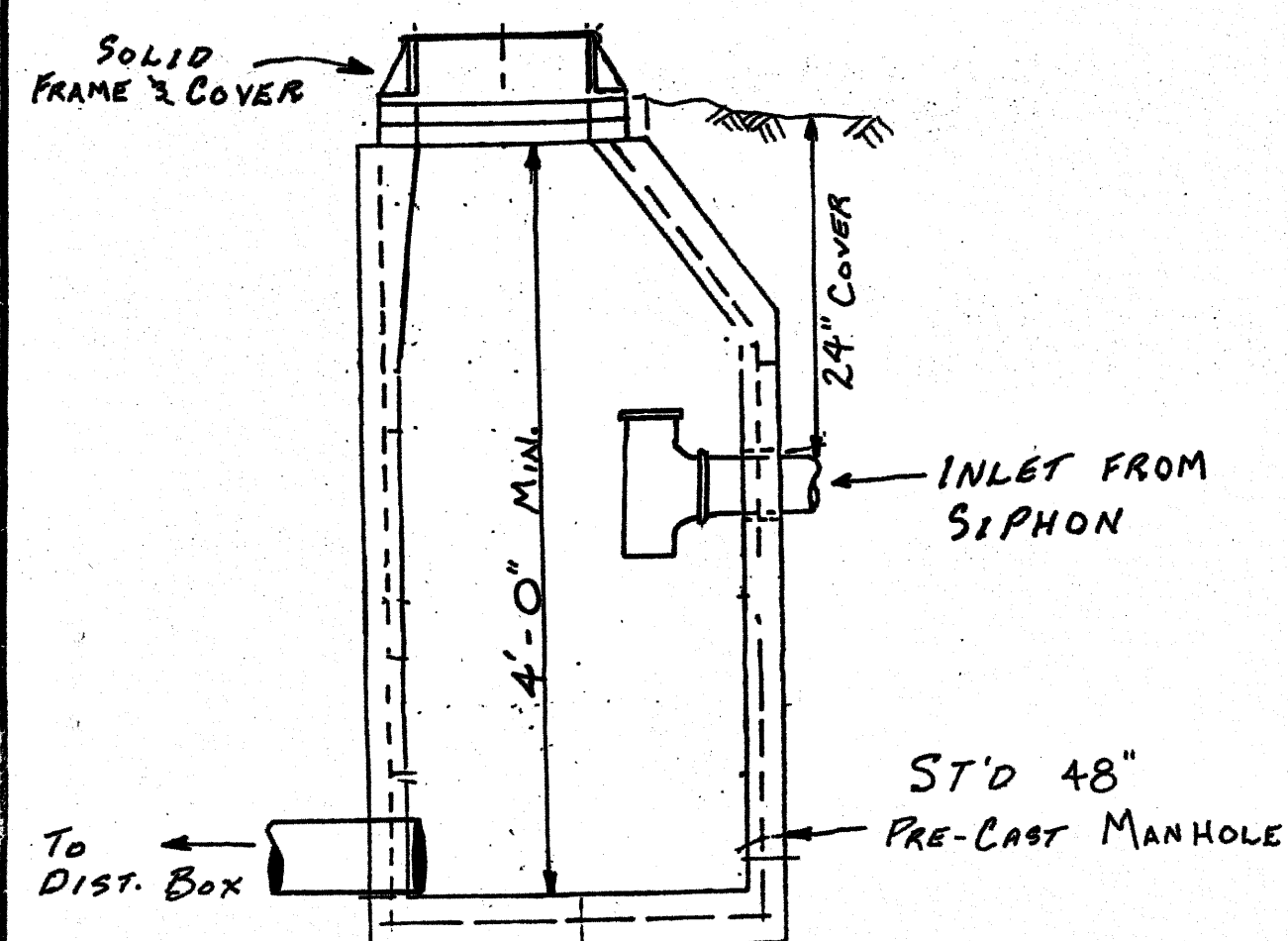


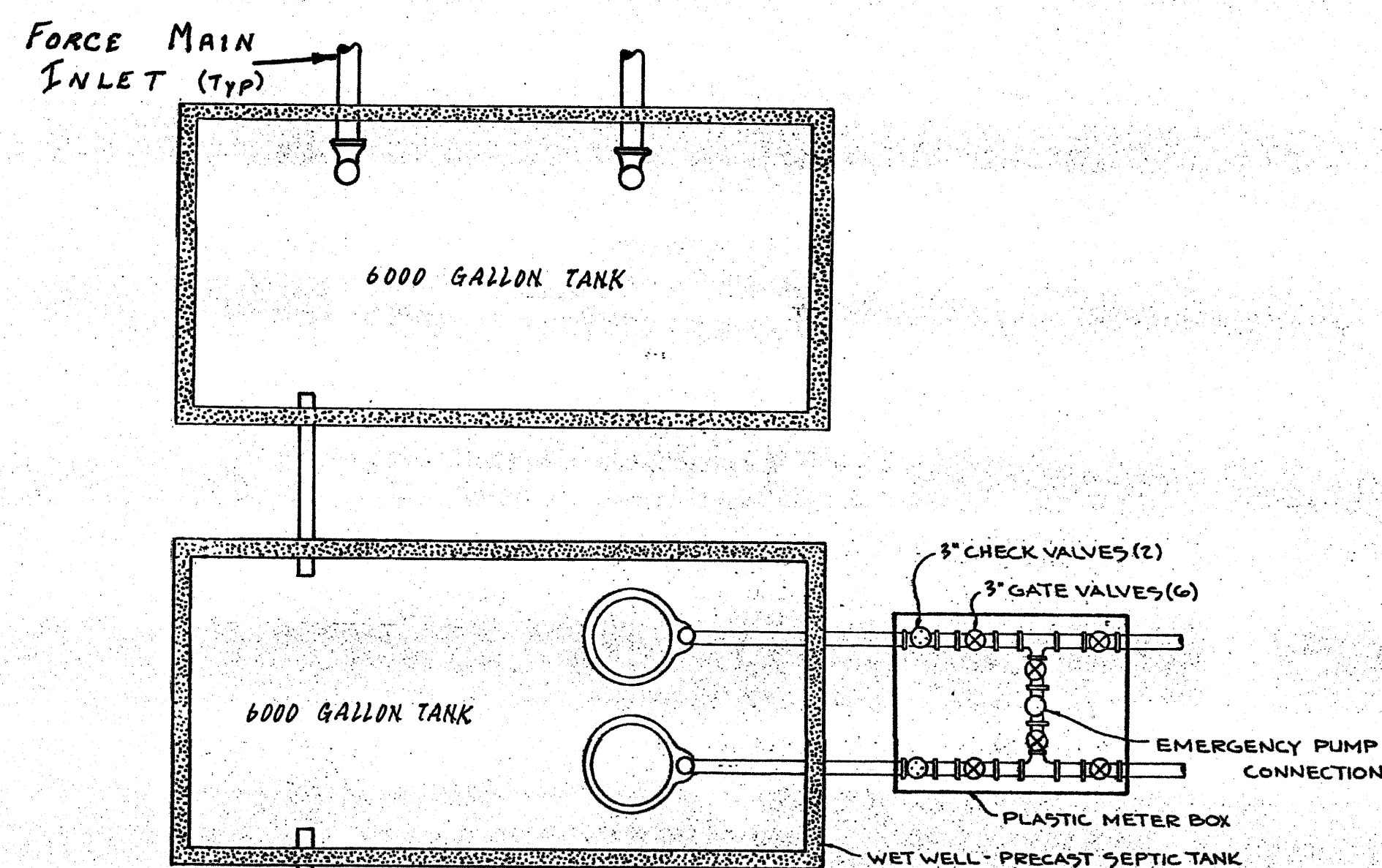
CENTRAL PUMPING STATION



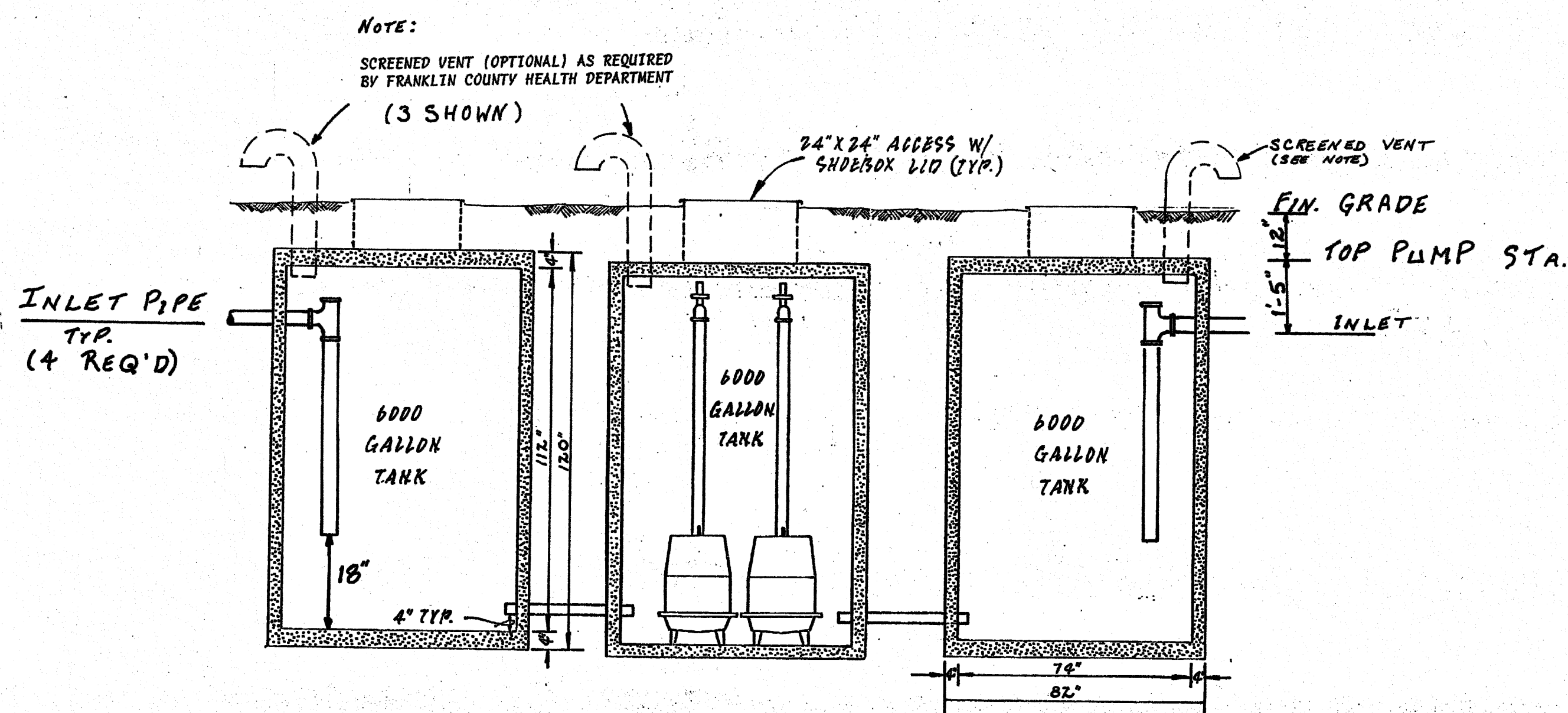
ENERGY DISSIPATOR
DETAIL

1. SEWAGE PUMPS
* CENTRAL PUMPING STATION
PUMPS SHALL BE F.E. MYERS SUBMERSTIBLE GRINDER PUMPS MODEL 9650H WITH 6" IMPELLAR (2 REQUIRED) EACH CAPABLE OF PRODUCING 80GPM AGAINST 100' TDH.
* INDIVIDUAL LOT PUMPING STATIONS
- SEE SCHEDULE SHEET 11 OF 11
2. PUMP CONTROLS
* CENTRAL PUMPING STATION
PUMPS SHALL BE CONTROLLED BY AN F.E. MYERS DUPLEX CONTROL PANEL DESIGNED FOR USE WITH THE SPECIFIED PUMPS. THE PANEL SHALL AUTOMATICALLY ALTERNATE THE OPERATION OF THE PUMPS AND SHALL CONTAIN BUILT IN AUDIO-VISUAL ALARMS. TWO (2) MERCURY LEVEL CONTROL SWITCHES MODEL ALS 2-3 SHALL BE PROVIDED AND PLACED AT THE SPECIFIED LEVELS IN THE PUMP STATIONS.
* INDIVIDUAL LOT PUMPING STATIONS
PUMPS SHALL BE CONTROLLED BY GOULDS MODEL ALS 3-1 SIMPLEX CONTROL PANEL OPERATING WITH TWO (2) MERCURY LEVEL FLOAT SWITCHES (MODEL ALS 2-3). EACH STATION SHALL BE EQUIPPED WITH A REMOTE ALARM MOUNTED INSIDE THE HOUSE. ALARM TO BE GOULDS MODEL ALS 4-1 WITH ALS 2-3 FLOAT SWITCH.
