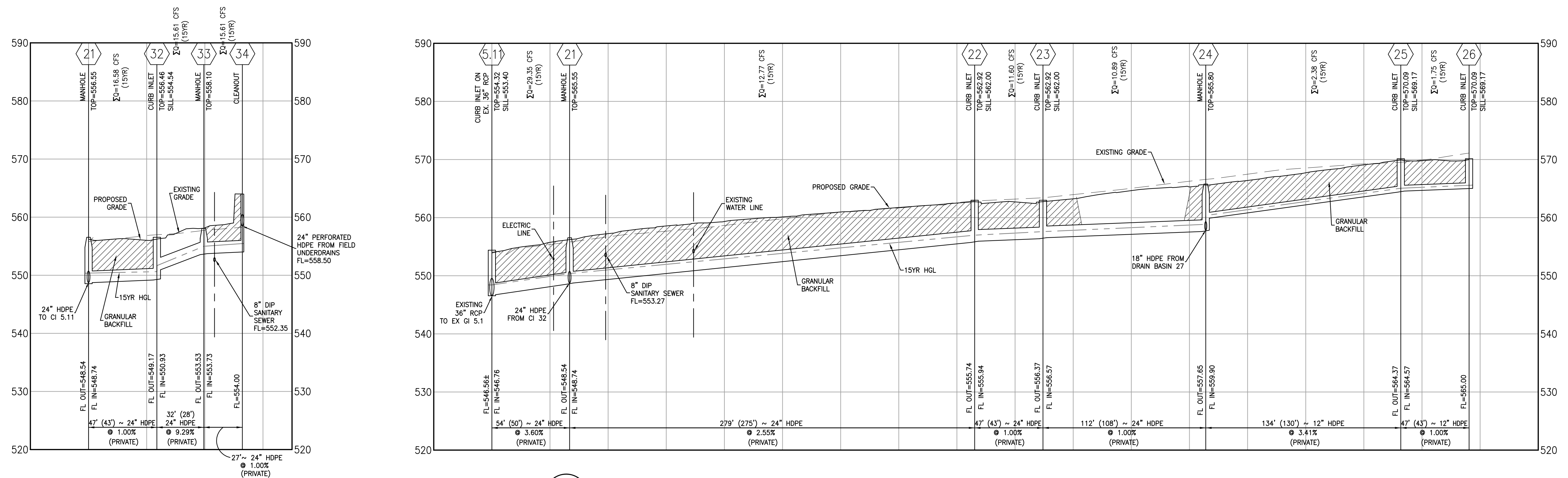
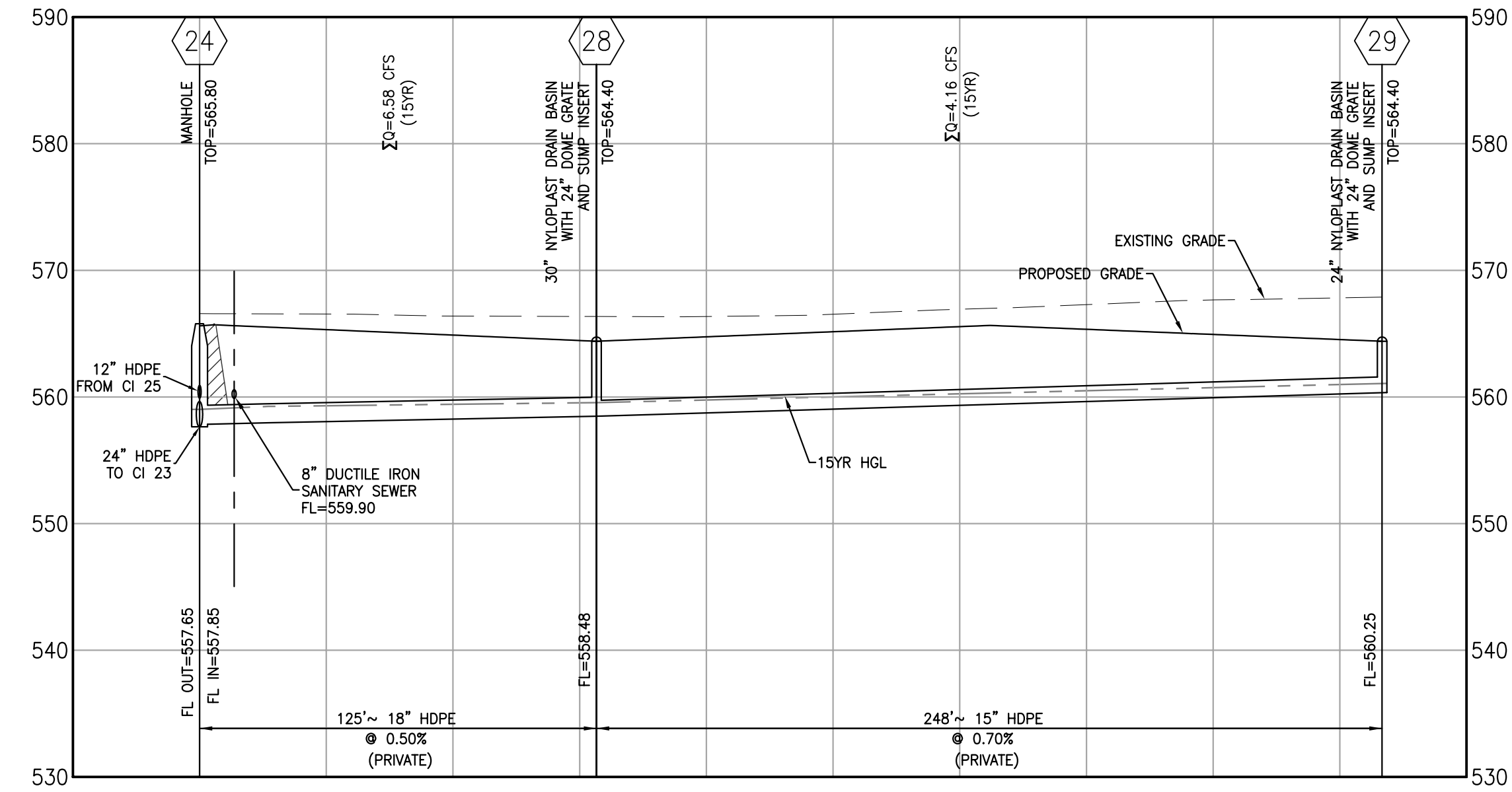


