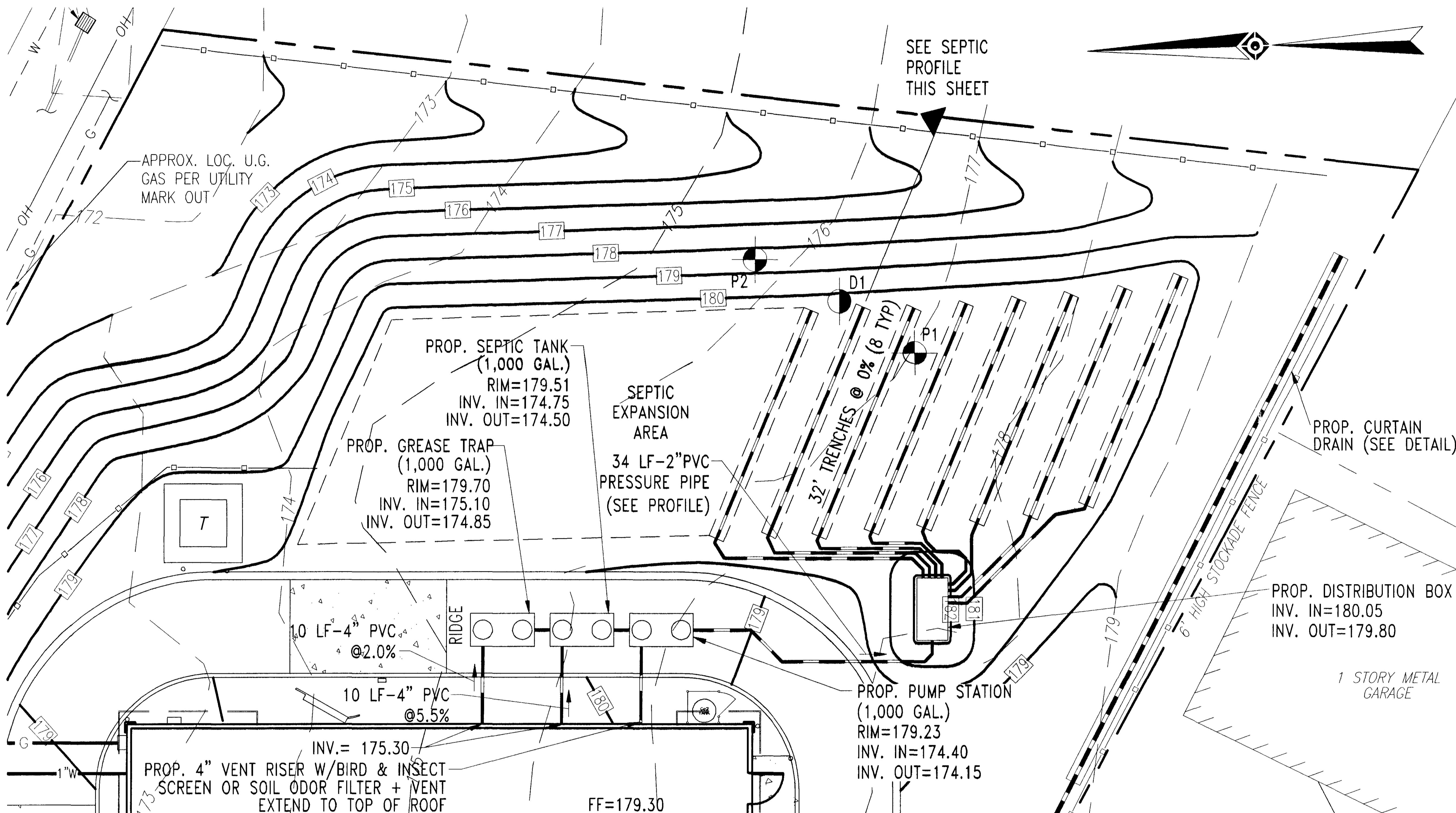


SEPTIC SYSTEM PROFILE

HORIZONTAL SCALE: 1"=10'
VERTICAL SCALE: 1"=10'



