00	\$ 988,150.00
22	Bioretention Basin Plantings (1 per square foot)	26,442	SF	\$ 20.00	\$ 528,850.00
23	Bioretention Basin Clear Stone	979	CY	\$ 64.00	\$ 62,700.00
24	Bioretention Basin Engineered Soil Media	1,959	CY	\$ 160.00	\$ 313,400.00
25	Erosion Control Mat for Turf Restoration	1,982	SY	\$ 3.00	\$ 5,950.00
26	Turf Reinforcement Mat for Emergency Spillway	292	SY	\$ 28.00	\$ 8,150.00
27	6-IN Salvaged Topsoil Placement (50%)	4,753	SY	\$ 5.00	\$ 23,750.00
28	6-IN Hauled-in Topsoil Placement (50%)	4,753	SY	\$ 10.00	\$ 47,550.00
29	Detention Basin Native Mix	7,525	SY	\$ 3.00	\$ 22,550.00
30	Erosion Control Mat at Native Restoration	7,525	SY	\$ 3.00	\$ 22,550.00
31	Turf Restoration - Seed and Fertilizer	1,982	SY	\$ 3.00	\$ 5,950.00
32	Native Vegetation Maintenance (3 Years)	0.61	AC	\$ 25,200.00	\$ 15,300.00
Subtotal					\$ 2,319,900
35% Contingency and Technical Services Allowance					\$ 811,965
Construction Cost					\$ 3,131,865
Land Purchase (3.37 acres)					\$ 272,418
Geotechnical Services					\$ 25,000
Grand Total					\$ 3,429,300
Notes	This planning level opinion of probable construction cost is based on limited data and assumptions, herein. It should be revisited in the future with site specific information.				
	Groundwater from the Mississippi River could influence infiltration rates of the basin				
	Potential PFAS contamination and other contamination from the airport may be present but is not accounted for in the OPCC				

**ALTERNATIVE : CAUSEWAY BOULEVARD WET DETENTION BASIN
LA CROSSE, WISCONSIN
ENGINEER'S OPINION OF PROBABLE CONSTRUCTION COST: PLANNING-LEVEL**

Item No.	Description	Quantity	Unit	Unit Price	Total Price
1	Mobilization/Demobilization	1	LS	\$ 59,800.00	\$ 59,800.00
2	Construction Layout	1	LS	\$ 3,700.00	\$ 3,700.00
3	Traffic Control	1	LS	\$ 3,200.00	\$ 3,200.00
4	Dewatering	1	LS	\$ 21,000.00	\$ 21,000.00
5	Dust Control	1	LS	\$ 2,600.00	\$ 2,600.00
6	Stone Tracking Pad	2	EA	\$ 2,800.00	\$ 5,600.00
7	Inlet Protection	1	EA	\$ 210.00	\$ 200.00
8	Silt Fence (Grading Extents)	1031	LF	\$ 3.00	\$ 3,100.00
9	Straw Wattle/Silt Sock (Around Perimeter of Pond 2 ft above WSEL)	833	LF	\$ 10.00	\$ 8,350.00
10	Stone Weeper at Outfall	1	EA	\$ 290.00	\$ 300.00
11	Outlet Control Structure	1	EA	\$ 13,700.00	\$ 13,700.00
12	Backflow Preventer	1	EA	\$ 30,000.00	\$ 30,000.00
13	24-IN RCP	133	LF	\$ 110.00	\$ 14,650.00
14	24-IN RCP Apron Endwall	2	EA	\$ 2,500.00	\$ 5,000.00
15	84-IN DIA Manhole	2	EA	\$ 12,600.00	\$ 25,200.00
16	48-IN X 48-IN Manhole with SAFL Baffle and Downturned Elbow	1	EA	\$ 16,400.00	\$ 16,400.00
17	Common Excavation and Grading (Hauled out) - Contaminated	18,505	CY	\$ 100.00	\$ 1,850,550.00
18	Excavation for 2' Clay Liner - Contaminated	2,199	CY	\$ 100.00	\$ 219,900.00
19	2' Clay Liner (Hauled-in and installed)	2,199	CY	\$ 31.00	\$ 68,150.00
20	Rip Rap	120	SY	\$ 72.00	\$ 8,650.00
21	6-IN Salvaged Topsoil Placement (50%)	2,580	SY	\$ 5.00	\$ 12,900.00
22	6-IN Hauled-in Topsoil Placement (50%)	2,580	SY	\$ 6.00	\$ 15,500.00
23	Detention Basin Native Mix	4,016	SY	\$ 3.00	\$ 12,050.00
24	Turf Restoration - Seed and Fertilizer	1,144	SY	\$ 3.00	\$ 3,450.00
25	Erosion Control Mat at Native Restoration	4,016	SY	\$ 3.00	\$ 12,050.00
26	Erosion Control Mat for Turf Restoration	1,144	SY	\$ 3.00	\$ 3,450.00
27	Turf Reinforcement Mat for Emergency Spillway	292	SY	\$ 28.00	\$ 8,150.00
28	Native Plugs at Water's Edge (1 per lf around pond perimeter)	751	EA	\$ 11.00	\$ 8,250.00
29	Goose Fence Around Pond Perimeter	751	LF	\$ 7.00	\$ 5,250.00
30	Landscaping Trees/Bushes	1	LS	\$ 10,000.00	\$ 10,000.00
				Subtotal	\$ 2,451,100
				35% Contingency and Technical Services Allowance	\$ 857,885
				Construction Cost	\$ 3,308,985
				Land Purchase (1.75 acres)	\$ 416,269
				Geotechnical Services	\$ 25,000
				Grand Total	\$ 3,750,254
Notes	This planning level opinion of probable construction cost is based on limited data and assumptions, herein. It should be revisited in the future with site specific information.				
	The land for this project is assessed at \$0.00 but will need to be secured by the City before development.				

**ALTERNATIVE: SAINT ANDREW STREET WET DETENTION BASIN
LA CROSSE, WISCONSIN
ENGINEER'S OPINION OF PROBABLE CONSTRUCTION COST: PLANNING-LEVEL**

