

REVISIONS	BY
REVISED SEPTIC MARCH 22, 2005	WSO

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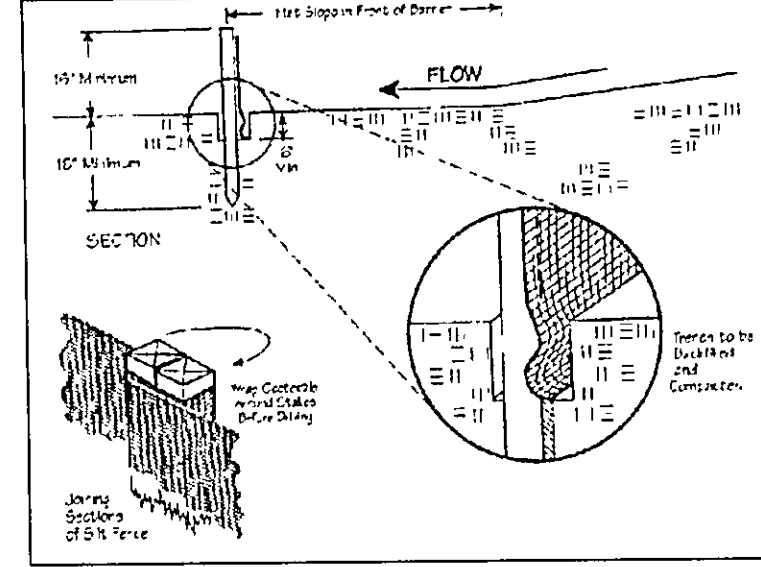
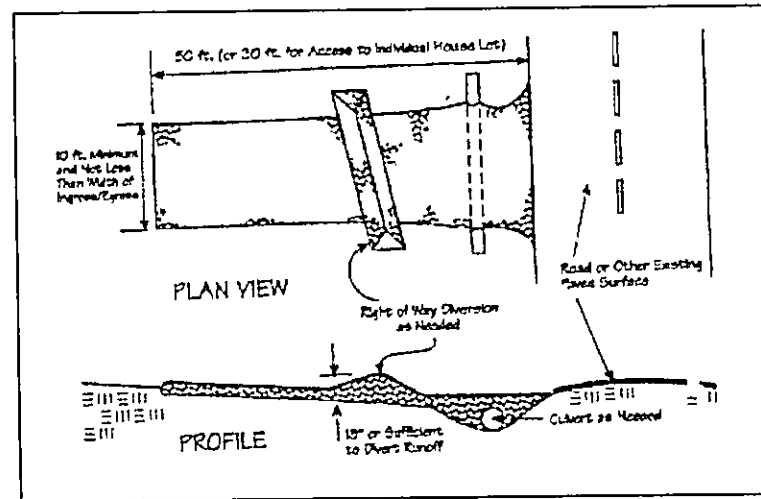
SITE PLAN
SIL 1 GIRDLED ROAD, CONCORD TWP., OHIO
P.P. No. 08A0020000360

DRAWN
WSO
CHECKED
DWN
DATE
FEB. 22, 2005
SCALE
1" = 20'
JOB NO.
05013
SHEET
112
OF SHEETS

05013

TEMPORARY SEEDING SPECIFICATIONS			
SEEDING DATES	SPECIES	LB./1000 FT.	PER AC.
MARCH 1 TO AUGUST 15	OATS	3	4 BUSHEL
	TALL FESCUE	1	40 LB.
	ANNUAL RYEGRASS	1	40 LB.
	PERENNIAL RYEGRASS	1	40 LB.
	TALL FESCUE	1	40 LB.
AUGUST 16 TO NOVEMBER 1	RYE	3	2 BUSHEL
	TALL FESCUE	1	40 LB.
	ANNUAL RYEGRASS	1	40 LB.
	WHEAT	3	2 BUSHEL
	TALL FESCUE	1	40 LB.
NOVEMBER 1 TO SPRING SEEDING	ANNUAL RYEGRASS	1	40 LB.
	TALL FESCUE	1	40 LB.
	PERENNIAL RYEGRASS	1	40 LB.
	WHEAT	3	2 BUSHEL
	TALL FESCUE	1	40 LB.

NOTE: OTHER APPROVED SEED SPECIES MAY BE SUBSTITUTED.



