

APPENDIX 1

PIPE ASSESSMENT SUPPORTING DOCUMENTATION



Shorewood Forest Subdivision Stormwater Infrastructure Study
Storm Sewer Televising Summary

= Indicates No Survey

= Indicates Pipe Completely Obstructed

Pipes Included in Capital Improvement Projects Shown in Red

Pipe ID	Video ID	Upstream	Downstream	Diameter (in)	Length Surveyed (ft)	Material	Survey Finished	Condition	Cleaning Required	Comments	Completely Obstructed	No Survey	Included in Scheduled Project	CIPP Improvement
A2-137	113	137	138	12	128.2	RCP	Yes	1	No					Yes
A2-145	101	145	146	12	181.5	RCP	Yes	1	No					Yes
A2-146	104	146	147	15	26.9	RCP	Yes	1	No					Yes
A2-147	152	147	148	15	102.9	RCP	Yes	1	No					Yes
A2-148	155	148	149	15	118.2	RCP	Yes	1	No					Yes
A2-149	157	149	150	18	276.2	RCP	Yes	1	No					Yes
A2-150	411	150	151	21	302.4	RCP	Yes	1	No					Yes
A2-151	412	151	151.5	21	227.8	RCP	Yes	1	No					Yes
A2-151.5	137	151.5	153	21	109.6	RCP	Yes	1	Yes	Rock				Yes
A2-152	110	152	151	12	186.4	RCP	Yes	1	No					Yes
A2-161	107	161	162	12	176.3	RCP	Yes	1	No					Yes
A3-163		163	164	24	22.7	CMP			Yes	Dredge, cannot jet or tv		X		Yes
A3-164		164	165	24	66.8	RCP			Yes	Dredge, cannot jet or tv		X		Yes
A3-165		165	166	24	71.2	RCP			Yes	Dredge, cannot jet or tv		X		Yes
A3-167	401	167	168	18	42.3	RCP	Yes	1	No					Yes
A3-169	402	169	170	18	22.3	RCP	Yes	1	No					Yes
A3-170	403	170	171	18	190.9	RCP	Yes	1	No					Yes
A3-171	404	171	173	21	192.1	RCP	Yes	1	No					Yes
A3-173	405	173	174	24	130.8	RCP	No	1	Yes	Sediment and debris starting at 110.0'				Yes
A3-177	409	177	178	15	242.7	RCP	Yes	1	No	High water level				Yes
A3-178	410	178	179	?	69.5	RCP	Yes	1	No	Upstream direction uncertain. 177 and 179 seem to both flow towards 178 in the middle of the two.				Yes
A3-180	527	180	181	12	178.9	RCP	Yes	1	No					Yes
A3-181	528	181	183	15	142.7	RCP	Yes	1	No					Yes
A3-182	529	182	181	12	32	RCP	Yes	1	No					Yes
A3-183	530	183	184	18	99.7	RCP	Yes	2	No	Rebar showing at 24.1				Yes
A3-184	531	184	187	24	174.7	RCP	Yes	1	No	High water level				Yes
A3-185	532	185	184	15	77.3	RCP	Yes	1	No					Yes
A3-186	533	186	185	12	162.8	RCP	Yes	1	No					Yes
A3-188		188	189	15	22.6	RCP			Yes	Dredge, cannot jet or tv		X		Yes
A3-190	525	190	191	15	67.7	RCP	Yes	1	Yes	Gravel and sediment built halfway through				Yes
A3-191	526	191	192	18	75	RCP	Yes	2	No	Patch repair at 57.6 has some cracking around it				Yes
B1-100	235	100	101	12	37.7	CMP	Yes	1	No	Small patch of sediment and gravel.				Yes
B1-101	232	101	102	12	38.5	CMP	Yes	3	No	Heavily corroded.				Yes
B1-102	238	102	103	12	190	CMP/HDPE	No	2	No	Small deformity in ceiling and verticle offset at material change.				
B1-102	241	102	103	12	60.7	CMP	No	2	No	Unauthorized tap in at 27'?				
B1-104	215	104	105	12	7.6	CMP	No	3	Yes	Pipe completely corroded with sediment and debris obstructing flow.				Yes
B1-104	219	104	105	12	15.3	CMP	No	3	Yes	Heavy corrosion forming and large amount of sediment in pipe.				Yes
B1-105	223	105	106	12	80.9	CMP	No	2	Yes	Pipe full of sediment and gravel restricting flow.				Yes
B1-106	226	106	107	12	8.3	CMP	No	3	Yes	Sediment and gravel covering corroded section.				Yes
B1-106	229	106	107	12	36.8	CMP	No	3	No	Sediment and gravel patch towards end where corrosion is also greater.				Yes
B1-109	211	109	108	24	114.9	CMP/VCP/Iron	No	3	No	Heavy corrosion with large section of pipe missing and a large void forming. Top of pipe is collapsed with a vehicle wheel broken through.				
B1-110	543	110	111	36	72	CMP	Yes	3	No	Hole on bottom for last 3 ft.			Yes	Yes
B1-111	542	111	112	36	2.9	CMP	Yes	2	No	Verticle offset at end of pipe.			Yes	

