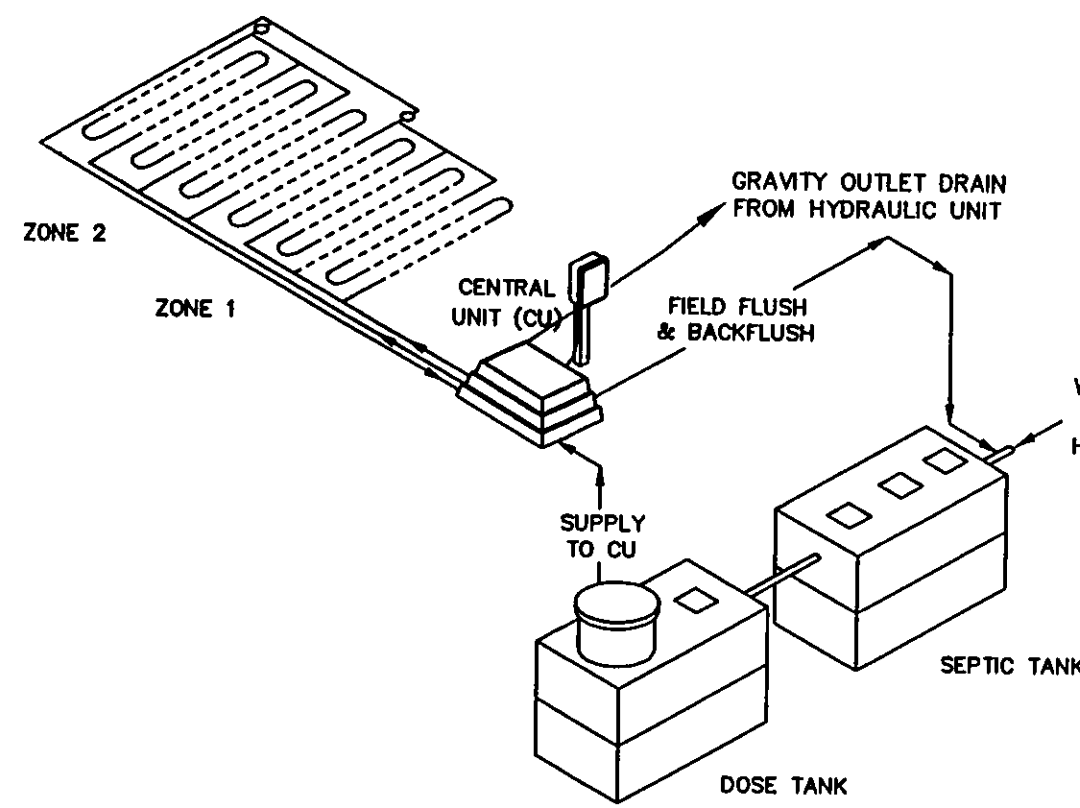
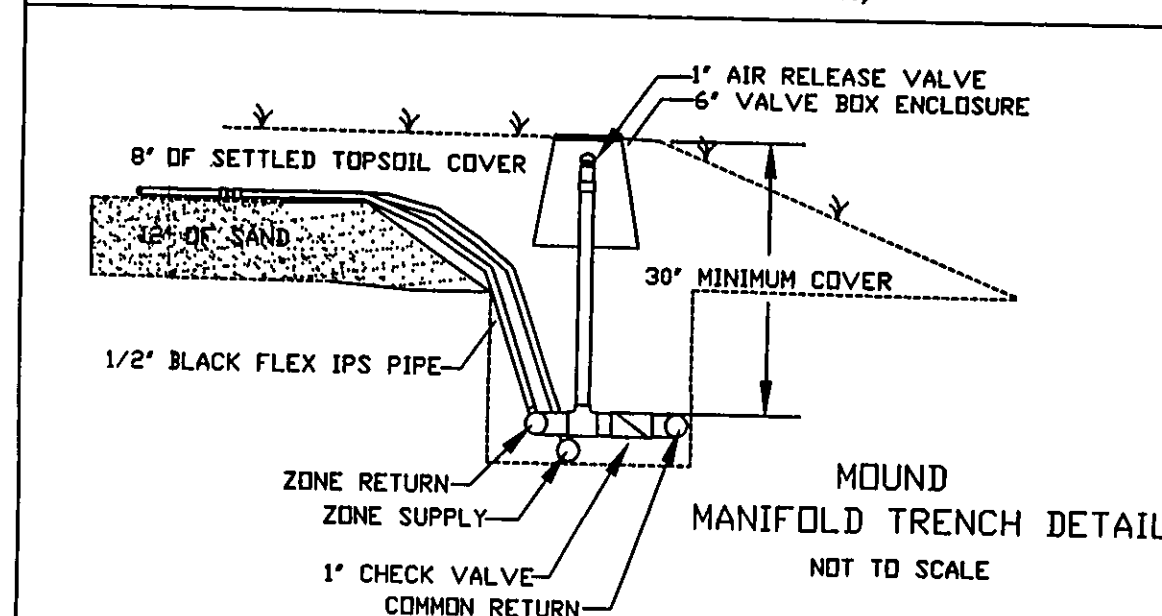