GENERAL NOTES:

- BENCHMARK - TOP STEM OF EXISTING FIRE HYD. TANT LOCATED IN FRONT SUBLT 3, ELEVATION = 1008.72.
- DRIVEWAY APRON TO BE 6" THICK CONCRETE.
- ALL DOWNSPOUTS TO BE OUTLETTED TO SPLASH BLOCKS.
- CONTRACTOR RESPONSIBLE FOR CONTACTING THE OHIO UTILITY PROTECTION SERVICE (1.800.362.2764) AND ALL UTILITY COMPANIES A MINIMUM OF 48 HOURS PRIOR TO CONSTRUCTION.
- THE LOCATION BOTH HORIZONTAL AND VERTICAL OF EXISTING UNDERGROUND UTILITIES SHOWN HEREON, HAVE BEEN OBTAINED BY A DILIGENT AND COMPREHENSIVE SEARCH OF AVAILABLE RECORDS. VERIFICATION BY FIELD OBSERVATION HAS BEEN CONDUCTED WHERE PRACTICAL, HOWEVER, BARRINGTON CONSULTING GROUP, INC. DOES NOT GUARANTEE THE COMPLETENESS, NOR ACCURACY THEREOF.
- CONTRACTOR SHALL VERIFY ELEVATIONS OF LATERAL INVERTS IN THE FIELD PRIOR TO FOUNDATION EXCAVATION.

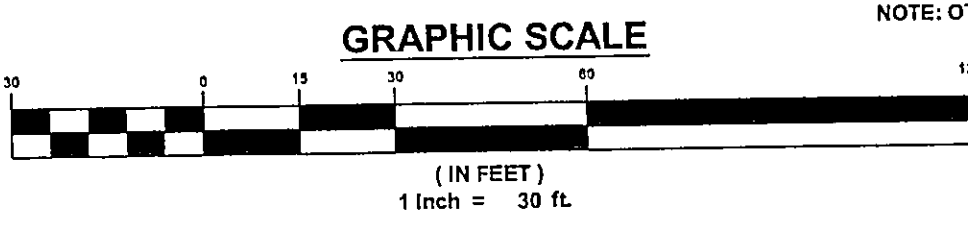
CERTIFICATION :

"I THE UNDERSIGNED HEREBY CERTIFIES THAT THIS TOPOGRAPHY INDICATED BY 1 FOOT CONTOURS AND ELEVATION SHOWN HEREON REPRESENTS AN ACTUAL SURVEY MADE BY ME ON THE 17th DAY OF FEBRUARY, 2005 AND THE ELEVATIONS WERE TAKEN AT AN APPROPRIATE INTERVAL AND AS OF THAT DAY THEY EXISTED AS INDICATED HEREON.

"I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME AND IS CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF"

David W. Novak
DAVID W. NOVAK, P.S. No. 7507

Water Management Plan
as shown and/or noted
JAMES R. GILLS, P.E.
County Drainage Engineer
Date 3/29/05



EROSION AND SEDIMENT CONTROL SCHEDULE

INGRESS-EGRESS
A STONE ACCESS DRIVE COMPLETE WITH UNDER LYING GEO-TEXTILE FABRIC (20 FEET WIDE AND 50 FEET LONG) FOR INGRESS AND EGRESS AT THE SITE SHALL BE INSTALLED. THIS DRIVE SHALL BE THE ONLY ENTRANCE AND EXIT TO THE SITE.

SILT FENCE
ALL SILT FENCE SHALL BE INSTALLED PRIOR TO ANY EARTHWORK ACTIVITIES AT THE SITE IN THE LOCATIONS SHOWN ON THE SITE PLAN AS WELL AS ALONG THE FRONT OF ANY LOT THAT SLOPES TOWARDS THE STREET.

TEMPORARY SEEDING
DISTURBED AREAS OF THE SITE THAT ARE TO REMAIN IDLE FOR MORE THAN THIRTY (30) DAYS SHALL BE PROPERLY SEEDDED AND STRAW MULCHED WITHIN SEVEN (7) DAYS OF COMPLETION OF INITIAL GRADING. TEMPORARY SEEDING AND MULCHING OF A THIRTY (30) FOOT STRIP OF THE ENTIRE FRONT OF THE LOT SHALL BE MAINTAINED ON THE SITE ONCE INITIAL GRADING IS COMPLETE.