USER: Brian Johnson, TAB: STORM PROFILES  
 DATE: June 20, 2017 - 11:07:22 AM  
 DRAWING: S:\JOBS\16-0042\16-0042\DWG\C-Plan\PlanSheets\UPLIAN\_SEWER\_PROFILES\_16-0042.dwg

Conduit FlexTable: Cole																			
Label	Diameter (in)	Length (Unified) (ft)	Manning's n	Bend Angle (degrees)	Slope (Calculated) (ft/ft)	Flow (cfs)	Capacity (Excess Full Flow) (cfs)	Capacity (Full Flow) (cfs)	Velocity (In) (ft/s)	Velocity (Out) (ft/s)	Stop Node	Elevation (ft)	Hydraulic Grade Line (ft)	Start Node	Invert (ft)	Elevation (ft)	Hydraulic Grade Line (ft)	Freeboard (ft)	
13-14	18.0	43.0	0.013	80.45	0.010	8.26	2.24	10.50	5.87	6.57	13	568.14	573.37	569.14	14	568.57	573.37	569.68	3.69
12-13	18.0	55.0	0.013	12.08	0.010	9.11	1.39	10.50	6.17	6.69	12	567.39	573.70	568.47	13	567.94	573.37	569.11	4.26
9-10	24.0	63.0	0.013	16.24	0.005	20.68	-4.56	16.12	6.59	7.54	9	557.66	564.50	559.29	10	557.98	561.18	559.97	1.21
8-9	30.0	336.0	0.012	89.01	0.005	27.28	4.14	31.42	7.21	7.29	8	555.78	562.00	557.56	9	557.46	564.50	559.26	5.24
6.2-8	30.0	24.1	0.013	89.87	0.010	27.28	12.76	40.04	7.29	8.28	6.2	555.35	559.24	556.94	8	555.58	562.00	557.36	4.64
3.8-3.9	18.0	18.9	0.013	0.78	0.068	4.14	23.16	27.30	4.46	3.37	3.8	549.69	554.99	550.67	3.9	550.97	557.52	551.75	5.77
11-12	18.0	164.0	0.013	4.40	0.010	9.11	1.39	10.50	6.17	6.69	11	565.55	570.69	566.63	12	567.19	573.70	568.36	5.34
10-11	24.0	193.0	0.013	80.28	0.010	17.30	5.32	22.62	6.85	5.83	10	558.18	561.18	559.97	11	560.11	570.69	561.61	9.08
11-16	18.0	43.0	0.013	87.09	0.010	7.61	2.89	10.50	5.65	6.45	11	565.55	570.69	566.50	16	565.98	570.69	567.05	3.64
10-15	12.0	79.0	0.013	35.19	0.010	2.77	0.79	3.56	3.53	3.53	10	558.18	561.18	559.97	15	558.97	564.51	560.45	4.06
6.1-6.2	36.0	420.6	0.013	0.00	0.010	27.28	38.01	65.29	6.66	3.86	6.1	551.32	560.34	554.32	6.2	555.35	559.24	557.04	2.20
18-19	18.0	125.9	0.013	0.00	0.006	5.49	2.67	8.16	4.94	4.42	18	558.42	564.40	559.41	19	559.18	564.40	560.08	4.32
9-18	18.0	75.7	0.013	90.06	0.010	6.60	3.93	10.53	5.31	3.73	9	557.66	564.50	559.26	18	558.42	564.40	559.41	4.99
25-26	12.0	43.0	0.013	88.57	0.010	1.75	1.81	3.56	3.84	4.52	25	564.57	569.17	565.06	26	565.00	569.17	565.56	3.61
24-25	12.0	130.0	0.013	28.24	0.034	2.38	4.23	6.61	4.32	7.73	24	559.90	565.80	560.31	25	564.37	569.17	565.03	4.14
23-24	24.0	108.0	0.013	75.30	0.010	8.96	13.66	22.62	5.25	6.78	23	556.57	562.00	557.44	24	557.65	565.80	558.72	7.08
