EMH&T
Engineers, Surveyors, Planners, Scientists

STORM SEWER COMPUTATION SHEET

SHT 1

Project: **Amlin Area Infrastructure Improvements** Date: 11/17/20
Job No.: **2020-0219** South Side of Rings Rd By: EAM
Intensity Reference: Franklin County Checked:
Revised:
Revised:

10 Yr Design Storm n= **0.012**

Struc.	Struc. Index	Sta.	Drainage Area Trib	Cumul.	C	Cumul CA	Time Delta t Min.	Sum t Min.	Intensity in/hr	Des Q CFS	Length ft.	Dia. In	Slope%	Vel	Cap. Flowing Full	Status	In	Out	TC	Remarks	25 YEAR HYDRAULIC GRADE LINE 25 Yr Rainfall Intensity	Discharge Q	Slope %	Minor Losses	25 Yr HGL w/ minor losses
73	CB11	10+26.37	0.47	0.47	0.55		11.24	11.24	4.98	1.29							939.37		943.67						
Catch Basin 12" Diameter			0.00		0.55	0.26					136.24	12	0.38%	3.0	2.4	OK				3.13 ft. cover	5.65	1.46	0.1423	0.0241	956.67
AA-S130																				4.30 ft. depth					problem
72	CB11	8+90.13	0.47	0.94	0.55		0.75	11.99	4.84	2.50							938.60	938.85	941.11	0.25 DROP					
Catch Basin 12" Diameter			0.00		0.55	0.52					133.11	15	0.38%	3.5	4.3	OK				1.07 ft. cover	5.50	2.84	0.1641	0.0375	956.45
AA-S130																				2.51 ft. depth					problem
71	CB11	7+57.02	0.47	1.41	0.55		0.63	12.62	4.73	3.67							937.99	938.09	941.54	0.10 DROP					
Catch Basin 12" Diameter			0.00		0.55	0.78					81.12	15	0.38%	3.5	4.3	OK				2.01 ft. cover	5.38	4.17	0.3536	0.0808	956.19
AA-S130																				3.55 ft. depth					problem
70	CB11	6+75.90	0.47	1.88	0.55		0.38	13.00	4.67	4.83							937.58	937.68	941.38	0.10 DROP					
Catch Basin 12" Diameter			0.00		0.55	1.03					121.45	18	0.24%	3.2	5.6	OK				2.09 ft. cover	5.31	5.49	0.2317	0.0675	955.83
AA-S130																				3.80 ft. depth					problem
69	CB11	5+54.45	0.47	2.35	0.55		0.64	13.64	4.56	5.90							937.19	937.29	940.94	0.10 DROP					
Catch Basin 12" Diameter			0.00		0.55	1.29					103.18	24	0.15%	3.0	9.5	OK				1.50 ft. cover	5.20	6.72	0.0748	0.0320	955.48
AA-S130																				3.75 ft. depth					problem
68	CB11	4+51.27	0.30	2.65	0.55		0.57	14.21	4.47	6.52							936.94	937.04	942.29	0.10 DROP					
Catch Basin 12" Diameter			0.00		0.55	1.46					155.13	24	0.15%	3.0	9.5	OK				3.00 ft. cover	5.11	7.44	0.0917	0.0392	955.37
AA-S130																				5.35 ft. depth					problem
67	CB11	2+96.14	0.30	2.95	0.55		0.85	15.06	4.35	7.06							936.61	936.71	943.27	0.10 DROP					
Catch Basin 12" Diameter			0.00		0.55	1.62					85.42	24	0.15%	3.0	9.5	OK				4.31 ft. cover	4.97	8.07	0.1078	0.0461	955.19
AA-S130																				6.66 ft. depth					problem
66	CB11	2+10.72	0.28	3.23	0.55		0.47	15.53	4.28	7.61							936.38	936.48	944.20	0.10 DROP					
Catch Basin 12" Diameter			0.00		0.55	1.78					124.40	24	0.15%	3.0	9.5	OK				5.47 ft. cover	4.90	8.71	0.1255	0.0537	955.05
AA-S130																				7.82 ft. depth					problem
65	MH7	0+86.32	0.00	27.60	0.40		0.68	61.59	1.85	21.36							936.09	936.19	945.35	0.10 DROP					
Manhole No. 3			24.37		0.40	11.52					86.32	15	0.10%	1.8	2.2	Problem				6.91 ft. cover	2.20	25.31	13.0121	6.6060	954.84
ODOT MH-1.2																				9.26 ft. depth					problem
node		0+00.00	0.00	27.60	0.40		0.80	62.39	1.84	21.17							936.00	936.10	945.25	0.10 DROP					
			0.00		0.40	11.52					50.00	15	0.10%	1.8	2.2	Problem				7.71 ft. cover	2.18	25.09	12.7888	0.0000	937.00
																				9.25 ft. depth					ok