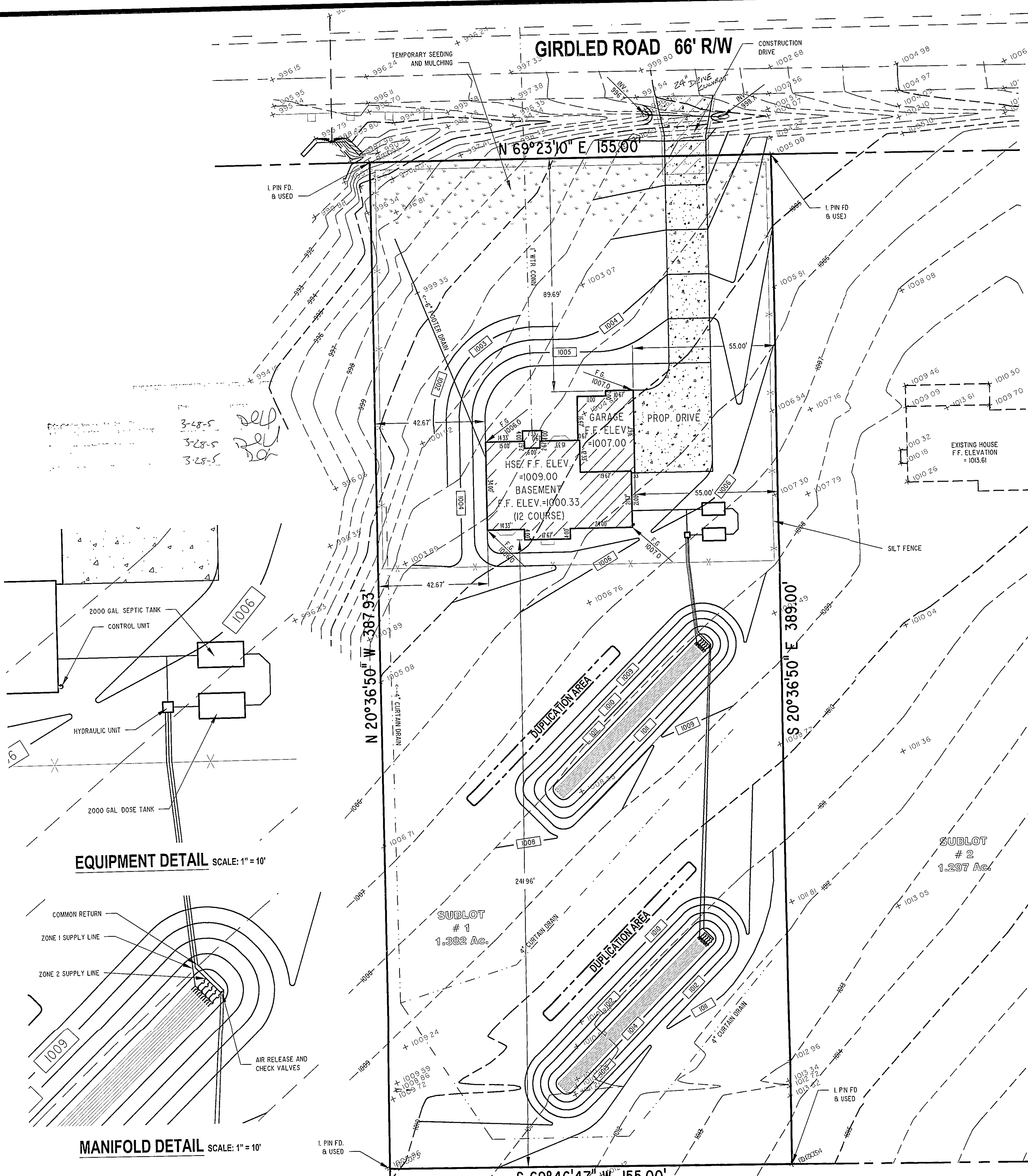
STABILIZATION OF CRITICAL AREAS WITHIN FIFTY (50) FEET OF ANY STREAM OR WETLAND SHALL BE COMPLETE WITHIN TWO (2) DAYS OF THE DISTURBANCE IF THE SITE IS TO REMAIN INACTIVE FOR LONGER THAN FOURTEEN (14) DAYS.