Item No.	Description	Quantity	Unit	Unit Price	Total Price
1	Mobilization/Demobilization	1	LS	\$ 166,500.00	\$ 166,500.00
2	Construction Layout	1	LS	\$ 5,300.00	\$ 5,300.00
3	Traffic Control	1	LS	\$ 5,300.00	\$ 5,300.00
4	Dewatering	1	LS	\$ 15,800.00	\$ 15,800.00
5	Dust Control	1	LS	\$ 3,100.00	\$ 3,100.00
6	Stone Tracking Pad	2	EA	\$ 2,800.00	\$ 5,600.00
7	Silt Fence (Grading Extents)	1687	LF	\$ 3.00	\$ 5,050.00
8	Straw Wattle/Silt Sock (Around Perimeter of Pond 2 ft above WSEL)	1401.69	LF	\$ 10.00	\$ 14,000.00
9	Stone Weeper at Outfall	1	EA	\$ 290.00	\$ 300.00
10	Outlet Control Structure	1	EA	\$ 16,800.00	\$ 16,800.00
11	18-IN RCP	113	LF	\$ 130.00	\$ 14,700.00
12	18-IN RCP Apron Endwall	1	EA	\$ 2,100.00	\$ 2,100.00
13	24-IN RCP	253	LF	\$ 110.00	\$ 27,850.00
14	24-IN RCP Apron Endwall	2	EA	\$ 2,500.00	\$ 5,000.00
15	48-IN DIA Manhole	1	EA	\$ 3,500.00	\$ 3,500.00
16	60-IN DIA Manhole	1	EA	\$ 4,600.00	\$ 4,600.00
17	96-IN DIA Manhole	2	EA	\$ 12,700.00	\$ 25,400.00
18	48-IN X 48-IN Manhole with SAFL Baffle and Downturned Elbow	2	EA	\$ 16,400.00	\$ 32,800.00
19	6-IN Watermain	54	LF	\$ 210.00	\$ 11,350.00
20	10-IN Sanitary Sewer	303	LF	\$ 150.00	\$ 45,450.00
21	4-FT DIA Sanitary Sewer MH	3	EA	\$ 5,600.00	\$ 16,800.00
22	Common Excavation and Grading (Hauled out) - contaminated soils	77,872	CY	\$ 70.00	\$ 5,451,050.00
23	Excavation for 2' Clay Liner - contaminated soils	8,197	CY	\$ 70.00	\$ 573,750.00
24	2' Clay Liner (Hauled-in and installed)	8,197	CY	\$ 25.00	\$ 204,900.00
25	Rip Rap	120	SY	\$ 72.00	\$ 8,650.00
26	Utility Trench Repair	1	EA	\$ 2,765.33	\$ 2,750.00
27	6-IN Salvaged Topsoil Placement (50%)	5,008	SY	\$ 5.00	\$ 25,050.00
28	6-IN Hauled-in Topsoil Placement (50%)	5,008	SY	\$ 6.00	\$ 30,050.00
29	Detention Basin Native Mix	8,141	SY	\$ 3.00	\$ 24,400.00
30	Turf Restoration - Seed and Fertilizer	1,874	SY	\$ 3.00	\$ 5,600.00
31	Erosion Control Mat at Native Restoration	8,141	SY	\$ 3.00	\$ 24,400.00
32	Erosion Control Mat for Turf Restoration	1,874	SY	\$ 3.00	\$ 5,600.00
33	Turf Reinforcement Mat for Emergency Spillway	292	SY	\$ 28.00	\$ 8,150.00
34	Native Plugs at Water's Edge (1 per lf around pond perimeter)	1,338	EA	\$ 11.00	\$ 14,700.00
35	Goose Fence Around Pond Perimeter	1,338	LF	\$ 7.00	\$ 9,350.00
36	Landscaping Trees/Bushes	1	LS	\$ 10,000.00	\$ 10,000.00
				Subtotal	\$ 6,825,700
				35% Contingency and Technical Services Allowance	\$ 2,388,995
				Construction Cost	\$ 9,214,695
				Land Purchase (5.27 acres)	\$ 1,877,207
				Geotechnical Services	\$ 25,000
				Grand Total	\$ 11,116,900
Notes	This planning level opinion of probable construction cost is based on limited data and assumptions, herein. It should be revisited in the future with site specific information.				

**ALTERNATIVE : SPENCE ELEMENTARY BIORETENTION BASIN
MUNICIPALITY, WISCONSIN
ENGINEER'S OPINION OF PROBABLE CONSTRUCTION COST: PLANNING-LEVEL**

Item No.	Description	Quantity	Unit	Unit Price	Total Price
1	Mobilization/Demobilization	1	LS	\$ 28,800.00	\$ 28,800.00
2	Construction Layout	1	LS	\$ 3,700.00	\$ 3,700.00
3	Traffic Control	1	LS	\$ 3,200.00	\$ 3,200.00
4	Dewatering	1	LS	\$ 10,500.00	\$ 10,500.00
5	Dust Control	1	LS	\$ 2,600.00	\$ 2,600.00
6	Stone Tracking Pad	1	EA	\$ 2,800.00	\$ 2,800.00
7	Inlet Protection	2	EA	\$ 210.00	\$ 400.00
8	Silt Fence	685	LF	\$ 3.00	\$ 2,050.00
9	Straw Wattle/Silt Sock (Around Perimeter of Pond)	781	LF	\$ 10.00	\$ 7,800.00
10	Stone Weeper at Outfall	1	EA	\$ 290.00	\$ 300.00
11	Outlet Control Structure	1	EA	\$ 10,500.00	\$ 10,500.00
12	24-IN RCP	460	LF	\$ 150.00	\$ 69,000.00
13	24-IN RCP Apron Endwall	2	LF	\$ 2,500.00	\$ 5,000.00
14	48-IN DIA Manhole	1	EA	\$ 3,500.00	\$ 3,500.00
15	60-IN DIA Manhole	2	EA	\$ 4,600.00	\$ 9,200.00
16	72-IN DIA Manhole	2	EA	\$ 8,900.00	\$ 17,800.00
17	48-IN X 48-IN Manhole with SAFL Baffle and Downturned Elbow	1	EA	\$ 16,400.00	\$ 16,400.00
18	Asphalt Utility Trench Patch	1	LS	\$ 4,140.44	\$ 4,150.00
19	18-IN Sanitary Sewer Force Main	81	LF	\$ 280.00	\$ 22,700.00
20	Energy Dissipation Pad	4	SY	\$ 72.00	\$ 250.00
21	Rip Rap at Basin Outlet Structure	120	SY	\$ 72.00	\$ 8,650.00
22	Common Excavation and Grading (Hauled out)	6,926	CY	\$ 32.00	\$ 221,650.00
23	Bioretention Basin Plantings (1 per square foot)	19,899	SF	\$ 20.00	\$ 397,973.40
24	Bioretention Basin Clear Stone	737	CY	\$ 64.00	\$ 47,167.22
25	Bioretention Basin Engineered Soil Media	1,474	CY	\$ 160.00	\$ 235,836.09
26	Erosion Control Mat for Turf Restoration	761	SY	\$ 3.00	\$ 2,300.00
27	Turf Reinforcement Mat for Emergency Spillway	292	SY	\$ 28.00	\$ 8,150.00
28	6-IN Salvaged Topsoil Placement (50%)	1,101	SY	\$ 5.00	\$ 5,500.00
29	6-IN Hauled-in Topsoil Placement (50%)	1,101	SY	\$ 10.00	\$ 11,000.00
30	Detention Basin Native Mix	1,441	SY	\$ 3.00	\$ 4,300.00
31	Erosion Control Mat at Native Restoration	1,441	SY	\$ 3.00	\$ 4,300.00
32	Turf Restoration - Seed and Fertilizer	761	SY	\$ 3.00	\$ 2,300.00
33	Native Vegetation Maintenance (3 Years)	0.46	AC	\$ 25,200.00	\$ 11,500.00
				Subtotal	\$ 1,181,277
				35% Contingency and Technical Services Allowance	\$ 413,447
				Construction Cost	\$ 1,594,724
				Geotechnical Services	\$ 20,000
				Grand Total	\$ 1,614,700

Notes This planning level opinion of probable construction cost is based on limited data and assumptions, herein. It should be revisited in the future with site specific information.

**ALTERNATIVE : DIAGONAL ROAD WET DETENTION BASIN
LA CROSSE, WISCONSIN
ENGINEER'S OPINION OF PROBABLE CONSTRUCTION COST: PLANNING-LEVEL**