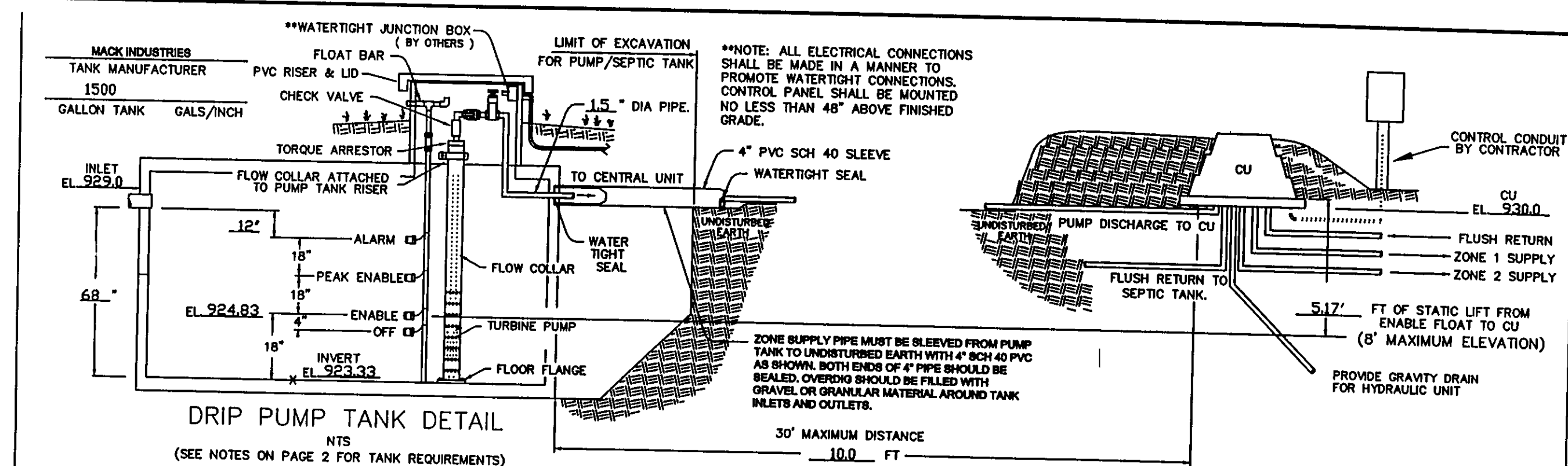


