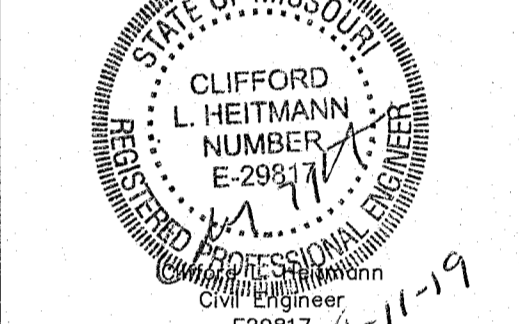


ENGINEERING  
 PLANNING  
 SURVEYING  
 221 Font West Blvd.  
 St. Charles, MO 63301  
 636-928-6552  
 FAX 636-928-1718



DISCLAIMER OF RESPONSIBILITY  
 I hereby certify that the documents intended to be authorized by my seal are limited to this sheet, and I hereby disclaim any responsibility for all other Drawings, Specifications, Estimates, Reports or other documents or instruments relating to or intended to be used for any part or parts of the architectural or engineering project or survey.

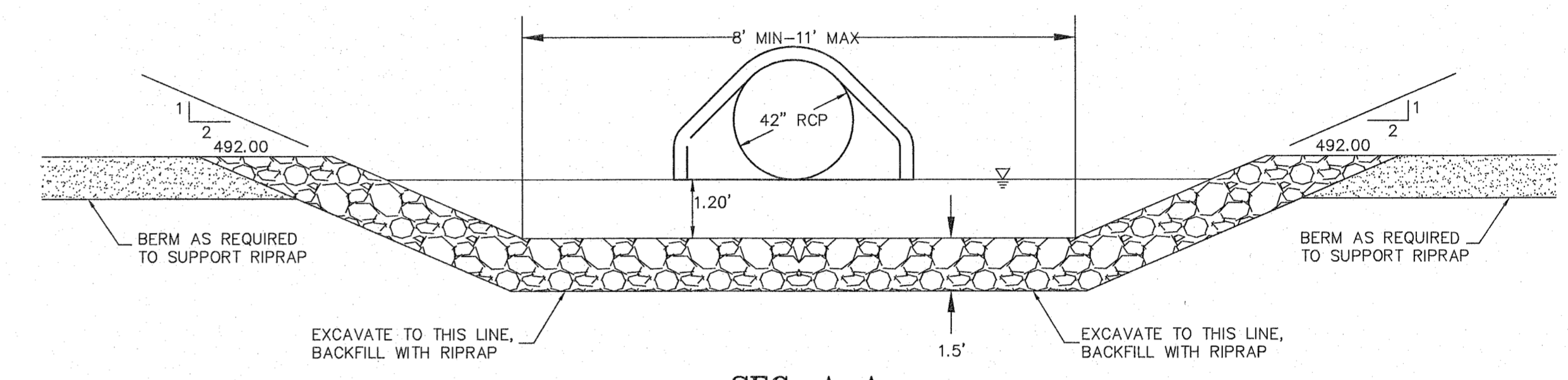
