EMH&T
Engineers, Surveyors, Planners, Scientists

STORM SEWER COMPUTATION SHEET

SHT 1

Project: **Amlin Area Infrastructure Improvements**
Job No.: **2020-0219**
Intensity Reference: Franklin County

Date: 11/18/20
By: JAF
Checked:

Revised:
Revised:

10 Yr Design Storm n= **0.012**

Struc.	Struc. Index	Sta.	Drainage Area Trib	Drainage Area Cumul.	Drainage Area C	Drainage Area Cumul CA	Time Delta t Min.	Time 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
12	CB11	11+85.95	0.02	0.02	0.73		10.00	10.00	5.24	0.08							937.64		942.35						
Catch Basin 12" Diameter			0.00		0.73	0.01					10.77	12	0.10%	1.6	1.2	OK				3.54 ft. cover	5.91	0.09	0.0005	0.0001	938.44
AA-S130																				4.71 ft. depth					ok
11	MH7	11+75.18	0.00	0.02	0.73		0.12	10.12	5.21	0.08							937.13	937.63	942.85	0.50 DROP					
Manhole No. 3			0.00		0.73	0.01					96.80	18	0.10%	2.0	3.6	OK				4.01 ft. cover	5.89	0.09	0.0001	0.0000	938.33
ODOT MH-1.2																				5.72 ft. depth					ok
10	MH7	10+78.38	0.00	0.18	0.73		0.79	10.91	5.05	0.65							936.93	937.03	942.37	0.10 DROP					
Manhole No. 3			0.16		0.71	0.13					113.04	18	0.10%	2.0	3.6	OK				3.63 ft. cover	5.72	0.73	0.0041	0.0005	938.13
ODOT MH-1.2																				5.44 ft. depth					ok
9	MH7	9+65.34	0.00	0.28	0.73		0.92	11.83	4.87	1.00							936.72	936.82	942.59	0.10 DROP					
Manhole No. 3			0.10		0.77	0.21					34.15	18	0.10%	2.0	3.6	OK				4.06 ft. cover	5.53	1.13	0.0099	0.0013	937.92
ODOT MH-1.2																				5.87 ft. depth					ok
8	MH7	9+31.19	0.00	1.71	0.73		0.28	12.11	4.82	5.13							936.59	936.69	942.43	0.10 DROP					
Manhole No. 3			1.43		0.60	1.06					103.64	18	0.10%	2.0	3.6	Problem				4.03 ft. cover	5.48	5.82	0.2603	0.0337	937.89
ODOT MH-1.2																				5.84 ft. depth					ok
7	MH7	8+27.55	0.00	1.84	0.73		0.85	12.95	4.67	8.17							935.99	936.49	941.96	0.50 DROP					
Manhole No. 3			0.13		0.82	1.17				2.70	167.10	24	0.10%	2.5	7.8	Problem				3.72 ft. cover	5.32	6.22	0.0641	0.0122	937.59
ODOT MH-1.2																				5.97 ft. depth					ok
6	MH7	6+60.45	0.00	2.05	0.73		1.13	14.08	4.49	8.71							935.72	935.82	941.14	0.10 DROP					
Manhole No. 3			0.21		0.80	1.34					221.18	24	0.10%	2.5	7.8	Problem				3.07 ft. cover	5.13	6.86	0.0779	0.0148	937.32
ODOT MH-1.2																				5.42 ft. depth					ok
5	MH7	4+39.27	0.00	2.05	0.73		1.49	15.57	4.28	8.42							935.40	935.50	940.91	0.10 DROP					
Manhole No. 3			0.00		0.73	1.34					123.77	24	0.10%	2.5	7.8	Problem				3.16 ft. cover	4.90	6.55	0.0710	0.0135	937.00
ODOT MH-1.2																				5.51 ft. depth					ok
4	MH7	3+15.50	0.00	2.66	0.73		0.83	16.40	4.17	10.09							935.18	935.28	940.42	0.10 DROP					
Manhole No. 3			0.61		0.72	1.77					122.31	24	0.10%	2.5	7.8	Problem				2.89 ft. cover	4.78	8.47	0.1188	0.0226	936.78
ODOT MH-1.2																				5.24 ft. depth					ok
3	MH7	1+93.19	0.00	3.05	0.73		0.82	17.23	4.06	11.03							934.96	935.06	940.91	0.10 DROP					
Manhole No. 3			0.39		0.71	2.05					143.22	24	0.10%	2.5	7.8	Problem				3.60 ft. cover	4.66	9.56	0.1515	0.0288	936.57
ODOT MH-1.2																				5.95 ft. depth					ok
2	CB6	0+49.97	0.00	3.05	0.53		0.97	18.19	3.95	10.80							934.72	934.82	942.11	0.10 DROP					
Catch Basin 2-2A			0.00		0.53	2.05					49.97	24	0.10%	2.5	7.8	Problem				5.04 ft. cover	4.54	9.31	0.1435	0.1159	936.32
ODOT CB-1.1																				7.39 ft. depth					ok
1	MH7	0+00.00	1.47	4.70	0.53		0.34	18.53	3.91	14.18							933.67	934.67	941.97	1.00 DROP					
Manhole No. 3			0.18		0.59	2.94					100.00	36	0.20%	4.6	32.4	OK		933.69		4.97 ft. cover	4.50	13.21	0.0332	0.0325	936.07
ODOT MH-1.2																				8.30 ft. depth					ok
node		0+00.00	0.00	4.70	0.53		0.36	18.89	3.87	14.06							933.20	933.27	941.00	0.10 DROP					
			0.00		0.53	2.94					100.00	36	0.20%	4.6	32.4	OK				4.40 ft. cover	4.45	13.08	0.0326	0.0000	935.60
																				7.80 ft. depth					ok

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STORM SEWER COMPUTATION SHEET