3. LIFT-OUT ASSEMBLY
ALL PUMPS SHALL BE INSTALLED WITH A SLIDE RAIL LIFT-OUT ASSEMBLY BY THEIR RESPECTIVE MANUFACTURERS WHICH WILL ENABLE THE OPERATOR TO REMOVE THE PUMP WITHOUT ENTERING THE STATION.
4. PIPING:
PIPING WITHIN THE PUMP STATION SHALL BE SCHEDULE 40 GALVANIZED STEEL WITH THREADED JOINTS. FORCE MAINS SHALL BE 200 PSI SPR 21 PVC PIPING. INSTALLATION AND TESTING SHALL CONFORM TO THE 1982 SEWAGE HANDLING AND DISPOSAL REGULATIONS.
5. DOSING SIPHON CRITERIA:
DOSING SIPHONS SHALL BE MILLER AUTOMATIC SIPHONS INSTALLED IN A VAULT AS SHOWN. THE VAULT SHALL CONTAIN 35.3 GALLONS OF FLUID PER INCH OF LIQUID DEPTH. DRAINDOWN FOR THE SIPHON SHALL BE 17 INCHES WHICH IS EQUIVALENT TO 600 GALLONS OF LIQUID Dosed TO THE DRAINFIELD. DOSING RATES WILL AVERAGE 160 GPH. TWO SIPHONS SHALL BE INSTALLED IN EACH VAULT TO AUTOMATICALLY ALTERNATE THE DOSING OF THE RESPECTIVE FIELDS.
6. EMERGENCY PUMPING EQUIPMENT:
PROVIDE AND STORE ON-SITE FOR EMERGENCY USE ONE PEARBODY BARNES MODEL 26CCG SELF PRIMING, ENGINE DRIVEN, CENTRIFUGAL PUMP. PUMP SHALL HAVE A MINIMUM CAPACITY OF 50GPM @ 150' TDH WITH A MAXIMUM SUCTION LIFT OF 20'. IN ADDITION TO THE STANDARD EQUIPMENT, PROVIDE 15' OF SUCTION HOSE AND 15' OF DISCHARGE HOSE WITH A QUICK-DISCONNECT ADAPTER SUITABLE FOR CONNECTION TO THE EMERGENCY PUMP CONNECTION PROVIDED.
THE EMERGENCY PUMP SHALL BE STORED IN A LOCKED STORAGE BUILDING ON THE SITE.
7. FORCE MAINS SHALL BE INSTALLED IN ACCORDANCE WITH SECTION 4.2.3 OF THE VIRGINIA SEWAGE HANDLING AND DISPOSAL REGULATIONS AS FOLLOWS:
ALL FORCE MAINS SHALL BE BEDDED TO SUPPLY UNIFORM SUPPORT ALONG THEIR LENGTH.
FORCE MAIN TRENCHES SHALL BE BACKFILLED AND TAMPED AS SOON AS POSSIBLE AFTER THE INSTALLATION OF THE FORCE MAIN HAS BEEN APPROVED. MATERIAL FOR BACKFILLING SHALL BE FREE OF LARGE STONES AND DEBRIS. COMPACTION EFFORTS OF BACKFILL SHALL NOT BE LESS THAN 90% OF THE THEORETICAL MAXIMUM DENSITY OF THE SAME MATERIAL AS TESTED UNDER AASHTO T-99.