MULCHING
STRAW-MULCH SHALL BE APPLIED AT A RATE OF 1 BALE PER EVERY TEN (10) FEET OF CURB, AT A WIDTH OF THIRTY (30) FEET OF THE ENTIRE LENGTH OF THE LOT. WOOD CHIPS MAY ALSO BE USED BUT MUST BE SPREAD AT A MINIMUM DEPTH OF FOUR INCHES OVER THE THIRTY-FOOT WIDTH AND MUST BE ACCOMPANIED BY A PROPERLY INSTALLED SILT FENCE.

MAINTENANCE
EROSION AND SEDIMENT CONTROLS SHALL BE INSPECTED EVERY SEVEN (7) DAYS OR WITHIN 24 HOURS OF A 0.5" OR GREATER RAINFALL EVENT. NECESSARY REPAIRS SHALL BE MADE AT THIS TIME.

NOTE:
ALL EROSION AND SEDIMENT CONTROL SPECIFICATIONS, APPLICATIONS, AND TIMETABLES ARE BASED OF THE DESCRIPTIONS AND STANDARDS OF THE OHIO DEPARTMENT OF NATURAL RESOURCES "RAINWATER AND LAND DEVELOPMENT MANUAL" AND CAN BE FOUND IN THE LAKE COUNTY EROSION AND SEDIMENT CONTROL RULES AS ADOPTED DECEMBER 21, 1999.

THE SPECIFIED EROSION AND SEDIMENT CONTROL STANDARDS ARE GENERAL GUIDELINES AND SHALL NOT LIMIT THE RIGHT OF THE COUNTY TO IMPOSE, AT ANY TIME, ADDITIONAL, MORE STRINGENT REQUIREMENTS. NOR SHALL THE STANDARDS LIMIT THE RIGHT OF THE COUNTY TO WAIVE, IN WRITING, INDIVIDUAL REQUIREMENTS.



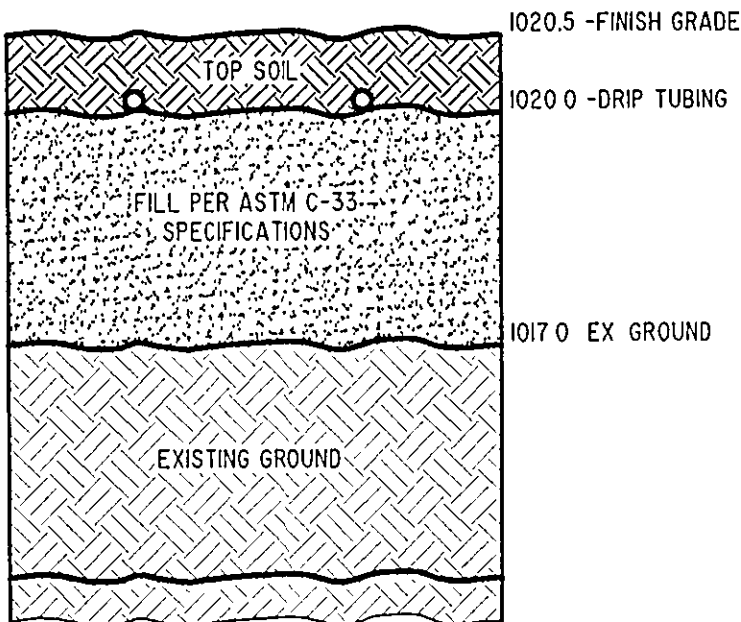
EQUIPMENT DETAIL SCALE: 1" = 10'

MANIFOLD DETAIL SCALE: 1" = 10'

