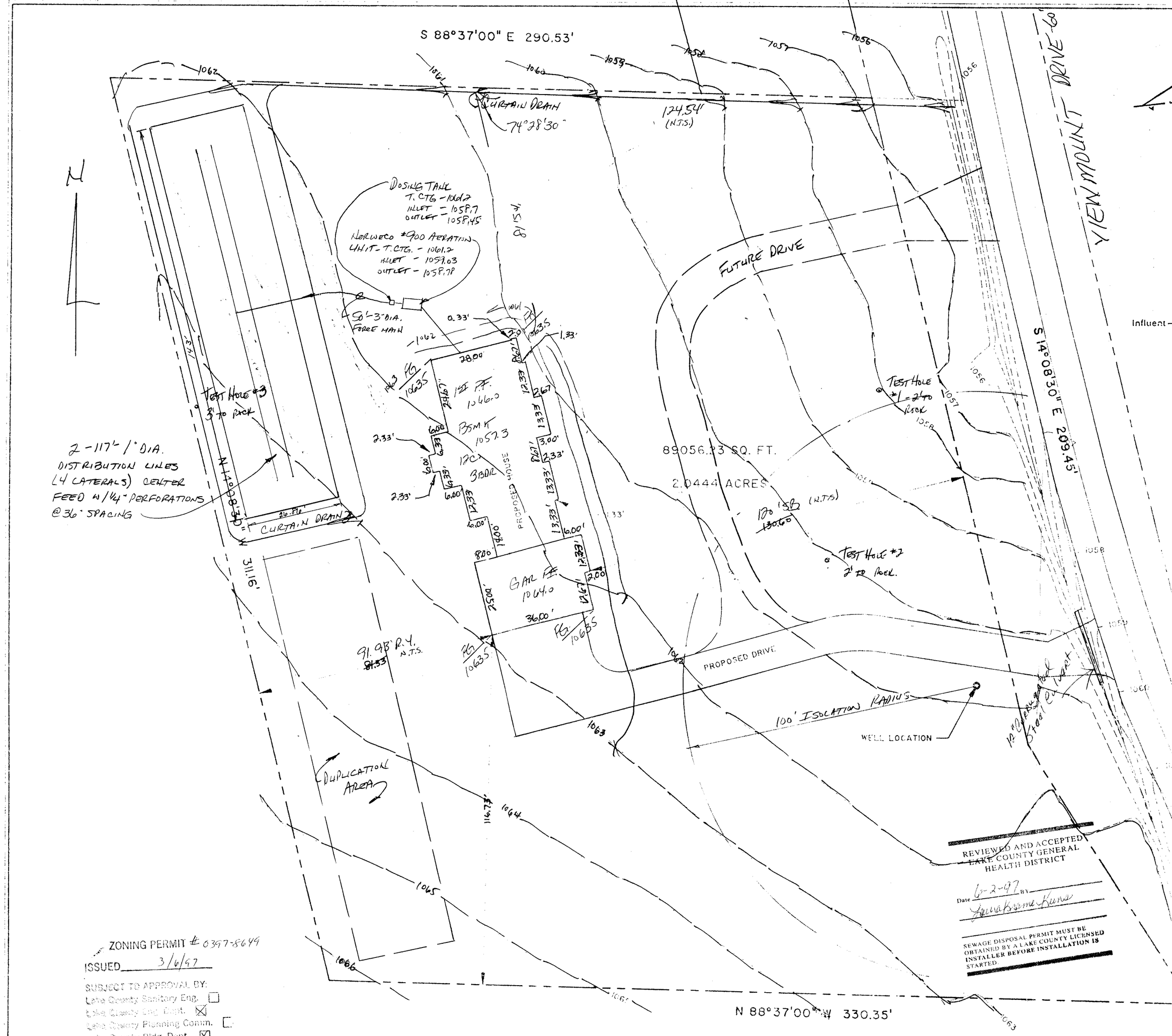
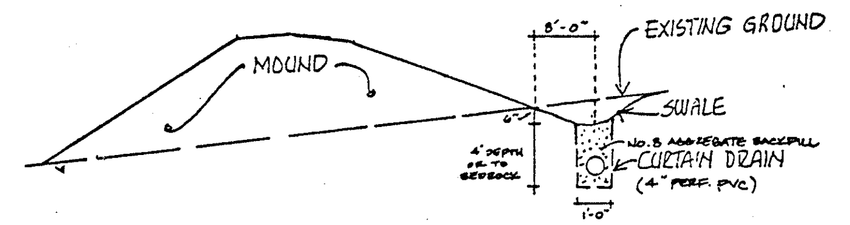