SEPTIC SYSTEM PLAN

SCALE: 1" = 10'

SEPTIC FLOW DESIGN RATE

PER NYSDEC:

0.1 GPD/SF = 3,200(0.1) = 418.5 GPD

DESIGN FLOW (INCREASED FOR HISTORICAL RECORD DATA)

20% CREDIT = 500 GPD

(WATER SAVING FIXTURES) = x .80

TOTAL GALLONS PER DAY = 400 GPD

SEPTIC PLAN LEGEND

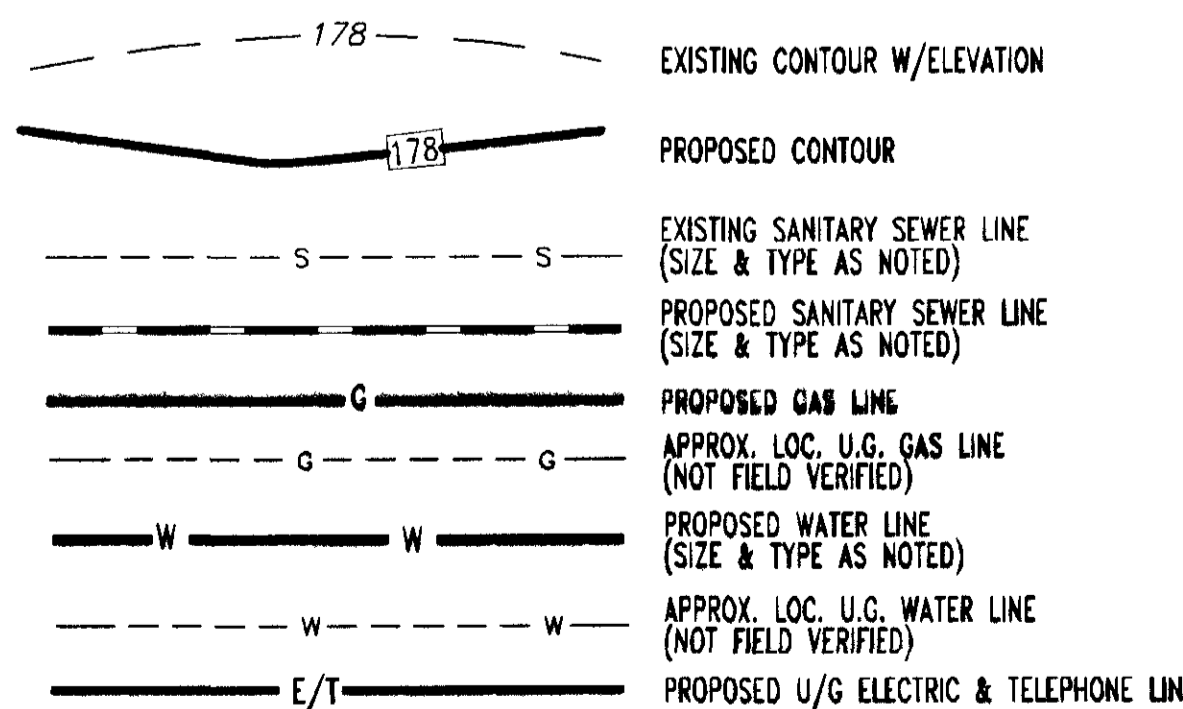


TABLE #1 - MINIMUM SEPARATION DISTANCES FROM WASTEWATER SYSTEM COMPONENTS

SYSTEM COMPONENT	TO STREAM, LAKE, WATERCOURSE OR WETLAND	FOUNDATION WALL	PROPERTY LINE	CATCH BASIN	PRESSURIZED WATER LINE
HOUSE SEWER	25'	10'	10'	---	10'
SEPTIC TANK	50'	10'	10'	25'	10'
EFFLUENT LINE TO DISTRIBUTION BOX	50'	10'	10'	---	10'
DISTRIBUTION BOX	100'	20'	10'	25'	10'
ABSORPTION LATERALS	100'	20'	10'	50'	10'