Item No.	Description	Quantity	Unit	Unit Price	Total Price
1	Mobilization/Demobilization	1	LS	\$ 28,300.00	\$ 28,300.00
2	Construction Layout	1	LS	\$ 5,300.00	\$ 5,300.00
3	Traffic Control	1	LS	\$ 5,300.00	\$ 5,300.00
4	Dewatering	1	LS	\$ 32,000.00	\$ 32,000.00
5	Dust Control	1	LS	\$ 3,100.00	\$ 3,100.00
6	Tree Removal	0.50	AC	\$ 12,900.00	\$ 6,450.00
7	Stone Tracking Pad	2	EA	\$ 2,800.00	\$ 5,600.00
8	Silt Fence (Grading Extents)	1524	LF	\$ 3.00	\$ 4,550.00
9	Straw Wattle/Silt Sock (Around Perimeter of Pond 2 ft above WSEL)	792.85	LF	\$ 10.00	\$ 7,950.00
10	Stone Weeper at Outfall	1	EA	\$ 290.00	\$ 300.00
11	Outlet Control Structure	1	EA	\$ 16,800.00	\$ 16,800.00
12	24-IN RCP	235	LF	\$ 110.00	\$ 25,850.00
13	24-IN RCP Apron Endwall	1	EA	\$ 2,500.00	\$ 2,500.00
14	36-IN RCP	207	LF	\$ 160.00	\$ 33,100.00
15	36-IN RCP Apron Endwall	2	EA	\$ 3,500.00	\$ 7,000.00
16	84-IN DIA Manhole	1	EA	\$ 12,600.00	\$ 12,600.00
17	120-IN DIA Manhole	2	EA	\$ 20,600.00	\$ 41,200.00
18	48-IN X 48-IN Manhole with SAFL Baffle and Downturned Elbow	2	EA	\$ 16,400.00	\$ 32,800.00
19	Common Excavation and Grading (Hauled out)	32,222	CY	\$ 20.00	\$ 644,450.00
20	Excavation for 2' Clay Liner	1,967	CY	\$ 20.00	\$ 39,350.00
21	2' Clay Liner (Hauled-in and installed)	1,967	CY	\$ 27.00	\$ 53,100.00
22	Rip Rap	93	SY	\$ 72.00	\$ 6,700.00
23	6-IN Salvaged Topsoil Placement (50%)	4,943	SY	\$ 5.00	\$ 24,700.00
24	6-IN Hauled-in Topsoil Placement (50%)	4,943	SY	\$ 6.00	\$ 29,650.00
25	Detention Basin Native Mix	8,193	SY	\$ 3.00	\$ 24,600.00
26	Turf Restoration - Seed and Fertilizer	1,693	SY	\$ 3.00	\$ 5,100.00
27	Erosion Control Mat at Native Restoration	1,693	SY	\$ 3.00	\$ 5,100.00
28	Turf Reinforcement Mat for Emergency Spillway	292	SY	\$ 28.00	\$ 8,150.00
29	Erosion Control Mat at Turf Restoration	8,193	SY	\$ 3.00	\$ 24,600.00
30	Native Plugs at Water's Edge (1 per lf around pond perimeter)	729	EA	\$ 11.00	\$ 8,000.00
31	Goose Fence Around Pond Perimeter	729	LF	\$ 7.00	\$ 5,100.00
32	Landscaping Trees/Bushes	1	LS	\$ 10,000.00	\$ 10,000.00
Subtotal					\$ 1,159,300
35% Contingency and Technical Services Allowance					\$ 405,755
Construction Cost					\$ 1,565,055
Land Purchase (2.22 acres)					\$ 100,495
Geotechnical Services					\$ 15,000
Grand Total					\$ 1,680,600

Notes This planning level opinion of probable construction cost is based on limited data and assumptions, herein. It should be revisited in the future with site specific information.

**ALTERNATIVE: LAKOTA COURT WET DETENTION BASIN
LA CROSSE, WISCONSIN
ENGINEER'S OPINION OF PROBABLE CONSTRUCTION COST: PLANNING-LEVEL**

Item No.	Description	Quantity	Unit	Unit Price	Total Price
1	Mobilization/Demobilization	1	LS	\$ 12,000.00	\$ 12,000.00
2	Construction Layout	1	LS	\$ 3,700.00	\$ 3,700.00
3	Traffic Control	1	LS	\$ 3,200.00	\$ 3,200.00
4	Dewatering	1	LS	\$ 10,500.00	\$ 10,500.00
5	Dust Control	1	LS	\$ 2,600.00	\$ 2,600.00
6	Stone Tracking Pad	2	EA	\$ 2,800.00	\$ 5,600.00
7	Silt Fence (Grading Extents)	688	LF	\$ 3.00	\$ 2,050.00
8	Straw Wattle/Silt Sock (Around Perimeter of Pond 2 ft above WSEL)	534.5	LF	\$ 10.00	\$ 5,350.00
9	Stone Weeper at Outfall	1	EA	\$ 290.00	\$ 300.00
10	Outlet Control Structure	1	EA	\$ 16,800.00	\$ 16,800.00
11	24-IN RCP	219	LF	\$ 110.00	\$ 24,100.00
12	24-IN RCP Apron Endwall	2	EA	\$ 2,500.00	\$ 5,000.00
13	72-IN DIA Manhole	1	EA	\$ 8,900.00	\$ 8,900.00
14	48-IN X 48-IN Manhole with SAFL Baffle and Downturned Elbow	2	EA	\$ 16,400.00	\$ 32,800.00
15	Common Excavation and Grading (Hauled out)	6,783	CY	\$ 32.00	\$ 217,050.00
16	Excavation for 2' Clay Liner	1,088	CY	\$ 32.00	\$ 34,800.00
17	2' Clay Liner (Hauled-in and installed)	1,088	CY	\$ 34.00	\$ 37,000.00
18	Rip Rap	120	SY	\$ 72.00	\$ 8,650.00
19	Utility Trench Repair	1	EA	\$ 3,309.33	\$ 3,300.00
20	6-IN Salvaged Topsoil Placement (50%)	1,328	SY	\$ 5.00	\$ 6,650.00
21	6-IN Hauled-in Topsoil Placement (50%)	1,328	SY	\$ 6.00	\$ 7,950.00
22	Detention Basin Native Mix	1,891	SY	\$ 3.00	\$ 5,650.00
23	Turf Restoration - Seed and Fertilizer	764	SY	\$ 3.00	\$ 2,300.00
24	Erosion Control Mat at Native Restoration	1,891	SY	\$ 3.00	\$ 5,650.00
25	Erosion Control Mat for Turf Restoration	764	SY	\$ 3.00	\$ 2,300.00
26	Turf Reinforcement Mat for Emergency Spillway	292	SY	\$ 28.00	\$ 8,150.00
27	Native Plugs at Water's Edge (1 per lf around pond perimeter)	471	EA	\$ 11.00	\$ 5,200.00
28	Goose Fence Around Pond Perimeter	471	LF	\$ 7.00	\$ 3,300.00
29	Landscaping Trees/Bushes	1	LS	\$ 10,000.00	\$ 10,000.00
				Subtotal	\$ 490,850
				35% Contingency and Technical Services Allowance	\$ 171,798
				Construction Cost	\$ 662,648
				Land Purchase (2.22 acres)	\$ 308,008
				Geotechnical Services	\$ 10,000
				Grand Total	\$ 980,700

Notes This planning level opinion of probable construction cost is based on limited data and assumptions, herein. It should be revisited in the future with site specific information.

**ALTERNATIVE : CAUSEWAY BOULEVARD WET DETENTION BASIN
LA CROSSE, WISCONSIN
ENGINEER'S OPINION OF PROBABLE CONSTRUCTION COST: PLANNING-LEVEL**