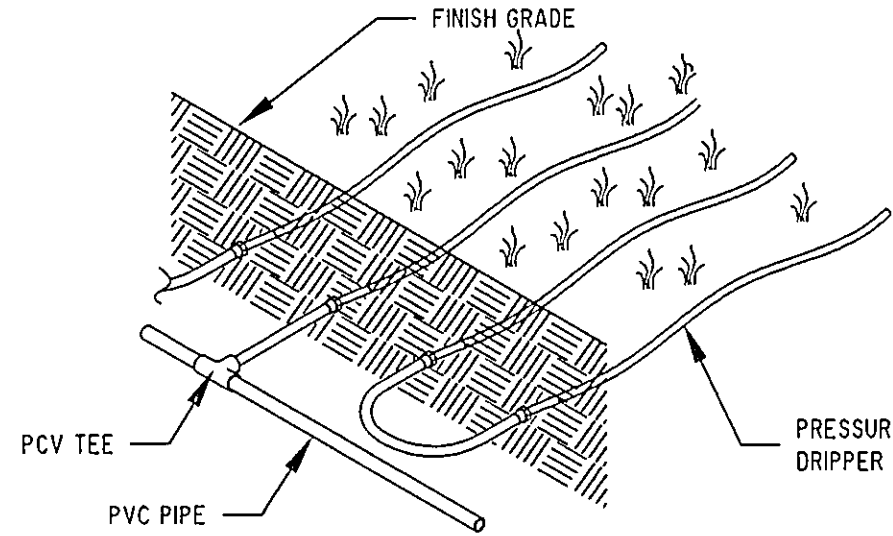
SEPTIC DRIP CALCULATION SHEET

1	417	GALLONS PER DAY	4	BEDROOMS
2	0.23	GPD/L F TUBING INFILTRATIVE SOIL LOADING RATE		
3	155	FT (Length)	14	FT (Width) AREA FOR DISPOSAL LAYOUT
4	0.19	GPD/FT2 AREA SOIL LOADING RATE PROVIDED	2170	FT SQ.
5	2	ZONES		
6	1550	TOTAL DRIPPER LINE PROVIDED		
7	2000	SEPTIC TANK SIZE		
8	2000	DOSING TANK SIZE		
9	33	GALLONS PER INCH IN DOSING TANK (Recommended Minimum)		
10	ZONE ONE			
11	1085	TOTAL ABSORPTION AREA		
12	775	LINEAR FEET OF DRIP TUBING		
13	155	LONGEST LATERAL LENGTH		
14	3.94	DOSING FLOW RATE		
15	5	NO RETURN FIELD FLUSH CONNECTIONS		
16	8.00	FIELD FLUSH FLOW RATE		
17	11.94	TOTAL FLOW REQUIRED		
18	ZONE TWO			
19	1085	TOTAL ABSORPTION AREA		
20	775	LINEAR FEET OF DRIP TUBING		
21	155	LONGEST LATERAL LENGTH		
22	3.94	DOSING FLOW RATE		
23	5	NO RETURN FIELD FLUSH CONNECTIONS		
24	8.00	FIELD FLUSH FLOW RATE		
25	11.94	TOTAL FLOW REQUIRED		
26	12	MAXIMUM DESIGN FLUSHING FLOW		
27	11	FEET OF HEAD LOSS FROM HYDRAULIC UNIT (Based on #26)		

28	HYDRAULIC UNIT SUPPLY LINE				
29	1.5	PIPE DIAMETER			
30	15	LENGTH SUPPLY PIPE			
31	7.1	FEET OF STATIC LIFT			
32	9	TOTAL FEET HEAD LOSS IN LINE (Dynamic Head Loss + #31)			
33	FORCE MAIN SUPPLY LINE PIPE SIZE & LENGTH:				
34	1"	ZONE 1 SIZE	150	ZONE 1 LENGTH	12
35	1"	ZONE 2 SIZE	150	ZONE 2 LENGTH	12
36	RETURN FLUSH LINE SIZE & RETURN:				
37	1"	ZONE 1 SIZE	150	ZONE 1 LENGTH	6
38	1"	ZONE 2 SIZE	150	ZONE 2 LENGTH	6
39	10	FEET OF TOTAL STATIC HEAD LOSS (Vertical Lift)			
40	TOTAL PRESSURE LOSS (Add Items 27, 32 34/35, 37/38, 39 + Flushing):				
41	64	ZONE 1 HEAD LOSS, INCLUDES	16	FEET FLUSHING	
42	64	ZONE 2 HEAD LOSS, INCLUDES	16	FEET FLUSHING	
43	PUMP SIZING:				
44	64	MAXIMUM TOTAL PRESSURE LOSS (Highest 41 or 42)			
45	124	DISC FILTER BACKFLUSH (#32 + 15ft @ 15 GPM)			
46	15	GPM @	124	FEET,	115
47				VOLTS,	1
48				PHASE,	0.5
49				HP.	
50	TIMED DOSING PER ZONE:				
51	ZONE ONE:				
52	4.58	Dosing GPM	6.84	MIN./DOSE	31.28
53	4	AVE. CYCLES	6.67	PEAK CYCLES	
54	ZONE TWO:				
55	4.58	Dosing GPM	6.84	MIN./DOSE	31.28
56	4	AVE. CYCLES	6.67	PEAK CYCLES	
57	4	INCHES DRAWDOWN FLOAT SWITCH SETTING (Minimum 4")			
58	Landscape Linear Loading Rate (LLLRL):				
59			LLLRL =	2.69	
60	Soil Loading Rate (SLR):				
61			SLR =	0.19	