TABLE #2 - DESIGN REQUIREMENTS

DAILY FLOW IN GPD	PERCOLATION RATE	ABSORPTION AREA APPLICATION RATE GPD/S.F.	ABSORPTION AREA REQUIRED SQ. FT.	REQUIRED LENGTH OF LATERALS 2 SF/LF	LINEAR FEET OF ABSORPTION LATERALS PROVIDED	NUMBER OF LATERALS	LENGTH OF LATERALS
400	11-15 MIN.	0.80	500	250 LF	256 LF	8	32.0'

SOIL DATA:

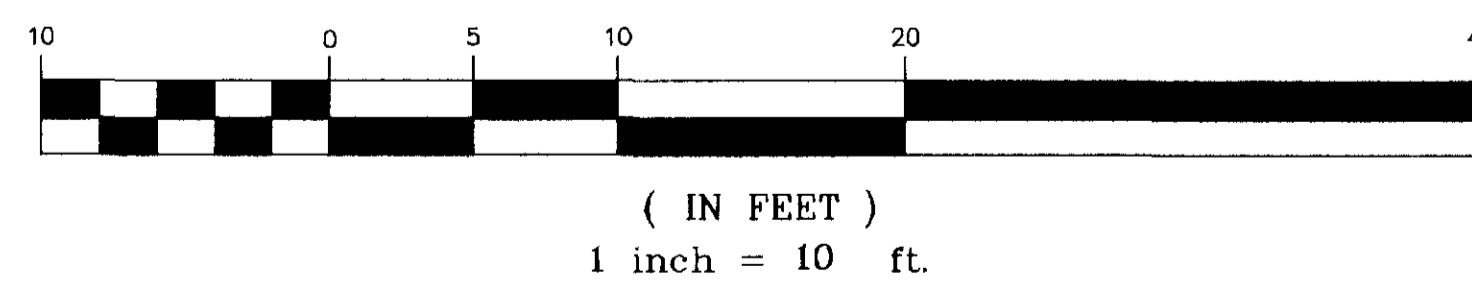
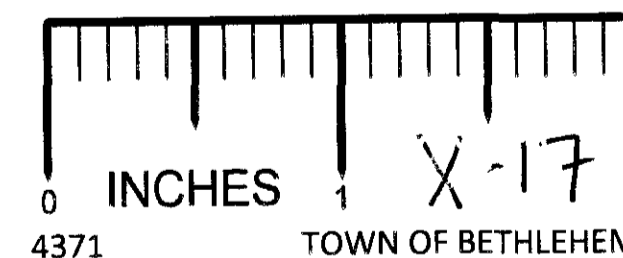
SOIL INVESTIGATION CONDUCTED BY BOHLER ENGINEERING, P.C. ON 5/10/07. WITNESSED BY JIM GILLESPIE OF BOHLER ENGINEERING AND MARK WYKES OF THE ALBANY COUNTY HEALTH DEPARTMENT

DEEP HOLE TEST:

D1 0"-12" - TOPSOIL
12"-6" - LIGHT BROWN FINE SANDY LOAM, TRACE SILT, LOOSE, SLIGHTLY MOIST, MOTTLED AT 1'-6" (ELEV=175.0)
6"-9" - MEDIUM GRAY SILTY LOAM, MEDIUM DENSE, SLIGHTLY MOIST, NO ROCK OR IMPERMEABLE SOIL ENCOUNTERED

PERCOLATION TESTS:

P1 STABILIZED PERCOLATION RATE = 15 MIN. (24" DEPTH)
P2 STABILIZED PERCOLATION RATE = 10 MIN. (24" DEPTH)