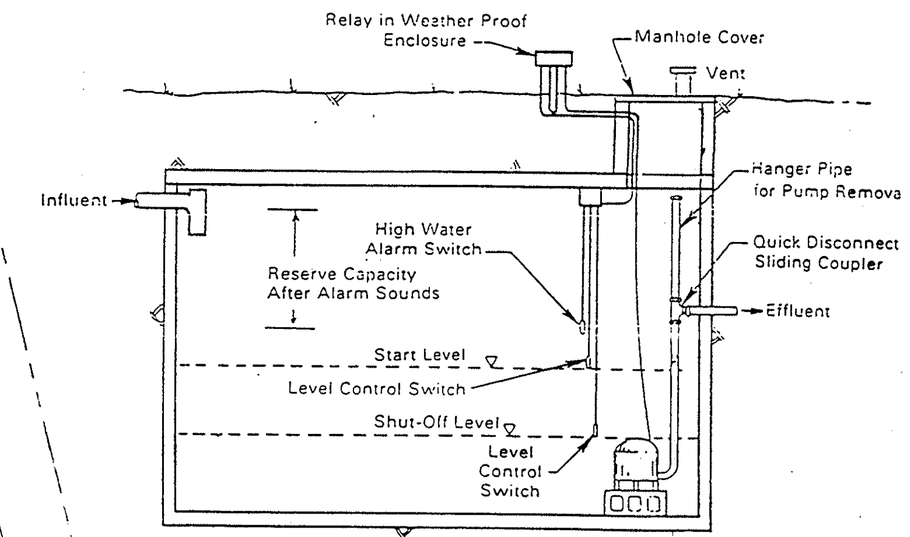
ZONING PERMIT # 0397-5649
ISSUED 3/6/97
SUBJECT TO APPROVAL BY:
Lake County Sanitary Engr. ☐
Lake County Engr. Dept. ☒
Lake County Planning Comm. ☐
Lake County Bldg. Dept. ☒

REVIEWED AND ACCEPTED
LAKE COUNTY GENERAL HEALTH DISTRICT
Date 6-2-97 BY
SEWAGE DISPOSAL PERMIT MUST BE OBTAINED BY A LAKE COUNTY LICENSED INSTALLER BEFORE INSTALLATION IS STARTED.

SOILS CLASSIFICATION: MITIWANGA



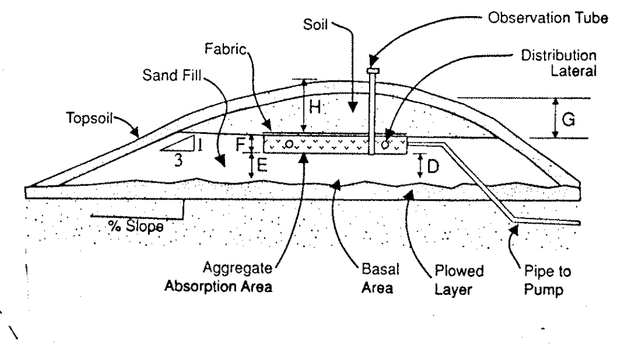
TYPICAL SWALE WITH CURTAIN DRAIN
NO SCALE

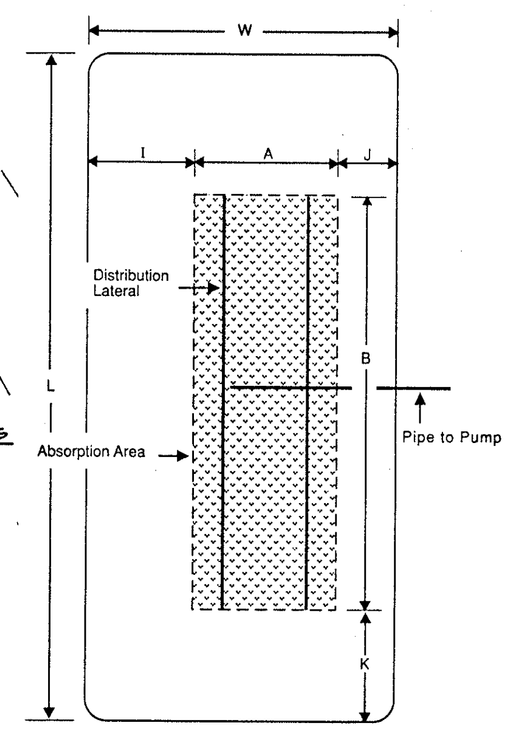


- DOSE CHAMBER SIZE : 750 GAL. DOSE VOLUME : 90 GAL/DOSE
- USE MERCURY CONTROL FLOATS & QUALITY ALARM W/ A MERCURY CONTROL FLOAT.

Typical Cross Section of a Dose Chamber with a Pump and Control Unit.