Item No.	Description	Quantity	Unit	Unit Price	Total Price
1	Mobilization/Demobilization	1	LS	\$ 59,800.00	\$ 59,800.00
2	Construction Layout	1	LS	\$ 3,700.00	\$ 3,700.00
3	Traffic Control	1	LS	\$ 3,200.00	\$ 3,200.00
4	Dewatering	1	LS	\$ 21,000.00	\$ 21,000.00
5	Dust Control	1	LS	\$ 2,600.00	\$ 2,600.00
6	Stone Tracking Pad	2	EA	\$ 2,800.00	\$ 5,600.00
7	Inlet Protection	1	EA	\$ 210.00	\$ 200.00
8	Silt Fence (Grading Extents)	1031	LF	\$ 3.00	\$ 3,100.00
9	Straw Wattle/Silt Sock (Around Perimeter of Pond 2 ft above WSEL)	833	LF	\$ 10.00	\$ 8,350.00
10	Stone Weeper at Outfall	1	EA	\$ 290.00	\$ 300.00
11	Outlet Control Structure	1	EA	\$ 13,700.00	\$ 13,700.00
12	Backflow Preventer	1	EA	\$ 30,000.00	\$ 30,000.00
13	24-IN RCP	133	LF	\$ 110.00	\$ 14,650.00
14	24-IN RCP Apron Endwall	2	EA	\$ 2,500.00	\$ 5,000.00
15	84-IN DIA Manhole	2	EA	\$ 12,600.00	\$ 25,200.00
16	48-IN X 48-IN Manhole with SAFL Baffle and Downturned Elbow	1	EA	\$ 16,400.00	\$ 16,400.00
17	Common Excavation and Grading (Hauled out) - Contaminated	18,505	CY	\$ 100.00	\$ 1,850,550.00
18	Excavation for 2' Clay Liner - Contaminated	2,199	CY	\$ 100.00	\$ 219,900.00
19	2' Clay Liner (Hauled-in and installed)	2,199	CY	\$ 31.00	\$ 68,150.00
20	Rip Rap	120	SY	\$ 72.00	\$ 8,650.00
21	6-IN Salvaged Topsoil Placement (50%)	2,580	SY	\$ 5.00	\$ 12,900.00
22	6-IN Hauled-in Topsoil Placement (50%)	2,580	SY	\$ 6.00	\$ 15,500.00
23	Detention Basin Native Mix	4,016	SY	\$ 3.00	\$ 12,050.00
24	Turf Restoration - Seed and Fertilizer	1,144	SY	\$ 3.00	\$ 3,450.00
25	Erosion Control Mat at Native Restoration	4,016	SY	\$ 3.00	\$ 12,050.00
26	Erosion Control Mat for Turf Restoration	1,144	SY	\$ 3.00	\$ 3,450.00
27	Turf Reinforcement Mat for Emergency Spillway	292	SY	\$ 28.00	\$ 8,150.00
28	Native Plugs at Water's Edge (1 per lf around pond perimeter)	751	EA	\$ 11.00	\$ 8,250.00
29	Goose Fence Around Pond Perimeter	751	LF	\$ 7.00	\$ 5,250.00
30	Landscaping Trees/Bushes	1	LS	\$ 10,000.00	\$ 10,000.00
				Subtotal	\$ 2,451,100
				35% Contingency and Technical Services Allowance	\$ 857,885
				Construction Cost	\$ 3,308,985
				Land Purchase (1.75 acres)	\$ 416,269
				Geotechnical Services	\$ 25,000
				Grand Total	\$ 3,750,254
Notes	This planning level opinion of probable construction cost is based on limited data and assumptions, herein. It should be revisited in the future with site specific information.				
	The land for this project is assessed at \$0.00 but will need to be secured by the City before development.				

**ALTERNATIVE : DIAGONAL ROAD WET DETENTION BASIN
LA CROSSE, WISCONSIN
ENGINEER'S OPINION OF PROBABLE CONSTRUCTION COST: PLANNING-LEVEL**

Item No.	Description	Quantity	Unit	Unit Price	Total Price
1	Mobilization/Demobilization	1	LS	\$ 28,300.00	\$ 28,300.00
2	Construction Layout	1	LS	\$ 5,300.00	\$ 5,300.00
3	Traffic Control	1	LS	\$ 5,300.00	\$ 5,300.00
4	Dewatering	1	LS	\$ 32,000.00	\$ 32,000.00
5	Dust Control	1	LS	\$ 3,100.00	\$ 3,100.00
6	Tree Removal	0.50	AC	\$ 12,900.00	\$ 6,450.00
7	Stone Tracking Pad	2	EA	\$ 2,800.00	\$ 5,600.00
8	Silt Fence (Grading Extents)	1524	LF	\$ 3.00	\$ 4,550.00
9	Straw Wattle/Silt Sock (Around Perimeter of Pond 2 ft above WSEL)	792.85	LF	\$ 10.00	\$ 7,950.00
10	Stone Weeper at Outfall	1	EA	\$ 290.00	\$ 300.00
11	Outlet Control Structure	1	EA	\$ 16,800.00	\$ 16,800.00
12	24-IN RCP	235	LF	\$ 110.00	\$ 25,850.00
13	24-IN RCP Apron Endwall	1	EA	\$ 2,500.00	\$ 2,500.00
14	36-IN RCP	207	LF	\$ 160.00	\$ 33,100.00
15	36-IN RCP Apron Endwall	2	EA	\$ 3,500.00	\$ 7,000.00
16	84-IN DIA Manhole	1	EA	\$ 12,600.00	\$ 12,600.00
17	120-IN DIA Manhole	2	EA	\$ 20,600.00	\$ 41,200.00
18	48-IN X 48-IN Manhole with SAFL Baffle and Downturned Elbow	2	EA	\$ 16,400.00	\$ 32,800.00
19	Common Excavation and Grading (Hauled out)	32,222	CY	\$ 20.00	\$ 644,450.00
20	Excavation for 2' Clay Liner	1,967	CY	\$ 20.00	\$ 39,350.00
21	2' Clay Liner (Hauled-in and installed)	1,967	CY	\$ 27.00	\$ 53,100.00
22	Rip Rap	93	SY	\$ 72.00	\$ 6,700.00
23	6-IN Salvaged Topsoil Placement (50%)	4,943	SY	\$ 5.00	\$ 24,700.00
24	6-IN Hauled-in Topsoil Placement (50%)	4,943	SY	\$ 6.00	\$ 29,650.00
25	Detention Basin Native Mix	8,193	SY	\$ 3.00	\$ 24,600.00
26	Turf Restoration - Seed and Fertilizer	1,693	SY	\$ 3.00	\$ 5,100.00
27	Erosion Control Mat at Native Restoration	1,693	SY	\$ 3.00	\$ 5,100.00
28	Turf Reinforcement Mat for Emergency Spillway	292	SY	\$ 28.00	\$ 8,150.00
29	Erosion Control Mat at Turf Restoration	8,193	SY	\$ 3.00	\$ 24,600.00
30	Native Plugs at Water's Edge (1 per lf around pond perimeter)	729	EA	\$ 11.00	\$ 8,000.00
31	Goose Fence Around Pond Perimeter	729	LF	\$ 7.00	\$ 5,100.00
32	Landscaping Trees/Bushes	1	LS	\$ 10,000.00	\$ 10,000.00
Subtotal					\$ 1,159,300
35% Contingency and Technical Services Allowance					\$ 405,755
Construction Cost					\$ 1,565,055
Land Purchase (2.22 acres)					\$ 100,495
Geotechnical Services					\$ 15,000
Grand Total					\$ 1,680,600

Notes This planning level opinion of probable construction cost is based on limited data and assumptions, herein. It should be revisited in the future with site specific information.

**ALTERNATIVE: LAKOTA COURT WET DETENTION BASIN
LA CROSSE, WISCONSIN
ENGINEER'S OPINION OF PROBABLE CONSTRUCTION COST: PLANNING-LEVEL**

