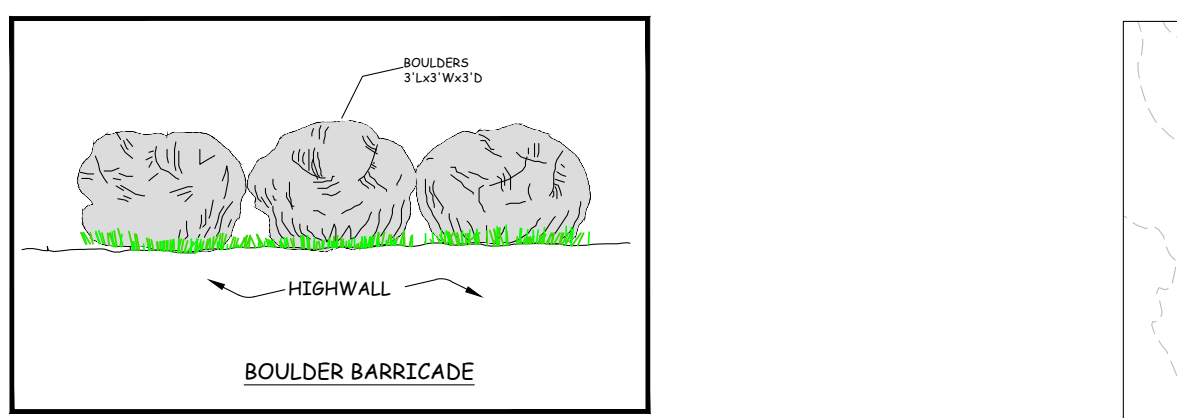
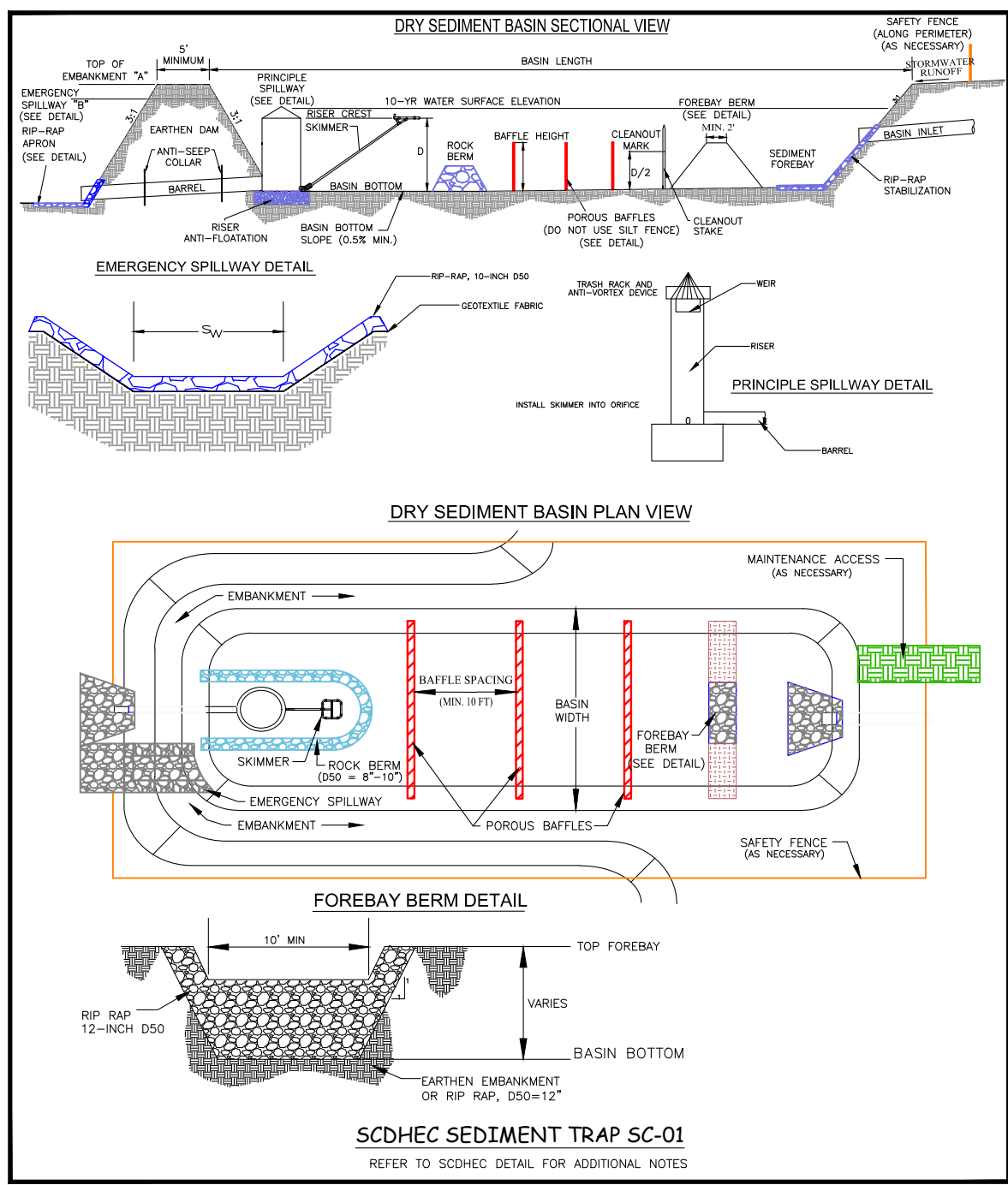