CROSS SECTION & TOP VIEW OF MOUND





MOUND DIMENSIONS

A = 40'
B = 11.7'
D = 2'
E = 3.12'
F = 6.75'
G = 1.0'
H = 1.5'
I = 11.61'
J = 11.25'
K = 13'
L = 148'
W = 26.96'

CONSTRUCTION NOTES

LOCATION OF MOUND TO BE STAKED BY CONTRACTOR PRIOR TO BEGINNING CONSTRUCTION.

MEASURE THE AVERAGE GROUND ELEVATION ALONG THE UPSLOPE EDGE OF THE UPPER TRENCH BOTTOM ELEVATION OF THE TRENCHES TO BE A MINIMUM OF 18" ABOVE THIS ELEVATION AS SHOWN ON THE DETAIL.

DETERMINE WHERE THE PIPE FROM THE PUMPING CHAMBER CONNECTS TO THE DISTRIBUTION SYSTEM IN THE MOUND.

TRENCH AND LAY THE EFFLUENT PIPE FROM THE PUMPING CHAMBER TO THE MOUND. CUT AND CAP THE PIPE ONE FT. BENEATH THE GROUND SURFACE. LAY PIPE BELOW FROST LINE, SLOPING UNIFORMLY BACK TO THE PUMPING CHAMBER SO THAT THE LINE DRAINS AFTER DOSING. BACKFILL AND COMPACT SOIL AROUND PIPE TO PREVENT BACK SEEPAGE OF EFFLUENT ALONG THE PIPE.

CHECK THE MOISTURE CONTENT OF THE SOIL AT 7-8 IN. DEEP. IF IT IS TOO WET, SMEARING AND COMPACTION WILL RESULT. SOIL MOISTURE CAN BE DETERMINED BY ROLLING A SOIL SAMPLE BETWEEN THE HANDS. IF IT ROLLS INTO A RIBBON, THE SITE IS TOO WET TO PREPARE. IF IT CRUMBLES, SOIL PREPARATION CAN PROCEED.

CUT TREES TO GROUND LEVEL. REMOVE EXCESS VEGETATION BY MOWING. PREPARE THE SITE USING A MOLDBOARD OR CHISEL PLOW BY PLOWING PERPINDICULAR TO THE SLOPE. ROTOTILLING THE SITE IS NOT PERMITTED. CONSTRUCTION OF THE MOUND SHALL BEGIN AS SOON AS THE BASE AREA HAS BEEN PLOWED. THE CONTRACTOR SHALL AVOID RUTTING OF PLOWED AREA WITH VEHICULAR TRAFFIC.

EXTEND THE EFFLUENT PIPE TO SEVERAL FEET ABOVE THE GROUND SURFACE.

PLACE THE FILL MATERIAL WHICH HAS BEEN PROPERLY SELECTED AROUND THE EDGE OF THE PLOWED AREA. KEEP WHEELS OF TRUCK OFF PLOWED AREAS. MINIMIZE TRAFFIC ON THE DOWNSLOPE SIDE OF THE MOUND. WORK FROM THE END AND UPSLOPE SIDE.

MOVE THE FILL MATERIAL INTO PLACE USING A SMALL TRACK TYPE TRACTOR WITH A BLADE. ALWAYS KEEP A MINIMUM OF 6" OF SAND BENEATH TRACKS TO PREVENT COMPACTION OF THE NATURAL SOIL.

PLACE THE FILL MATERIAL TO THE REQUIRED DEPTH WHICH IS THE TOP OF THE TRENCHES. SHAPE SIDES TO THE DESIRED SLOPE.

WITH THE BLADE OF THE TRACTOR, FORM THE TRENCHES. HAND LEVEL THE BOTTOM OF THE TRENCHES. THE BOTTOMS SHALL BE AT THE SAME ELEVATION AND LEVEL.

PLACE THE COARSE AGGREGATE IN THE TRENCHES. AGGREGATE SHALL BE 1/2-2 IN. NON-DETERIORATING AGGREGATE.

PLACE THE DISTRIBUTION SYSTEM ON THE AGGREGATE. CONNECT THE MANIFOLD TO THE PIPE FROM THE PUMPING CHAMBER. SLOPE MANIFOLD TO EFFLUENT PIPE. LAY LATERALS LEVEL, REMOVING RISES AND DIPS.

PLACE 2 IN. OF AGGREGATE OVER THE DISTRIBUTION PIPES.

PLACE 4-5 IN. OF UNCOMPACTED STRAW OR MARSH HAY, UNTREATED BUILDING PAPER OR A SYNTHETIC FABRIC, SUCH AS TYPAR, MIRAFI OR THE EQUIVALENT OVER AGGREGATE.