- GENERAL NOTES - DRIP DISPOSAL
- ALL INSTALLATION AND CONSTRUCTION TECHNIQUES SHALL CONFORM TO COUNTY CODES AND OHIO DEPARTMENT OF HEALTH "SEWAGE TREATMENT SYSTEM RULES" PERTAINING TO ON-SITE SEWAGE SYSTEMS AND THE PERMIT FOR THIS SITE.
 - THE INSTALLATION OF THIS SYSTEM SHALL BE IN ACCORDANCE WITH SPECIFICATIONS AND PROCEDURES AS SUPPLIED BY THE MANUFACTURER OF THE EQUIPMENT.
 - ALL PVC PIPE AND FITTINGS SHALL BE PVC SCH 40 TYPE 1 RATED FOR PRESSURE APPLICATIONS. ALL GLUED JOINTS SHALL BE CLEANED AND PRIMED PRIOR TO BEING GLUED.
 - ALL CUTTING OF PVC PIPE, FLEXIBLE PVC AND DRIPPER TUBING SHALL BE ACCOMPLISHED WITH PIPE CUTTERS APPROVED BY MANUFACTURER. NO SAWING OF PVC, FLEXIBLE PVC OR DRIPPER TUBING IS ALLOWED.
 - ALL PVC PIPE, FLEXIBLE PVC AND DRIPPER TUBING IN THE WORK AREA SHALL HAVE THE ENDS COVERED WITH DUCT TAPE TO PREVENT CONSTRUCTION DEBRIS FROM ENTERING THE PIPE. PRIOR TO GLUING, ALL JOINTS SHALL BE INSPECTED FOR AND CLEARED OF ANY CONSTRUCTION DEBRIS.
 - NO WET WEATHER INSTALLATION IS PERMITTED.
 - NO ACTIVITY ON DRAINFIELD AREA NOR ON REPLACEMENT AREA OTHER THAN MINIMUM REQUIRED TO INSTALL SYSTEM. DO NOT PARK EQUIPMENT, DRIVE LARGE EQUIPMENT OVER, OR STORE MATERIALS ON DRAINFIELD NOR ON REPLACEMENT AREA SITE.
 - HORIZONTAL SPACING BETWEEN DRIPPER LINES AND THE INSTALLATION DEPTH SHALL BE AS SPECIFIED.
 - THE BUILDING BEWER SHALL BE 4" SCH 40 PVC WITH A MINIMUM SLOPE OF 1/8" PER FOOT. THERE SHALL BE NO BENDS GREATER THAN 45 DEGREES. CLEANOUTS SHOULD BE PROVIDED EVERY 100 FEET. FOR CONSTRUCTION TECHNIQUES REFER TO THE "SEWAGE TREATMENT SYSTEM RULES".
 - IF TREES OR BRUSH ARE TO BE REMOVED FROM SITE, FOLLOW LOCAL HEALTH DEPARTMENT REGULATIONS FOR REMOVAL.
 - GRAVEL BASE UNDER CENTRAL CONTROL UNIT IS TO BE DRAINED VIA 2" PVC PIPE, SCREENED AT INLET AND OUTLET. DISCHARGE TO BE AT GRADE DOWN SLOPE TO ENSURE DRAINAGE OF SURFACE WATER FROM UNIT).
 - THE CONTRACTOR SHALL BE QUALIFIED TO INSTALL THIS TYPE OF SYSTEM BY THE MANUFACTURER AND SHALL HOLD A PRE-CONSTRUCTION MEETING WITH THE INDIVIDUALS RESPONSIBLE FOR SOIL EVALUATION, PERMITTING, AND INSPECTIONS PRIOR TO BEGINNING SITE WORK. THIS IS REQUIRED TO INSURE PROTECTION OF THE SITE CONDITIONS AND TO ENSURE THE SYSTEM IS INSTALLED ACCORDING TO DESIGN.
 - IF SITE CONDITIONS REQUIRE THE INSTALLATION OF THE SYSTEM TO DEVIATE FROM THESE PLANS, ALL SITE WORK SHALL STOP IMMEDIATELY AND THE DESIGNER SHALL BE NOTIFIED. ANY ONGOING WORK SHALL BE AT THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
 - DRAINFIELD SUPPLY, RETURN AND MANIFOLD LINES TO BE INSTALLED AT ADEQUATE DEPTH TO PREVENT FREEZING, OR AT A MINIMUM OF 30" BELOW GRADE.
 - AREAS DESIGNATED FOR INSTALLATION AND REPLACEMENT SHALL BE UNDISTURBED AND BE PROTECTED FROM DAMAGE OR DISTURBANCE. ANY DISTURBANCE OR DAMAGE OF THESE DESIGNATED AREAS MAY RESULT IN THE INVALIDATION OF THIS DESIGN PLAN. IF ANY DISTURBANCE OR DAMAGE HAS OCCURRED, INSTALLATION SHALL NOT PROCEED AND THE REGISTERED INSTALLER SHALL CONTACT THE OWNER, THE DRIP DISTRIBUTION RESPONSIBLE PARTY AND THE BOARD OF HEALTH.
 - AN AS-BUILT RECORD OF THE INSTALLATION IS REQUIRED FROM THE REGISTERED INSTALLER.