**Rock Hill Quarry - Vicinity Map
No Scale**

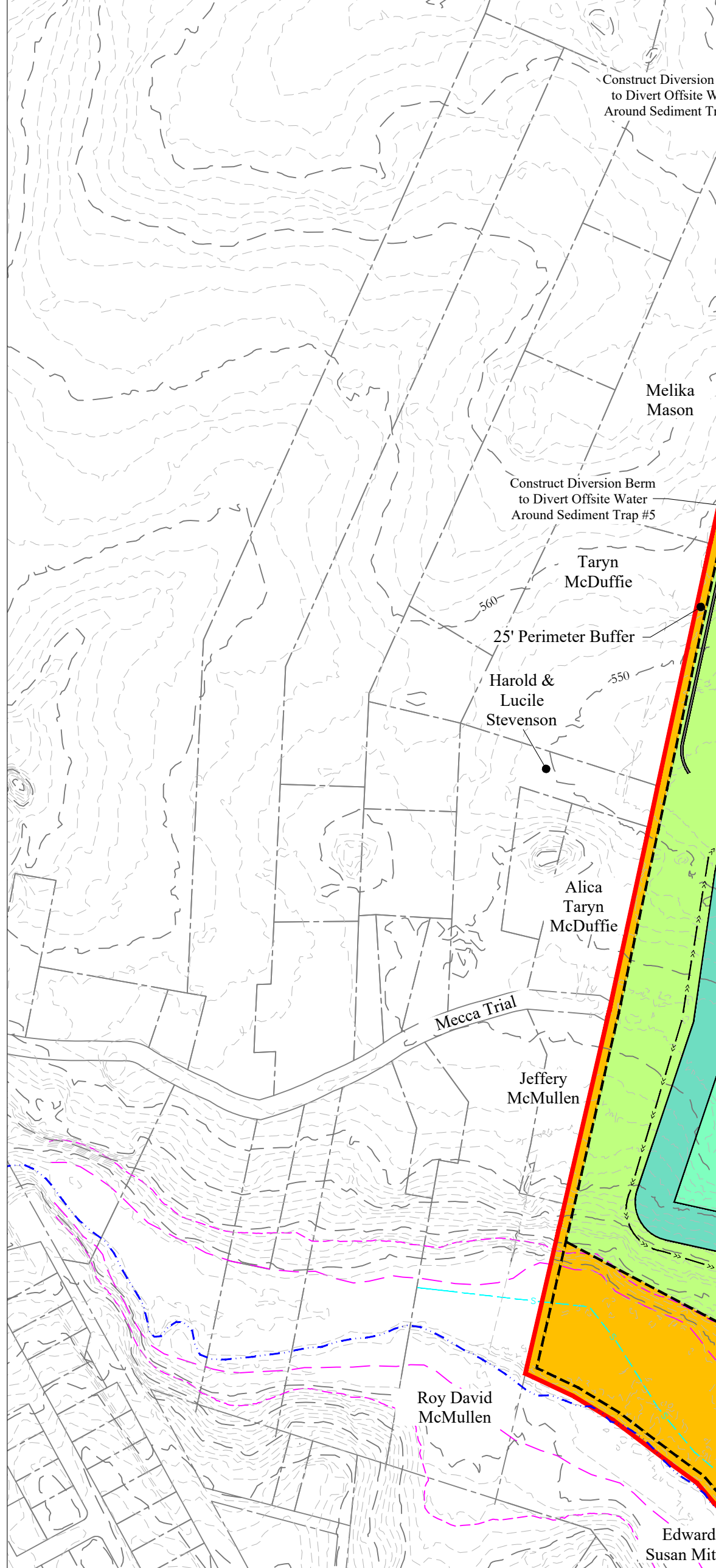


Trap #	Drainage Area	Storage Volume Required (Cu. Ft.)	Storage Volume Provided (Cu. Ft.)	Bottom Length (ft)	Bottom Width (ft)	Storage Depth (ft)	Spillway Length
ST 1	2.8	4,680	5,558	50	20	3.5	10
ST 2	2.6	4,680	5,558	50	20	3.5	10
ST 3	3.5	6,300	6,503	60	20	3.5	10
ST 4	2.8	5,040	5,558	50	20	3.5	10
ST 5	5.0	9,000	9,496	65	30	3.5	10
ST 6	4.8	8,640	8,848	60	30	3.5	10
ST 7	2.0	3,600	3,668	30	20	3.5	10
ST 8	2.0	3,600	3,668	30	20	3.5	10
ST 9	1.6	2,880	3,668	30	20	3.5	10
ST 10	3.3	5,940	6,556	50	25	3.5	10
ST 11	4.8	8,640	8,848	60	30	3.5	10
ST 12	3.8	6,840	7,553	50	30	3.5	10
ST 13	4.6	8,280	8,848	60	30	3.5	10
ST 14	4.8	8,640	8,848	60	30	3.5	10
ST 15	3.8	6,840	7,553	50	30	3.5	10
ST 16	4.7	8,640	11,438	80	30	3.5	10
ST 17	4.7	8,640	11,438	80	30	3.5	10
ST 18	2.8	5,040	5,558	50	20	3.5	10
ST 19	1.5	2,700	3,022	30	15	3.5	10
ST 20	4.8	8,640	8,848	60	30	3.5	10

- Notes:**
- Sediment Storage Calculations are based on Drainage Area * 1,800 cu/ft/Acre
 - Calculations are based on Rational Formula $Q10=CA, C=0.50, I=7.03$
 - Weir Formula $Q=CLH^{1.5}, C=3.0, H=1.0$
 - Berm footprints will be modified in the field to allow room for basins to be constructed outside defined stream buffers.