FORCE MAINS SHALL BE TESTED AT THE MAXIMUM PUMP PRESSURE OF 70PSI FOR A DURATION OF TWO HOURS WITH NO ALLOWABLE LEAKAGE. IF THE LINE FAILS, THE PIPE WILL BE REPAIRED AND RETESTED UNTIL SATISFACTORY RESULTS ARE OBTAINED.
THE MINIMUM HORIZONTAL SEPARATION BETWEEN SEWAGE FORCE MAINS AND POTABLE WATERLINES SHALL BE 10 FEET. THE HORIZONTAL SEPARATION BETWEEN DRAINFIELDS AND WATERLINES SHALL BE 30'.

NOTE: THE WATER & SEWER LINE SEPARATIONS MUST BE IN ACCORDANCE WITH SECTION 12.05 OF THE WATERWORKS REGULATIONS AND SECTION 4.12 OF THE SEWAGE HANDLING AND DISPOSAL REGULATIONS.



PLAN



SECTION

NOTE: CONCRETE TANKS MUST BE BEDDED WITH AT LEAST 6 INCHES OF SAND OR FINE GRAVEL WHERE ROCK OR OTHER UNDESIRABLE CONDITIONS ARE ENCOUNTERED.

Berkley Howell & Assoc. ENGINEERS • SURVEYORS • PLANNERS			
SCALE:	APPROVED BY:	DRAWN BY:	REVISION:
DATE: 11-3-89			
CONTENTMENT ISLAND			
PUMP STATION DETAILS			DRAWING NUMBER 10 OF 11

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