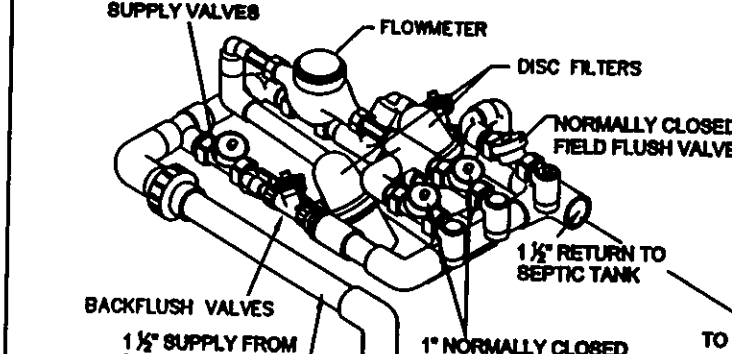
System Schematic
(Not Intended for Construction)

MOUND INSTALLATION
Engineered By:
StreamKey
Engineered Plumbing & Watercolor Solutions
10515 Reading Road
Cincinnati, OH 45241
513-792-1221

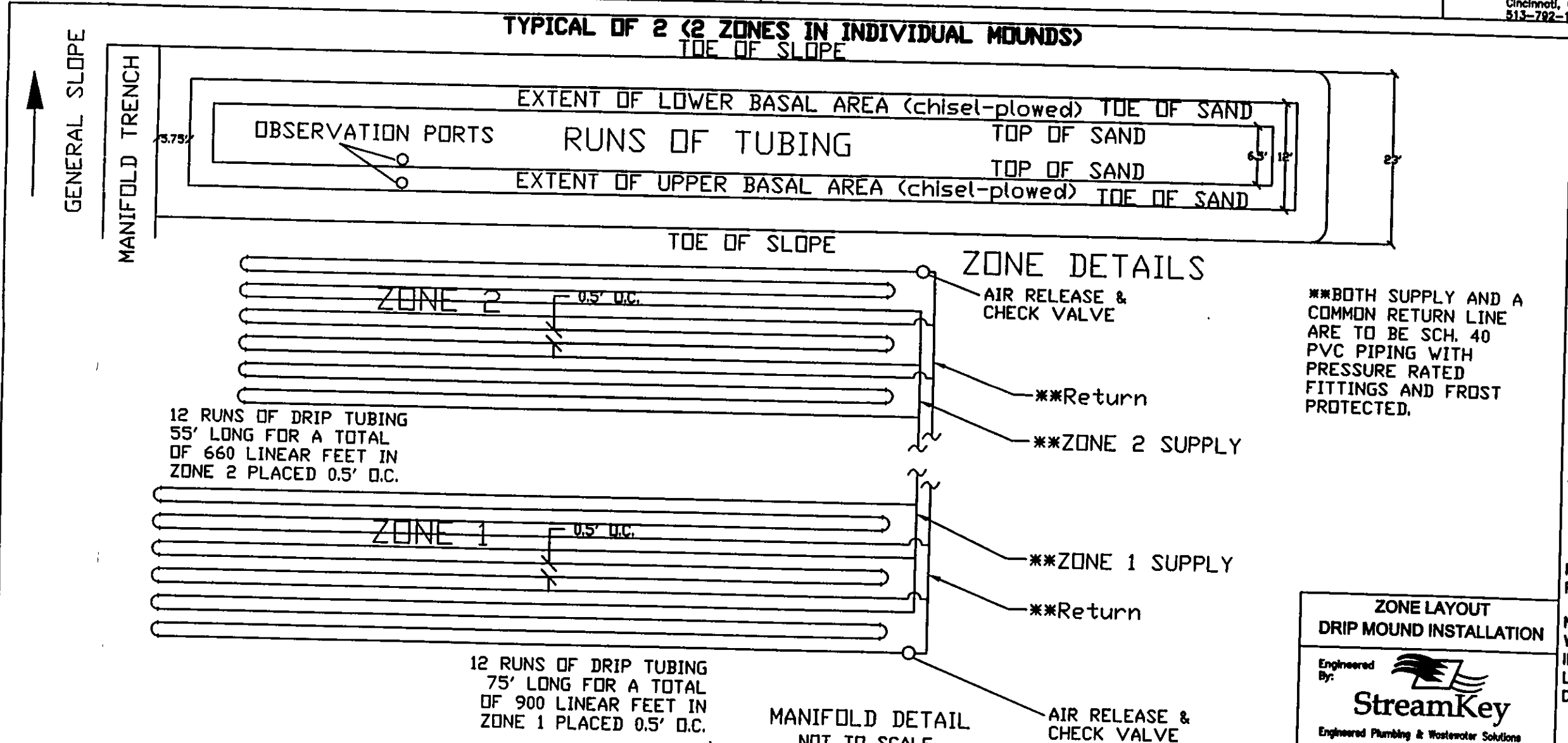


AMERICAN MFG. COMPANY
TWO-FILTER - 15 GPM
HYDRAULIC UNIT
2 ZONE ARRANGEMENT

PRESSURE COMPENSATING DRIP TUBING SHALL BE USED. NETAFIM BICLINE 17, CATALOG # 08WRAM.6-24V. EMITTERS SPACED 2.0' ON CENTER; FLOW RATE: 0.61 GAL/HR/EMITTER. SYSTEM PERFORMS SCOURING FLUSH EVERY 25 CYCLES (EVERY 3 DAYS FOR EACH ZONE).