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B1-113	541	113	114	36	15.2	CMP	Yes	2	Yes	Sediment and debris in pipe. Long piece of lumber at end			Yes	Yes
B1-114	206	114	115	36	278.7	CMP	No	3	Yes	Heavy corrosion throughout pipe with small holes appearing.			Yes	Yes
B1-115	520	115	116	36	51	CMP	Yes	3	Yes	Last 6 ft has corroded bottom with large holes			Yes	Yes
B1-117	519	117	115	24	26.3	CMP	Yes	2	Yes	Some corrosion forming in spots			Yes	Yes
B1-118	518	118	117	24	24.9	CMP	Yes	3	No	6 ft section corroded and end of pipe has large holes on both sides of pipe			Yes	
B1-119	517	119	118	24	24.3	CMP	Yes	2	No	Light corrosion along bottom of pipe.				Yes
B1-122	202	122	123	12	138.6	CMP	Yes	2	No	Various rings of corrosion with a couple small deformations.				Yes
B1-124	244	124	125	15	28.1	CMP	Yes	2	No	Corrosion along lower half of pipe.				Yes
B1-125		125	126	15	210	CMP		3		Cannot tv, bottom rusted out on both ends		X		Yes
B1-127	247	127	238	8	27.4	Poly	Yes	1	No					Yes
B1-128	262	128	129	12	57	CMP	Yes	2	No	Minor corrosion along bottom of pipe.				Yes
B1-130	259	130	131	15	196.6	CMP	Yes	1	No	Minor corrosion along bottom of pipe.				Yes
B1-132	250	132	133	12	10.9	CMP	No	1	Yes	Debris and sediment restricting flow.	Yes			Yes
B1-132	422	132	133	12	25.3	CMP	No	1	Yes	Sediment completely obstructing flow at 25.3'	Yes			Yes
B1-133	256	133	134	12	152.1	CMP	Yes	2	No	Small section with entire pipe corroding.				Yes
B2-135	253	135	136	12	4	CMP	No	1	Yes	Rocks and Sediment fills 1/3 of pipe.				Yes
B2-138	116	138	139	12	110	RCP	Yes	1	No					Yes
B2-139	149	139	140	15	52.7	RCP	Yes	1	No					Yes
B2-140	146	140	141	18	126.6	RCP	Yes	1	No					Yes
B2-141	143	141	144	21	245.9	RCP	Yes	3	No	Pipe joint broken				
B2-143	119	143	494	12	55.1	RCP	Yes	1	No					Yes
B2-153	140	153	154	12	281	RCP	Yes	1	No					Yes
B2-155	125	155	156	48(BOX)	76.6	RCP	Yes	1	Yes					Yes
B2-157	128	157	158	48(BOX)	18.5	RCP	Yes	1	Yes	Rocks				Yes
B2-158	131	158	159	48(BOX)	26.5	RCP	Yes	1	Yes	Rocks				Yes
B2-159	134	159	160	48(BOX)	4.4	RCP	No	1	Yes	Sediment and rocks				Yes
B2-221	255	221	222	12	28	CMP	Yes	2	No	Corrosion along bottom of pipe.				Yes
B2-222	258	222	223	12	187.1	CMP/HDPE	No	2	Yes	Tree roots growing into pipe, deformities with tap break-in, and water level fills entire pipe near end.				
B2-227	261	227	228	12	126.4	CMP	No	3	Yes	Heavily corroded halfway through to end and sediment on back end of pipe.				Yes
B2-494	124	494	141	15	26.4	RCP	Yes	1	No					Yes
B3-172	406	172	171	15	233	RCP	Yes	1	No					Yes
B3-175	407	175	176	15	56.8	RCP	Yes	1	Yes	Gravel and rocks starting at 30.0'				Yes
B3-176	408	176	177	15	196.8	RCP	Yes	2	No	Chunk of pipe near top of joint broke and fell into pipe, exposing soil.				
B3-193	236	193	194	15	62	CMP	Yes	2	No	Light corrosion along bottom of pipe.			Yes	Yes
B3-194	239	194	195	15	34.6	CMP	Yes	2	Yes	Rocks restricting flow in pipe.			Yes	Yes
B3-195	242	195	196	18	116.3	CMP	No	3	No	Large holes where soil is visible throughout pipe			Yes	
B3-195	245	195	196	18	27.3	CMP	No	3	No	Large hole with soil visible at 27.3'				
B3-197	248	197	198	15	22.6	Poly	No	2	Yes	Pipe 1/3 filled with sediment. Hole in side of pipe with soil coming into pipe.				
B3-234	221	234	235	12	31.6	CMP	Yes	1	No	Sediment and gravel throughout pipe.				Yes
B3-235	224	235	236	12	118.4	CMP	No	2	Yes	Chunk of asphalt in pipe.				Yes
B3-235	227	235	236	12	135.7	CMP	No	2	Yes	A brick and chunk of asphalt are in the pipe.				Yes
B3-236	230	236	237	15	88.2	CMP	Yes	2	No	Corroded rings in pipe throughout.				Yes