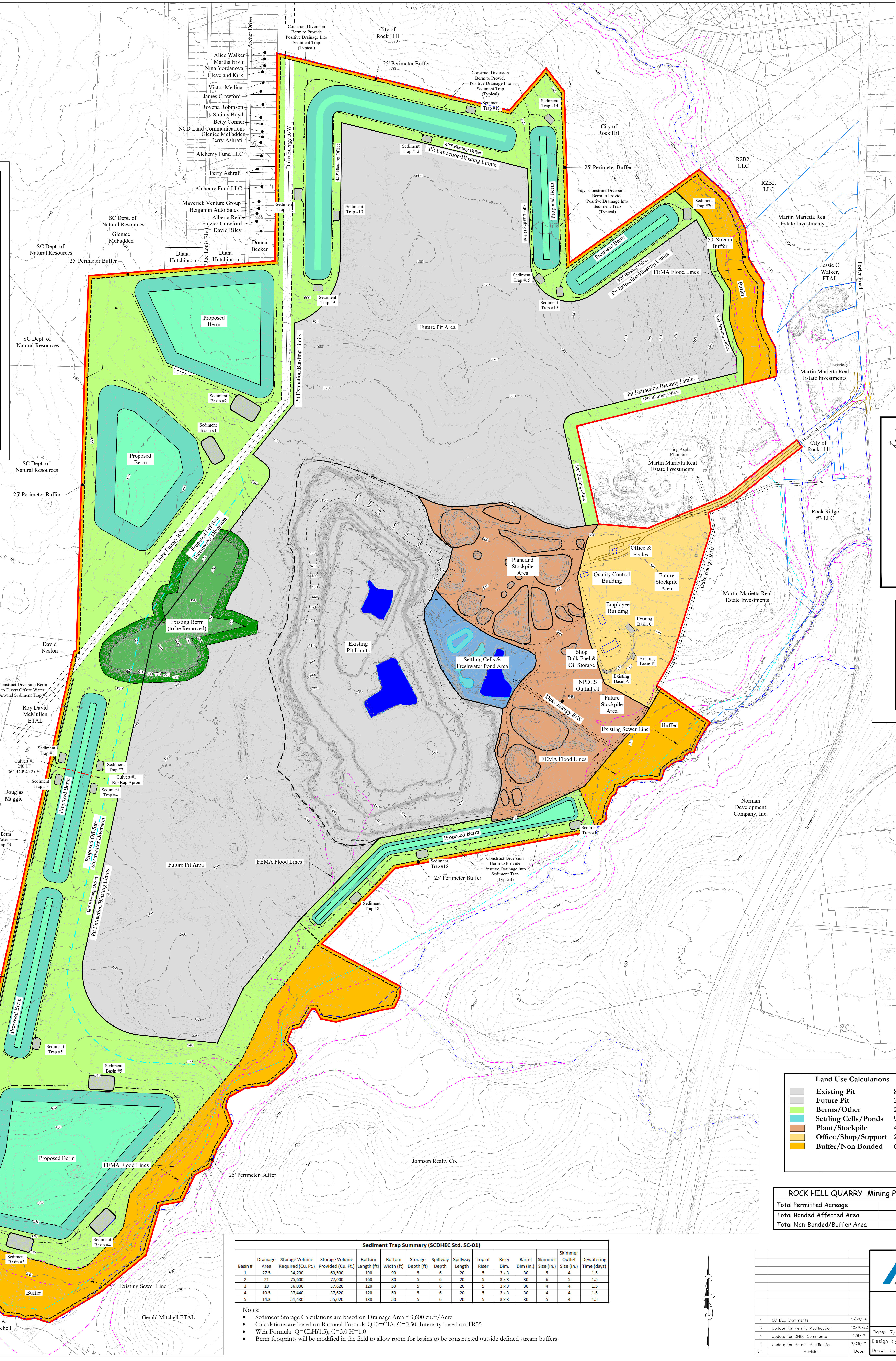
Culvert & Energy Dissipator Design

Pipe #	Drainage Area	Q10	Pipe Size	Slope	Length	Width at Outlet	Width at End of Apron	Stone Size
#1	19.3	751	36" RCP	2.0%	9'	30'	34'	CLASS 1
#2	34.1	725	36" RCP	1.0%	9'	30'	34'	CLASS 1



Notes:

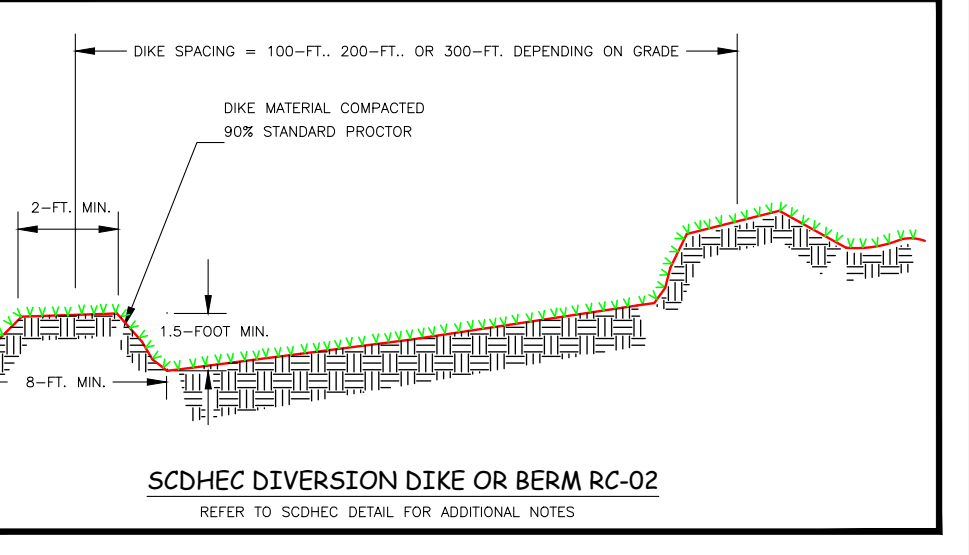
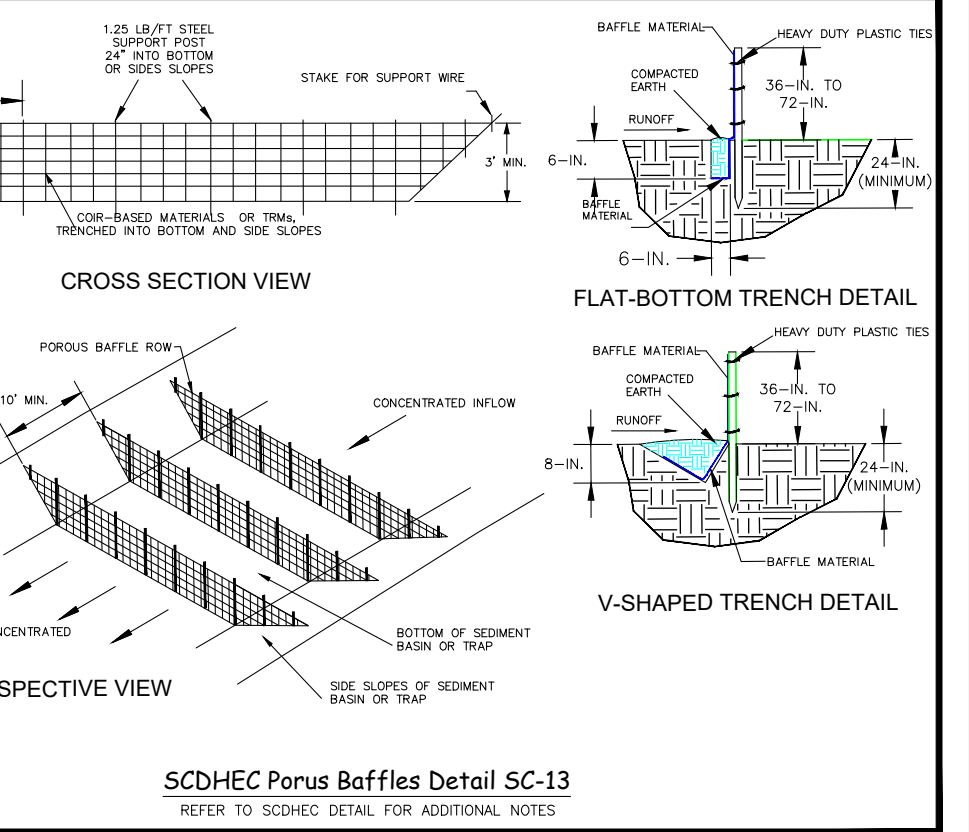
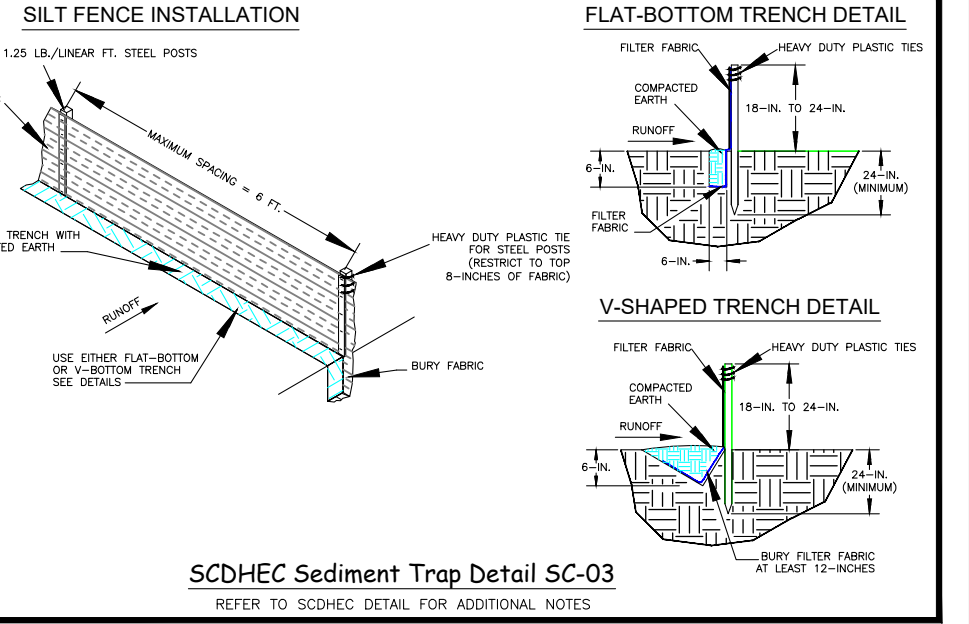
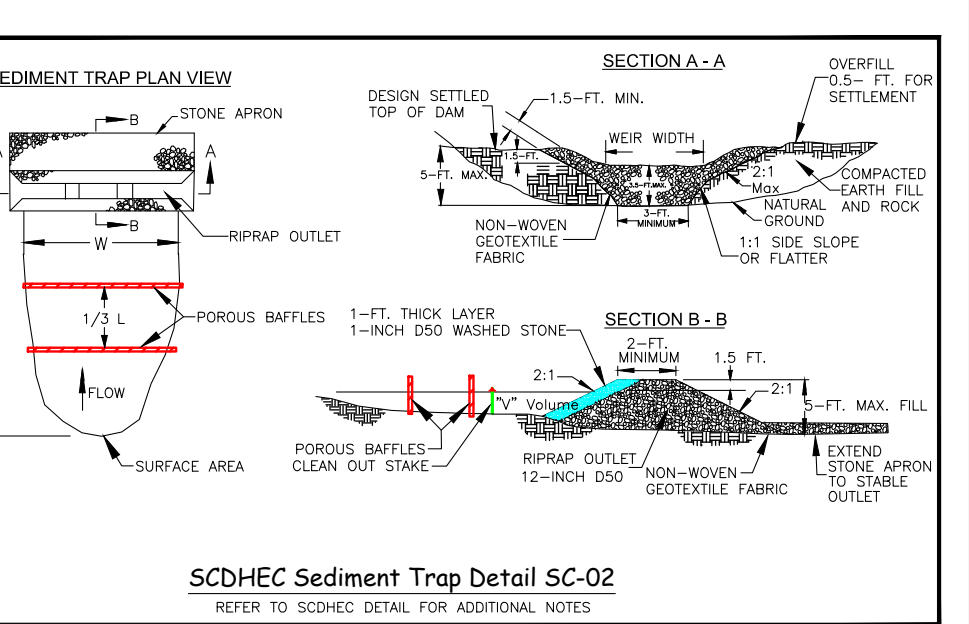