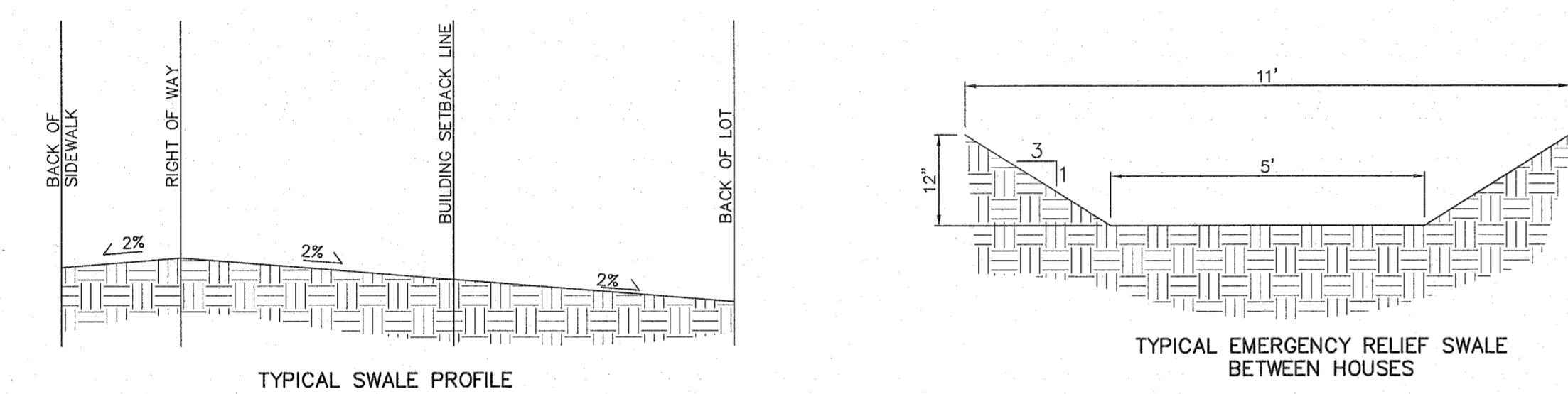
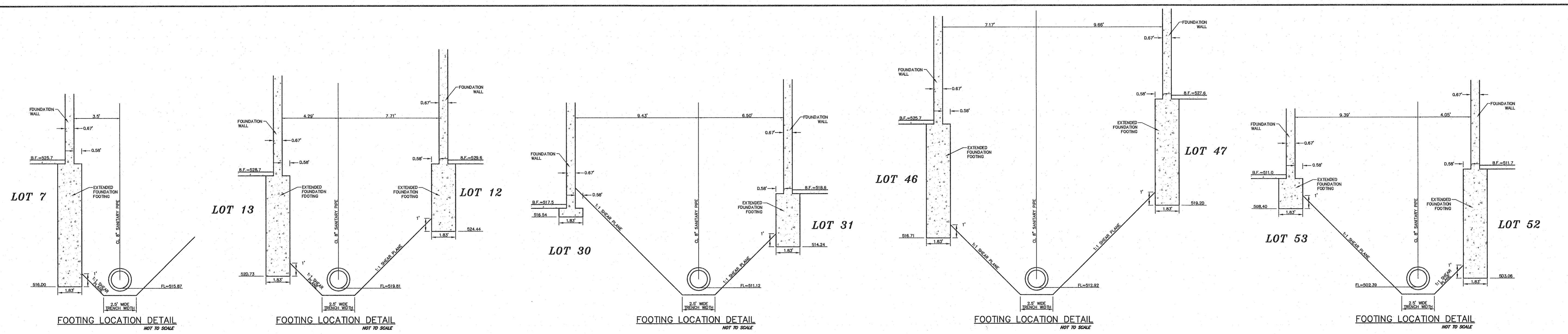
REVISIONS

12/19/16	P.W.S.D.#2, DUCKETT & SUTHERLAND
01/05/17	P.W.S.D.#2 COMMENTS
02/20/17	CITY COMMENTS
03/17/17	CITY COMMENTS
09/20/18	CITY COMMENTS
11/06/18	CITY COMMENTS
12/14/18	CITY COMMENTS
12/28/18	CITY COMMENTS

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 Surveying Authority No. 000144  
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Developer / Owner:  
**Bridgewater Communities, Inc.**  
 P.O. Box 4607  
 Chesterfield, Missouri 63005  
 636-294-6020