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B3-237	252	237	238	18	131.8	CMP	Yes	3	No	Deformity near beginning of pipe and pipe section broken exposing soil at 13.5'				
B3-240	233	240	237	12	141.4	CMP	Yes	3	Yes	Heavily corroded sections in pipe.				Yes
B3-240.5	424	240.5	240	12	1.5	CMP	No	2	Yes	Filled with sediment halfway to top of pipe.				Yes
B3-241	217	241	242	12	32.9	CMP	Yes	3	Yes	Bottom half of pipe heavily corroded.				Yes
B3-242	208	242	243	15	54.3	CMP	No	2	Yes	Large rock in pipe.				Yes
B3-242	213	242	243	15	52.1	CMP	No	2	Yes	Corrosion forming along bottom of pipe. Large rocks in pipe.				Yes
C1-120	120	119	24	24	283.53	CMP				Cannot tv, buried		X		Yes
C1-121	201	121	120	24	112.8	CMP	Yes	2	No	Verticle Crack in pipe near end.				Yes
C1-199	207	199	200	12	26.2	CMP	Yes	2	Yes	-At 4.0', full circumference, for 2.0'				Yes
C1-200	212	200	201	12	98.6	CMP	Yes	2	No	Corrosion forming along bottom of pipe.				Yes
C1-202	216	202	203	12	23.7	CMP	Yes	3	No	Heavily corroded throughout pipe.				Yes
C1-203	220	203	204	12	99.5	CMP	Yes	2	Yes	12' section of pipe halfway corroded.				Yes
C1-205	237	205	206	12	222.2	CMP	Yes	2	Yes	Some sediment throughout pipe with corrosion forming.				Yes
C1-206	544	206	207	12	220.1	CMP	No	3	No	Heavy corrosion on bottom, pipe pushed to 2/3 size at 154.3, entire bottom gone after 220.1				
C1-208	263	208	209	18	25.4	CMP	Yes	2	No	Small section with entire pipe corroding.				Yes
C1-209	251	209	210	24	150.6	CMP	Yes	3	No	Corrosion throughout with many holes.				Yes
C1-210	254	210	212	24	268.2	CMP	Yes	1	Yes	Sections of sediment in pipe.				Yes
C1-211		211	210	12	44	CMP			Yes	Heavy debris, cannot tv		X		Yes
C1-212	257	212	213	36	32.1	CMP	Yes	2	No	Small section with entire pipe corroding.				Yes
C1-213	260	213	214	36	119.4	CMP	Yes	1	No	Minor corrosion along bottom of pipe.				Yes
C1-215	515	215	216	12	34.1	CMP	Yes	2	Yes	1 ft ring of corrosion at 11.6				Yes
C1-216		216	217	12		CMP			Yes	Heavy debris, cannot tv		X		Yes
C1-258A	234	258	259	12	83.7	Poly	Yes	1	No	High water level.				Yes
C1-258B	205	258	261	12	10.7	CMP	No	3	No	Large sections of pipe missing or with holes.				
C1-258B	210	258	261	12	41.2	VCP/CMP	No	3	No	Corrosion along bottom of pipe and and hole at 41.2'				
C1-260	225	260	261	12	14.4	CMP	No	3	Yes	Heavily corroded throughout pipe.				Yes
C1-260	228	260	261	12	13.8	CMP	No	3	Yes	Heavily corroded and high water level.				Yes
C1-261	231	261	262	12	31.8	CMP	Yes	3	No	Multiple holes ranging in size throughout pipe.				Yes
C1-263		263	264	12	60.6	CMP			Yes	Heavy debris, cannot tv		X		Yes
C1-264	249	264	265	12	136.8	CMP	No	3	No	Bottom of pipe has large holes near end of pipe.				Yes
C1-266	240	266	267	12	27.3	CMP	Yes	3	No	Completely corroded				Yes
C1-267	246	267	268	12	116.9	CMP	Yes	2	No	Corroded along lower half of pipe.				Yes
C2-218	423	218	219	12	0	CMP	No	2	Yes	Filled with sediment halfway to top, signs of corrosion along sediment edge.				Yes
C2-219	516	219	220	12	153.3	CMP	Yes	2	Yes	Some rings of corrosion forming				Yes
C2-225	513	225	226	12	17.5	CMP	No	3	No	Corrosion along bottom, holes and deformities in pipe throughout.				
C2-225	514	225	226	12	44.8	Poly/CMP	No	3	No	Large hole at material transition at 44.8				
C2-269	243	269	270	12	205.8	RCP	No	1	Yes	Flow heavily restricted due to gravel and sediment.				Yes
C2-271	545	271	272	12	76.6	CMP	Yes	3	Yes	Patches of heavy corrosion throughout pipe				Yes