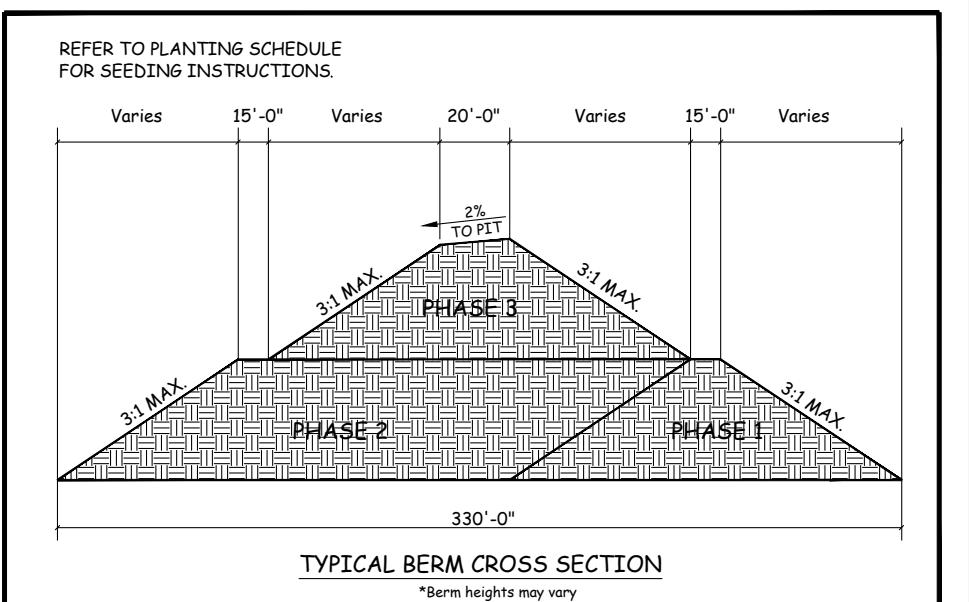
- Sediment Storage Calculations are based on Drainage Area * 3,600 cu/ft/Acre
- Calculations are based on Rational Formula $Q10=CA, C=0.50, Intensity$ based on TR55
- Weir Formula $Q=CLH^{1.5}, C=3.0, H=1.0$
- Berm footprints will be modified in the field to allow room for basins to be constructed outside defined stream buffers.