22-23	24.0	43.0	0.013	90.00	0.010	9.67	12.95	22.62	5.39	6.76	22	555.94	562.00	556.87	23	556.37	562.00	557.48	4.52
21-22	24.0	275.0	0.013	0.00	0.025	10.84	25.25	36.09	5.62	3.98	21	548.74	556.55	550.36	22	555.74	562.00	556.92	5.08
5.1-11	24.0	50.0	0.013	28.90	0.036	27.42	15.26	42.68	9.15	12.84	5.11	546.76	553.40	548.05	21	548.54	556.55	550.36	6.19
5.15-11	36.0	57.3	0.013	0.06	0.011	28.27	41.11	69.38	6.74	6.43	5	545.94	551.94	547.73	11	546.56	553.40	548.28	5.12
5.0-5.1	36.0	78.7	0.013	0.00	0.052	30.50	121.35	151.85	4.93	4.31	5.0	541.86	541.86	544.86	5.1	545.94	541.86	547.73	4.21
33-34	24.0	26.5	0.013	90.00	0.010	15.61	7.22	22.83	6.52	7.52	33	553.73	558.10	554.99	34	554.00	563.98	555.42	8.56
32-33	24.0	28.0	0.013	0.00	0.093	15.61	53.32	68.93	6.52	14.05	32	550.93	555.54	551.70	33	553.53	558.10	554.95	3.15
21-32	24.0	43.0	0.013	90.00	0.010	16.58	6.04	22.62	6.71	6.09	21	548.74	556.55	550.36	32	549.17	555.54	550.64	4.90
28-29	15.0	248.0	0.013	0.00	0.007	4.16	1.30	5.46	4.83	3.65	28	558.48	564.40	559.58	29	560.25	564.40	561.08	3.14
3.9-3.11	12.0	224.0	0.013	62.00	0.011	1.27	2.54	3.81	3.45	1.93	3.9	550.97	557.52	551.75	3.11	553.53	560.55	554.01	6.00
3.5-3.6	18.0	127.7	0.013	0.00	0.006	9.54	+1.65	7.89	5.40	5.40	3.5	547.92	554.00	549.42	3.6	548.64	553.86	550.47	3.39
3.7-3.8	18.0	46.0	0.013	19.92	0.008	5.23	4.06	9.29	4.26	3.14	3.7	549.33	555.08	549.69	3.8	549.69	554.99	550.67	4.32
3.6-3.7	18.0	61.0	0.013	21.87	0.011	6.42	4.75	11.17	3.85	3.63	3.6	548.64	553.86	550.47	3.7	549.33	555.08	550.67	4.41
30-5.2	12.0	109.1	0.013	0.28	0.010	1.06	2.47	3.53	3.25	1.53	30	547.35	554.95	548.18	5.2	548.42	557.72	548.85	8.87
5.1-30	12.0	144.3	0.013	61.37	0.010	2.06	1.46	3.52	2.96	2.62	5.1	545.94	551.94	547.73	30	547.35	554.95	548.18	6.69
4.1-4.2	12.0	12.5	0.013	86.35	0.046	4.20	3.48	7.68	5.82	5.37	4.1	544.30	548.59	545.28	4.2	544.88	548.76	545.74	3.02
4.0-4.1	12.0	22.1	0.013	0.00	0.113	7.56	4.43	11.99	9.67	9.63	4.0	541.80	541.80	542.80	4.1	544.30	548.59	545.28	3.31
16-17	18.0	10.0	0.013	0.00	0.010	6.99	1.51	10.50	5.44	6.05	16	566.18	570.69	567.11	17	566.28	570.69	567.30	3.50
19-27	15.0	178.0	0.013	0.00	0.006	3.53	1.48	5.01	4.42	3.72	19	559.18	564.40	560.08	27	560.25	564.40	561.02	3.38
24-28	18.0	125.3	0.013	75.24	0.005	6.58	0.87	7.45	4.76	5.30	24	557.85	565.80	558.84	28	558.48	564.40	559.58	4.82

