

USER: Taylor, Stuart; TAB: DETAILS 2
 DATE: September 3, 2013 11:30:36 AM
 DRAWING: S:\WORKS\Job2013\13-0054\CSD-DWG\C-Out\MASS GRADING\C_MG_DETAILS.dwg

Conduit FlexTable: Hydraulic Calculations (strmcad_10-0051.stc)

Current Time: 0.000 min

Label	Diameter (in)	Length (ft)	Manning's n	Bend Angle (Calculated) (degrees)	Slope (ft/ft)	Flow (ft ³ /s)	Excess Capacity (Full Flow) (ft ³ /s)	Capacity (Full Flow) (ft ³ /s)	Velocity (In) (ft/s)	Velocity (Out) (ft/s)	Start Node	Stop Node	Invert (Upstream) (ft)	Invert (Downstream) (ft)	Elevation Ground (Start) (ft)	Elevation Ground (Stop) (ft)	Hydraulic Grade In (ft)	Hydraulic Grade Out (ft)	Headloss (ft)	Notes
4-3	48	218	0.013	4.92	0.005	71.76	29.81	101.57	8.44	8.16	4	3	539.94	538.85	546.85	546.05	542.50	541.49	1.01	
3-2	48	126.9	0.013	39.62	0.005	71.76	29.40	101.16	8.44	7.26	3	2	538.85	538.22	546.05	545.06	541.41	541.16	0.26	
2-1	48	44.2	0.013	0.00	0.005	71.76	29.81	101.57	8.44	8.75	2	1	538.22	538.00	545.06	538.00	540.78	540.48	0.30	
6-5	36	80.9	0.013	0.00	0.01	49.24	17.45	66.69	8.53	10.06	6	5	558.81	558.00	567.60	560.00	561.09	559.96	1.13	

Catch Basin FlexTable: Hydraulic Calculations (strmcad_10-0051.stc)

Current Time: 0.000 min

Label	Elevation (Ground) (ft)	Elevation (Rim) (ft)	Elevation (Invert) (ft)	Flow (Total Out) (ft ³ /s)	Velocity (In-Governing) (ft/s)	Velocity (Out) (ft/s)	Hydraulic Grade In (ft)	Hydraulic Grade Out (ft)	Intercepted Flow (ft ³ /s)	Bypassed Flow (ft ³ /s)	Capture Efficiency (%)	Bypass Target	Freeboard (ft)	Headloss (ft)	Notes
4	546.85	546.85	539.94	71.76	8.44	8.44	542.50	542.50	71.76	0.00	100	100	(N/A)	0.00	
6	567.60	567.60	558.81	49.24	8.53	8.53	561.09	561.09	49.24	0.00	100	100	(N/A)	0.00	