EMH&T
Engineers, Surveyors, Planners, Scientists

STORM SEWER COMPUTATION SHEET

SHT 2

Project: **Amlin Area Infrastructure Improvements** Date: 11/17/20
Job No.: **2020-0219** North Side of Rings Rd By: EAM
Intensity Reference: Franklin County Checked:
Revised:
Revised:

10 Yr Design Storm n= **0.012**

Struc.	Struc. Index	Sta.	Drainage Area Trib	Cumul.	C	Cumul CA	Time Delta t Min.	Sum t Min.	Intensity in/hr	Des Q CFS	Length ft.	Dia. In	Slope%	Vel	Cap. Flowing Full	Status	In	Out	TC	Remarks	25 YEAR HYDRAULIC GRADE LINE 25 Yr Rainfall Intensity	Discharge Q	Slope %	Minor Losses	25 Yr HGL w/ minor losses
81	CB11	9+33.97	1.00	1.00	0.40		25.70	25.70	3.26	1.30							938.72		942.51						
Catch Basin 12" Diameter			0.00		0.40	0.40					98.82	12	0.20%	2.2	1.7	OK				2.62 ft. cover	3.78	1.51	0.1527	0.0259	959.08
AA-S130																				3.79 ft. depth					problem
80	CB11	8+35.15	1.00	2.00	0.40		0.75	26.45	3.20	2.56							938.42	938.52	941.82	0.10 DROP					
Catch Basin 12" Diameter			0.00		0.40	0.80					98.72	15	0.20%	2.6	3.1	OK				1.96 ft. cover	3.72	2.98	0.1799	0.0411	958.91
AA-S130																				3.40 ft. depth					problem
79	CB11	7+36.43	1.00	3.00	0.40		0.64	27.09	3.16	3.79							938.12	938.22	942.77	0.10 DROP					
Catch Basin 12" Diameter			0.00		0.40	1.20					76.51	18	0.24%	3.2	5.6	OK				2.94 ft. cover	3.67	4.40	0.1490	0.0434	958.69
AA-S130																				4.65 ft. depth					problem
78	CB11	6+59.92	1.00	4.00	0.40		0.40	27.49	3.13	5.01							937.84	937.94	943.44	0.10 DROP					
Catch Basin 12" Diameter			0.00		0.40	1.60					107.66	18	0.24%	3.2	5.6	OK				3.79 ft. cover	3.64	5.82	0.2604	0.0759	958.53
AA-S130																				5.60 ft. depth					problem
77	CB11	5+52.26	1.00	5.00	0.40		0.57	28.06	3.09	6.18							937.48	937.58	941.49	0.10 DROP					
Catch Basin 12" Diameter			0.00		0.40	2.00					67.77	18	0.30%	3.5	6.2	OK				2.20 ft. cover	3.60	7.19	0.3975	0.1158	958.17
AA-S130																				4.01 ft. depth					problem
76	CB6	4+84.49	1.00	6.00	0.40		0.32	28.38	3.07	7.37							937.18	937.28	941.04	0.10 DROP					
Catch Basin 2-2A			0.00		0.40	2.40					275.01	24	0.15%	3.0	9.5	OK				1.61 ft. cover	3.57	8.58	0.1218	0.0521	957.79
ODOT CB-1.1																				3.86 ft. depth					problem
75	CB11	2+09.48	0.62	6.62	0.55		1.51	29.89	2.98	8.16							936.67	936.77	944.91	0.10 DROP					
Catch Basin 12" Diameter			0.00		0.55	2.74					173.33	24	0.15%	3.0	9.5	OK				5.89 ft. cover	3.47	9.51	0.1496	0.0640	957.40
AA-S130																				8.24 ft. depth					problem
74	CB6	0+36.15	0.62	7.24	0.55		0.95	30.85	2.92	9.00							936.31	936.41	944.02	0.10 DROP					
Catch Basin 2-2A			0.00		0.55	3.08					36.15	24	0.20%	3.5	11.0	OK				5.36 ft. cover	3.40	10.49	0.1823	0.1039	957.08
ODOT CB-1.1																				7.71 ft. depth					problem
74A	cb9	0+50.00	0.00	21.14	0.40		0.17	31.02	2.91	40.91							936.14	936.24	944.26	0.10 DROP					
Catch Basin 2-4			13.90		0.40	8.64					50.00	15	0.10%	1.8	2.2	Problem				5.77 ft. cover	3.39	29.33	17.4665	11.0842	956.91
ODOT CB-1.2																				8.12 ft. depth					problem
node		0+00.00	0.00	21.14	0.40		0.46	31.48	2.88	24.91							936.09	936.09	945.35	0.10 DROP					
			0.00		0.40	8.64					50.00	15	0.10%	1.8	2.2	Problem				7.82 ft. cover	3.36	29.07	17.1653	0.0000	937.09
																				9.26 ft. depth					ok