

OPTION 3 NOTES

- APPROXIMATELY 763 LINEAR FEET OF ACCESS ROAD REQUIRED.
- TWO CULVERT CROSSINGS REQUIRED.
- APPROXIMATELY 1,569 SQ. FT. (0.04 AC.) OF WETLAND IMPACTS

PROS

- ASSUMPTIONS OF THIS APPROACH ARE CONSISTENT WITH ASSUMPTIONS OF JULY 2008 REPORT ENTITLED LAKE MONTCLAIR SEDIMENTATION CONTROL FEASIBILITY STUDY BY WHITMAN, REQUARDT AND ASSOCIATES, LLP (WRA).
- SEDIMENT VOLUME PROVIDED EXCEEDS THE ASSUMED SEDIMENT LOADING FROM POWELLS CREEK (1,200 TO 1,800 CY PER WRA REPORT).
- THIS FACILITY WILL CONTROL SEDIMENT FROM THE SCHOOL OUTFALL. THE WRA REPORT ESTIMATES THIS TO BE APPROXIMATELY 1,000 C.Y.

CONS

- EXCESSIVE GRADING FOR ACCESS ROAD.
- ACCESS ROAD HAS SIGNIFICANT SLOPE.
- ACCESS ROAD TO BE VISIBLE FROM TOWNHOUSES LOCATED NEAR THE END OF THE ACCESS ROAD.
- ACCESS ROAD HAS TO CROSS AN EXISTING GAS LINE.
- POWELLS CREEK WILL NOT FLOW INTO THIS FOREBAY BECAUSE OF GRADE DIFFERENCE, FOREBAY WOULD HAVE TO BE LOCATED DIRECTLY ON TOP OF GAS EASEMENT AND DIRECTLY ADJACENT TO POWELLS CREEK.
- THE TYPICAL FOREBAY VOLUME REQUIRED FOR THE CONTRIBUTING DRAINAGE AREA IS APPROXIMATELY 129,067 C.Y. THE VOLUME PROVIDED IS 1.64% OF THE REQUIRED VOLUME.
- THE STORAGE VOLUME PROVIDED (2,123.50 C.Y.) IS SHORT OF THE RECOMMENDED STORAGE VOLUME (2,300 C.Y.) PER WRA REPORT.
- SIGNIFICANT COST OF ROAD VS FACILITY.

EXISTING TREE SURVEY

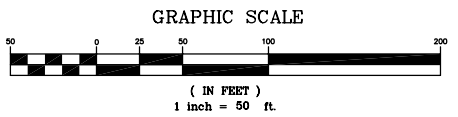
1-8in Locust	34-40in Hickory
2-24in Maple	35-32in Hickory
3-30in Maple	36-30in Hickory
4-24in Poplar	37-36in Hickory
5-20in Birch	38-30in Hickory
6-36in Maple	39-30in Hickory
7-24in Maple	40-27in Maple
8-30in Poplar	41-30in Maple
9-24in Maple	42-30in Maple
10-36in Poplar	43-26in Maple
11-24in Maple	44-36in Maple
12-32in Hickory	45-32in Maple
13-22in Maple	46-30in Hickory
14-24in Hickory	47-36in Sycamore
15-26in Oak	48-42in Maple
16-44in Oak	49-36in Sycamore
17-44in Oak	50-36in Sycamore
18-26in Sycamore	51-36in Oak
19-64in Oak	52-24in Maple
20-32in Maple	53-30in Poplar
21-40in Hickory	54-30in Poplar
22-36in Maple	55-26in Poplar
23-26in Sycamore	56-30in Poplar
24-30in Sycamore	57-24in Maple
25-24in Maple	58-36in Sycamore
26-36in Oak	59-30in Maple
27-44in Hickory	60-30in Maple
28-38in Hickory	61-24in Birch
29-32in Hickory	62-14in Maple
30-36in Hickory	63-12in Maple
31-30in Hickory	64-10in maple
32-36in Hickory	65-14in Cherry
33-32in Hickory	66-8in Cherry

SANITARY SEWER ASBUILT

(A) San MH	Top=211.3
	Inv In=202.8
	Inv Out=202.6
(B) San MH	Top=200.1
	Inv In=195.1
	Inv Out=190.9
(C) San MH	Top=199.4
	Inv In=189.5
	Inv Out=189.2
(D) San MH	Top=194.6
	Inv In=187.6
	Inv Out=187.5
(E) San MH	Top=219.5
	Inv Out=199.4
(F) San MH	Top=195.6
	Inv In=186.8(From E)
	Inv In=186.2(From D)
	Inv Out=186.1
(G) San MH	Top=192.7
	Inv In=184.7

STORM SEWER ASBUILT

(1) Catch Basin	Top=222.4
	Inv Out=216.2
(2) Storm MH	Top=222.1
	Inv In=210.6
	Inv Out=200.9
(3) End-Section	Inv In=199.9
(4) Storm MH	Top=216.6
	Inv Out=206.2
(5) Storm MH	Top=210.0
	Inv In=205.8
	Inv Out=198.1
(6) End-Section	Inv In=197.5
(7) Conc Headwall	Top=204.7
(8) Pond	Top=201.7
(9) Structure	Top=214.7
(10) Conc Headwall	Top=204.4
	Inv=202.1
(11) Storm Grate	Top=215.9
	Inv=204.6



OPTION 3
PRELIMINARY DESIGN PARALLEL
TO GAS EASEMENT OPTION
FOR
**LAKE MONTCLAIR
SEDIMENT FOREBAY**
DUMFRIES DISTRICT
PRINCE WILLIAM COUNTY, VIRGINIA
AUGUST 11, 2009
SHEET 1 OF 1