SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Department of Human Services
Division of Health Engineering, 10 SHS
(207) 287-5672 Fax: (207) 287-3165

>> CAUTION: PERMIT REQUIRED - ATTACH IN SPACE BELOW <<

PROPERTY LOCATION

City, Town, or Plantation: AUGUSTA
Street or Road: LEIGHTON ROAD
Subdivision, Lot #: 138

AUGUSTA PERMIT # 5627 TOWN COPY
Date Permit Issued: 12/30/05 $ 100.00 ☐ If Double Fee Charged FEE
Local Plumbing Inspector Signature L.P.I. #

OWNER/APPLICANT INFORMATION

Name (last, first, MI): THOMPSON, TOM (F.W. Webb Co.) ☐ Owner ☑ Applicant
Mailing Address of Owner/Applicant: 34 LEIGHTON RD / AUGUSTA, ME
Daytime Tel. #: 623-2521

Municipal Tax Map # 9 Lot # 32

OWNER OR APPLICANT STATEMENT
I state and acknowledge that the information submitted is correct to the best of my knowledge and understand that any falsification is reason for the Department and/or Local Plumbing Inspector to deny a Permit.
Signature of Owner or Applicant — Date: 08/11/05

CAUTION: INSPECTION REQUIRED
I have inspected the installation authoirzed above and found it to be in compliance with the Subsurface Wastewater Disposal Rules Application.
Local Plumbing Inspector Signature — (1st) date approved 4/13/06 — (2nd) date approved
inspected based on contractor copy.

PERMIT INFORMATION

TYPE OF APPLICATION
☑ 1. First Time System
☐ 2. Replacement System
Type replaced:
Year installed:
☐ 3. Expanded System ☐ a. Minor Expansion ☐ b. Major Expansion
☐ 4. Experimental System
☐ 5. Seasonal Conversion

THIS APPLICATION REQUIRES
☑ 1. No Rule Variance
☐ 2. First Time System Variance
☐ a. Local Plumbing Inspector Approval ☐ b. State & Local Plumbing Inspector Approval
☐ 3. Replacement System Variance
☐ a. Local Plumbing Inspector Approval ☐ b. State & Local Plumbing Inspector Approval
☐ 4. Minimum Lot Size Variance
☐ 5. Seasonal Conversion Permit

See drawings for Copies for Owner

DISPOSAL SYSTEM COMPONENTS
☑ 1. Complete Non-engineered System
☐ 2. Primitive System (graywater & all. toilet)
☐ 3. Alternative Toilet, specify:
☐ 4. Non-engineered Treatment Tank (only)
☐ 5. Holding Tank, ____ gallons
☐ 6. Non-engineered Disposal Field (only)
☐ 7. Separated Laundry System
☐ 8. Complete Engineered System (2000 gpd or more)
☐ 9. Engineered Treatment Tank (only)
☐ 10. Engineered Disposal Field (only)
☐ 11. Pre-treatment, specify:
☐ 12. Miscellaneous Components

SIZE OF PROPERTY
13.8± ☐ SQ. FT. ☑ ACRES

DISPOSAL SYSTEM TO SERVE
☐ 1. Single Family Dwelling Unit, No. of Bedrooms:
☐ 2. Multiple Family Dwelling, No. of Units:
☑ 3. Other: 40,000 ft² COMMERCIAL BLD (specify)
Current Use ☐ Seasonal ☐ Year Round ☐ Undeveloped

TYPE OF WATER SUPPLY
☐ 1. Drilled Well ☐ 2. Dug Well ☐ 3. Private
☑ 4. Public ☐ 5. Other

SHORELAND ZONING
☐ Yes ☐ No

DESIGN DETAILS (SYSTEM LAYOUT SHOWN ON PAGE 3)

TREATMENT TANK
☑ 1. Concrete
☑ a. Regular
☐ b. Low Profile
☐ 2. Plastic
☐ 3. Other:
CAPACITY: 1000 GAL.

DISPOSAL FIELD TYPE & SIZE
☐ 1. Stone Bed ☐ 2. Stone Trench
☑ 3. Proprietary Device
☐ a. cluster array ☐ c. Linear
☐ b. regular load ☐ d. H-20 load
☐ 4. Other:
SIZE: 1230 ☑ sq. ft. ☐ lin. ft.

GARBAGE DISPOSAL UNIT
☑ 1. No ☐ 2. Yes ☐ 3. Maybe
If Yes or Maybe, specify one below:
☐ a. multi-compartment tank
☐ b. ___ tanks in series
☐ c. increase in tank capacity
☐ d. Filter on Tank Outlet

DESIGN FLOW
300 gallons per day
BASED ON:
☐ 1. Table 501.1 (dwelling unit(s))
☐ 2. Table 501.2 (other facilities)
SHOW CALCULATIONS
---- for other facilites ---
20 EMPLOYEES × 15GPD = 300 gpd (NO SHOWERS)
☐ 3. Section 503.0 (meter readings)
ATTACH WATER METER DATA

SOIL DATA & DESIGN CLASS
PROFILE CONDITION DESIGN
B / D / 3
at Observation Hole # TP-1
Depth 13"
of Most Limiting Soil Factor