TYPICAL SECTION



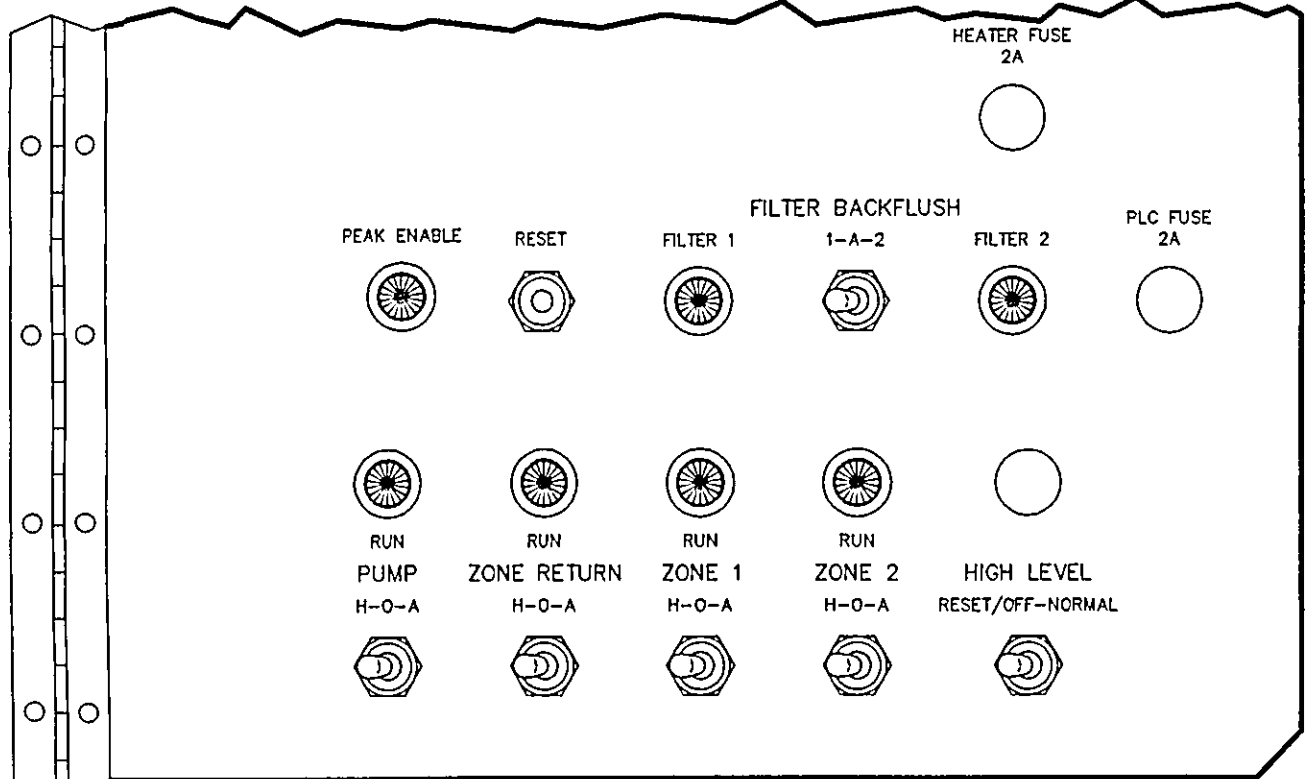
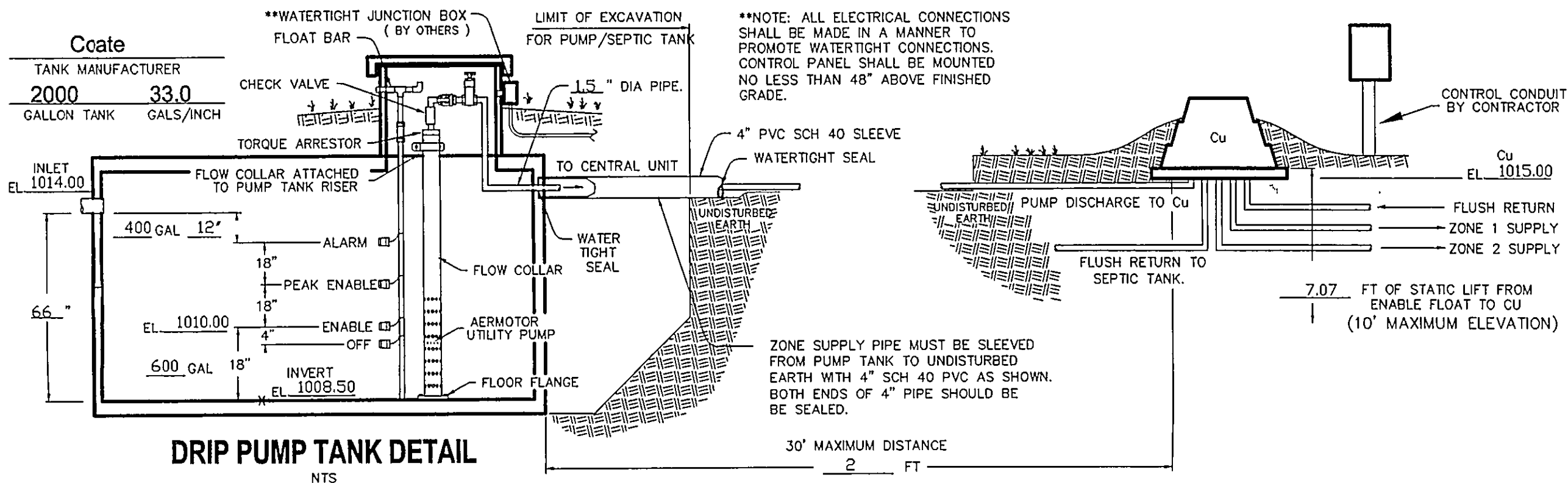
SUBSURFACE DISTRIBUTION SYSTEM