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C2-272	546	272	273	12	81.7	CMP	Yes	2	No	Corrosion on bottom of pipe				Yes
C3-243	203	243	244	15	146.1	CMP	Yes	2	No	Corrosion along bottom of the pipe.				Yes
C3-244	512	244	245	15	113.6	CMP	Yes	2	No	Corroded along bottom of pipe				Yes
C3-245	304	245	246	18	8.5	CMP	No	2	Yes	Large rock restricting flow				Yes
C3-247		247	245	12	34.9	CMP			Yes	Heavy debris, cannot tv		X		Yes
C3-248	120	248	249	12	48.2	Poly	No	1	No	Stopped due to "Y" connection. Y-connection shows 12" pipe branching south towards basketball half court on map.				Yes
C3-248	122	248	249	12	27.1	Poly	No	2	Yes	Blocked by a large rocks downstream				Yes
C3-248	328	248	249	12	96.3	Poly	Yes	1	No	Man hole covered with cement at 90'. Y-connection at 40' with 12" pipe branching south towards parking lot and base of hill (Oval at 410 Shorewood Ct.)				Yes
C3-248	330	248	249	12	0	RPP	No	NA	NA	No video				Yes
C3-249	114	249	25	12	90.6	Poly	Yes	2	No	Skew in pipe @ 39.6				Yes
C3-250	117	250	251	12	50.1	Poly	Yes	1	No					Yes
C3-251		251	252	12	23.4	HDPE			Yes	Light debris		X		Yes
C3-252	105	252	253	15	21.8	CMP	Yes	1	No					Yes
C3-253	102	253	254	15	17.5	CMP	No	1	Yes	Blocked by a large rock downstream				Yes
C3-253	108	253	254	15	8.5	CMP	No	1	Yes	Blocked by a large rock upstream				Yes
C3-254	111	254	255	15	18.1	CMP	No	1	No	Water level too high to finish				Yes
C3-256		256	257	12	40.5	CMP			Yes	Light debris		X		Yes
C3-274	138	274	275	12	2	CMP	No	3	Yes	Surface corrosion and sediment				Yes
C3-275	334	275	276	12	9.6	CMP	No	3	Yes	Heavy corrosion and heavy build up of sediment				Yes
C3-275	336	275	274	12	2.4	CMP	No	3	Yes	Heavily corroded at entrance, pipe full of gravel and sediment.				Yes
C3-276	159	276	277	12	61.9	CMP	Yes	1	No					Yes
C3-278	161	278	276	12	24.4	CMP	No	3	Yes	Surface corrosion and sediment				Yes
C3-278	332	278	276	12	14.5	CMP	No	2	Yes	Sediment and debris restricting flow				Yes
C3-279	135	279	280	12	2	CMP	No	3	No	Bottom of pipe missing/corrosion				Yes
C3-281	126	281	282	12	25.9	CMP	Yes	2	Yes	Surface corrosion				Yes
C3-282	132	282	283	12	51	CMP	Yes	3	No	Pipe separated @ 40.7				
C3-284	129	284	285	12	212.2	CMP	Yes	1	No					Yes
C3-315	156	315	316	12	12.2	CMP	No	2	Yes	Surface corrosion, sediment, and rocks				Yes
C3-315	301	315	316	12	23	CMP	Yes	3	Yes	Heavy corrosion with debris and sediment throughout pipe				Yes
C3-316	158	316	317	12	81.4	CMP	Yes	2	No	Surface corrosion				Yes
C3-317	141	317	318	12	105	Poly	Yes	1	No					Yes
C3-319	153	319	320	12	33	CMP	Yes	2	No	Surface corrosion				Yes
C3-320	144	320	321	12	29	CMP	No	3	No	Bottom of pipe missing/corrosion				Yes
C3-322		322	323	12	27	CMP			Yes	Heavy debris, cannot tv		X		Yes
C3-323		323	324	12	25.3	CMP			Yes	Heavy debris, cannot tv		X		Yes
C3-326	150	326	327	15	53.9	CMP	Yes	2	Yes	Sediment				Yes
D1-286	109	286	287	12	12.4	CMP	No	3	Yes	Blocked by a large rock and sediment upstream. Extensive surface corrosion				Yes
D1-286	127	286	287	12	31.8	CMP	No	3	Yes	Sediment and surface corrosion				Yes
D1-287	112	287	288	12	38.4	CMP	No	3	No	Pipe buckled and deformed				
D1-287	115	287	288	12	106.7	CMP	No	3	No	Pipe buckled and deformed				
D1-288	123	288	291	12	4	CMP	No	3	No	Bottom of pipe missing/corrosion				Yes
D1-289	118	289	290	12	28	CMP	Yes	3	Yes	Pipe rusted away in areas, extensive surface corrosion				Yes
D1-290	121	290	288	12	39.2	CMP	Yes	2	Yes					Yes
D1-292	509	292	293	12	66.6	HDPE	Yes	1	Yes	Some gravel and debris towards end of pipe				Yes