3 HYDRAULIC CALCULATIONS (15 YR)  
 SCALE: NTS REF. DWG. C7.1

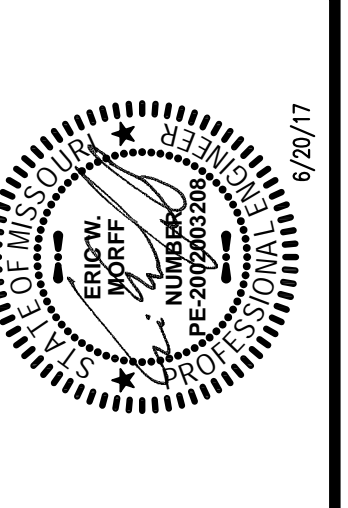


2 STORM SEWER PROFILES  
 SCALE: 1"=40' HORIZ. 1"=10' VERT. REF. DWG. C7.1

NO	REVISION DESCRIPTION	DATE	CLIENT/CITY/AGENCY COMMENTS
4	REVISED SANITARY SEWER ALIGNMENT	6/29/17	CLIENT/CITY/AGENCY COMMENTS
3	REVISED SANITARY SEWER ALIGNMENT	6/28/17	CLIENT/CITY/AGENCY COMMENTS
2	REVISED SANITARY SEWER ALIGNMENT	6/28/17	CLIENT/CITY/AGENCY COMMENTS
1	REVISED SANITARY SEWER ALIGNMENT	6/28/17	CLIENT/CITY/AGENCY COMMENTS

DEVELOPER/OWNER:  
**40 DD SPORTS, LLC**  
 4160 EHL MANN ROAD  
 ST. PETERS, MO 63376  
 636-359-0621

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MISSOURI RUSH  
 SOCCER COMPLEX  
 CALEDONIA DRIVE  
 O'FALLON, MO 63366

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DESIGN/CALC BY: BSJ  
 DRAWN BY: BSJ  
 CHECKED BY: EWM  
 DRAWING SCALE: AS SHOWN  
 DATE: 4/28/17  
 Job Number: 16-0042-A  
 Sheet Number: C8.1