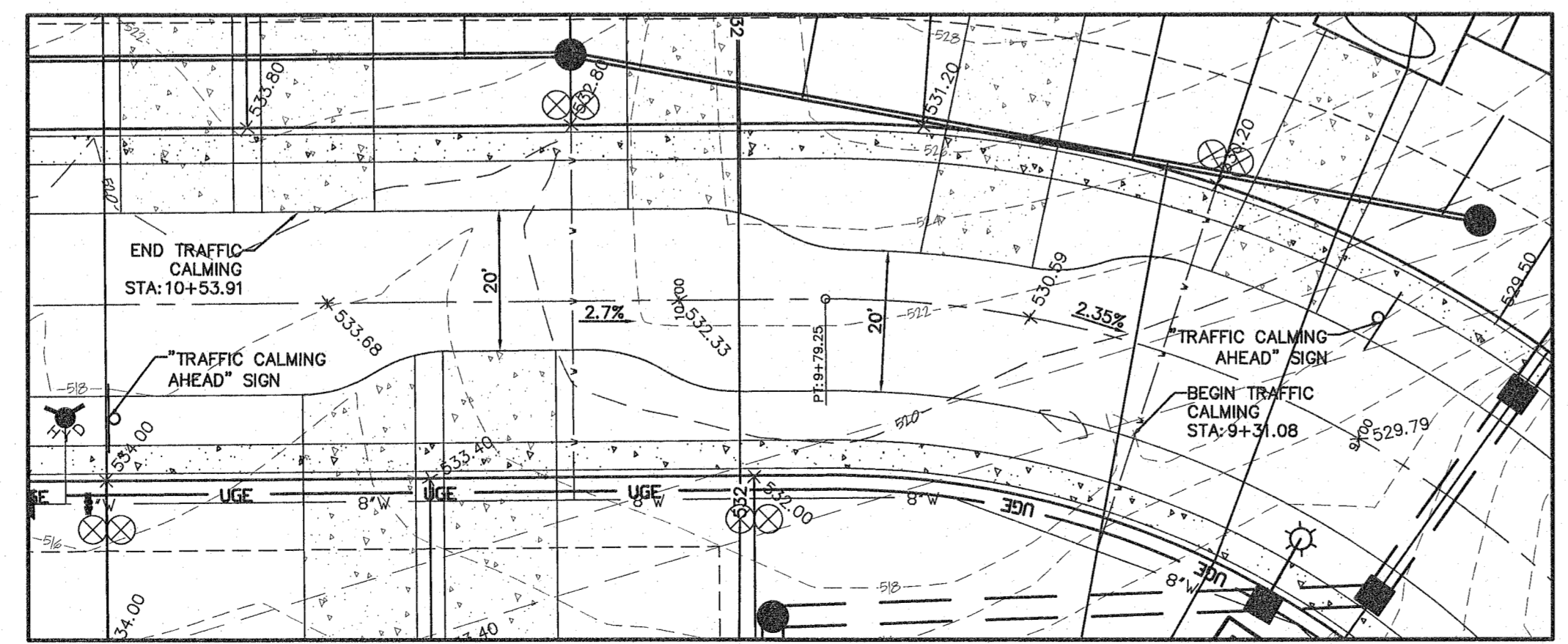
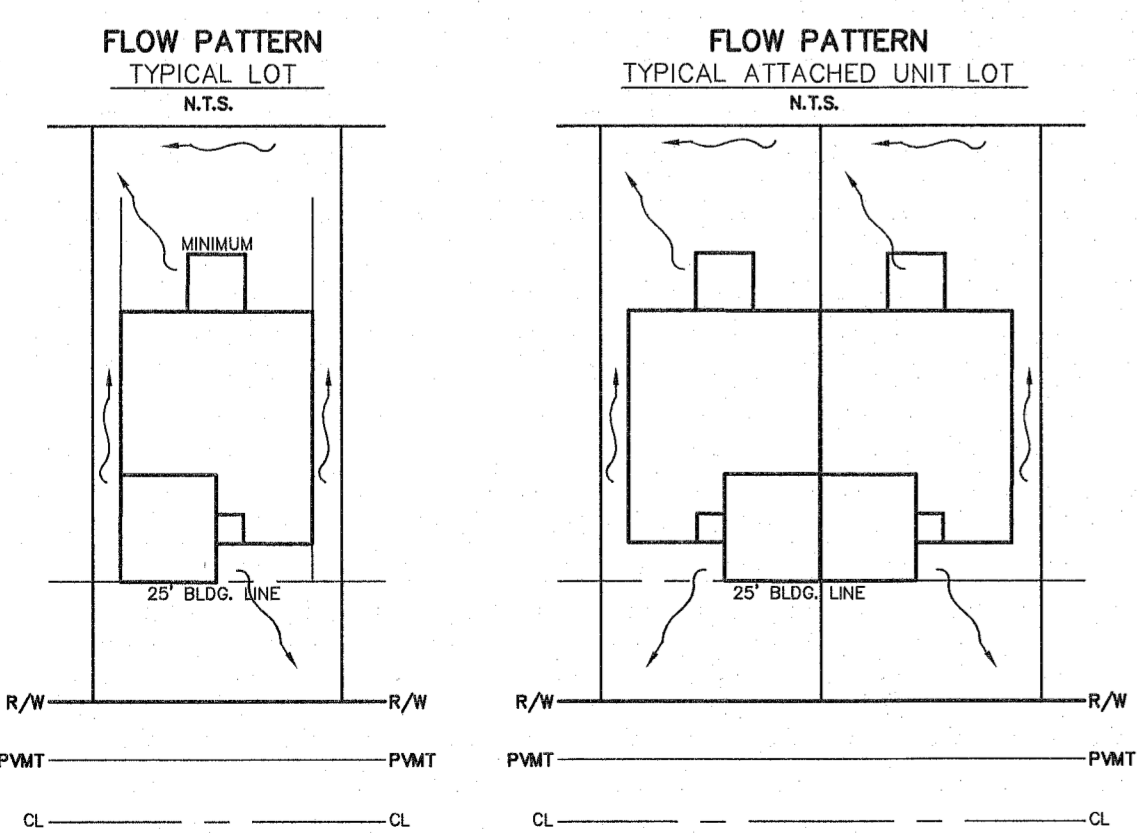
P+Z No. 18-003986  
 June 7, 2018  
 City No. #18-009384  
 Permit #RSP18-000006