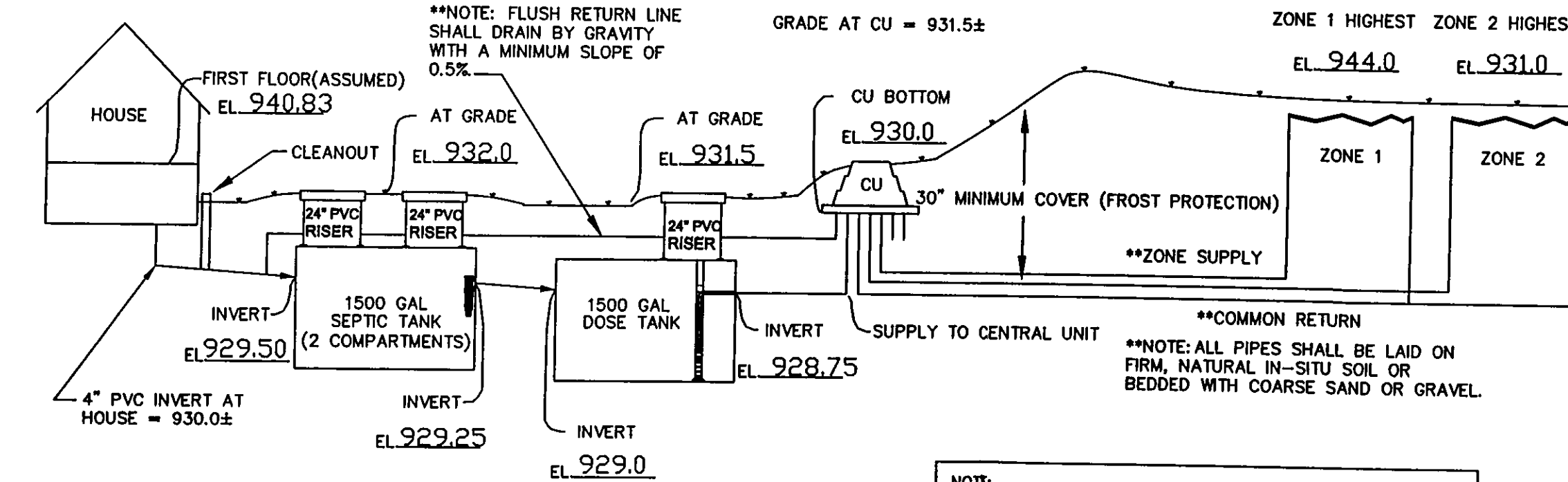


PUMP & CONTROL DETAIL MOUND INSTALLATION
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Engineered Plumbing & Watercolor Solutions
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Cincinnati, OH 45241
513-792-1221



SYSTEM SIZING INFORMATION	
DESIGN FLOW	360 GPD (3 BEDROOM)
SOIL REPORT L.L.R.	3.0 GPD/LF
SOIL REPORT B.L.R.	0.6 GPD/SF
DEPTH TO LIMIT	9-14 INCHES
SITE SLOPE	5-9%
SYSTEM TYPE	DRIP MOUND
MINIMUM LENGTH	120' TOTAL
TUBING LENGTH	
Zone 1	75'
Zone 2	55'
SYSTEM LENGTH	
Zone 1	75' + 5.0' END SLOPES = 85'
Zone 2	55' + 5.0' END SLOPES = 65'
MINIMUM WIDTH	5.0'
MOUND TOP WIDTH	USE 6.5'
SYSTEM WIDTH	23'
BASAL AREA	
Zone 1	55' X 12' = 660 SF
Zone 2	75' X 12' = 900 SF
TOTAL	1560 SF
NO. DRIP LINES	24 LINES IN TWO ZONES (12 PER ZONE)
TOTAL TUBING	
Zone 1	900 LF
Zone 2	660 LF
TOTAL	1,560 LF
PROVIDED L.L.R.	2.77 GPD/LF
PROVIDED B.L.R.	0.23 GPD/SF