PLACE SOIL ON TOP OF THE TRENCHES TO A DEPTH OF 1 FT. IN THE CENTER AND 6 IN. AT THE OUTER EDGE OF THE TRENCHES. THIS MAY BE A SUBSOIL OR TOPSOIL.

PLACE 6 IN. OF GOOD QUALITY TOPSOIL OVER THE ENTIRE MOUND SURFACE. THIS WILL RAISE THE ELEVATION AT THE CENTER OF THE MOUND TO A MINIMUM OF 15 FT. AND THE OUTSIDE EDGES OF THE TRENCHES TO 1 FT.

LANDSCAPE THE MOUND BY SEEDING AND MULCHING. A MIXTURE OF 90% BIRDSFOOT TREEFOIL AND 10% TIMOTHY MAY BE USED IF THE MOUND WILL NOT BE MANICURED. IF MANICURING IS DESIRED, A COMBINATION OF 60% BLUEGRASS, 30% CREEPING RED FESCUE AND 10% ANNUAL RYE GRASS MAY BE USED. SHRUBS CAN BE PLANTED AROUND THE BASE AND UP THE SIDESLOPES. THEY SHOULD BE SOMEWHAT MOISTURE TOLERANT SINCE THE TOP OF THE MOUND MAY BE SOMEWHAT MOIST DURING VARIOUS TIMES OF THE YEAR.

ALL LAWS AND RULES OF THE LAKE COUNTY GENERAL HEALTH DISTRICT AND THE OHIO DEPARTMENT OF HEALTH PERTAINING TO INDIVIDUAL SEWAGE DISPOSAL AND WATER SUPPLY SYSTEMS SHALL BE FOLLOWED.

BUILDING CONSTRUCTION SHALL COMPLY TO ALL APPLICABLE REGULATIONS OF THE LAKE COUNTY BUILDING DEPARTMENT.

RESIDENCE MUST UTILIZE WATER SAVING TOILETS, SHOWER-HEADS, AND FAUCETS.

DRAINAGE IMPROVEMENTS OR CHANGES FROM EXISTING GRADE NOTED ON THE APPROVED PLAN SHALL BE INSTALLED PRIOR TO SEWAGE DISPOSAL SYSTEM CONSTRUCTION.

NO OPEN BURNING WILL OCCUR DURING CONSTRUCTION.

DOWNSPOUTS AND FOOTER DRAINS SHALL BE CONNECTED TO THE MOUND SYSTEM CURTAIN DRAIN AS SHOWN ON THE PLANS.

SURFACE WATER SHALL BE DIVERTED AWAY FROM THE MOUND AREA BY THE USE OF SWALES.

SEWAGE LIFT PUMP SHALL BE CAPABLE OF LIFTING RESIDENTIAL SEWAGE EFFLUENT AT A RATE OF 50 GPM AT 50 FT. OF HEAD. THE PUMPING CHAMBER SHALL HAVE A MINIMUM CAPACITY OF 750 GALLONS. THE FLOAT LEVELS SHALL BE ADJUSTED TO PROVIDE FOR A 90 GALLON DOSING VOLUME TO THE MOUND.

ELECTRICAL WORK & EQUIPMENT SHALL CONFORM WITH THE CURRENT EDITION OF THE NATIONAL ELECTRICAL CODE.

MECHANICAL COMPONENTS SHALL BE INSTALLED IN A PROPERLY VENTED LOCATION AND ALL VENTS, AIR INTAKES AND AIR HOSES SHALL BE PROTECTED FROM SNOW, ICE OR WATER VAPOR ACCUMULATIONS. INSTALLATION SHALL BE MADE TO MINIMIZE RELEASE OF ODORS AND AREOSOLS.

MECHANICAL COMPONENTS INSTALLED IN OR AT THE SEWAGE TANK SHALL BE PROTECTED AGAINST DAMAGE OR IMPAIREMENT OF EFFICIENCY BY FLOODING, FOAMING OR SURCHARGING. PUMPS MUST BE READILY REMOVABLE FROM THE MANHOLE IN CASE OF PUMP FAILURE.

Inspections to be conducted by design engineer at the following phases of construction:

1. After preparation of basal area
2. After placement of the mound fill material and mound distribution laterals
3. After placement of remaining fill, topsoil & seeding

"I, the undersigned hereby certify that this topography indicated by 6", 1' or 2' contours, and elevations shown hereon represent an actual field survey made by me on the 2nd day of JAN., 1997 and that the elevations were taken at appropriate intervals and that as of that date they existed as indicated hereon."

Harry S. Jones, Jr. #6343
Name Reg. No.

STATE OF OHIO
HARRY S. JONES, JR.
S-6343
REGISTERED SURVEYOR