TOWN OF BETHLEHEM APPROVAL AREA

MAINTENANCE SCHEDULE

1. THE GREASE TRAP AND ZABEL FILTER SHALL BE INSPECTED MONTHLY AND SHALL BE CLEANED BY A LICENSED SEPTIC HAULER TRAINED IN THE PROPER INSTALLATION AND MAINTENANCE OF THE ZABEL FILTER AS SPECIFIED BY THE MANUFACTURER WHENEVER THE LEVEL OF GREASE IS 25% OF THE EFFECTIVE DEPTH OR EVERY THREE(3) MONTHS, WHICHEVER IS SOONER.
2. THE SEPTIC TANK AND ZABEL SHALL BE INSPECTED ONCE EVERY SIX MONTHS AND PUMPED ONCE EVERY YEAR BY A LICENSED SEPTIC HAULER TRAINED IN THE PROPER INSTALLATION AND MAINTENANCE OF THE ZABEL FILTER AS SPECIFIED BY THE MANUFACTURER. WHEN THE SEPTIC TANK IS PUMPED, THE CONDITION OF THE TANK AND THE FILTER SHALL BE NOTED IN A REPORT FORM AND FORWARDED TO THE STORE MANAGER.
3. IT IS RECOMMENDED THAT BATHROOMS BE SUPPLIED WITH MECHANICAL HAND DRYERS AND NOT CONTAIN PAPER TOWEL DISPENSERS AND NOT CONTAIN PAPER TOWEL DISPENSERS AND THAT A FEMININE NAPKIN DISPENSER BE PLACED IN THE LADIES ROOM AND PROPERLY LABELED.
4. DAIRY, BEVERAGE AND FOOD PRODUCTS, CLEANING AGENTS AND WAXES SHALL NOT BE DISPOSED OF INSIDE STORE FLOOR DRAINS, MOP SINKS, HAND WASH SINKS, THREE COMPARTMENT SINKS OR TOILETS OR ANY OTHERS FIXTURES WHICH CONNECT TO THE SEPTIC SYSTEM NOT SPECIFICALLY IDENTIFIED.
5. WASTES ASSOCIATED WITH FACILITY CLEANING/OPERATION AND/ OR FOOD PREP AREA TO BE DISPOSED OF INTO CONTAINERS FOR REMOVAL AND DISPOSAL BY APPROPRIATELY QUALIFIED LICENSED DISPOSAL CONTRACTOR FOR SPECIFIC MATERIALS BEING GENERATED. CONTACT LOCAL BOARD OF HEALTH OR DEPARTMENT OF ENVIRONMENTAL PROTECTION FOR MORE INFORMATION ON SPECIFIC PRODUCTS.
6. DRAIN LINE CLEANING/ GREASE REMOVAL ADDITIVES SHALL NOT BE USED WITHOUT PRIOR CONSENT OF THE DESIGN ENGINEER, LOCAL BOARD OF HEALTH AGENT OR THE DEPARTMENT OF ENVIRONMENTAL PROTECTION AS THOSE PRODUCTS MAY BE HARMFUL TO THE SEPTIC SYSTEM.

WASTEWATER DISPOSAL SYSTEM PIPING

- A. BUILDING TO TANKS: 4" SOLID PIPE, TIGHT JOINTS, MINIMUM SLOPE -1/4" PER FOOT MIN. (PVC, CAST IRON).
- B. LIFT STATION TO DISTRIBUTION BOX 2" SOLID PVC PRESSURE LINE, TIGHT JOINTS.
- C. DISTRIBUTION BOX TO LEACH FIELD: 4" SOLID PVC PIPE, TIGHT JOINTS, MINIMUM SLOPE - 1/8" PER FOOT (PVC, CAST IRON).
- D. LEACH FIELD: 4"PERFORATED PVC INSTALLED @ 0% SLOPE IN STONE TRENCH (SEE DETAIL SHEET 7).