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D1-293	510	293	294	12	28.6	CMP	Yes	3	No	Heavy corrosion in first half of pipe				Yes
D1-294	511	294	295	15	191.6	CMP	Yes	3	No	Heavy corrosion along bottom and holes throughout				Yes
D1-295	103	295	296	15	128.6	CMP	Yes	1	No					Yes
D1-297	106	297	298	12	148.4	CMP	No	2	Yes	Blocked by sediment downstream	Yes			Yes
D1-333	505	333	334	30	81.1	CMP	No	3	No	Large hole at bottom of pipe, position 5 to 7, for more than 5 ft.				Yes
D1-335	508	335	336	12	61.1	CMP	Yes	3	Yes	Heavily corroded with small holes throughout				Yes
D1-336	506	336	337	12	9.5	CMP	No	3	No	Large hole at bottom of pipe about 5 ft in length				Yes
D1-336	507	336	337	12	4	CMP	No	3	No	Large hole at bottom of pipe about 5 ft in length				Yes
D2-299	501	299	300	12	29	CMP	Yes	3	Yes	Heavy corrosion				Yes
D2-300	502	300	301	12	49	CMP	Yes	3	Yes	Hole at top of pipe at 31.1				Yes
D2-301		301	302	12	115.1	CMP		3		Buried, cannot jet or tv		X		Yes
D2-303	548	303	304	12	28.5	CMP	Yes	3	Yes	Heavy corrosion in sections throughout				Yes
D2-304		304	305	15	34.1	CMP		3		Bottom rusted out		X		Yes
D2-306	163	306	307	12	32.2	CMP	Yes	2	No	Surface corrosion				Yes
D2-306	310	306	307	15	28.1	CMP	Yes	3	No	Heavy corrosion in middle section of pipe.				Yes
D2-307	165	307	308	15	13.8	CMP	No	3	Yes	Conduit through pipe				
D2-307	173	307	308	15	12.8	CMP	No	2	Yes	Compacted sediment and rock				Yes
D2-307	307	307	308	15	8.9	CMP	No	3	Yes	Flow obstructed by bore through pipe collecting sediment and debris.				
D2-307	313	307	308	15	48.1	CMP	No	2	Yes	Pipe caved in partially with rock and gravel debris in the area.				
D2-308	175	308	309	18	90.2	CMP	Yes	2	Yes	Compacted sediment and rock				Yes
D2-310	169	310	311	12	29.7	HDPE	Yes	2	No	Deformed Pipe				
D2-311	171	311	308	18	16.7	CMP	No	3	Yes	Surface corrosion and sediment				Yes
D2-311	177	311	308	15	21.7	CMP	No	2	Yes	Surface corrosion and sediment/rocks				Yes
D2-312	133	312	313	15	29.5	CMP	Yes	2	Yes	Surface corrosion				Yes
D2-313	130	313	314	15	32.7	CMP	Yes	2	No	Pipe corrosion at outfall				Yes
D2-338		338	339	?		CMP		3		Bottom rusted out, cannot jet or tv		X	Yes	Yes
D2-340	421	340	341	15	14.4	CMP	No	2	No	Pipe deformity at joint. Might be exposing soil.				
D2-341	547	341	342	10	25.3	PVC/CMP	No	3	Yes	Holes and large debris at material change				
D2-343		343	344	48		CMP		3	Yes	Dredge, cannot jet or tv		X	Yes	Yes
D2-345		345	346	?		CMP		3	Yes	Dredge, cannot jet or tv		X	Yes	Yes
D2-347	550	347	349.5	12	121.9	PVC	Yes	1	No					Yes
D2-349.5	551	349.5	349	18	144.2	CMP	Yes	3	Yes	Joint separation with cable line showing at 7.0				
D2-350	549	350	349.5	12	24.2	PVC	No	1	No					Yes
D2-351A	538	351	352	12	30.5	HDPE	Yes	1	No					Yes
D2-351B	537	351	355	12	52.5	HDPE	Yes	1	No					Yes
D2-354	539	354	357	36	4.4	CMP	No	2	Yes	High water level and debris				Yes
D2-356		356	353	36	120.3	CMP			Yes	Dredge, cannot jet or tv		X		Yes
D2-362	503	362	363	12	75.8	CMP	Yes	2	Yes	Light gravel and debris. Some corrosion throughout.				Yes
D2-363	504	363	364	12	5.9	CMP	No	3	No	Large obstruction sticking through pipe				
D3-325	147	325	326	15	177.9	CMP	No	3	No	Conduit through pipe				
D3-358	324	358	359	12	200.3	CMP	No	3	No	Pipe fully collapsed and filled with debris and sediment	Yes			
D3-360	204	360	361	15	163.9	CMP	No	2	No	Corrosion along bottom of the pipe.				Yes
D3-360.5	209	360.5	360	12	81.6	CMP	Yes	3	No	Sections of pipe completely eroded.				Yes
D3-365	522	365	366	18	138.5	RCP	Yes	1	No					Yes

Shorewood Forest Subdivision Stormwater Infrastructure Study
Storm Sewer Televising Summary