SHT 2

Project: **Amlin Area Infrastructure Improvements**
Job No.: **2020-0219**
Intensity Reference: Franklin County

Date: 11/18/20
By: JAF
Checked:

Revised:
Revised:

10 Yr Design Storm n= **0.012**

Struc.	Struc. Index	Sta.	Drainage Area Trib	Drainage Area Cumul.	Drainage Area C	Drainage Area Cumul CA	Time Delta t Min.	Time 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
35	CB6	0+08.00	0.18	0.18	0.59		10.00	10.00	5.24	0.56							933.80		938.84						
Catch Basin 2-2A			0.00		0.59	0.11					8.00	12	0.40%	3.1	2.4	OK				3.87 ft. cover	5.91	0.63	0.0263	0.0045	934.60
ODOT CB-1.1																				5.04 ft. depth					ok
1	MH7	0+00.00	0.00	0.18	0.59		0.04	10.04	5.23	0.56							933.67	933.77	941.97	0.10 DROP					
Manhole No. 3			0.00		0.59	0.11														7.03 ft. cover					
ODOT MH-1.2																				8.30 ft. depth					

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STORM SEWER COMPUTATION SHEET

SHT 3

Project: **Amlin Area Infrastructure Improvements**
Job No.: **2020-0219**
Intensity Reference: Franklin County

Date: 11/18/20
By: JAF
Checked:

Revised:
Revised:

10 Yr Design Storm n= **0.012**

Struc.	Struc. Index	Sta.	Drainage Area Trib	Drainage Area Cumul.	Drainage Area C	Drainage Area Cumul CA	Time Delta t Min.	Time 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
25	CB6	0+15.51	0.28	0.28	0.58		10.00	10.00	5.24	0.85							935.12		940.20						
Catch Basin 2-2A			0.00		0.58	0.16					15.51	12	0.40%	3.1	2.4	OK				3.91 ft. cover	5.91	0.96	0.0616	0.0104	935.92
ODOT CB-1.1																				5.08 ft. depth					ok
3	MH7	0+00.00	0.00	0.28	0.58		0.08	10.08	5.22	0.85							934.96	935.06	940.91	0.10 DROP					
Manhole No. 3			0.00		0.58	0.16														4.68 ft. cover					
ODOT MH-1.2																				5.95 ft. depth					

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STORM SEWER COMPUTATION SHEET

SHT 4

Project: **Amlin Area Infrastructure Improvements**
Job No.: **2020-0219**
Intensity Reference: Franklin County

Date: 11/18/20
By: JAF
Checked:

Revised:
Revised:

10 Yr Design Storm n= **0.012**

25 YEAR HYDRAULIC GRADE LINE

Struc.	Struc. Index	Sta.	Drainage Area Trib	Drainage Area Cumul.	Drainage Area C	Drainage Area Cumul CA	Time Delta t Min.	Time Sum t Min.	Intensity in/hr	Des Q CFS	Length ft.	Dia. In	Slope%	Vel	Cap. Flowing Full	Status	In	Out	TC	Remarks	25 Yr Rainfall Intensity	Discharge Q	Slope %	Minor Losses	25 Yr HGL w/ minor losses
26	CI4	0+06.15	0.11	0.11	0.84		10.00	10.00	5.24	0.48							935.08		940.28						
Catch Basin No. 3A			0.00		0.84	0.09					6.15	12	0.40%	3.1	2.4	OK				4.03 ft. cover	5.91	0.55	0.0199	0.0034	935.88
ODOT CB-2.2																				5.20 ft. depth					ok
3	MH7	0+00.00	0.00	0.11	0.84		0.03	10.03	5.23	0.48							934.96	935.06	940.91	0.10 DROP					
Manhole No. 3			0.00		0.84	0.09														4.68 ft. cover					
ODOT MH-1.2																				5.95 ft. depth					

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STORM SEWER COMPUTATION SHEET

SHT 5

Project: **Amlin Area Infrastructure Improvements**
Job No.: **2020-0219**
Intensity Reference: Franklin County

Date: 11/18/20
By: JAF
Checked:

Revised:
Revised:

10 Yr Design Storm n= **0.012**

25 YEAR HYDRAULIC GRADE LINE

Struc.	Struc. Index	Sta.	Drainage Area Trib	Drainage Area Cumul.	Drainage Area C	Drainage Area Cumul CA	Time Delta t Min.	Time Sum t Min.	Intensity in/hr	Des Q CFS	Length ft.	Dia. In	Slope%	Vel	Cap. Flowing Full	Status	In	Out	TC	Remarks	25 Yr Rainfall Intensity	Discharge Q	Slope %	Minor Losses	25 Yr HGL w/ minor losses
27	CB6	0+15.00	0.40	0.40	0.58		10.00	10.00	5.24	1.21							935.34		939.29						
Catch Basin 2-2A			0.00		0.58	0.23					15.00	12	0.40%	3.1	2.4	OK				2.78 ft. cover	5.91	1.37	0.1257	0.0213	936.14
ODOT CB-1.1																				3.95 ft. depth					ok
4	MH7	0+00.00	0.00	0.40	0.58		0.08	10.08	5.22	1.21							935.18	935.28	940.42	0.10 DROP					
Manhole No. 3			0.00		0.58	0.23														3.97 ft. cover					
ODOT MH-1.2																				5.24 ft. depth					

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Engineers, Surveyors, Planners, Scientists

STORM SEWER COMPUTATION SHEET

SHT 6

Project: **Amlin Area Infrastructure Improvements**
Job No.: **2020-0219**
Intensity Reference: Franklin County

Date: 11/18/20
By: JAF
Checked:

Revised:
Revised:

10 Yr Design Storm n= **0.012**

25 YEAR HYDRAULIC GRADE LINE

Struc.	Struc. Index	Sta.	Drainage Area Trib	Drainage Area Cumul.	Drainage Area C	Drainage Area Cumul CA	Time Delta t Min.	Time Sum t Min.	Intensity in/hr	Des Q CFS	Length ft.	Dia. In	Slope%	Vel	Cap. Flowing Full	Status	In	Out	TC	Remarks	25 Yr Rainfall Intensity	Discharge Q	Slope %	Minor Losses	25 Yr HGL w/ minor losses
28	CI4	0+06.15	0.21	0.21	0.85		10.00	10.00	5.24	0.93							935.30		939.79						
Catch Basin No. 3A			0.00		0.85	0.18					6.15	12	0.40%	3.1	2.4	OK				3.32 ft. cover	5.91	1.06	0.0744	0.0126	936.10
ODOT CB-2.2																				4.49 ft. depth					ok
4	MH7	0+00.00	0.00	0.21	0.85		0.03	10.03	5.23	0.93							935.18	935.28	940.42	0.10 DROP					
Manhole No. 3			0.00		0.85	0.18														3.97 ft. cover					
ODOT MH-1.2																				5.24 ft. depth					

EMH&T
Engineers, Surveyors, Planners, Scientists

STORM SEWER COMPUTATION SHEET

SHT 7

Project: **Amlin Area Infrastructure Improvements**
Job No.: **2020-0219**
Intensity Reference: Franklin County

Date: 11/18/20
By: JAF
Checked:

Revised:
Revised:

10 Yr Design Storm n= **0.012**

25 YEAR HYDRAULIC GRADE LINE

Struc.	Struc. Index	Sta.	Drainage Area Trib	Drainage Area Cumul.	Drainage Area C	Drainage Area Cumul CA	Time Delta t Min.	Time Sum t Min.	Intensity in/hr	Des Q CFS	Length ft.	Dia. In	Slope%	Vel	Cap. Flowing Full	Status	In	Out	TC	Remarks	25 Yr Rainfall Intensity	Discharge Q	Slope %	Minor Losses	25 Yr HGL w/ minor losses
29	CI4	0+06.15	0.21	0.21	0.80		10.00	10.00	5.24	0.88							935.84		940.52						
Catch Basin No. 3A			0.00		0.80	0.17					6.15	12	0.40%	3.1	2.4	OK				3.51 ft. cover	5.91	0.99	0.0659	0.0112	936.64
ODOT CB-2.2																				4.68 ft. depth					ok
6	MH7	0+00.00	0.00	0.21	0.80		0.03	10.03	5.23	0.88							935.72	935.82	941.14	0.10 DROP					
Manhole No. 3			0.00		0.80	0.17														4.15 ft. cover					
ODOT MH-1.2																				5.42 ft. depth					

EMH&T
Engineers, Surveyors, Planners, Scientists

STORM SEWER COMPUTATION SHEET

SHT 8

Project: **Amlin Area Infrastructure Improvements**
Job No.: **2020-0219**
Intensity Reference: Franklin County

Date: 11/18/20
By: JAF
Checked:

Revised:
Revised:

10 Yr Design Storm n= **0.012**

Struc.	Struc. Index	Sta.	Drainage Area Trib	Drainage Area Cumul.	Drainage Area C	Drainage Area Cumul CA	Time Delta t Min.	Time 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
30	CI4	0+09.65	0.13	0.13	0.82		10.00	10.00	5.24	0.56							936.13		941.28						
Catch Basin No. 3A			0.00		0.82	0.11					9.65	12	0.40%	3.1	2.4	OK				3.98 ft. cover	5.91	0.63	0.0265	0.0045	936.93
ODOT CB-2.2																				5.15 ft. depth					ok
7	MH7	0+00.00	0.00	0.13	0.82		0.05	10.05	5.23	0.56							935.99	936.09	941.96	0.10 DROP					
Manhole No. 3			0.00		0.82	0.11														4.70 ft. cover					
ODOT MH-1.2																				5.97 ft. depth					

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STORM SEWER COMPUTATION SHEET

SHT 9

Project: **Amlin Area Infrastructure Improvements**
Job No.: **2020-0219**
Intensity Reference: Franklin County

Date: 11/18/20
By: JAF
Checked:

Revised:
Revised:

10 Yr Design Storm n= **0.012**

25 YEAR HYDRAULIC GRADE LINE

Struc.	Struc. Index	Sta.	Drainage Area Trib	Drainage Area Cumul.	Drainage Area C	Drainage Area Cumul CA	Time Delta t Min.	Time Sum t Min.	Intensity in/hr	Des Q CFS	Length ft.	Dia. In	Slope%	Vel	Cap. Flowing Full	Status	In	Out	TC	Remarks	25 Yr Rainfall Intensity	Discharge Q	Slope %	Minor Losses	25 Yr HGL w/ minor losses
31	CB6	0+18.80	1.43	1.43	0.60		10.00	10.00	5.24	4.49							936.82		940.55						
Catch Basin 2-2A			0.00		0.60	0.86					18.80	15	0.68%	4.7	5.8	OK				2.29 ft. cover	5.91	5.07	0.5228	0.1194	937.82
ODOT CB-1.1																				3.73 ft. depth					ok
8	MH7	0+00.00	0.00	1.43	0.60		0.07	10.07	5.22	4.48							936.59	936.69	942.43	0.10 DROP					
Manhole No. 3			0.00		0.60	0.86														4.30 ft. cover					
ODOT MH-1.2																				5.84 ft. depth					

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Engineers, Surveyors, Planners, Scientists

STORM SEWER COMPUTATION SHEET

SHT 10

Project: **Amlin Area Infrastructure Improvements**
Job No.: **2020-0219**
Intensity Reference: Franklin County

Date: 11/18/20
By: JAF
Checked:

Revised:
Revised:

10 Yr Design Storm n= **0.012**

25 YEAR HYDRAULIC GRADE LINE

Struc.	Struc. Index	Sta.	Drainage Area Trib	Drainage Area Cumul.	Drainage Area C	Drainage Area Cumul CA	Time Delta t Min.	Time Sum t Min.	Intensity in/hr	Des Q CFS	Length ft.	Dia. In	Slope%	Vel	Cap. Flowing Full	Status	In	Out	TC	Remarks	25 Yr Rainfall Intensity	Discharge Q	Slope %	Minor Losses	25 Yr HGL w/ minor losses
32	CI4	0+06.84	0.10	0.10	0.77		10.00	10.00	5.24	0.40							936.85		942.44						
Catch Basin No. 3A			0.00		0.77	0.08					6.84	12	0.40%	3.1	2.4	OK				4.42 ft. cover	5.91	0.46	0.0138	0.0023	937.65
ODOT CB-2.2																				5.59 ft. depth					ok
9	MH7	0+00.00	0.00	0.10	0.77		0.04	10.04	5.23	0.40							936.72	936.82	942.59	0.10 DROP					
Manhole No. 3			0.00		0.77	0.08														4.60 ft. cover					
ODOT MH-1.2																				5.87 ft. depth					

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Engineers, Surveyors, Planners, Scientists

STORM SEWER COMPUTATION SHEET

SHT 11

Project: **Amlin Area Infrastructure Improvements**
Job No.: **2020-0219**
Intensity Reference: Franklin County

Date: 11/18/20
By: JAF
Checked:

Revised:
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10 Yr Design Storm n= **0.012**

Struc.	Struc. Index	Sta.	Drainage Area Trib	Drainage Area Cumul.	Drainage Area C	Drainage Area Cumul CA	Time Delta t Min.	Time 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
33	CB11	0+05.61	0.06	0.06	0.65		10.00	10.00	5.24	0.20							937.05		943.07						
Catch Basin 12" Diameter			0.00		0.65	0.04					5.61	12	0.40%	3.1	2.4	OK				4.85 ft. cover	5.91	0.23	0.0036	0.0006	937.85
AA-S130																				6.02 ft. depth					ok
10	MH7	0+00.00	0.00	0.06	0.65		0.03	10.03	5.23	0.20							936.93	937.03	942.37	0.10 DROP					
Manhole No. 3			0.00		0.65	0.04														4.17 ft. cover					
ODOT MH-1.2																				5.44 ft. depth					

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Engineers, Surveyors, Planners, Scientists

STORM SEWER COMPUTATION SHEET

SHT 12

Project: **Amlin Area Infrastructure Improvements**
Job No.: **2020-0219**
Intensity Reference: Franklin County

Date: 11/18/20
By: JAF
Checked:

Revised:
Revised:

10 Yr Design Storm n= **0.012**

Struc.	Struc. Index	Sta.	Drainage Area Trib	Drainage Area Cumul.	Drainage Area C	Drainage Area Cumul CA	Time Delta t Min.	Time 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
34	CI4	0+06.70	0.10	0.10	0.77		10.00	10.00	5.24	0.40							937.06		942.55						
Catch Basin No. 3A			0.00		0.77	0.08					6.70	12	0.40%	3.1	2.4	OK				4.32 ft. cover	5.91	0.46	0.0138	0.0023	937.86
ODOT CB-2.2																				5.49 ft. depth					ok
10	MH7	0+00.00	0.00	0.10	0.77		0.04	10.04	5.23	0.40							936.93	937.03	942.37	0.10 DROP					
Manhole No. 3			0.00		0.77	0.08														4.17 ft. cover					
ODOT MH-1.2																				5.44 ft. depth					

EMH&T
Engineers, Surveyors, Planners, Scientists

STORM SEWER COMPUTATION SHEET

SHT 13

Project: **Amlin Area Infrastructure Improvements**
Job No.: **2020-0219**
Intensity Reference: Franklin County

Date: 11/18/20
By: JAF
Checked:

Revised:
Revised:

10 Yr Design Storm n= **0.012**

Struc.	Struc. Index	Sta.	Drainage Area Trib	Drainage Area Cumul.	Drainage Area C	Drainage Area Cumul CA	Time Delta t Min.	Time 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
24	CB11	11+80.28	0.00	0.04	0.40		10.00	10.00	10.00	0.31							936.44		943.00						
Catch Basin 12" Diameter			0.04		0.77	0.03					11.00	12	0.10%	1.6	1.2	OK				5.39 ft. cover	5.91	0.18	0.0022	0.0004	937.24
AA-S130																				6.56 ft. depth					ok
23	MH7	11+69.28	0.00	0.04	0.40		0.12	10.12	5.21	0.16							935.93	936.43	943.93	0.50 DROP					
Manhole No. 3			0.00		0.40	0.03					113.17	18	0.10%	2.0	3.6	OK				6.29 ft. cover	5.89	0.18	0.0003	0.0001	937.13
ODOT MH-1.2																				8.00 ft. depth					ok
22	MH7	10+56.11	0.00	0.15	0.40		0.92	11.04	5.02	0.56							935.72	935.82	943.22	0.10 DROP					
Manhole No. 3			0.11		0.73	0.11					102.12	18	0.10%	2.0	3.6	OK				5.69 ft. cover	5.69	0.63	0.0031	0.0004	936.92
ODOT MH-1.2																				7.50 ft. depth					ok
21	MH7	9+53.99	0.00	0.22	0.40		0.83	11.87	4.86	0.79							935.52	935.62	942.71	0.10 DROP					
Manhole No. 3			0.07		0.74	0.16					38.15	18	0.10%	2.0	3.6	OK				5.38 ft. cover	5.52	0.90	0.0062	0.0008	936.72
ODOT MH-1.2																				7.19 ft. depth					ok
20	MH7	9+15.84	0.00	0.40	0.40		0.31	12.19	4.81	1.51							935.38	935.48	942.52	0.10 DROP					
Manhole No. 3			0.18		0.84	0.31					135.21	18	0.10%	2.0	3.6	OK				5.33 ft. cover	5.46	1.71	0.0225	0.0029	936.58
ODOT MH-1.2																				7.14 ft. depth					ok
19	MH7	7+80.63	0.00	0.54	0.40		1.10	13.29	4.62	1.95							935.14	935.24	941.89	0.10 DROP					
Manhole No. 3			0.14		0.78	0.42					120.00	18	0.10%	2.0	3.6	OK				4.94 ft. cover	5.26	2.22	0.0379	0.0049	936.34
ODOT MH-1.2																				6.75 ft. depth					ok
18	MH7	6+60.63	0.00	0.59	0.40		0.98	14.27	4.46	2.03							934.92	935.02	941.29	0.10 DROP					
Manhole No. 3			0.05		0.65	0.45					47.84	18	0.10%	2.0	3.6	OK				4.56 ft. cover	5.10	2.32	0.0413	0.0053	936.17
ODOT MH-1.2																				6.37 ft. depth					ok
17	MH7	6+12.79	0.00	0.79	0.40		0.39	14.66	4.41	2.72							934.77	934.87	941.13	0.10 DROP					
Manhole No. 3			0.20		0.81	0.62					92.74	18	0.10%	2.0	3.6	OK				4.55 ft. cover	5.03	3.11	0.0741	0.0096	936.15
ODOT MH-1.2																				6.36 ft. depth					ok
16	MH7	5+20.05	0.00	0.82	0.40		0.76	15.42	4.30	2.74							934.58	934.68	941.47	0.10 DROP					
Manhole No. 3			0.03		0.69	0.64					128.44	18	0.10%	2.0	3.6	OK				5.08 ft. cover	4.92	3.14	0.0755	0.0098	936.07
ODOT MH-1.2																				6.89 ft. depth					ok
15	MH7	3+91.61	0.00	0.82	0.40		1.05	16.47	4.16	2.65							934.35	934.45	940.90	0.10 DROP					
Manhole No. 3			0.00		0.40	0.64					123.82	18	0.10%	2.0	3.6	OK				4.74 ft. cover	4.77	3.04	0.0710	0.0092	935.96
ODOT MH-1.2																				6.55 ft. depth					ok
14	MH7	2+67.79	0.00	1.26	0.40		1.01	17.48	4.03	3.96							934.13	934.23	940.70	0.10 DROP					
Manhole No. 3			0.44		0.78	0.98					123.64	18	0.10%	2.0	3.6	Problem				4.76 ft. cover	4.63	4.54	0.1584	0.0205	935.87
ODOT MH-1.2																				6.57 ft. depth					ok
13	MH7	1+44.15	0.00	1.47	0.40		1.01	18.49	3.92	4.44							933.91	934.01	940.87	0.10 DROP					
Manhole No. 3			0.21		0.74	1.14					144.15	18	0.10%	2.0	3.6	Problem				5.15 ft. cover	4.50	5.11	0.2007	0.0260	935.65
ODOT MH-1.2																				6.96 ft. depth					ok
1	MH7	0+00.00	0.00	4.52	0.62		1.18	19.66	3.79	12.07							933.67	933.77	941.97	0.10 DROP					
Manhole No. 3			3.05		0.67	3.19					49.97	18	0.20%	2.9	5.1	Problem				6.49 ft. cover	4.36	13.91	1.4852	0.1923	935.33
ODOT MH-1.2																				8.30 ft. depth					ok
node		0+00.00	0.00	4.52	0.62		0.29	19.95	3.76	11.97							933.20	933.27	941.00	0.10 DROP					
			0.00		0.62	3.19					100.00	18	0.20%	2.9	5.1	Problem				6.02 ft. cover	4.33	13.80	1.4631	0.0000	934.40
																				7.80 ft. depth					ok

EMH&T
Engineers, Surveyors, Planners, Scientists

STORM SEWER COMPUTATION SHEET

SHT 14

Project: **Amlin Area Infrastructure Improvements**
Job No.: **2020-0219**
Intensity Reference: Franklin County

Date: 11/18/20
By: JAF
Checked:

Revised:
Revised:

10 Yr Design Storm n= **0.012**

Struc.	Struc. Index	Sta.	Drainage Area Trib	Drainage Area Cumul.	Drainage Area C	Drainage Area Cumul CA	Time Delta t Min.	Time 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
36	CB6	0+08.00	0.09	0.09	0.60		10.00	10.00	5.24	0.28							934.04		940.37						
Catch Basin 2-2A			0.00		0.60	0.05					8.00	12	0.40%	3.1	2.4	OK				5.16 ft. cover	5.91	0.32	0.0068	0.0012	934.84
ODOT CB-1.1																				6.33 ft. depth					ok
13	MH7	0+00.00	0.00	0.09	0.60		0.04	10.04	5.23	0.28							933.91	934.01	940.87	0.10 DROP					
Manhole No. 3			0.00		0.60	0.05														5.69 ft. cover					
ODOT MH-1.2																				6.96 ft. depth					

EMH&T
Engineers, Surveyors, Planners, Scientists

STORM SEWER COMPUTATION SHEET

SHT 15

Project: **Amlin Area Infrastructure Improvements**
Job No.: **2020-0219**
Intensity Reference: Franklin County

Date: 11/18/20
By: JAF
Checked:

Revised:
Revised:

10 Yr Design Storm n= **0.012**

25 YEAR HYDRAULIC GRADE LINE

Struc.	Struc. Index	Sta.	Drainage Area Trib	Drainage Area Cumul.	Drainage Area C	Drainage Area Cumul CA	Time Delta t Min.	Time Sum t Min.	Intensity in/hr	Des Q CFS	Length ft.	Dia. In	Slope%	Vel	Cap. Flowing Full	Status	In	Out	TC	Remarks	25 Yr Rainfall Intensity	Discharge Q	Slope %	Minor Losses	25 Yr HGL w/ minor losses
37	CI4	0+06.00	0.12	0.12	0.87		10.00	10.00	5.24	0.55							934.03		940.25						
Catch Basin No. 3A			0.00		0.87	0.10					6.00	12	0.40%	3.1	2.4	OK				5.05 ft. cover	5.91	0.62	0.0254	0.0043	934.83
ODOT CB-2.2																				6.22 ft. depth					ok
13	MH7	0+00.00	0.00	0.12	0.87		0.03	10.03	5.23	0.55							933.91	934.01	940.87	0.10 DROP					
Manhole No. 3			0.00		0.87	0.10														5.69 ft. cover					
ODOT MH-1.2																				6.96 ft. depth					

EMH&T
Engineers, Surveyors, Planners, Scientists

STORM SEWER COMPUTATION SHEET

SHT 16

Project: **Amlin Area Infrastructure Improvements**
Job No.: **2020-0219**
Intensity Reference: Franklin County

Date: 11/18/20
By: JAF
Checked:

Revised:
Revised:

10 Yr Design Storm n= **0.012**

25 YEAR HYDRAULIC GRADE LINE

Struc.	Struc. Index	Sta.	Drainage Area Trib	Drainage Area Cumul.	Drainage Area C	Drainage Area Cumul CA	Time Delta t Min.	Time Sum t Min.	Intensity in/hr	Des Q CFS	Length ft.	Dia. In	Slope%	Vel	Cap. Flowing Full	Status	In	Out	TC	Remarks	25 Yr Rainfall Intensity	Discharge Q	Slope %	Minor Losses	25 Yr HGL w/ minor losses
38	CI4	0+05.65	0.44	0.44	0.78		10.00	10.00	5.24	1.80							934.25		939.79						
Catch Basin No. 3A			0.00		0.78	0.34					5.65	12	0.40%	3.1	2.4	OK				4.37 ft. cover	5.91	2.03	0.2750	0.0467	935.05
ODOT CB-2.2																				5.54 ft. depth					ok
14	MH7	0+00.00	0.00	0.44	0.78		0.03	10.03	5.23	1.79							934.13	934.23	940.70	0.10 DROP					
Manhole No. 3			0.00		0.78	0.34														5.30 ft. cover					
ODOT MH-1.2																				6.57 ft. depth					

EMH&T
Engineers, Surveyors, Planners, Scientists

STORM SEWER COMPUTATION SHEET

SHT 17

Project: **Amlin Area Infrastructure Improvements**
Job No.: **2020-0219**
Intensity Reference: Franklin County

Date: 11/18/20
By: JAF
Checked:

Revised:
Revised:

10 Yr Design Storm n= **0.012**

25 YEAR HYDRAULIC GRADE LINE

Struc.	Struc. Index	Sta.	Drainage Area Trib	Drainage Area Cumul.	Drainage Area C	Drainage Area Cumul CA	Time Delta t Min.	Time Sum t Min.	Intensity in/hr	Des Q CFS	Length ft.	Dia. In	Slope%	Vel	Cap. Flowing Full	Status	In	Out	TC	Remarks	25 Yr Rainfall Intensity	Discharge Q	Slope %	Minor Losses	25 Yr HGL w/ minor losses
39	CB11	0+08.00	0.03	0.03	0.69		10.00	10.00	5.24	0.11							934.71		941.01						
Catch Basin 12" Diameter			0.00		0.69	0.02					8.00	12	0.40%	3.1	2.4	OK				5.13 ft. cover	5.91	0.12	0.0010	0.0002	935.51
AA-S130																				6.30 ft. depth					ok
16	MH7	0+00.00	0.00	0.03	0.69		0.04	10.04	5.23	0.11							934.58	934.68	941.47	0.10 DROP					
Manhole No. 3			0.00		0.69	0.02														5.62 ft. cover					
ODOT MH-1.2																				6.89 ft. depth					

EMH&T
Engineers, Surveyors, Planners, Scientists

STORM SEWER COMPUTATION SHEET

SHT 18

Project: **Amlin Area Infrastructure Improvements**
Job No.: **2020-0219**
Intensity Reference: Franklin County

Date: 11/18/20
By: JAF
Checked:

Revised:
Revised:

10 Yr Design Storm n= **0.012**

25 YEAR HYDRAULIC GRADE LINE

Struc.	Struc. Index	Sta.	Drainage Area Trib	Drainage Area Cumul.	Drainage Area C	Drainage Area Cumul CA	Time Delta t Min.	Time Sum t Min.	Intensity in/hr	Des Q CFS	Length ft.	Dia. In	Slope%	Vel	Cap. Flowing Full	Status	In	Out	TC	Remarks	25 Yr Rainfall Intensity	Discharge Q	Slope %	Minor Losses	25 Yr HGL w/ minor losses
40	CB11	0+08.00	0.06	0.06	0.76		10.00	10.00	5.24	0.24							934.90		940.99						
Catch Basin 12" Diameter			0.00		0.76	0.05					8.00	12	0.40%	3.1	2.4	OK				4.92 ft. cover	5.91	0.27	0.0049	0.0008	935.70
AA-S130																				6.09 ft. depth					ok
17	MH7	0+00.00	0.00	0.06	0.76		0.04	10.04	5.23	0.24							934.77	934.87	941.13	0.10 DROP					
Manhole No. 3			0.00		0.76	0.05														5.09 ft. cover					
ODOT MH-1.2																				6.36 ft. depth					