SEPTIC TANK

1. SEPTIC TANK SHALL HAVE A MINIMUM LIQUID CAPACITY OF 1,000 GALLONS. CONSTRUCTION SHALL BE PRECAST CONCRETE HORIZONTAL EXTENDED SEPTIC TANK MANUFACTURED BY THE FORT MILLER CO., OR OTHER APPROVED EQUAL.
2. SEPTIC TANK SIZE PER NYS DEC - 1.5 (0) = 1.5 (400 GAL.) = 600 GAL. 1,000 GALLONS PROVIDED (NO GARBAGE GRINDER)

DISTRIBUTION BOX

1. DISTRIBUTION BOXES TO BE PRECAST CONCRETE WITH REMOVABLE COVERS FOR CLEANING ACCESS. BOXES TO HAVE SUFFICIENT OUTLETS FOR LATERALS, AND TO BE CONSTRUCTED WITH AN INTERIOR BAFFLE. DISTRIBUTION BOXES SHALL BE MANUFACTURED BY THE FORT MILLER CO., OR OTHER APPROVED EQUAL.

INSPECTION OF CONSTRUCTION

1. THE DESIGN ENGINEER AND ALBANY COUNTY HEALTH DEPARTMENT SHALL BE NOTIFIED 48 HOURS IN ADVANCE FOR THE FOLLOWING INSPECTIONS:
 - AT THE STAKEOUT OF ALL SYSTEM COMPONENTS AND ABSORPTION AREAS
 - AT THE INSTALLATION OF THE SEPTIC TANKS AND DISTRIBUTION BOX
 - AT THE PLACEMENT OF THE ABSORPTION LATERALS, GREASE TRAPS & LIFT STATION
 - AFTER THE FINAL GRADING, TOPSOIL AND SEEDING.
2. CERTIFICATION BY A PROFESSIONAL ENGINEER SHALL BE PROVIDED TO THE BUILDING DEPARTMENT AND HEALTH DEPARTMENT UPON COMPLETION OF THE SYSTEM, AND PRIOR TO THE ISSUANCE OF THE CERTIFICATE OF OCCUPANCY.
3. CERTIFICATION BY A PROFESSIONAL ENGINEER SHALL BE PROVIDED TO THE BUILDING DEPARTMENT AND HEALTH DEPARTMENT UPON COMPLETION OF THE STORM WATER MANAGEMENT SYSTEM, AND PRIOR TO THE ISSUANCE OF THE CERTIFICATE OF OCCUPANCY.

GENERAL NOTES

1. THIS SEPTIC SYSTEM HAS BEEN DESIGNED IN ACCORDANCE WITH CURRENT STATE AND LOCAL HEALTH CODES, REGULATIONS AND DESIGN PRINCIPLES. HOWEVER IT CAN NOT BE GUARANTEED AGAINST FAILURE DO TO MISUSE, EXCESSIVE WATER USE, IMPROPER INSTALLATION AND/OR GRADING OR ANY UNDETERMINABLE FUTURE SITE CONDITION THAT MAY DEVELOP. THE SYSTEM MUST BE LOCATED AS SHOWN & BUILT IN CONFORMANCE WITH THE DETAILS & SPECIFICATIONS PROVIDED IN THESE PLANS. ANY DEVIATION MUST BE APPROVED BY THE DESIGN ENGINEER & ALBANY COUNTY HEALTH DEPARTMENT PRIOR TO PERFORMING WORK.
2. EXISTING GROUND SURFACE IN THE ABSORPTION FIELD AREA SHALL BE THOROUGHLY CLEARED AND GRUBBED. ALL STUMPS, ROOTS AND BOULDERS SHALL BE REMOVED.
3. HEAVY EQUIPMENT SHALL ONLY BE ALLOWED IN THE SDS ABSORPTION FIELD AREA FOR PLACEMENT OF TRENCHES AND SHALL NOT BE ALLOWED DURING WET WEATHER CONDITIONS. STORAGE OF EQUIPMENT OR MATERIALS SHALL BE PROHIBITED FROM THE SDS ABSORPTION FIELD DURING THE ENTIRE OF SITE AND BUILDING CONSTRUCTION.
4. SURFACE OF THE TILE FIELD AREA TO BE GRADED IN A MANNER SO AS TO SHEED SURFACE RUNOFF.
5. SHOP DRAWINGS AND MATERIAL CERTIFICATION FOR ALL COMPONENTS OF THE WASTEWATER DISPOSAL SYSTEM SHALL BE SUBMITTED TO THE DESIGN ENGINEER FOR APPROVAL PRIOR TO INSTALLATION.
6. PROPERTY LINES ARE TO BE STAKED PRIOR TO SYSTEM INSTALLATION, AND THE ENTIRE SYSTEM MUST BE STAKED BY A NEW YORK STATE LICENSED LAND SURVEYOR. SURVEYOR TO PROVIDE BENCHMARK PRIOR TO CONSTRUCTION.
7. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY "THE NEW YORK ONE CALL SYSTEM" (1-800-962-7962) 72 HOURS PRIOR TO ANY EXCAVATION ON THIS SITE.
8. THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF RECORD AND THE DEPARTMENT OF HEALTH AT LEAST 48 HOURS PRIOR TO SYSTEM PREPARATION AND/OR INSTALLATION.
9. SYSTEM INSTALLATION SHALL BE INSPECTED BY A NEW YORK STATE LICENSED PROFESSIONAL ENGINEER TO ASSURE COMPLIANCE TO THE DESIGN PLAN.
10. AN "AS BUILT PLAN", CERTIFIED BY A NYS LICENSED ENGINEER SHALL BE SUBMITTED TO THE DEPARTMENT OF HEALTH BEFORE A "PERMIT TO DISCHARGE" IS ISSUED.