Item No.	Description	Quantity	Unit	Unit Price	Total Price
1	Mobilization/Demobilization	1	LS	\$ 12,000.00	\$ 12,000.00
2	Construction Layout	1	LS	\$ 3,700.00	\$ 3,700.00
3	Traffic Control	1	LS	\$ 3,200.00	\$ 3,200.00
4	Dewatering	1	LS	\$ 10,500.00	\$ 10,500.00
5	Dust Control	1	LS	\$ 2,600.00	\$ 2,600.00
6	Stone Tracking Pad	2	EA	\$ 2,800.00	\$ 5,600.00
7	Silt Fence (Grading Extents)	688	LF	\$ 3.00	\$ 2,050.00
8	Straw Wattle/Silt Sock (Around Perimeter of Pond 2 ft above WSEL)	534.5	LF	\$ 10.00	\$ 5,350.00
9	Stone Weeper at Outfall	1	EA	\$ 290.00	\$ 300.00
10	Outlet Control Structure	1	EA	\$ 16,800.00	\$ 16,800.00
11	24-IN RCP	219	LF	\$ 110.00	\$ 24,100.00
12	24-IN RCP Apron Endwall	2	EA	\$ 2,500.00	\$ 5,000.00
13	72-IN DIA Manhole	1	EA	\$ 8,900.00	\$ 8,900.00
14	48-IN X 48-IN Manhole with SAFL Baffle and Downturned Elbow	2	EA	\$ 16,400.00	\$ 32,800.00
15	Common Excavation and Grading (Hauled out)	6,783	CY	\$ 32.00	\$ 217,050.00
16	Excavation for 2' Clay Liner	1,088	CY	\$ 32.00	\$ 34,800.00
17	2' Clay Liner (Hauled-in and installed)	1,088	CY	\$ 34.00	\$ 37,000.00
18	Rip Rap	120	SY	\$ 72.00	\$ 8,650.00
19	Utility Trench Repair	1	EA	\$ 3,309.33	\$ 3,300.00
20	6-IN Salvaged Topsoil Placement (50%)	1,328	SY	\$ 5.00	\$ 6,650.00
21	6-IN Hauled-in Topsoil Placement (50%)	1,328	SY	\$ 6.00	\$ 7,950.00
22	Detention Basin Native Mix	1,891	SY	\$ 3.00	\$ 5,650.00
23	Turf Restoration - Seed and Fertilizer	764	SY	\$ 3.00	\$ 2,300.00
24	Erosion Control Mat at Native Restoration	1,891	SY	\$ 3.00	\$ 5,650.00
25	Erosion Control Mat for Turf Restoration	764	SY	\$ 3.00	\$ 2,300.00
26	Turf Reinforcement Mat for Emergency Spillway	292	SY	\$ 28.00	\$ 8,150.00
27	Native Plugs at Water's Edge (1 per lf around pond perimeter)	471	EA	\$ 11.00	\$ 5,200.00
28	Goose Fence Around Pond Perimeter	471	LF	\$ 7.00	\$ 3,300.00
29	Landscaping Trees/Bushes	1	LS	\$ 10,000.00	\$ 10,000.00
				Subtotal	\$ 490,850
				35% Contingency and Technical Services Allowance	\$ 171,798
				Construction Cost	\$ 662,648
				Land Purchase (2.22 acres)	\$ 308,008
				Geotechnical Services	\$ 10,000
				Grand Total	\$ 980,700

Notes This planning level opinion of probable construction cost is based on limited data and assumptions, herein. It should be revisited in the future with site specific information.

**ALTERNATIVE: SAINT ANDREW STREET WET DETENTION BASIN
LA CROSSE, WISCONSIN
ENGINEER'S OPINION OF PROBABLE CONSTRUCTION COST: PLANNING-LEVEL**

Item No.	Description	Quantity	Unit	Unit Price	Total Price
1	Mobilization/Demobilization	1	LS	\$ 166,500.00	\$ 166,500.00
2	Construction Layout	1	LS	\$ 5,300.00	\$ 5,300.00
3	Traffic Control	1	LS	\$ 5,300.00	\$ 5,300.00
4	Dewatering	1	LS	\$ 15,800.00	\$ 15,800.00
5	Dust Control	1	LS	\$ 3,100.00	\$ 3,100.00
6	Stone Tracking Pad	2	EA	\$ 2,800.00	\$ 5,600.00
7	Silt Fence (Grading Extents)	1687	LF	\$ 3.00	\$ 5,050.00
8	Straw Wattle/Silt Sock (Around Perimeter of Pond 2 ft above WSEL)	1401.69	LF	\$ 10.00	\$ 14,000.00
9	Stone Weeper at Outfall	1	EA	\$ 290.00	\$ 300.00
10	Outlet Control Structure	1	EA	\$ 16,800.00	\$ 16,800.00
11	18-IN RCP	113	LF	\$ 130.00	\$ 14,700.00
12	18-IN RCP Apron Endwall	1	EA	\$ 2,100.00	\$ 2,100.00
13	24-IN RCP	253	LF	\$ 110.00	\$ 27,850.00
14	24-IN RCP Apron Endwall	2	EA	\$ 2,500.00	\$ 5,000.00
15	48-IN DIA Manhole	1	EA	\$ 3,500.00	\$ 3,500.00
16	60-IN DIA Manhole	1	EA	\$ 4,600.00	\$ 4,600.00
17	96-IN DIA Manhole	2	EA	\$ 12,700.00	\$ 25,400.00
18	48-IN X 48-IN Manhole with SAFL Baffle and Downturned Elbow	2	EA	\$ 16,400.00	\$ 32,800.00
19	6-IN Watermain	54	LF	\$ 210.00	\$ 11,350.00
20	10-IN Sanitary Sewer	303	LF	\$ 150.00	\$ 45,450.00
21	4-FT DIA Sanitary Sewer MH	3	EA	\$ 5,600.00	\$ 16,800.00
22	Common Excavation and Grading (Hauled out) - contaminated soils	77,872	CY	\$ 70.00	\$ 5,451,050.00
23	Excavation for 2' Clay Liner - contaminated soils	8,197	CY	\$ 70.00	\$ 573,750.00
24	2' Clay Liner (Hauled-in and installed)	8,197	CY	\$ 25.00	\$ 204,900.00
25	Rip Rap	120	SY	\$ 72.00	\$ 8,650.00
26	Utility Trench Repair	1	EA	\$ 2,765.33	\$ 2,750.00
27	6-IN Salvaged Topsoil Placement (50%)	5,008	SY	\$ 5.00	\$ 25,050.00
28	6-IN Hauled-in Topsoil Placement (50%)	5,008	SY	\$ 6.00	\$ 30,050.00
29	Detention Basin Native Mix	8,141	SY	\$ 3.00	\$ 24,400.00
30	Turf Restoration - Seed and Fertilizer	1,874	SY	\$ 3.00	\$ 5,600.00
31	Erosion Control Mat at Native Restoration	8,141	SY	\$ 3.00	\$ 24,400.00
32	Erosion Control Mat for Turf Restoration	1,874	SY	\$ 3.00	\$ 5,600.00
33	Turf Reinforcement Mat for Emergency Spillway	292	SY	\$ 28.00	\$ 8,150.00
34	Native Plugs at Water's Edge (1 per lf around pond perimeter)	1,338	EA	\$ 11.00	\$ 14,700.00
35	Goose Fence Around Pond Perimeter	1,338	LF	\$ 7.00	\$ 9,350.00
36	Landscaping Trees/Bushes	1	LS	\$ 10,000.00	\$ 10,000.00
				Subtotal	\$ 6,825,700
				35% Contingency and Technical Services Allowance	\$ 2,388,995
				Construction Cost	\$ 9,214,695
				Land Purchase (5.27 acres)	\$ 1,877,207
				Geotechnical Services	\$ 25,000
				Grand Total	\$ 11,116,900
Notes	This planning level opinion of probable construction cost is based on limited data and assumptions, herein. It should be revisited in the future with site specific information.				