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Pipes Included in Capital Improvement Projects Shown in Red

Pipe ID	Video ID	Upstream	Downstream	Diameter (in)	Length Surveyed (ft)	Material	Survey Finished	Condition	Cleaning Required	Comments	Completely Obstructed	No Survey	Included in Scheduled Project	CIPP Improvement
D3-366	521	366	367	24	108.3	RCP	Yes	1	No					Yes
D3-368	523	368	369	12	28.7	CMP	Yes	1	Yes	Gravel and sediment in back half of pipe				Yes
D3-369	524	369	370	12	41	CMP	Yes	2	No	Cracking at joint at 27.0				Yes
D3-371	142	371	374	18	41.5	CMP	No	3	Yes	Block pipe	Yes			Yes
D3-372		372	373	12	26.5	CMP			Yes	Dredge, cannot jet or tv		X		Yes
D3-373	136	373	374	12	13.4	CMP	No	2	Yes	Surface corrosion and sediment				Yes
D3-373	139	373	374	12	11.5	CMP	No	3	Yes	Surface corrosion and sediment				Yes
D3-374	145	374	375	24	5.9	CMP	No	3	Yes	Surface corrosion and sediment				Yes
D3-374	326	374	375	18	21.4	CMP	Yes	3	Yes	Fully corroded with some debris and sediment				Yes
D3-375	148	375	376	24	47.1	CMP/HDPE	Yes	2	Yes	Surface corrosion and sediment				Yes
D3-377	151	377	378	15	6.4	CMP	No	2	Yes	Sediment				Yes
D3-377	162	377	378	15	12.8	CMP	No	2	Yes	Surface corrosion and sediment				Yes
D3-378	154	378	379	15	165.5	CMP/HDPE	No	3	Yes	Pipe buckled and deformed at material change/end and sediment				
D3-378	160	378	379	15	75.5	Poly	No	3	No	Pipe deformed and breaking				
D3-380	164	380	381	30	61	CMP	Yes	1	No	Inlet (380) needs cleaned				Yes
D3-381	166	381	382	30	36	CMP	Yes	1	No					Yes
D3-382	168	382	383	36	4	CMP	No	3	No	Bottom of pipe corrosion				Yes
D3-382	170	382	383	36	159.6	CMP	No	3	No	Pipe joint separated at end/Upstream				
D3-384	176	384	385	12	27.8	CMP	Yes	1	Yes	Sediment and rock				Yes
D3-385	174	385	382	12	86.8	CMP	Yes	2	No	Few spots of infiltration				Yes
D3-457	312	457	458	15	149.7	RCP	Yes	2	No	Broken position with no exposed soil				Yes
D4-328	186	328	329	15	111.9	CMP	No	1	Yes	Sediment and rocks				Yes
D4-330	184	330	331	15	58.6	CMP	No	2	Yes	Surface corrosion and sediment/rocks				Yes
D4-331	185	331	332	15	102.1	CMP	No	3	Yes	Block with sediment @ downstream				Yes
D4-386	178	386	387	12	29.2	CMP	Yes	1	No				Yes	Yes
D4-387	179	387	388	15	45.8	CMP	No	2	Yes	Sediment and rock			Yes	Yes
D4-387	419	387	388	15	92.6	CMP	Yes	2	Yes	Gravel and sediment in patches throughout pipe. Corrosion at end of pipe			Yes	Yes
D4-388	418	388	389	15	143.6	CMP	Yes	2	No	Patches of corrosion in first 15', camera out of focus preventing better inspection. Heavily corroded on bottom portion of pipe, worse towards beginning.			Yes	Yes
D4-389	416	389	390	15	115	CMP	No	3	No				Yes	Yes
D4-390	180	390	391	15	85.1	CMP	Yes	2	No	Pipe corrosion at outfall			Yes	Yes
D4-392	417	392	389	15	23.1	CMP	No	2	Yes	Narrow strip of corrosion throughout pipe and pile of sticks at manhole at end			Yes	Yes
D4-393		393	394	12	129	CMP			Yes	Heavy debris, cannot tv		X		Yes
D4-395	182	395	396	15	28.1	CMP	Yes	1	Yes	Sediment and rocks				Yes
D4-395	413	395	396	21	24.5	CMP	Yes	2	No	Corroded on bottom 1/3 of pipe.				Yes
D4-396	183	396	397	15	153.2	CMP/Poly	No	3	Yes	Collapse @ pipe material change				
D4-396	188	396	397	15	41	Poly	No	3	No	Multipe Taps with soil visible				
D4-398	414	398	399	15	24.2	CMP	Yes	3	Yes	Corrosion throughout but heavier in the first 5.0'				Yes
D4-399	181	399	400	15	7	CMP	No	3	Yes	Block with sediment @ downstream				Yes
D4-399	415	399	400	15	80.6	CMP	No	3	No	Pipe filled with water towards end. Pipe might be heavily corroded where water level sits.				Yes
D4-462	191	462	463	18	294	CMP	No	1	No	Did not Finish, ran out of line??				Yes
D4-463	190	463	464	15	49.6	Poly	Yes	1	No					Yes
D4-465		465	466	12	27.8	CMP			Yes	Heavy debris, cannot tv		X		Yes
D4-466	189	466	463	12	62.3	CMP	Yes	2	Yes	Surface corrosion and sediment/rocks				Yes
D4-475		475	476	12	29.3	RCP			3	Inundated		X		