SCOPE: DOMESTIC SEWAGE WILL FLOW BY GRAVITY THROUGH THE SEPTIC TANK THEN INTO A FINAL DOSING TANK. THE CENTRAL UNIT WILL DISPOSE OF THE EFFLUENT BY ALTERNATELY DOSING MULTIPLE ZONES IN THE ABSORPTION AREA.

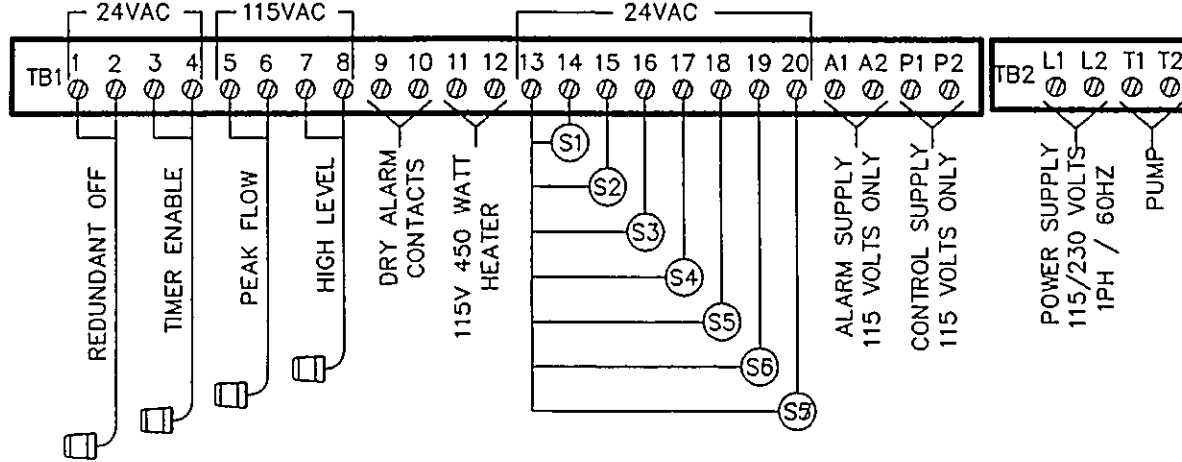
THE CENTRAL UNIT COMPRISES BOTH THE CONTROLS AND THE HYDRAULIC UNIT.