Sediment Trap Summary (SCDHEC Std. SC-01)

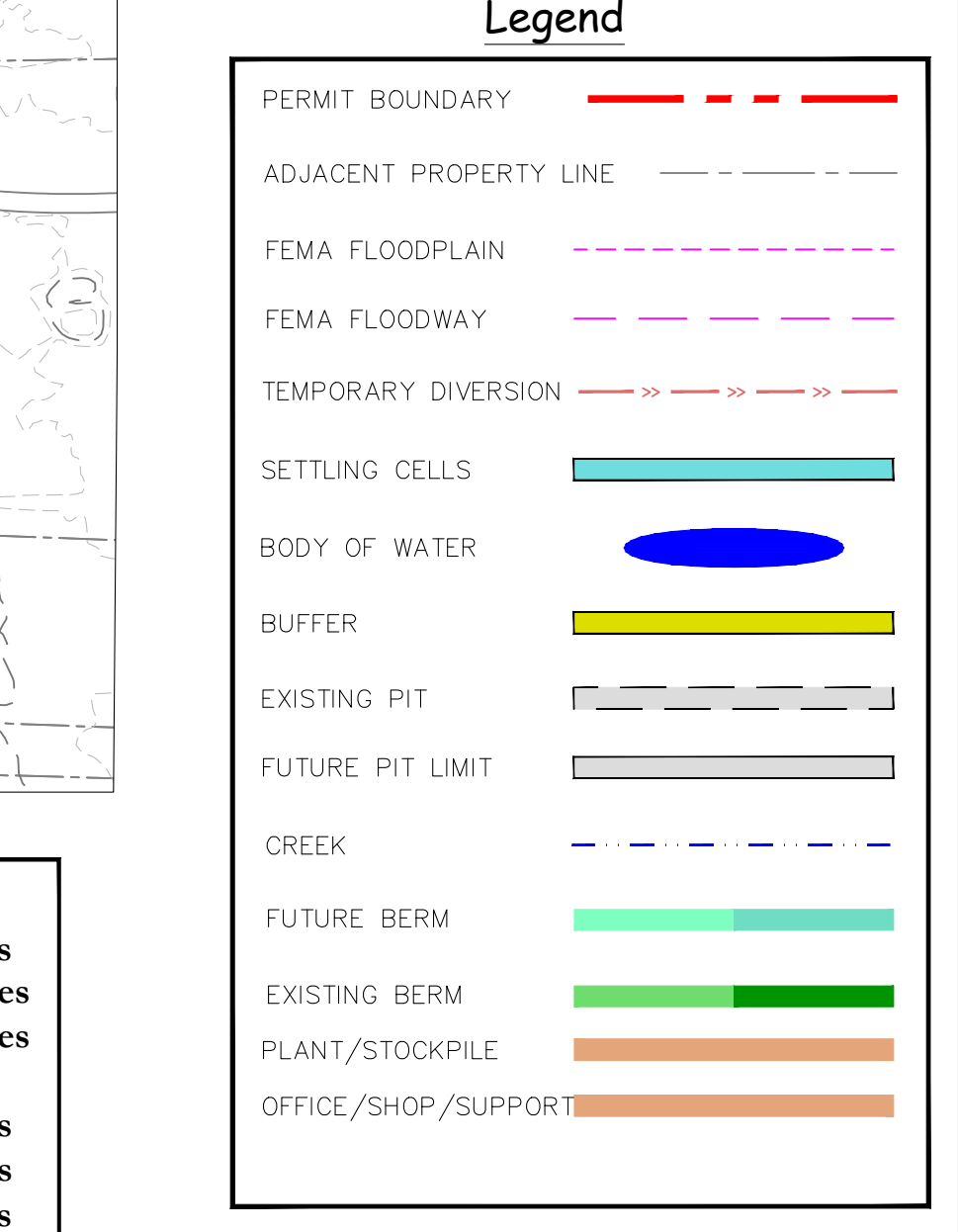
Basin #	Drainage Area	Storage Volume Required (Cu. Ft.)	Storage Volume Provided (Cu. Ft.)	Bottom Length (ft)	Bottom Width (ft)	Storage Depth (ft)	Spillway Length	Spillway Width	Top of Riser	Riser Dim. (ft)	Barrel Dim. (ft)	Skimmer Size (in.)	Skimmer Size (ft)	Outlet Size (in.)	Dewatering Time (days)
1	27.5	34,200	60,500	390	90	5	6	20	5	3 x 3	30	5	4	1.5	
2	21	75,600	77,000	160	80	5	6	20	5	3 x 3	30	6	5	1.5	
3	10	36,000	37,620	120	50	5	6	20	5	3 x 3	30	4	4	1.5	
4	10.5	37,440	37,620	120	50	5	6	20	5	3 x 3	30	4	4	1.5	
5	14.3	51,480	55,020	180	50	5	6	20	5	3 x 3	30	5	4	1.5	