ZONE LAYOUT DRIP MOUND INSTALLATION
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Engineered Plumbing & Watercolor Solutions
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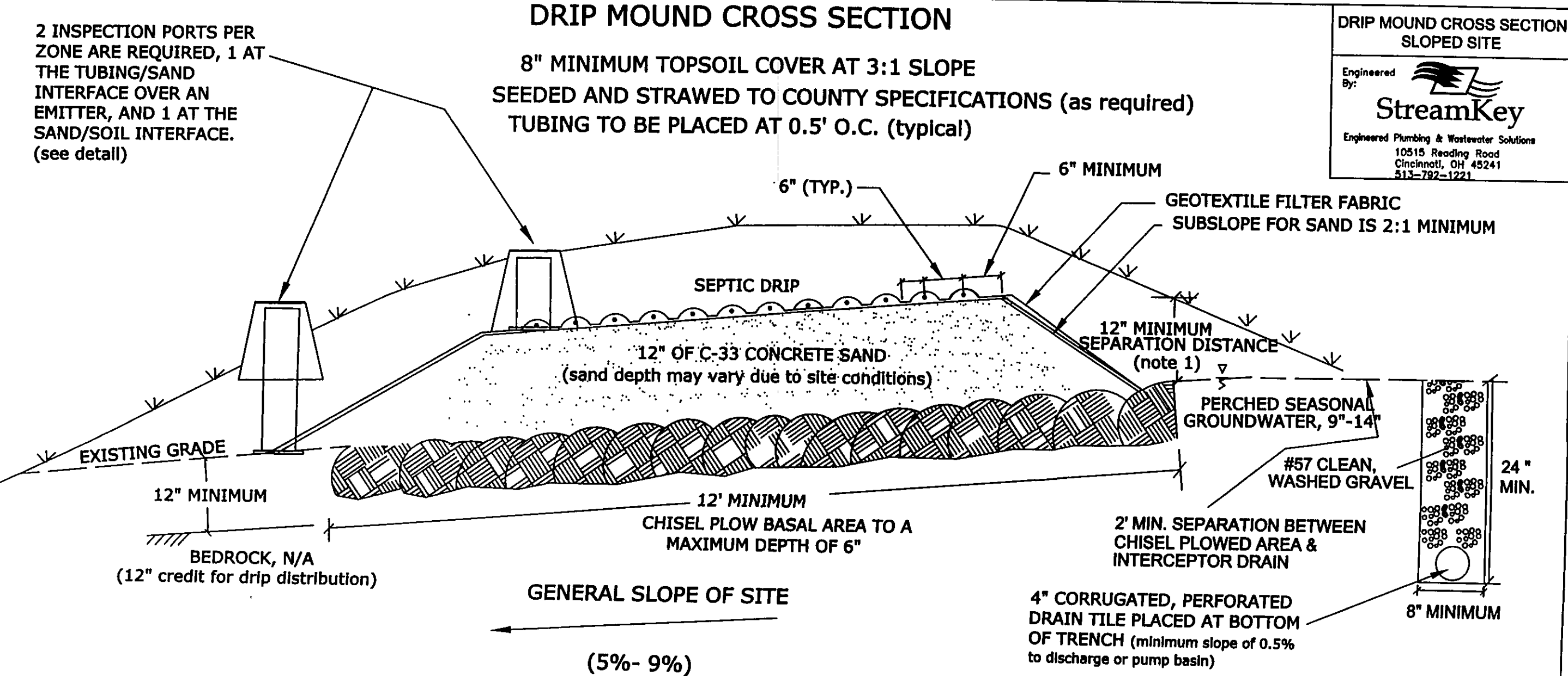
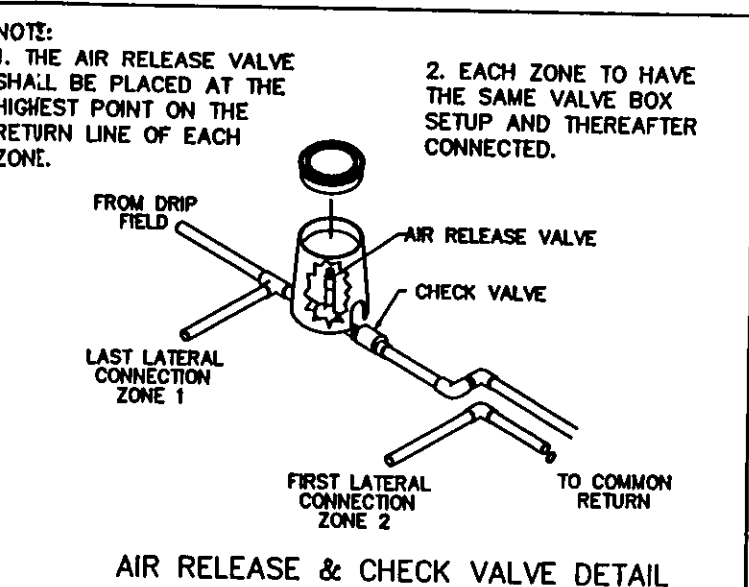
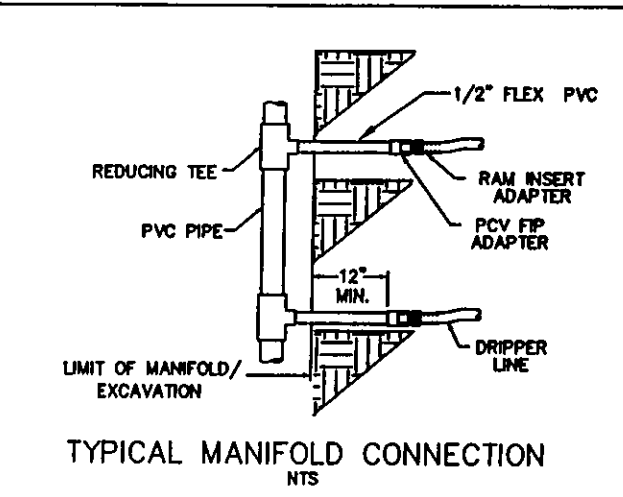
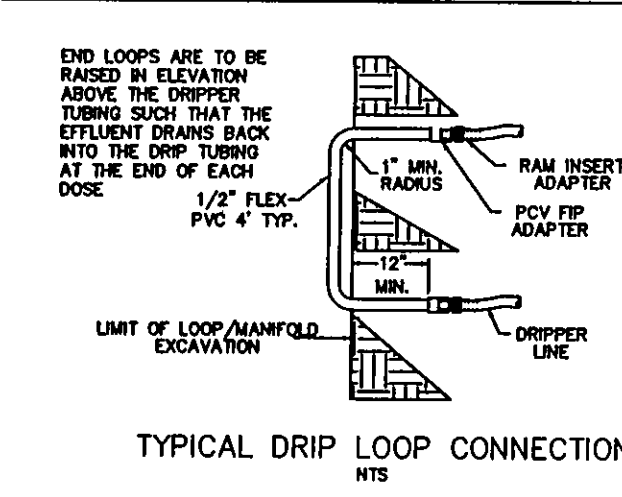