Shorewood Forest Subdivision Stormwater Infrastructure Study
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Pipes Included in Capital Improvement Projects Shown in Red

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D4-476		476	493	12	196	RCP		3		Inundated		X		
D4-477	347	477	478	12	68	RCP	No	1	Yes	Sediment and gravel in pipe near end				Yes
E3-401	318	401	402	12	129.1	RCP	Yes	1	No	Minor cracking at joint				Yes
E3-403	320	403	404	12	21.7	RCP	Yes	1	No					Yes
E3-404	322	404	405	12	165.4	RCP	No	2	No	Hole at 9.6'				Yes
E3-405	325	405	406	12	177.3	RCP	No	1	No					Yes
E3-406	331	406	407	15	22.9	RCP	Yes	1	No					Yes
E3-407	333	407	408	15	156.4	RCP	Yes	2	No	Some cracking around circumference				Yes
E3-408	337	408	409	15	150.6	RCP	No	3	No	Large joint offset with soil visible				
E3-410	327	410	411	12	0	RCP	No	2	Yes					Yes
E3-410	335	410	411	12	27	RCP	No	2	Yes	Debris and gravel restricting flow.				Yes
E3-411	329	411	406	12	24.3	RCP	Yes	1	No					Yes
E3-412	344	412	413	12	63.5	RCP	No	1	Yes	Flow obstructed by heavy debris	Yes			Yes
E3-412	346	412	413	12	130.7	RCP	Yes	1	No					Yes
E3-413		413	414	12		RCP			Yes	Heavy debris, cannot tv		X	Yes	Yes
E3-414	345	414	415	12	94.5	RCP	Yes	3	No	Large joint separations towards end of pipe			Yes	
E3-416	321	416	417	12	8.8	CMP	No	1	Yes	Sediment in pipe with rock restricting flow				Yes
E3-417	323	417	418	12	181.2	PVC/CMP	No	2	No	Deformation in pipe with some corrosion towards end of pipe				
E3-418A	319	418	419	18	100.6	CMP	Yes	3	No	Large section heavily corroded with holes, water level very high near end				Yes
E3-418B	420	418	423	24	0	CMP	No	1	Yes	Large rocks in pipe restricting flow				Yes
E3-420	311	420	421	12	25.3	RCP	Yes	1	No					Yes
E3-421	314	421	422	12	72.1	RCP	Yes	1	No					Yes
E3-422	316	422	423	15	104.1	RCP	Yes	1	No					Yes
E3-424	302	424	425	15	100.8	RCP	Yes	1	No	Broom stick wedged in pipe.				Yes
E3-425	305	425	426	21	62	RCP	Yes	1	No					Yes
E3-427	369	427	428	12	20.4	RCP	Yes	1	Yes	Some gravel at beginning of pipe				Yes
E3-428	370	428	429	12	147.4	RCP	Yes	1	No					Yes
E3-429	308	429	430	12	188.6	RCP	Yes	1	No					Yes
E3-430	340	430	431	15	103.1	RCP	Yes	1	No					Yes
E3-431	341	431	432	15	166.4	RCP	Yes	2	No	Hole near end of pipe with no soil visible				Yes
E3-433	338	433	434	12	22	RCP	Yes	1	No					Yes
E3-434	339	434	431	12	192.4	RCP	Yes	1	No					Yes
E3-435	342	435	436	12	37.2	RCP	Yes	1	No					Yes
E3-436	343	436	437	12	151.3	RCP	Yes	2	No	Pipe partially crushed in a couple sections				
E3-437		437	438	15	105.3	HDPE		3		Buried, cannot jet or tv		X		
E3-439	315	439	440	12	65.5	RCP	Yes	1	No					Yes
E3-440	317	440	441	12	144.8	RCP	Yes	2	No	Rebar in section showing, joint separation, and pipe gasket visible				
E3-442	364	442	443	12	24.8	RCP	Yes	2	No	Some slight cracking at joint and mortar appearing				
E3-443	363	443	444	12	292.7	RCP	Yes	1	No	Stick lodged in joint of pipe				Yes
E3-458	309	458	459	15	48.7	RCP	Yes	1	No					Yes
E3-459	303	459	460	12	24.4	RCP	Yes	1	No					Yes
E4-444	367	444	445	15	85.7	RCP	Yes	1	No				Yes	Yes
E4-446	368	446	444	15	50.8	RCP	Yes	1	No					Yes
E4-447	366	447	448	12	23.7	RCP	Yes	1	Yes	Thin layer of gravel for 1st half of pipe				Yes
E4-448	365	448	449	12	28.5	RCP	Yes	2	No	Joint separation of 4"				
E4-450	214	450	451	12	52.2	Poly	Yes	1	No					Yes
E4-451	218	451	452	24	55	Poly	Yes	1	No					Yes
E4-453	222	453	454	15	60.6	Poly	Yes	1	No					Yes