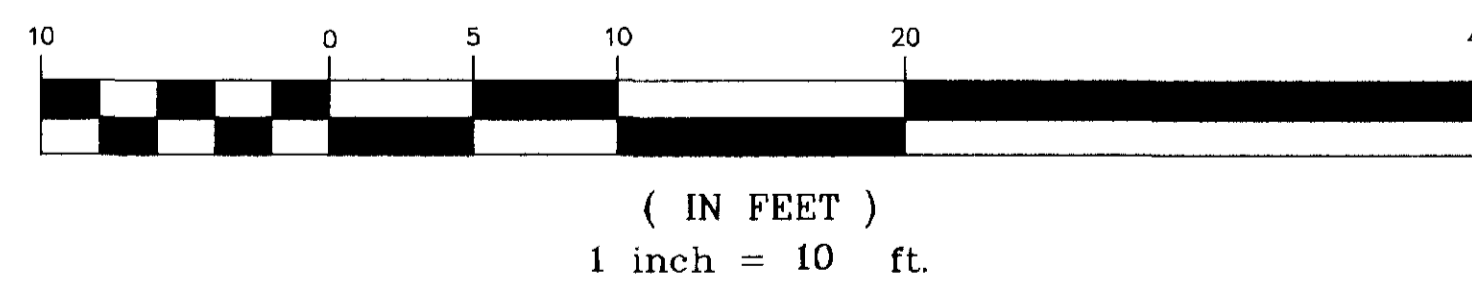
CONSTRUCTION NOTES FOR SUBSURFACE SEWAGE TREATMENT SYSTEMS REQUIRING FILL

1. FILL MUST BE STABILIZED BY ALLOWING THE FILL MATERIAL TO SETTLE NATURALLY FOR A PERIOD OF AT LEAST 6 MONTHS AND INCLUDE AT LEAST ONE FREEZE-THAW CYCLE, OR FILL STABILIZATION MAY BE ACHIEVED BY MECHANICAL COMPACTION IN APPROXIMATELY 6 INCH LIFTS TO THE APPROXIMATE DENSITY OF THE UNDISTURBED UNDERLYING GRANULAR SOIL.
2. SITE MODIFICATION ACTIVITIES INVOLVING PLACEMENT OF FILLS ARE TO BE CONDUCTED DURING RELATIVELY DRY PERIODS TO MINIMIZE SOIL SMEARING AND EXCESSIVE SOIL COMPACTION.
3. FILL SHALL BE RUN OF BANK GRAVEL SUITABLE FOR SEWAGE ABSORPTION, BE FREE OF FINES OR OTHER UNSUITABLE MATERIAL AND SHALL HAVE AN IN-PLACE PERCOLATION RATE OF AT LEAST EQUAL TO THE NATURAL SOIL AFTER THE REQUIRED STABILIZATION PERIOD (15 MINUTES/INCH W.N.). THE DESIGN PROFESSIONAL SHALL PERFORM FINAL PERCOLATION TEST IN THE FILL AFTER STABILIZATION.
4. FILL SUITABLE FOR SEWAGE ABSORPTION SHOULD CONTAIN NO MORE THEN 5 PERCENT AND PREFERABLY NO MORE THAN 2 PERCENT FINES BY WEIGHT. FINES ARE CLAY AND SILT PARTICLES THAT PASS A #200 SIEVE. NO MORE THAN 10% BY WEIGHT OF THE FILL MATERIAL SHOULD PASS A #100 SIEVE.