**ALTERNATIVE : SPENCE ELEMENTARY BIORETENTION BASIN
MUNICIPALITY, WISCONSIN
ENGINEER'S OPINION OF PROBABLE CONSTRUCTION COST: PLANNING-LEVEL**

Item No.	Description	Quantity	Unit	Unit Price	Total Price
1	Mobilization/Demobilization	1	LS	\$ 28,800.00	\$ 28,800.00
2	Construction Layout	1	LS	\$ 3,700.00	\$ 3,700.00
3	Traffic Control	1	LS	\$ 3,200.00	\$ 3,200.00
4	Dewatering	1	LS	\$ 10,500.00	\$ 10,500.00
5	Dust Control	1	LS	\$ 2,600.00	\$ 2,600.00
6	Stone Tracking Pad	1	EA	\$ 2,800.00	\$ 2,800.00
7	Inlet Protection	2	EA	\$ 210.00	\$ 400.00
8	Silt Fence	685	LF	\$ 3.00	\$ 2,050.00
9	Straw Wattle/Silt Sock (Around Perimeter of Pond)	781	LF	\$ 10.00	\$ 7,800.00
10	Stone Weeper at Outfall	1	EA	\$ 290.00	\$ 300.00
11	Outlet Control Structure	1	EA	\$ 10,500.00	\$ 10,500.00
12	24-IN RCP	460	LF	\$ 150.00	\$ 69,000.00
13	24-IN RCP Apron Endwall	2	LF	\$ 2,500.00	\$ 5,000.00
14	48-IN DIA Manhole	1	EA	\$ 3,500.00	\$ 3,500.00
15	60-IN DIA Manhole	2	EA	\$ 4,600.00	\$ 9,200.00
16	72-IN DIA Manhole	2	EA	\$ 8,900.00	\$ 17,800.00
17	48-IN X 48-IN Manhole with SAFL Baffle and Downturned Elbow	1	EA	\$ 16,400.00	\$ 16,400.00
18	Asphalt Utility Trench Patch	1	LS	\$ 4,140.44	\$ 4,150.00
19	18-IN Sanitary Sewer Force Main	81	LF	\$ 280.00	\$ 22,700.00
20	Energy Dissipation Pad	4	SY	\$ 72.00	\$ 250.00
21	Rip Rap at Basin Outlet Structure	120	SY	\$ 72.00	\$ 8,650.00
22	Common Excavation and Grading (Hauled out)	6,926	CY	\$ 32.00	\$ 221,650.00
23	Bioretention Basin Plantings (1 per square foot)	19,899	SF	\$ 20.00	\$ 397,973.40
24	Bioretention Basin Clear Stone	737	CY	\$ 64.00	\$ 47,167.22
25	Bioretention Basin Engineered Soil Media	1,474	CY	\$ 160.00	\$ 235,836.09
26	Erosion Control Mat for Turf Restoration	761	SY	\$ 3.00	\$ 2,300.00
27	Turf Reinforcement Mat for Emergency Spillway	292	SY	\$ 28.00	\$ 8,150.00
28	6-IN Salvaged Topsoil Placement (50%)	1,101	SY	\$ 5.00	\$ 5,500.00
29	6-IN Hauled-in Topsoil Placement (50%)	1,101	SY	\$ 10.00	\$ 11,000.00
30	Detention Basin Native Mix	1,441	SY	\$ 3.00	\$ 4,300.00
31	Erosion Control Mat at Native Restoration	1,441	SY	\$ 3.00	\$ 4,300.00
32	Turf Restoration - Seed and Fertilizer	761	SY	\$ 3.00	\$ 2,300.00
33	Native Vegetation Maintenance (3 Years)	0.46	AC	\$ 25,200.00	\$ 11,500.00
Subtotal					\$ 1,181,277
35% Contingency and Technical Services Allowance					\$ 413,447
Construction Cost					\$ 1,594,724
Geotechnical Services					\$ 20,000
Grand Total					\$ 1,614,700

Notes This planning level opinion of probable construction cost is based on limited data and assumptions, herein. It should be revisited in the future with site specific information.

Subject: RE: City of La Crosse MS4 TSS Modeling
Sent: 4/4/2024, 11:34:51 AM
From: Williams, Mike<Mike.Williams@strand.com>
To: 'McGowan, Ethan I - DNR'
Cc: Hinke, Leanne C - DNR; Jablonski, Claire; greenoja@cityoflacrosse.org; Hein, Brian; Lindert, Jon; Johnstone, Daniel

Ethan - Thank you for your review and approval of the existing conditions models and modeling approach as listed in the report. I will make sure to give you a heads up a few weeks in advance before sending you the alternative analysis and final plan.

Thanks again,

Mike

From: McGowan, Ethan I - DNR <ethan.mcgowan@wisconsin.gov>
Sent: Tuesday, March 12, 2024 8:58 AM
To: Williams, Mike <Mike.Williams@strand.com>
Cc: Hinke, Leanne C - DNR <Leanne.Hinke@wisconsin.gov>; Jablonski, Claire <JablonskiC@cityoflacrosse.org>; greenoja@cityoflacrosse.org; Hein, Brian <heinb@cityoflacrosse.org>; Lindert, Jon <Jon.Lindert@strand.com>; Johnstone, Daniel <Daniel.Johnstone@strand.com>
Subject: RE: City of La Crosse MS4 TSS Modeling

[EXTERNAL EMAIL]: Verify sender before opening links or attachments.

Mike,

Thanks for the updates. We'll look forward to seeing what the City has planned to meet their requirements.

Thanks,

We are committed to service excellence.

Visit our survey at <http://dnr.wi.gov/customersurvey>, to evaluate how I did.

Ethan McGowan, PE

Phone: (715) 492-6019

Ethan.McGowan@Wisconsin.gov

From: Williams, Mike <Mike.Williams@strand.com>
Sent: Monday, March 11, 2024 4:22 PM
To: McGowan, Ethan I - DNR <ethan.mcgowan@wisconsin.gov>
Cc: Hinke, Leanne C - DNR <Leanne.Hinke@wisconsin.gov>; Jablonski, Claire <JablonskiC@cityoflacrosse.org>; greenoja@cityoflacrosse.org; Hein, Brian <heinb@cityoflacrosse.org>; Lindert, Jon <Jon.Lindert@strand.com>; Johnstone, Daniel <Daniel.Johnstone@strand.com>
Subject: RE: City of La Crosse MS4 TSS Modeling

**CAUTION: This email originated from outside the organization.
Do not click links or open attachments unless you recognize the sender and know the content is safe.**

Ethan,

Thank you for the comments from your email on February 27, 2024. Our response to your comments are in [blue](#) within your email below. Please review each of our responses and let us know if you need any further information. Overall, with changes made to address the comments, the percent TSS and TP reduction change from 17.55% TSS and 14.7% TP to 17.23% TSS and 14.5% TP.

Thank you again for your review comments and time.

Mike

From: McGowan, Ethan I - DNR <ethan.mcgowan@wisconsin.gov>
Sent: Tuesday, February 27, 2024 12:12 PM
To: Williams, Mike <Mike.Williams@strand.com>
Cc: Hinke, Leanne C - DNR <Leanne.Hinke@wisconsin.gov>; Jablonski, Claire <JablonskiC@cityoflacrosse.org>; greenoja@cityoflacrosse.org; Hein, Brian <heinb@cityoflacrosse.org>; Lindert, Jon <Jon.Lindert@strand.com>; Johnstone, Daniel <Daniel.Johnstone@strand.com>
Subject: City of La Crosse MS4 TSS Modeling

[EXTERNAL EMAIL]: Verify sender before opening links or attachments.

Mike,

I was able to review the SWQMP and take a closer look at some of the modeled areas. Please see the comments below. I do not foresee the City meeting the 20% requirement. The comments below may even reduce the modeled TSS from 17.5% by a percent or two.

Please note that we plan on performing an alternatives analysis as part of this effort to develop a plan to meet the City's 20% TSS reduction requirement. This work will begin after completion of this existing condition modeling review step.

1. It is noted that many areas were shown/listed as exempt due to being riparian. Please clarify why the developed portions of the delineated areas below were included as riparian.
 - a. 10038 (NE corner of 1320, S of 1319), 10048 (N edge of 1371), 1058, 1078, 10228, 10238, 10548, 10698 (N of 1277), 10798, 11681, 13289

SAI Responses: In reference to Figure 1.01-1, Figure 2.01-1, and Figure 2.01-2 we have the following comments.

10038 (NE corner of 1320, S of 1319): Based on the contours, this area drains directly to the open area to the east which drains to the La Crosse river without entering the City's MS4 and is therefore exempted.

10048 (N edge of 1371): This portion of the watershed drains directly to railroad ROW and through railroad cross culverts to the river. The water from this watershed does not enter the City's MS4 and is therefore exempted.

1058: This basin, based on existing contours, drains directly to the La Crosse River without entering the City's MS4 and is therefore exempted.