HYDRAULIC PROFILE
NOT INTENDED TO SHOW COMPONENT DETAILS
(NOT TO SCALE)

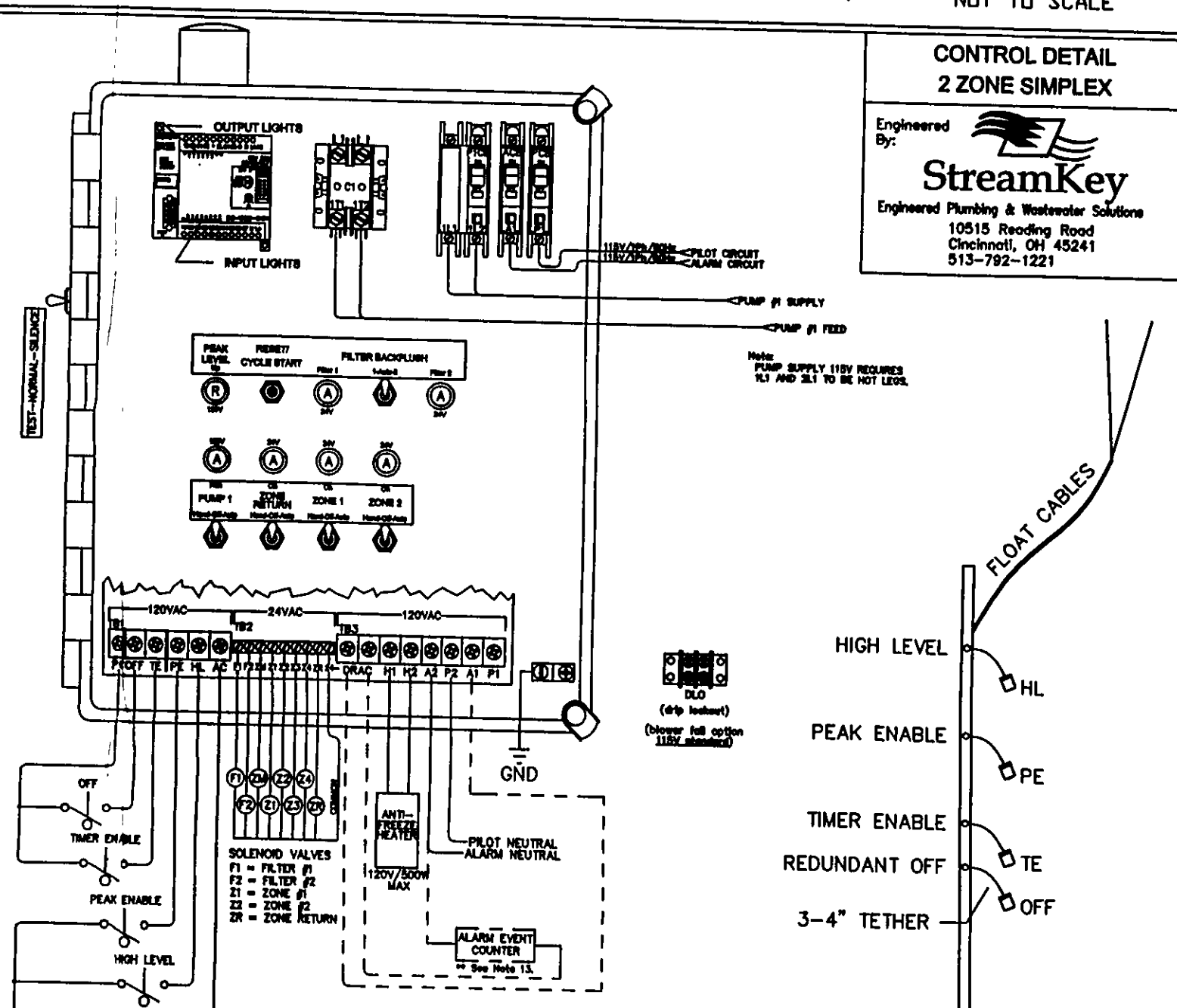
****IMPORTANT TANK NOTES**
THE INSTALLING CONTRACTOR IS RESPONSIBLE FOR PROVIDING WATERPROOF TANKS. BOTH THE SEPTIC TANK AND THE DOSING TANK SHALL BE FITTED WITH FLEXIBLE BOOTS ON THE INLETS AND OUTLETS. TANK OPENINGS ARE TO HAVE ADAPTER RINGS CAST IN THE TOP TO ACCEPT PVC RISERS. TANKS SHALL BE WATER TIGHT PER OHIO ADMINISTRATIVE CODE CHAPTER 3701-29 "SEWAGE TREATMENT SYSTEM RULES".

