

POST DRAINAGE MAP
 GREY OAKS DRIVE
 PINE WATCH CIRCLE
 WATERLINE 700
 FORCE MAIN SEWER 2
THE ESTATE LOTS
 AT
LAKEWATCH PLANTATION
 PLANNED COMMERCIAL DEVELOPMENT
 DEVELOPED BY: LAKE WATCH, L.L.C.
 GILLS CREEK MAGISTERIAL DISTRICT
 FRANKLIN COUNTY, VIRGINIA
 JOB NO 21-04
 OCTOBER 24, 2006
 REVISED DECEMBER 28, 2006
 SHEET 2 OF 10
 REVISED APRIL 30, 2007

SOIL & EROSION PLAN
NOVEMBER 15, 2006
APPROVED FEBRUARY 21, 2007

SEDIMENT BASIN 16
 DRAINAGE AREA: 8.44 ACRES
 Q ALLOWED 36" STAND PIPE
 $Q = 2.48 \text{ CFS}$
 $Q = 6 \text{ X } 7.0 \text{ X } 1.0 \text{ X } 32.2 \text{ X } 1.0$
 $Q = 33.7 \text{ CFS}$
 Q25 REQUIRED = 21.98 CFS
 TDP BERM: 940.00'
 WIDTH BERM: 10'
 SIDES: 2:5:1
 TDP 36" RISER: 937.00'
 INVERT: 829.00'
 BASE: 6' X 6' X 1/4" STEEL PLATE
 TRASH RACK:
 CYLINDER D = 54"
 THICKNESS = 14 GAGE
 HEIGHT = 17"
 SUPPORT BAR = #8 REBAR
 TDP = 14 GAGE CORRUGATED
 AT ELEV: 833.50', WET V = 16000 CUBIC FEET
 AT ELEV: 937.00', DRY V = 16143 CUBIC FEET

SEDIMENT BASIN 16
 DRAINAGE AREA: 8.44 ACRES
 $h = (937 - 933.5) / 2 = 1.75'$
 $S = 16143 / 21600 = 0.75 \text{ CFS}$
 $0.75 = 0.6A \text{ X } 32.2 \text{ X } 1$
 $A = 0.16 \text{ SQ. FT.}$
 $R = 0.22'$
 $D = 2R = 0.44' = 5.3"$
 USE 6" STUB WITH 8" PERFORATED PIPE
 OUTLET PIPE: 68" - 24" CMP
 INV IN: 929.00'
 INV OUT: 924.00'
 ANTI SEEP COLLARS: 2 EACH @ 6.0' X 6.0'
 $P = (6.0 - 2.0) / 2 = 2.0'$
 $14P = 28.0'$
 FIRST AT 8', SECOND AT 36' (FROM INVERT IN)
 OUTLET PROTECTION: L = 10', W = 6', d50 = 6'

TRAP 34 DRAINAGE AREA: 2.06 ACRES
 WET STORAGE: 67 X 2.06 X 27 = 3727 CUBIC FEET
 DRY STORAGE: 67 X 2.06 X 27 = 3727 CUBIC FEET
 TOTAL STORAGE REQUIRED = 7454 CUBIC FEET
 AT ELEV: 889 WET V = 3800 CUBIC FEET
 AT ELEV: 890 DRY V = 4000 CUBIC FEET
 HEIGHT BERM: 10'
 WIDTH BERM: 10'
 LENGTH OPENING: 12'

NOTE 1
 PROVIDE EC-1 SOIL STABILIZATION MAT ON ALL
 CUT AND FILL SLOPES IF SEEDING IS NOT
 ADEQUATE TO CONTROL BANK EROSION.

A1	0.66 AC
A2	0.03 AC
A3	0.69 AC
A4	0.30 AC
A5	1.75 AC
A6	0.28 AC
A7	0.36 AC
A8	0.24 AC
A9	0.04 AC
A10	0.18 AC
A11	0.20 AC
A12	0.06 AC
A13	0.12 AC
A14	0.12 AC
A15	0.16 AC
A16	0.06 AC
A17	0.24 AC
A18	0.30 AC
A19	0.48 AC
A20	0.50 AC
A21	0.45 AC
A22	0.25 AC
A23	0.15 AC
A24	2.06 AC
A25	0.06 AC
A26	0.13 AC
A27	0.12 AC
A28	0.10 AC
A29	0.08 AC
A30	0.05 AC

LEGEND

- SURVEYED PROPERTY LINE
- DEED LINE
- 10' CONTOUR (EXISTING)
- 2' CONTOUR (EXISTING)
- 10' CONTOUR (PROPOSED)
- 2' CONTOUR (PROPOSED)
- B/M DENOTES BENCHMARK
- CD DENOTES CHECK DAM
- CMP DENOTES CORRUGATED METAL PIPE
- DB DENOTES DIVERSION BERM
- IP DENOTES INLET PROTECTION
- OP DENOTES OUTLET PROTECTION
- PUE DENOTES PUBLIC UTILITY EASEMENT
- PS DENOTES PERMANENT SEEDING
- R DENOTES RADIUS
- SE DENOTES SEWER EASEMENT
- SF DENOTES SLOPE
- SM DENOTES SLOPE MAINTENANCE EASEMENT
- SS DENOTES 2" FORCE MAIN SEWER
- W700 DENOTES 6" WATER LINE

50 0 50 100 150
 SCALE: 1" = 50'