EMH&T
Engineers, Surveyors, Planners, Scientists

STORM SEWER COMPUTATION SHEET

SHT 19

Project: **Amlin Area Infrastructure Improvements**
Job No.: **2020-0219**
Intensity Reference: Franklin County

Date: 11/18/20
By: JAF
Checked:

Revised:
Revised:

10 Yr Design Storm n= **0.012**

Struc.	Struc. Index	Sta.	Drainage Area Trib	Drainage Area Cumul.	Drainage Area C	Drainage Area Cumul CA	Time Delta t Min.	Time 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
41	CI4	0+05.67	0.14	0.14	0.86		10.00	10.00	5.24	0.63							934.89		940.52						
Catch Basin No. 3A			0.00		0.86	0.12					5.67	12	0.40%	3.1	2.4	OK				4.46 ft. cover	5.91	0.71	0.0338	0.0057	935.69
ODOT CB-2.2																				5.63 ft. depth					ok
17	MH7	0+00.00	0.00	0.14	0.86		0.03	10.03	5.23	0.63							934.77	934.87	941.13	0.10 DROP					
Manhole No. 3			0.00		0.86	0.12														5.09 ft. cover					
ODOT MH-1.2																				6.36 ft. depth					

EMH&T
Engineers, Surveyors, Planners, Scientists

STORM SEWER COMPUTATION SHEET

SHT 20

Project: **Amlin Area Infrastructure Improvements**
Job No.: **2020-0219**
Intensity Reference: Franklin County

Date: 11/18/20
By: JAF
Checked:

Revised:
Revised:

10 Yr Design Storm n= **0.012**

Struc.	Struc. Index	Sta.	Drainage Area Trib	Drainage Area Cumul.	Drainage Area C	Drainage Area Cumul CA	Time Delta t Min.	Time 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
42	CB11	0+08.00	0.05	0.05	0.65		10.00	10.00	5.24	0.17							935.05		940.94						
Catch Basin 12" Diameter			0.00		0.65	0.03					8.00	12	0.40%	3.1	2.4	OK				4.72 ft. cover	5.91	0.19	0.0025	0.0004	935.85
AA-S130																				5.89 ft. depth					ok
18	MH7	0+00.00	0.00	0.05	0.65		0.04	10.04	5.23	0.17							934.92	935.02	941.29	0.10 DROP					
Manhole No. 3			0.00		0.65	0.03														5.10 ft. cover					
ODOT MH-1.2																				6.37 ft. depth					

EMH&T
Engineers, Surveyors, Planners, Scientists

STORM SEWER COMPUTATION SHEET

SHT 21

Project: **Amlin Area Infrastructure Improvements**
Job No.: **2020-0219**
Intensity Reference: Franklin County

Date: 11/18/20
By: JAF
Checked:

Revised:
Revised:

10 Yr Design Storm n= **0.012**

25 YEAR HYDRAULIC GRADE LINE

Struc.	Struc. Index	Sta.	Drainage Area Trib	Drainage Area Cumul.	Drainage Area C	Drainage Area Cumul CA	Time Delta t Min.	Time Sum t Min.	Intensity in/hr	Des Q CFS	Length ft.	Dia. In	Slope%	Vel	Cap. Flowing Full	Status	In	Out	TC	Remarks	25 Yr Rainfall Intensity	Discharge Q	Slope %	Minor Losses	25 Yr HGL w/ minor losses
43	CB11	0+08.00	0.07	0.07	0.69		10.00	10.00	5.24	0.25							935.27		940.61						
Catch Basin 12" Diameter			0.00		0.69	0.05					8.00	12	0.40%	3.1	2.4	OK				4.17 ft. cover	5.91	0.29	0.0054	0.0009	936.07
AA-S130																				5.34 ft. depth					ok
19	MH7	0+00.00	0.00	0.07	0.69		0.04	10.04	5.23	0.25							935.14	935.24	941.89	0.10 DROP					
Manhole No. 3			0.00		0.69	0.05														5.48 ft. cover					
ODOT MH-1.2																				6.75 ft. depth					

EMH&T
Engineers, Surveyors, Planners, Scientists

STORM SEWER COMPUTATION SHEET

SHT 22

Project: **Amlin Area Infrastructure Improvements**
Job No.: **2020-0219**
Intensity Reference: Franklin County

Date: 11/18/20
By: JAF
Checked:

Revised:
Revised:

10 Yr Design Storm n= **0.012**

25 YEAR HYDRAULIC GRADE LINE

Struc.	Struc. Index	Sta.	Drainage Area Trib	Drainage Area Cumul.	Drainage Area C	Drainage Area Cumul CA	Time Delta t Min.	Time Sum t Min.	Intensity in/hr	Des Q CFS	Length ft.	Dia. In	Slope%	Vel	Cap. Flowing Full	Status	In	Out	TC	Remarks	25 Yr Rainfall Intensity	Discharge Q	Slope %	Minor Losses	25 Yr HGL w/ minor losses
44	CI4	0+05.65	0.07	0.07	0.87		10.00	10.00	5.24	0.32							935.26								
Catch Basin No. 3A			0.00		0.87	0.06					5.65	12	0.40%	3.1	2.4	OK				-936.43 ft. cover	5.91	0.36	0.0087	0.0015	936.06
ODOT CB-2.2																				-935.26 ft. depth					problem
19	MH7	0+00.00	0.00	0.07	0.87		0.03	10.03	5.23	0.32							935.14	935.24	941.89	0.10 DROP					
Manhole No. 3			0.00		0.87	0.06														5.48 ft. cover					
ODOT MH-1.2																				6.75 ft. depth					

EMH&T
Engineers, Surveyors, Planners, Scientists

STORM SEWER COMPUTATION SHEET

SHT 23

Project: **Amlin Area Infrastructure Improvements**
Job No.: **2020-0219**
Intensity Reference: Franklin County