****SYSTEM DESCRIPTION**
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. THE HYDRAULIC UNIT INCLUDES WASTEWATER FILTRATION, FLOW MEASUREMENT AND VALVING TO ISOLATE FLOWS TO ZONES.

MOUND INSTALLATION
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DRIP MOUND CROSS SECTION SLOPED SITE
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Engineered Plumbing & Watercolor Solutions
10515 Reading Road
Cincinnati, OH 45241
513-792-1221



CONTROL DETAIL 2 ZONE SIMPLEX
Engineered By:
StreamKey
Engineered Plumbing & Watercolor Solutions
10515 Reading Road
Cincinnati, OH 45241
513-792-1221

GENERAL NOTES - DRIP DISTRIBUTION SYSTEMS:

ALL INSTALLATION AND CONSTRUCTION TECHNIQUES SHALL CONFORM TO CHAPTER 3701-29 OF THE OHIO ADMINISTRATIVE CODE, OHIO DEPARTMENT OF HEALTH REGULATIONS AND LOCAL COUNTY HEALTH DISTRICT REGULATIONS IN EFFECT AT THE TIME OF INSTALLATION AND CONSTRUCTION.

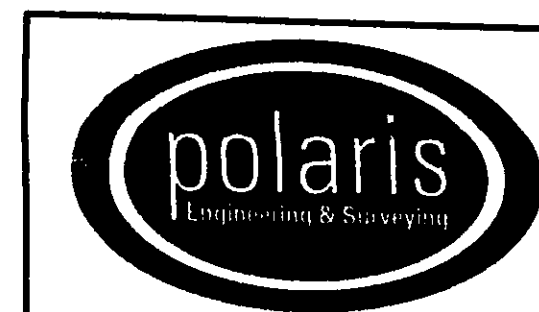
THE AREAS DESIGNATED FOR PRIMARY AND REPLACEMENT DISTRIBUTION SHALL BE UNDISTURBED AND PROTECTED (BY CONSTRUCTION FENCING, FLAGGING, ETC.) FROM DAMAGE OR DISTURBANCE. ANY DISTURBANCE OR DAMAGE MAY RESULT IN THE INVALIDATION OF THE DESIGN PLAN. IF ANY REGISTERED INSTALLER CONTACTS THE OWNER, DESIGNER AND BOARD OF HEALTH.

AREAS FOR DISTRIBUTION FIELD AND REPLACEMENT AREAS SHALL BE STAKED AND ROPED OR FENCED OFF TO PREVENT ACCESS DURING ALL CONSTRUCTION ACTIVITIES ON THE SITE. NO PARKING OR MATERIAL STORAGE IS PERMITTED IN AREAS DESIGNATED FOR THE DISTRIBUTION FIELD. NO HEAVY EQUIPMENT SHALL BE OPERATED OVER THE DISTRIBUTION FIELD.

INSTALLATION OF SURFACE DRIP TUBING OR PREPARATION OF THE SOIL INFILTRATION INTERFACE FOR AT GRADE OR ELEVATED SAND FILT DRIP FIELDS SHALL NOT PROCEED WHEN THERE IS A RISK OF SMEARING OR COMPACTION.

ANY SAND FILL USED SHALL MEET ASTM C 33 SPECIFICATIONS AND THE SPECIFICATIONS LISTED IN CHAPTER 3701-29-13 OF THE OHIO ADMINISTRATIVE CODE.

DRIP TUBING SHALL BE INSTALLED PARALLEL TO NATURAL SURFACE CONTOURS. AN UNDISTURBED AREA OF TWENTY FIVE FEET SHALL BE PRESERVED BELOW (DOWNSLOPE OF) THE DRIP DISTRIBUTION AREA AND THE DESIGNATED REPLACEMENT AREA.



POLARIS ENGINEERING & SURVEYING, INC.
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www.polaris-es.com

NCT BUILDERS LLC
P.P.N. 10-A-026-A-00-004-0
CONCORD TOWNSHIP - LAKE COUNTY - OHIO

CONTRACT No.
07082
SHEET 2 OF 2
DATE: 6/28/07
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