- Notes:**
- Sediment Storage Calculations are based on Drainage Area * 3,600 cu/ft/Acre
 - Calculations are based on Rational Formula $Q10=CA, C=0.50, Intensity$ based on TR55
 - Weir Formula $Q=CLH^{1.5}, C=3.0, H=1.0$
 - Berm footprints will be modified in the field to allow room for basins to be constructed outside defined stream buffers.



SEEDING SCHEDULE (REVERSE 1/10/16)

Date	Type	PLANTING RATE
Aug 18 - Nov 1	Tall Fescue	300 lbs/Acre
Nov 1 - March 1	Tall Fescue & Abruzzo Ryegrass	300 lbs/Acre
March 1 - April 15	Tall Fescue	25 lbs/Acre
April 15 - June 30	Hybrid Crotchet Bermegrass	300 lbs/Acre
July 1 - Aug 15	Tall Fescue and ***Sorghum Sudan Hybrid	150 lbs/Acre and 30 lbs/Acre
Aug 15 - Sept 1	Tall Fescue and ***Sorghum Sudan Hybrid	150 lbs/Acre and 30 lbs/Acre
Sept 1 - Oct 1	Tall Fescue and ***Sorghum Sudan Hybrid	150 lbs/Acre and 30 lbs/Acre
Oct 1 - Nov 1	Tall Fescue and Abruzzo Ryegrass	300 lbs/Acre and 25 lbs/Acre

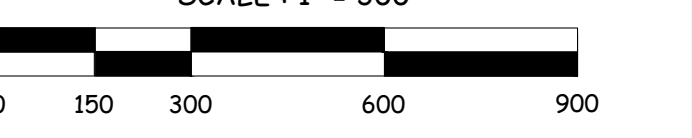


Land Use Calculations

Existing Pit	82.3 Acres
Future Pit	254.5 Acres
Berms/Other	257.9 Acres
Settling Cells/Ponds	9.0 Acres
Plant/Stockpile	46.3 Acres
Office/Shop/Support	24.4 Acres
Buffer/Non Bonded	63.9 Acres

ROCK HILL QUARRY Mining Permit #104

Total Permitted Acreage	738.3
Total Bonded Affected Area	674.4
Total Non-Bonded/Buffer Area	63.9



Martin Marietta East Division Carolina Region

ROCK HILL QUARRY MINE MAP

Date: 7/26/17 Scale: 1" = 300'

Design by: Mining Permit #104 Located: Rock Hill, York County

Drawn by: RWB, JN Site Number: 1