1078: This basin is not exempted and has loadings and results tables B-1 and B-2. However, 10788 is exempted and is in a different area than 1078. Basin 10788 drains to an unnamed creek which drains to the La Crosse River without entering the City's MS4.

10228: This basin, based on existing contours, drains directly to the Mississippi River without entering the City's MS4 and is therefore exempted.

10238: This basin, based on existing contours, drains directly to the Mississippi River without entering the City's MS4 and is therefore exempted.

10548: This basin, based on existing contours, drains directly to the Mississippi River without entering the City's MS4 and is therefore exempted.

10698 (N of 1277): This basin, based on existing contours, drains directly to the La Crosse River without entering the City's MS4 and is therefore exempted.

10798: This basin, based on existing contours, drains directly to the La Crosse River without entering the City's MS4 and is therefore exempted.

11681: This basin, based on existing contours, drains directly to the Mississippi River without entering the City's MS4 and is therefore exempted.

13289: This basin, based on existing contours, drains directly to the Mississippi River without entering the City's MS4 and is therefore exempted.

2. Please confirm the unshaded area in the exhibits as the UWL campus, and that it is not included in the modeled areas (e.g. 1041, 1059)

SAI Response: The unshaded areas on Figures 3.06-1 through 3.06-4 are UW Lacrosse lands which was not included in the City-Wide modeling for the City and are not included in the report. The following statement will be added to the end of section 1.01 describing as such.

"Please note that this report and modeling herein does not incorporate University of Wisconsin - La Crosse lands." We also now show the UW-La Crosse boundary as a blue hatched polygon on various maps including Figures 1.01-1, 2.01-2, 2.01-3, 2.03-1, 2.04-1, 3.04-1, 3.05-1, 3.05-2, 3.05-3, and 3.05-4.

3. Please verify all practices shown on Figure 3.04-01 match with the tables in the appendices. For example, area 1301 shows a dry pond on B-5 but bioretention is shown on Figure 3.04-01.

SAI Response: Catchment 1301 has a bioretention basin modeled in it. Table B-5 has been updated to reflect this. Also, basin 1079 was shown on Figure 3.04-1 as a swale when in reality it is a bioretention basin. The figure has been updated with this. All other BMPs shown on Figure 3.04-1 match the corresponding reference in Table B-5.

4. Please clarify if additional areas were exempted for reasons other than riparian or ROW.

- a. Please clarify why large wooded areas (such as 1262, 1263, 1371, 1378, etc.) are included in the model. Please note that undeveloped parcels over 5 acres would be subject to new development regulations and should be excluded in accordance with the 2010 Guidance for Developed Urban Areas.

SAI Response: The mentioned watersheds and all of these large undeveloped areas east of the City are zoned as conservancy on the City's ArcGIS Online Mapping tool. Because they are zoned as conservancy, they will not be developed in the future and were therefore included in the model. It is also extremely unlikely that these areas will ever be developed because of the rather extreme topography of the area. These areas were modeled using the open space WinSLAMM standard land use and because they are zoned to be left as a conservancy Strand believes that the open area should continue to be modeled as such. Turn on the zoning layer at link below to see mapping of the conservancy areas.

https://gis.cityoflacrosse.org/maps/lacrosse_gis/

5. Please make sure all biofilter/basin floors and wet pond perm pools are modeled as Water Body Areas.

Strand Response: The source area acreages were developed by utilizing the standard land use feature in WinSLAMM. The standard land use files are based on historic data which determines source area percentages and generates pollutant loadings. None of the source areas in the models are an exact measurement of actual individual areas. This approach for municipality-wide analyses has been accepted on all past stormwater quality management plan updates by the WDNR and is considered an industry-standard method for municipal-wide studies. It should be noted that the water surface areas for many of these basins are a small fraction of the overall area and would only slightly change the pollutant load.

6. Please verify all exempted DOT/ROW areas have the OD (e.g. 1360).

SAI Response: The WinSLAMM model for catchment 1360 was updated to include an "other device" to remove the loading from the DOT ROW. All other models that have DOT ROW were checked but no additional basins were found to have a missing OD. The pollutant loading tables were updated.

7. Please clarify the land use for 1339. The model shows roofs, parking, playgrounds, streets, sidewalks, and grass. Figure 2.01-3 and Google Historical Images show the area as a runway for the airport. It appears that this area may have been used for event/overflow parking for a couple months in 2005, but returned to grass/runway.

SAI Response: There is no WinSLAMM standard land use for airports and the WDNR does not require a certain standard land use be required; however, the institutional land use has been widely accepted as an appropriate standard land use for airports. The institutional standard land use does have all of the land uses that you mentioned and an airport does not, but these standard land uses are to be a generalization of what is actually out in the real world. Based on previously WDNR accepted municipality-wide stormwater quality modeling across the state, airports have been modeled as the institutional standard land use.

8. Please clarify the biocells.

- a. It appears that a blanket 94% TSS reduction was applied to all biocells, as outlined in Section 3.04.D. Please provide context on how this removal rate was calculated.

SAI Response: The 94% TSS reduction and 93.7% TP reduction were calculated based on an average of eight different biocells and their corresponding basins throughout the City. The City's typical sections of these biocells were used alongside LiDAR data as a standard across these eight different models for purposes of WinSLAMM entry. The % TSS and %TP reduction ranged from 72% to 100% with a majority of these biocells having %TSS and %TP reductions greater than 98%. Please see the table below for additional details. The average percent reductions were then applied across the other biocells in the City. This provided an efficient method to model each basin biocell. The table below and the following statement will be added to the end of section 3.04 D: "The following table summarizes the findings of the biocell treatment analysis to determine pollutant loading reductions which included eight different watersheds with biocells of varying sizes and land uses."

- b. For more accurate results, please take into consideration the size of the BMP relative to the contributing DA. For example, a site with the largest biocell relative to DA and site with the smallest biocell relative to DA could have their rates calculated. The remaining biocells could be interpolated based on their respective bmp/da size ratio.

SAI Response: As you can see in the table below, the drainage area to biocell area ratio is not a perfect measure of the treatment that any given biocell will achieve. We did do an analysis of the three largest drainage areas draining to biocells. It was determined that due to the almost entirely impervious 10.53 acres in catchment 1197 that the biocell would not be able to achieve the average reduction and was therefore removed from the modeling. The next two largest basins, catchment 1061 (3.71 acres) and catchment 1117 (2.09 acres), were analyzed to see what their reductions would be; however, both of these catchments, which were not included in the eight original analyzed basins, achieved over 99% TSS and TP reduction. Therefore, the average 94% TSS and 93.7% TP reduction are conservative. The table below also shows the overall averages of TSS and TP reduction if you include catchments 1061 and 1117. You will notice that even with the larger upstream areas and increase in the drainage area to biocell area ratio, the overall % reductions increased. After this analysis, and with the acknowledgement that every basin is unique, we feel comfortable that the original % TSS and % TP reductions are reasonable.