DISPOSAL FIELD SIZING
☐ 1. Small---2.0 sq. ft. / gpd
☐ 2. Medium---2.6 sq. ft. / gpd
☐ 3. Medium---Large 3.3 sq. f.t / gpd
☑ 4. Large---4.1 sq. ft. / gpd
☐ 5. Extra Large---5.0 sq. ft. / gpd

EFFLUENT/EJECTOR PUMP
☑ 1. Not Required
☐ 2. May Be Required
☐ 3. Required
Specify only for engineered systems:
DOSE: ____ gallons

SITE EVALUATOR STATEMENT

I certify that on 12/28/04 (date) I completed a site evaluation on this property and state that the data reported are accurate and that the proposed system is in compliance with the State of Maine Subsurface Wastewater Disposal Rules (10-144A CMR 241).

Charles H. Lyman — Site Evaluator Signature
5367 — SE #
01/05/05 — Date
for S. W. COLE ENGINEERING, INC
CHARLES H. LYMAN — Site Evaluator Name Printed
622-0600 — Telephone Number
CLYMAN@SWCOLE.COM — E-mail Address

Note: Changes to or deviations from the design should be confirmed with the Site Evaluator.

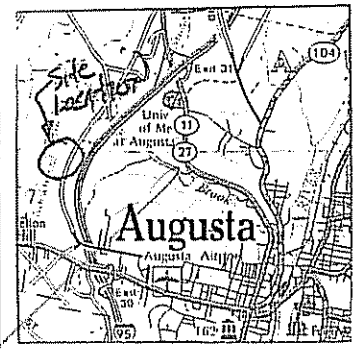
SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Department of Human Services
Division of Health Engineering
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation | Street, Road, Subdivision | Owner's Name

SITE PLAN

Scale 1" = _____ ft. or as shown



SEE ATTACHED PLANS

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown Above)

Observation Hole TP-1 ☑ Test Pit ☐ Boring

0 " Depth of Organic Horizon Above Mineral Soil

Depth Below Mineral Soil Surface (inches)	Texture	Consistency	Color	Mottling
0–10	Loamy	friable	DRK Yellowish Brn	None
10–20	Silt Loam	firm	Olive	FFD Pale Olive; FFP Lt. Olive Brn; MMD Pale Olive
20–30				
30–40	Limit of Observations			
40–50				

Soil Classification	Slope	Limiting Factor	
B Profile / D Condition	0-5 %	13"	[✓] Ground Water; [✓] Restrictive Layer; [ ] Bedrock; [ ] Pit Depth

Observation Hole TP-2 ☑ Test Pit ☐ Boring

0 " Depth of Organic Horizon Above Mineral Soil

Depth Below Mineral Soil Surface (inches)	Texture	Consistency	Color	Mottling
0–10	Loamy	friable	DRK Yellowish Brn	
10–20	Silt Loam	firm	Olive	FFP Lt. Olive Brn; MMD Pale Olive
20–30				
30–40	Limit of Observations			
40–50				

Soil Classification	Slope	Limiting Factor	
B Profile / D Condition	0-3 %	14"	[✓] Ground Water; [✓] Restrictive Layer; [ ] Bedrock; [ ] Pit Depth