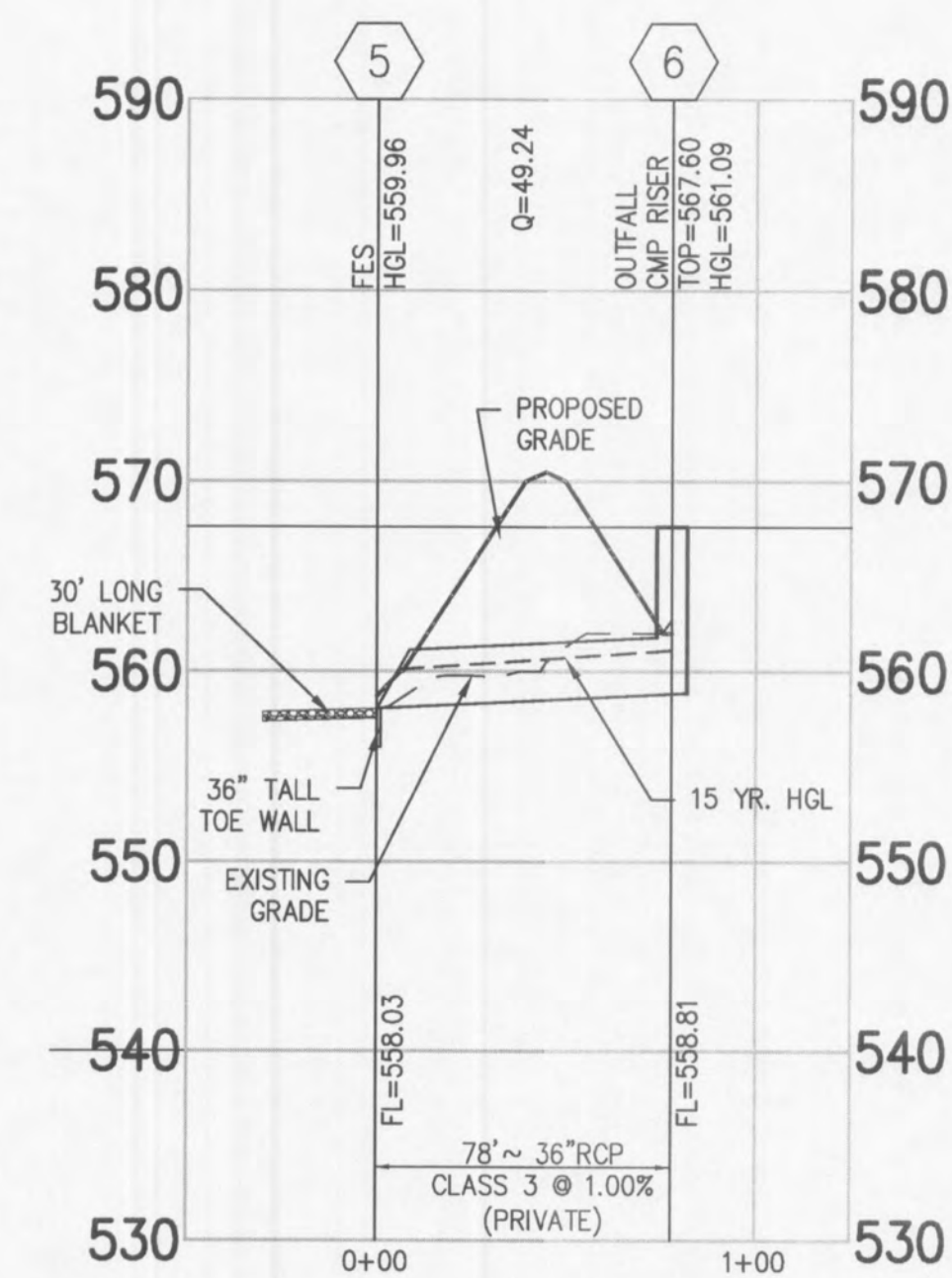
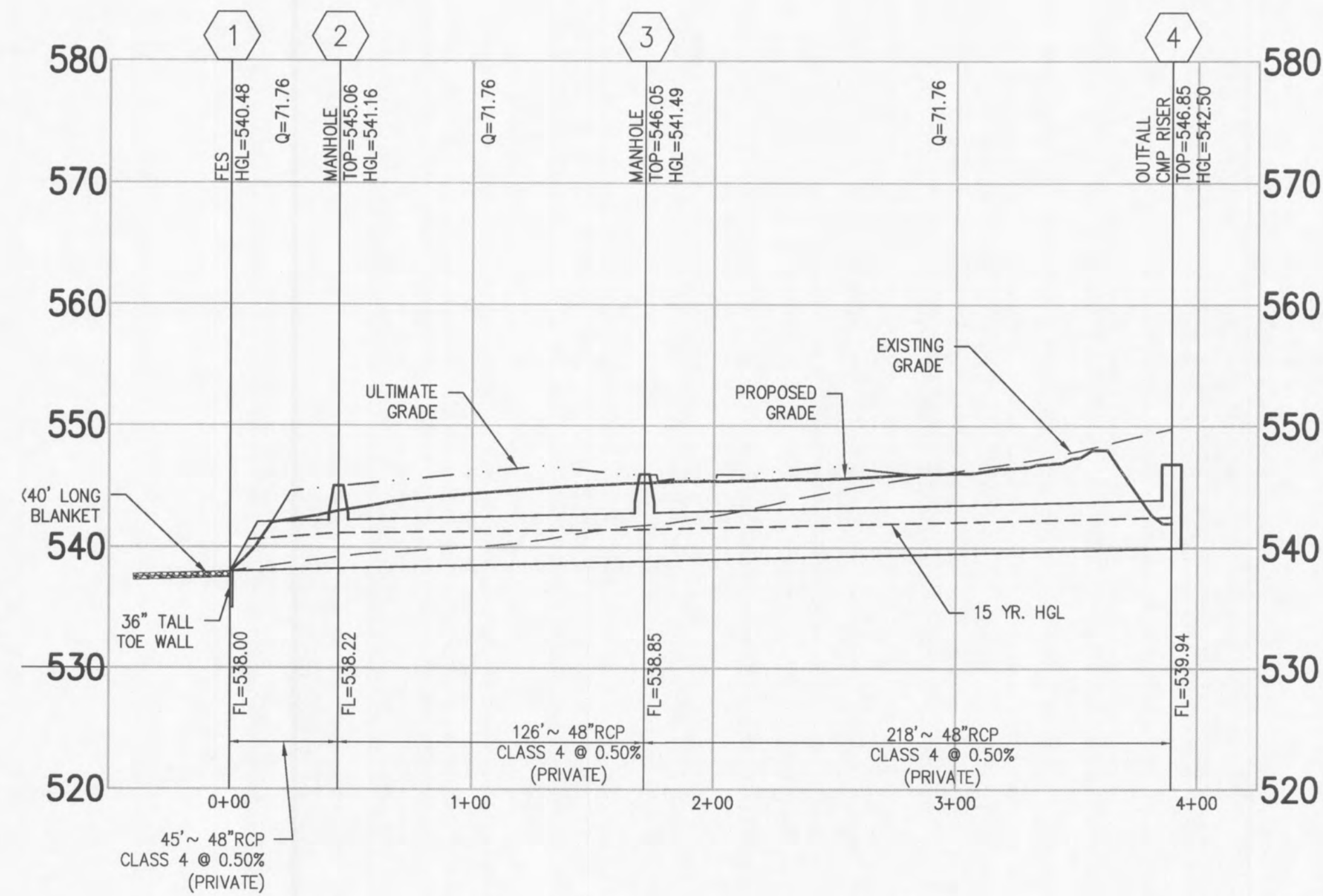
Manhole FlexTable: Hydraulic Calculations (strmcad_10-0051.stc)