Overland Flow Path Calculations

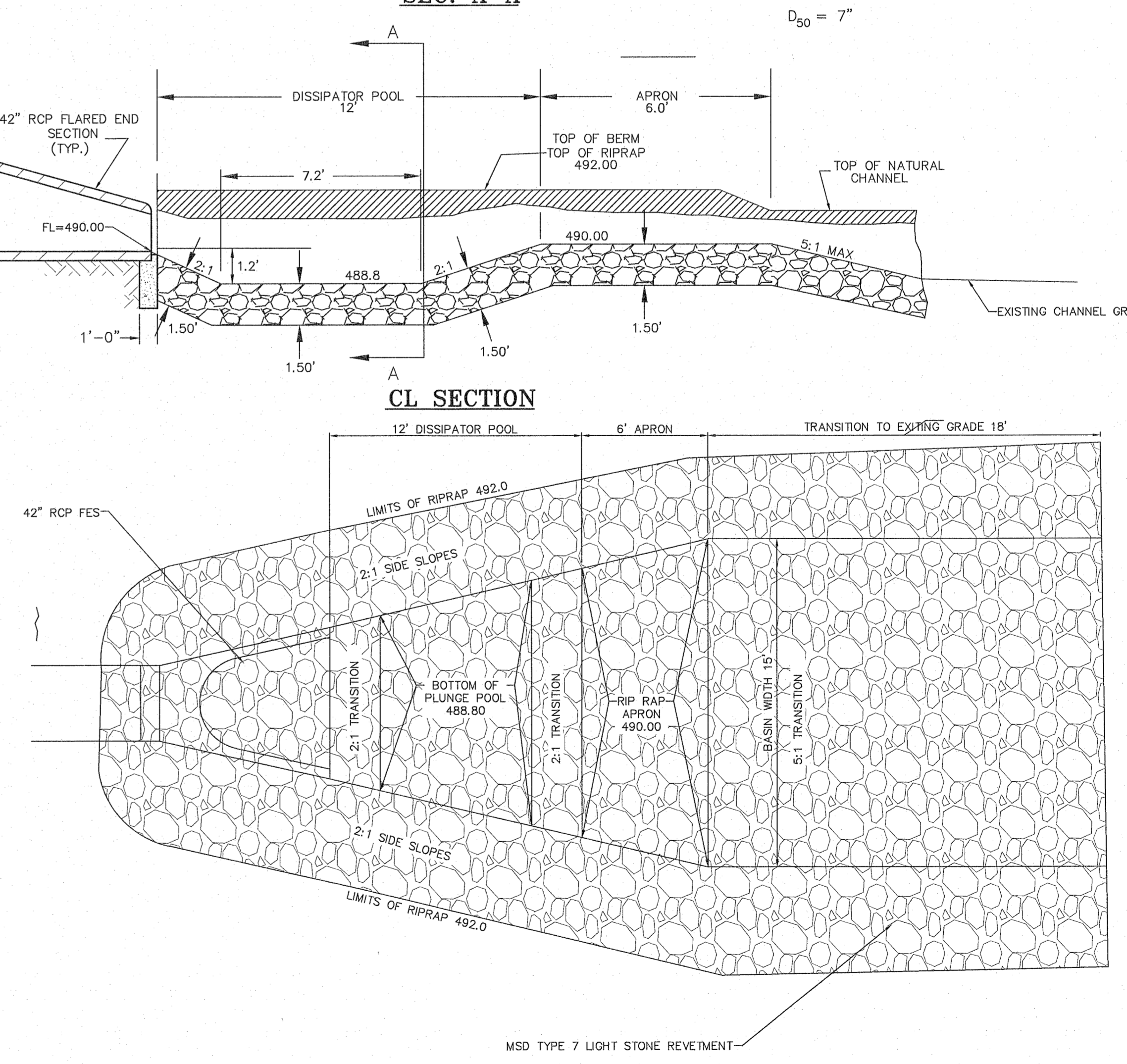
Location	Flow	Top of Foundation	Lowest Sill	X-section Location	Flow Line	Slope	Bottom Width	Highwater	Freeboard
Behind lot 21	Al 33 3.17 cfs	535.10 ft	531.40 ft	Swale	529.25 ft	2.0%	0.00 ft	529.50 ft	1.90 ft
Behind lot 22	swale 3.44 cfs	534.20 ft	530.50 ft	Swale	528.00 ft	2.0%	0.00 ft	528.20 ft	2.30 ft
Behind lot 23	swale 4.15 cfs	533.40 ft	525.60 ft	Swale	524.00 ft	9.5%	0.00 ft	524.16 ft	1.44 ft
Behind lot 24	swale 4.74 cfs	530.90 ft	523.10 ft	Swale	520.00 ft	2.0%	0.00 ft	520.49 ft	2.61 ft
Behind lot 25	swale 5.52 cfs	528.40 ft	520.60 ft	Swale	518.90 ft	2.0%	0.00 ft	519.41 ft	1.19 ft
Behind lot 26	swale 6.17 cfs	526.70 ft	518.90 ft	Swale	517.30 ft	2.0%	0.00 ft	517.84 ft	1.06 ft
Behind lot 27	swale 7.54 cfs	526.30 ft	518.50 ft	Swale	515.80 ft	2.0%	0.00 ft	516.38 ft	2.12 ft
Behind lot 28	Al 36 8.17 cfs	525.30 ft	517.50 ft	Swale	513.70 ft	2.0%	0.00 ft	514.29 ft	3.21 ft
Behind lot 29	swale 9.42 cfs	524.90 ft	517.10 ft	Swale	511.90 ft	2.0%	0.00 ft	512.53 ft	4.57 ft
Behind lot 30	Al 35 10.50 cfs	525.30 ft	517.50 ft	Swale	509.90 ft	2.0%	0.00 ft	510.65 ft	6.85 ft
Between Lots 16 & 17	Cl 23 6.22 cfs	534.20 ft	533.20 ft	ROW	530.60 ft	---	5.00 ft	531.52 ft	1.68 ft
Between Lots 39 & 40	Al 26 10.48 cfs	534.00 ft	533.00 ft	ROW	530.70 ft	2.0%	5.00 ft	531.12 ft	1.88 ft
Between Lots 54 & 55	DCl 3 7.03 cfs	518.40 ft	517.40 ft	ROW	515.20 ft	2.0%	5.00 ft	515.53 ft	1.87 ft
Between Lots 29 & 30	DCl 37 6.51 cfs	524.90 ft	523.90 ft	ROW	521.60 ft	2.0%	5.00 ft	521.92 ft	1.98 ft
Behind lot 55	swale 4.99 cfs	518.40 ft	514.70 ft	Swale	510.10 ft	2.0%	0.00 ft	510.74 ft	3.96 ft