Date: 11/18/20
By: JAF
Checked:

Revised:
Revised:

10 Yr Design Storm n= **0.012**

Struc.	Struc. Index	Sta.	Drainage Area Trib	Drainage Area Cumul.	Drainage Area C	Drainage Area Cumul CA	Time Delta t Min.	Time 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
45	CB11	0+11.00	0.03	0.03	0.75		10.00	10.00	5.24	0.12							935.52		941.75						
Catch Basin 12" Diameter			0.00		0.75	0.02					11.00	12	0.40%	3.1	2.4	OK				5.06 ft. cover	5.91	0.13	0.0012	0.0002	936.32
AA-S130																				6.23 ft. depth					ok
20	MH7	0+00.00	0.00	0.03	0.75		0.06	10.06	5.22	0.12							935.38	935.48	942.52	0.10 DROP					
Manhole No. 3			0.00		0.75	0.02														5.87 ft. cover					
ODOT MH-1.2																				7.14 ft. depth					

EMH&T
Engineers, Surveyors, Planners, Scientists

STORM SEWER COMPUTATION SHEET

SHT 24

Project: **Amlin Area Infrastructure Improvements**
Job No.: **2020-0219**
Intensity Reference: Franklin County

Date: 11/18/20
By: JAF
Checked:

Revised:
Revised:

10 Yr Design Storm n= **0.012**

25 YEAR HYDRAULIC GRADE LINE

Struc.	Struc. Index	Sta.	Drainage Area Trib	Drainage Area Cumul.	Drainage Area C	Drainage Area Cumul CA	Time Delta t Min.	Time Sum t Min.	Intensity in/hr	Des Q CFS	Length ft.	Dia. In	Slope%	Vel	Cap. Flowing Full	Status	In	Out	TC	Remarks	25 Yr Rainfall Intensity	Discharge Q	Slope %	Minor Losses	25 Yr HGL w/ minor losses
46	CI4	0+03.77	0.15	0.15	0.92		10.00	10.00	5.24	0.72							935.50		941.93						
Catch Basin No. 3A			0.00		0.92	0.14					3.77	12	0.40%	3.1	2.4	OK				5.26 ft. cover	5.91	0.82	0.0445	0.0075	936.30
ODOT CB-2.2																				6.43 ft. depth					ok
20	MH7	0+00.00	0.00	0.15	0.92		0.02	10.02	5.23	0.72							935.38	935.48	942.52	0.10 DROP					
Manhole No. 3			0.00		0.92	0.14														5.87 ft. cover					
ODOT MH-1.2																				7.14 ft. depth					

EMH&T
Engineers, Surveyors, Planners, Scientists

STORM SEWER COMPUTATION SHEET

SHT 25

Project: **Amlin Area Infrastructure Improvements**
Job No.: **2020-0219**
Intensity Reference: Franklin County

Date: 11/18/20
By: JAF
Checked:

Revised:
Revised:

10 Yr Design Storm n= **0.012**

25 YEAR HYDRAULIC GRADE LINE

Struc.	Struc. Index	Sta.	Drainage Area Trib	Drainage Area Cumul.	Drainage Area C	Drainage Area Cumul CA	Time Delta t Min.	Time Sum t Min.	Intensity in/hr	Des Q CFS	Length ft.	Dia. In	Slope%	Vel	Cap. Flowing Full	Status	In	Out	TC	Remarks	25 Yr Rainfall Intensity	Discharge Q	Slope %	Minor Losses	25 Yr HGL w/ minor losses
47	Cb11	0+11.00	0.07	0.07	0.74		10.00	10.00	5.24	0.27							935.66		941.60						
Catch Basin 12" Diameter			0.00		0.74	0.05					11.00	12	0.40%	3.1	2.4	OK				4.77 ft. cover	5.91	0.31	0.0063	0.0011	936.46
AA-S130																				5.94 ft. depth					ok
21	MH7	0+00.00	0.00	0.07	0.74		0.06	10.06	5.22	0.27							935.52	935.62	942.71	0.10 DROP					
Manhole No. 3			0.00		0.74	0.05														5.92 ft. cover					
ODOT MH-1.2																				7.19 ft. depth					

EMH&T
Engineers, Surveyors, Planners, Scientists

STORM SEWER COMPUTATION SHEET

SHT 26

Project: **Amlin Area Infrastructure Improvements**
Job No.: **2020-0219**
Intensity Reference: Franklin County

Date: 11/18/20
By: JAF
Checked:

Revised:
Revised:

10 Yr Design Storm n= **0.012**

25 YEAR HYDRAULIC GRADE LINE

Struc.	Struc. Index	Sta.	Drainage Area Trib	Drainage Area Cumul.	Drainage Area C	Drainage Area Cumul CA	Time Delta t Min.	Time Sum t Min.	Intensity in/hr	Des Q CFS	Length ft.	Dia. In	Slope%	Vel	Cap. Flowing Full	Status	In	Out	TC	Remarks	25 Yr Rainfall Intensity	Discharge Q	Slope %	Minor Losses	25 Yr HGL w/ minor losses
48	CB11	0+09.50	0.11	0.11	0.73		10.00	10.00	5.24	0.42							935.86		942.57						
Catch Basin 12" Diameter			0.00		0.73	0.08					9.50	12	0.40%	3.1	2.4	OK				5.54 ft. cover	5.91	0.47	0.0151	0.0026	936.66
AA-S130																				6.71 ft. depth					ok
22	MH7	0+00.00	0.00	0.11	0.73		0.05	10.05	5.23	0.42							935.72	935.82	943.22	0.10 DROP					
Manhole No. 3			0.00		0.73	0.08														6.23 ft. cover					
ODOT MH-1.2																				7.50 ft. depth					