Current Time: 0.000 min

Label	Elevation (Ground) (ft)	Elevation (Rim) (ft)	Elevation (Invert) (ft)	Flow (Total Out) (ft ³ /s)	Velocity (In-Governing) (ft/s)	Velocity (Out) (ft/s)	Hydraulic Grade In (ft)	Hydraulic Grade Out (ft)	Diameter (in)	Freeboard (ft)	Headloss (ft)
3	546.05	546.05	538.85	71.76	8.16	8.44	541.49	541.41	36.00	4.56	0.08
2	545.06	545.06	538.22	71.76	7.26	8.44	541.16	540.78	36.00	3.90	0.38

2 HYDRAULIC CALCULATIONS

SCALE: NTS REF. DWG.



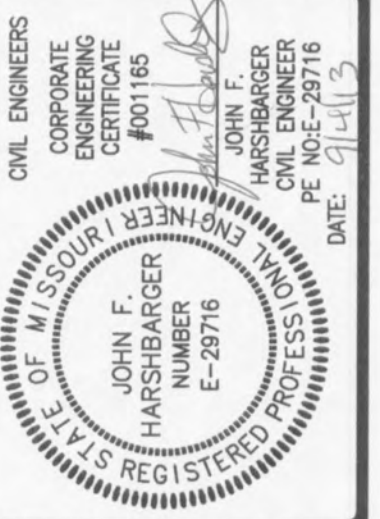
1 STORM SEWER PROFILES

SCALE: 1"=50' HORIZ. 1"=10' VERT. REF. DWG.

NO.	DATE	REVISION DESCRIPTION
1	8/29/2013	CITY COMMENTS
2	9/25/2013	CITY COMMENTS

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CHECKED BY	JFH
DRAWING SCALE	-
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