Behind lot 56	swale 4.63 cfs	519.00 ft	515.30 ft	Swale	512.30 ft	2.0%	0.00 ft	512.93 ft	2.37 ft
Behind lot 57	swale 4.23 cfs	520.00 ft	516.30 ft	Swale	513.90 ft	2.0%	0.00 ft	514.51 ft	1.79 ft
Behind lot 58	swale 3.90 cfs	522.00 ft	518.30 ft	Swale	515.70 ft	2.0%	0.00 ft	516.29 ft	2.01 ft
Behind lot 59	swale 3.70 cfs	524.10 ft	520.40 ft	Swale	518.90 ft	10.0%	0.00 ft	519.32 ft	1.08 ft
Behind lot 60	swale 3.20 cfs	527.70 ft	524.00 ft	Swale	522.40 ft	3.6%	0.00 ft	522.88 ft	1.12 ft
Behind lot 61	swale 2.55 cfs	529.80 ft	526.10 ft	Swale	524.00 ft	4.5%	0.00 ft	524.43 ft	1.67 ft
Behind lot 62	swale 1.91 cfs	532.70 ft	529.00 ft	Swale	527.00 ft	2.0%	0.00 ft	527.45 ft	1.55 ft
Behind lot 1	swale 0.27 cfs	552.00 ft	551.00 ft	Swale	548.00 ft	5.4%	0.00 ft	548.17 ft	2.83 ft
Behind lot 2	swale 0.51 cfs	545.20 ft	541.50 ft	Swale	540.20 ft	6.7%	0.00 ft	540.41 ft	1.09 ft
Behind lot 3	swale 0.82 cfs	542.30 ft	538.60 ft	Swale	537.40 ft	28.0%	0.00 ft	537.59 ft	1.01 ft
Behind lot 4	swale 1.61 cfs	539.90 ft	536.20 ft	Swale	533.80 ft	4.4%	0.00 ft	534.16 ft	2.04 ft
Behind lot 5	swale 1.95 cfs	537.50 ft	533.80 ft	Swale	531.50 ft	2.4%	0.00 ft	531.94 ft	1.86 ft
Behind lot 6	swale 2.49 cfs	535.20 ft	531.50 ft	Swale	529.90 ft	4.2%	0.00 ft	530.33 ft	1.17 ft
Behind lot 7	swale 2.87 cfs	533.50 ft	529.80 ft	Swale	527.50 ft	2.0%	0.00 ft	528.02 ft	1.78 ft

OVERLAND FLOW CALCULATIONS  
 NOT TO SCALE



TRAFFIC CALMING DETAIL  
 SCALE: 1" = 20'

NOTE:  
 ALL SECTIONS OF THE TRAFFIC CALMING DEVICE SHALL BE CONSTRUCTED TO ENSURE POSITIVE STORM WATER DRAINAGE THROUGH THE TRAFFIC CALMING DEVICE. NO STORM WATER PONDING WILL BE ALLOWED.



RIP-RAP STILLING BASIN DETAIL