Shorewood Forest Subdivision Stormwater Infrastructure Study
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E4-455		455	456	30	40.3	HDPE			Yes	Large tree on upstream, full downstream	Yes	X		Yes
E4-460	306	460	461	12	181.1	RCP	Yes	1	No					Yes
E4-461		461	462	18	106.44	CMP						X		Yes
E4-467	192	467	468	30	97.1	PVC	No	1	No	Did not Finish, too much water in line			Yes	Yes
E4-469	348	469	470	12	29	RCP	Yes	1	No					Yes
E4-470	349	470	471	12	105.4	RCP	Yes	1	No					Yes
E4-470.5	350	470.5	471	12	113.4	RCP	Yes	1	No					Yes
E4-471	351	471	472	12	98.3	RCP	Yes	1	No					Yes
E4-472		472	473	?		RCP		3		Inundated, dredge, cannot tv		X	Yes	
E4-473		473	474	15		RCP		3		Inundated, dredge, cannot tv		X	Yes	
E4-479		479	480	12	65.1	RCP				No information		X		Yes
E4-481	359	481	482	18	232	RCP	Yes	1	No					Yes
E4-482	360	482	491	24	310.7	RCP	Yes	1	No	A brick is in the pipe				Yes
E4-483	352	483	484	12	254.9	RCP	Yes	1	No					Yes
E4-484	355	484	485	12	113.4	RCP	Yes	1	No					Yes
E4-485	356	485	486	18	94.1	RCP	Yes	1	No					Yes
E4-485	357	485	486	18	20.8	RCP	Yes	1	No					Yes
E4-486	358	486	482	18	62.8	RCP	Yes	1	No					Yes
E4-487	353	487	488	12	22.5	RCP	Yes	1	Yes					Yes
E4-488	354	488	485	12	52.6	RCP	Yes	1	No					Yes
E4-489		489	486	12	28.1	RCP				No information		X		Yes
E4-490	362	490	482	12	16.5	RCP	Yes	1	No					Yes
E4-491	361	491	492	24	13.7	RCP	Yes	1	No					Yes



CB
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CLIENT:

PORTER COUNTY, INDIANA
DEPT. OF DEVELOPMENT & STORM WATER MGMT.
155 INDIANA AVE, SUITE 311
VALPARAISO, IN 46383

NO.	DATE	NATURE OF REVISION	DSGN.		
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			CHKD.		
			SCALE:		
			PLOT DATE:	1/15/2021	
			CAD USER:	agebhard	
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TITLE:

**SHOREWOOD FOREST
STORM SEWER
SECTION 3**

PROJ. NO. 20-0085.00000
DATE: 1/15/2021
SHEET 3 OF 10
DRAWING NO.
3



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			DWN.	
			CHKD.	
			SCALE:	
			PLOT DATE:	1/15/2021
			CAD USER:	agebhard
			MODEL:	6
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TITLE:

**SHOREWOOD FOREST
STORM SEWER
SECTION 6**

PROJ. NO. 20-0085.00000
DATE: 1/15/2021
SHEET 6 OF 10
DRAWING NO.
6



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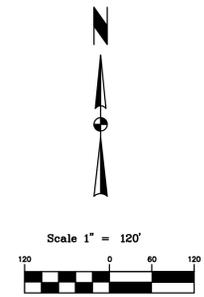
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CHKD. _____
SCALE: _____
PLOT DATE: 1/15/2021
CAD USER: agebhard
MODEL: 8

TITLE:

**SHOREWOOD FOREST
STORM SEWER
SECTION 8**

PROJ. NO. 20-0085.00000
DATE: 1/15/2021
SHEET 8 OF 10
DRAWING NO.
8



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NO.	DATE	NATURE OF REVISION	DSGN.		
			DWN.		
			CHKD.		
			SCALE:		
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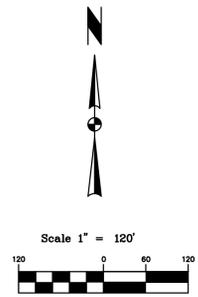
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**SHOREWOOD FOREST
STORM SEWER
SECTION 9**

PROJ. NO. 20-0085.00000
DATE: 1/15/2021
SHEET 9 OF 10
DRAWING NO.
9



10



11



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NO.	DATE	NATURE OF REVISION	DSGN.	DWN.	CHKD.	SCALE:	PLOT DATE:	CAD USER:	MODEL:
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TITLE:

**SHOREWOOD FOREST
 STORM SEWER
 SECTIONS 10 & 11**

PROJ. NO. 20-0085.00000
 DATE: 1/15/2021
 SHEET 10 OF 10
 DRAWING NO.
10