EXISTING FOUNDATION NOTE:

1. CONTRACTOR TO REMOVE ENTIRE EXISTING FOUNDATION, STRUCTURES, SEPTIC PIPING TANKS & ANY OTHER FEATURE BENEATH THE PROPOSED SEPTIC FIELD OTHER THAN NATURAL EARTH. FILL SHALL BE PLACED PER THE SPECIFICATIONS ABOVE IN ANY AREA BENEATH THE PROPOSED SEPTIC SYSTEM.

GRAPHIC SCALE



BOHLER ENGINEERING, P.C. CIVIL & CONSULTING ENGINEERS ■ PROJECT MANAGERS ■ ENVIRONMENTAL & SITE PLANNERS ■ MUNICIPAL ENGINEERS 5 Computer Drive West, Albany, NY 12205 518.438.9900 fax: 518.438.0900 www.bohlereeng.com		TITLE: SEPTIC PLAN SCALE: (H) 1"=10' DATE: 09/12/06 (V) NONE DRAWN BY: SMV PROJECT NO: B050649 CHECKED BY: CEB CAD ID: B050649ss0 CONSTRUCTION CHECK DATE:	
PROJECT: CUMBERLAND FARMS, INC. PROP. CONVENIENCE STORE & GAS STATION LOTS 7, 8 & 12, BLOCK 1, SECTION 121.04 NEW YORK STATE HIGHWAY ROUTE 9W TOWN OF BETHLEHEM, ALBANY COUNTY, NEW YORK		PROFESSIONAL ENGINEER NEW YORK LICENSE No. 63409 NEW JERSEY LICENSE No. 27410 PENNSYLVANIA LICENSE No. 37184 MASSACHUSETTS LICENSE No. 17918 MASSACHUSETTS LICENSE No. 37025	
PROFESSIONAL ENGINEER NEW YORK LICENSE No. 071284 CONNECTICUT LICENSE No. 21854 VERMONT LICENSE No. 7735 MASSACHUSETTS LICENSE No. 42844 RHODE ISLAND LICENSE No. 7268		SHEET No: 7 OF 19 REV. No:	

ANY PERSON IS PROHIBITED FROM ALTERING ANYTHING ON THESE DRAWINGS AND/OR THE ACCOMPANYING SPECIFICATIONS, UNLESS IT IS UNDER THE WRITTEN DIRECTION OF A LICENSED PROFESSIONAL ENGINEER OF THE FIRM. IN THE EVENT SUCH ALTERATIONS ARE MADE, THE PROFESSIONAL ENGINEER OF THE FIRM MUST SIGN, SEAL, DATE, AND DESCRIBE THE FULL EXTENT OF THE ALTERATION ON THE DRAWINGS AND/OR IN THE SPECIFICATIONS. (NYS EDUCATION LAW SECTION 2202-2)

ALL UTILITIES SHALL BE INSTALLED IN ACCORDANCE WITH TOWN STANDARD DETAILS AND SPECIFICATIONS. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL OBTAIN THESE DOCUMENTS FOR USE ON THE JOB.



THE STATE OF NEW YORK REQUIRES NOTIFICATION BY EXCAVATORS, DESIGNERS, OR ANY PERSON PREPARING TO DISTURB THE EARTH'S SURFACE ANYWHERE IN THE STATE.
(1-800-962-7962)