Basins with modeled Biocells						
File Name	Catchment Area (ac)	Biocell Area (ac)	Drainage Area to Biocell Area Ratio	% TSS Removed	Total Phosphorus % Reduction	Originally Modeled
catchment1044	0.723	0.0145	49.990	85.36%	85%	Yes
catchment1045	0.763	0.0096	79.134	72.46%	72%	Yes
catchment1075	0.401	0.0168	23.928	97.87%	98%	Yes
catchment1143	0.408	0.0116	35.193	98.90%	99%	Yes
catchment1292	0.559	0.0108	51.809	99.38%	99%	Yes
catchment1293	0.591	0.0106	55.965	98.83%	99%	Yes
catchment1296	1.111	0.0246	45.229	98.83%	99%	Yes
catchment1297	0.512	0.0259	19.737	100%	100%	Yes
catchment1061	3.710	0.0387	95.756	99.4%	99%	No
catchment1117	2.090	0.1039	20.120	99.2%	99%	No
Original Analysis Averages	0.634	0.0155	45.123	93.95%	93.7%	Yes
New Analysis Averages	1.087	0.0267	47.686	95.02%	94.85%	No

9. Please clarify the porous pavement.

- a. Section 3.04.E notes that the pavement is not cleaned/maintained. If the BMP is not maintained (and assumed to be clogged), please remove from the modeling or set the treatment to 0%.
 - i. The 5yr results for 1072 show that the system is almost clogged after 5 years (0.05psf shown, 0.06psf is default clogging load).
 - ii. The 5yr results for 1282 show that the system clogged after 2.8 years and is no longer functional. Results from my run showed 22.5% TSS while the table on B-4 shows 24.9%.
- b. Many of the porous pavement areas are modeled to have near 100% TSS removal. This appears to conflict with the above comment. It is also not anticipated that porous pavement with 1.4-9.2ac drainage areas (1072, 1073, 1080-82, 1085, etc.) would be that effective. Please note that porous pavement should be modeled using a 20yr analysis in WinSLAMM per TS1008 and the corresponding Tech Note.

SAI Response: Based on coordination with Claire Jablonksi at the City of La Crosse on March 8, 2024, the City does vacuum sweep the porous pavement along East Ave., The Diagonal Park Neighborhood, and porous pavement around Cameron and 8th Street. The catchments include 1072, 1073, 1111, 1113, 1176, 1177, 1178, 1179, 1180, 1182. Claire stated that these areas are swept once every three weeks along with the rest of the City and are inspected for ponding during/after storm events although none has been noted. Catchments 1009, 1080, 1081, 1082, 1085, 1086, 1087, 1095, and 1282 had the porous pavement removed from the modeling as they are unable to be swept the City's current vacuum street sweeper. The City intends to begin sweeping these areas in the future but the treatment has been removed from existing conditions for this update. The catchments that are swept currently had their models run for 20 years with cleaning three times a year (which is the highest frequency available) selected even though it is done once every three weeks. The results of the new analysis are summarized in the table below and tables B-1 and B-2 have been modified to reflect the new analysis (as shown below).

Catchment	Baseline TSS (lbs)	Existing TSS (lbs)	TSS % Reduction	Baseline Particulate Phosphorous (lbs)	Existing Particulate Phosphorous (lbs)	Particulate Phosphorous % Reduction	Baseline Dissolved Phosphorous (lbs)	Existing Dissolved Phosphorous (lbs)	Dissolved Phosphorous % Reduction	Baseline TP (lbs)	Existing TP (lbs)	TP % Reduction	Notes
1009	143.06	142.96	0.1%	0.26	0.26	0.1%	0.04	0.046	0.0%	0.31	0.31	0.1%	Street Sweeping Only
1080_1081_1082	753.20	712.00	5.5%	1.42	1.35	4.6%	0.23	0.23	0.0%	1.65	1.59	3.9%	Street Sweeping Only
1085	1037.40	1037.00	0.1%	1.23	1.23	0.0%	0.55	0.55	0.0%	1.78	1.78	0.0%	Street Sweeping Only
1086	706.60	706.20	0.1%	0.84	0.84	0.1%	0.37	0.37	0.0%	1.21	1.21	0.0%	Street Sweeping Only
1087	95.76	93.24	2.6%	0.11	0.11	2.5%	0.046	0.05	0.0%	0.16	0.15	1.8%	Street Sweeping Only
1095	939.00	938.20	0.1%	2.13	2.13	0.1%	0.46	0.46	0.0%	2.60	2.60	0.1%	Street Sweeping Only
1282	562.00	561.60	0.1%	1.04	1.04	0.1%	0.18	0.18	0.0%	1.22	1.22	0.1%	Street Sweeping Only
1072	2288.80	899.55	60.7%	5.44	2.15	60.4%	1.48	0.65	55.8%	6.92	2.80	59.4%	Porous Pavement Swept three times per year for a 20 year model run
1073	1912	99.95	94.8%	4.25	0.22	94.7%	1.07	0.07	92.8%	5.32	0.30	94.3%	Porous Pavement Swept three times per year for a 20 year model run
1111	484.85		100.0%	1.023		100.0%	0.22		100.0%	1.24		100.0%	Porous Pavement Swept three times per year for a 20 year model run
1113	790.60	3.80	99.2%	1.90	0.01	99.5%	0.51	0.01	98.9%	2.42	0.02	99.4%	Porous Pavement Swept three times per year for a 20 year model run
1176_1177_1178	1041.20		100.0%	2.513		100.0%	0.68		100.0%	3.19		100.0%	Porous Pavement Swept three times per year for a 20 year model run
1179_1180_1182	967.20		100.0%	2.34		100.0%	0.65		100.0%	3.00		100.0%	Porous Pavement Swept three times per year for a 20 year model run

Thanks,

We are committed to service excellence.

Visit our survey at <http://dnr.wi.gov/customersurvey> to evaluate how I did.

Ethan McGowan, PE
 Stormwater Engineer – Bureau of Watershed Management
 Wisconsin Department of Natural Resources
 Phone: (715) 492-6019
Ethan.McGowan@Wisconsin.gov

Williams, Mike

From: Wagner, Teagan M - DNR <teagan.wagner@wisconsin.gov>
Sent: Friday, February 10, 2023 12:36 PM
To: Williams, Mike
Cc: Lyster, Keith
Subject: RE: City of La Crosse BMP Infiltration Rates

[EXTERNAL EMAIL]: Verify sender before opening links or attachments.

Hello Mike,

Leanne is in agreement that the delineation of soil types appears reasonable. Just to clarify, these delineations should not override any site specific information on file with the City for individual practices from construction records.

Thanks,

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Visit our survey at <http://dnr.wi.gov/customersurvey> to evaluate how I did.

Teagan Wagner, PE
Pronouns: she/her/hers
Phone: (715) 563-5267
Teagan.Wagner@Wisconsin.gov

From: Wagner, Teagan M - DNR
Sent: Thursday, February 09, 2023 1:05 PM
To: Williams, Mike <Mike.Williams@strand.com>
Cc: Lyster, Keith <Keith.Lyster@strand.com>
Subject: RE: City of La Crosse BMP Infiltration Rates

Hello Mike,

Things appear reasonable to me. I sent the analysis to the storm water specialist who covers La Crosse and is local and familiar with area as well for her thoughts. She has been out sick but stated she will hopefully take a look tomorrow and get back to me.

Thanks,

We are committed to service excellence.
Visit our survey at <http://dnr.wi.gov/customersurvey> to evaluate how I did.

Teagan Wagner, PE
Pronouns: she/her/hers
Phone: (715) 563-5267
Teagan.Wagner@Wisconsin.gov

From: Williams, Mike <Mike.Williams@strand.com>
Sent: Monday, February 06, 2023 1:27 PM

To: Wagner, Teagan M - DNR <teagan.wagner@wisconsin.gov>

Cc: Lyster, Keith <Keith.Lyster@strand.com>

Subject: City of La Crosse BMP Infiltration Rates

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Hello Teagan,

A few months ago you provided us with soils information for several NOI's within the City of La Crosse. Based on the NOI infiltration rates you provided and water quality modeling we received from the City of La Crosse that includes WDNR approved BMP infiltration rates, we have created the following figures proposing infiltration rate regions throughout the City. When developing these regions, we primarily considered the infiltration rates reported in the NOI's and used the approved modeled infiltration rates as supplemental information to refine the extents of each proposed region. Historical (c. 1937) aerial imagery from the State Cartographers Office was also used to determine likely extents of fill that was placed in riparian areas for modern developments. The maps have been annotated to detail our thought process and reasoning.

We propose to use these infiltration regions to assign infiltration rates for individual BMPs within the City.

Please let me know if you find this methodology acceptable. If you would like to have a Teams meeting to discuss this further please let me know.

Thank you,

Mike



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