DRIPPER LINE TO FOLLOW CONTOURS WITH PVC MANIFOLD PERPENDICULAR TO GRADE. PVC MANIFOLD TO BE FREEZE PROTECTED.

DRIP DETAIL SCHEMATICS

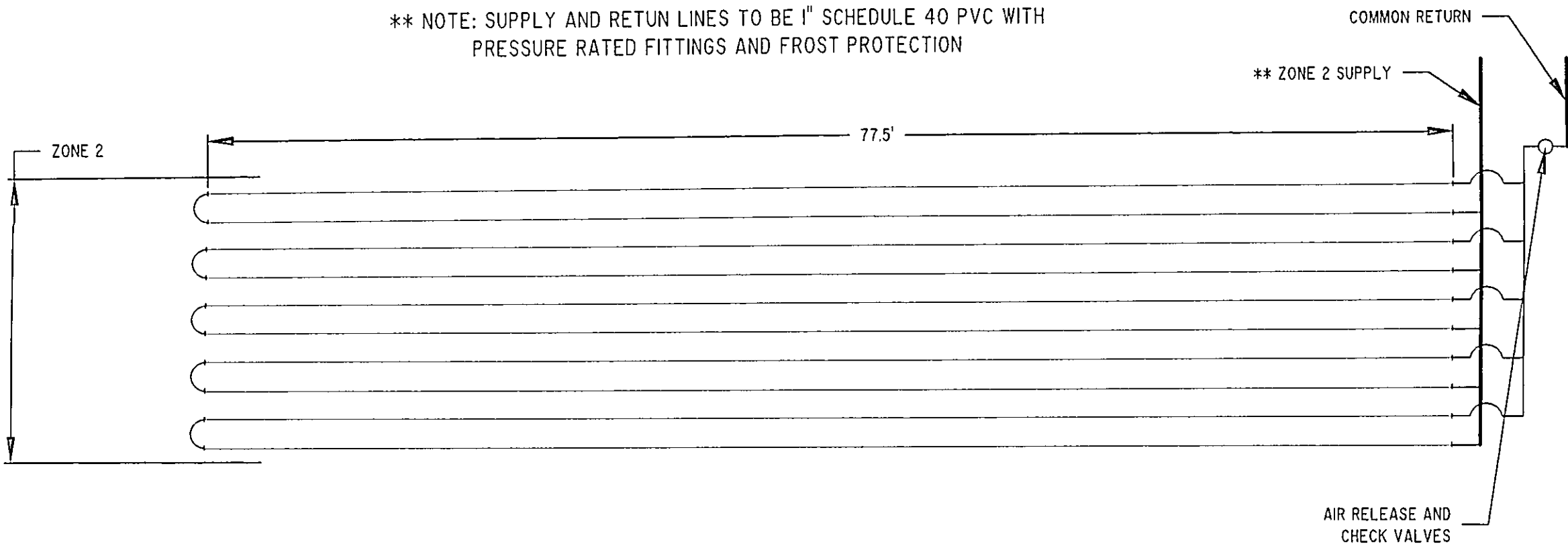


INNER DOOR LAYOUT



PUMP & CONTROL DETAIL

** NOTE: SUPPLY AND RETURN LINES TO BE 1" SCHEDULE 40 PVC WITH PRESSURE RATED FITTINGS AND FROST PROTECTION



MANIFOLD DETAIL AND ZONE LAYOUT

REVISIONS	BY
REVISED SEPTIC SYS 01/08/04	DWN
REVISED SEPTIC SYS 01/01/05	WSO
REVISED SEPTIC MARCH 23, 2005	WSO
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DETAILS
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NONE
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2/2
OF SHEETS