Charles H Lynn — Site Evaluator Signature | S367 — SE # | 01/05/05 — Date

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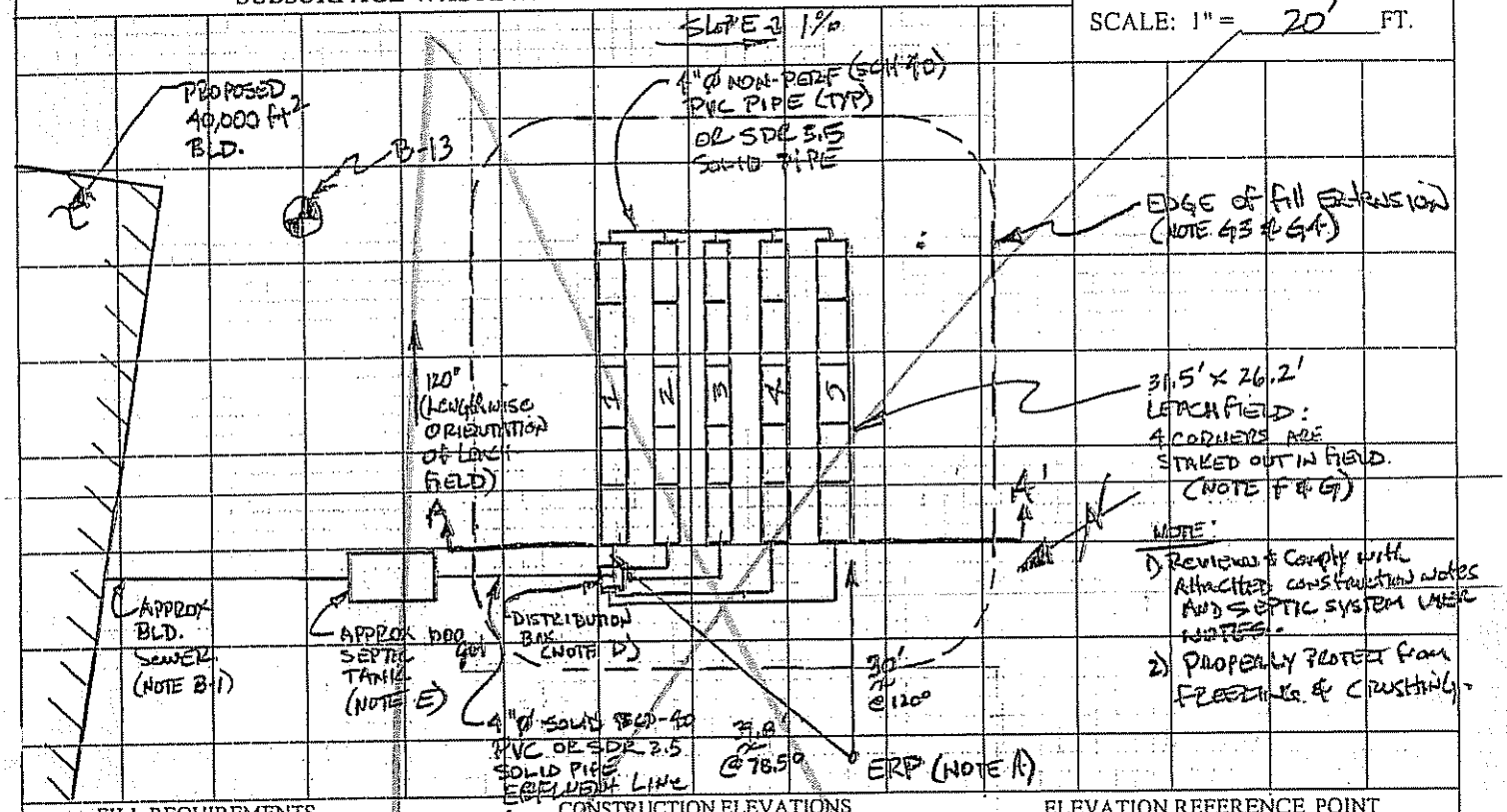
SUBSURFACE WASTEWATER DISPOSAL PLAN

SCALE: 1" = 20' FT.



FILL REQUIREMENTS

Depth of Fill (Upslope) 33"

Depth of Fill (Downslope) 36"

CONSTRUCTION ELEVATIONS

Finished Grade Elevation	+32"
Top of Distribution Pipe or Proprietary Device	+20"
Bottom of Disposal Area	+4"

ELEVATION REFERENCE POINT

Location & Description: GRADE STAKE, (GRND ELEVATION @ STAKE).

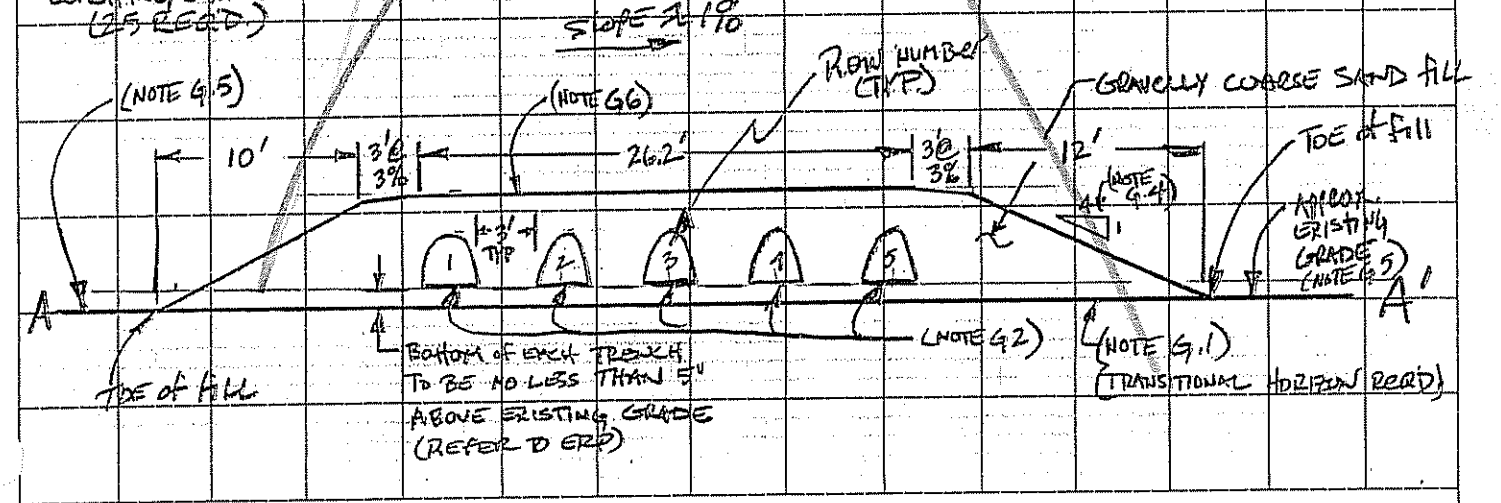
Reference Elevation: 0.0'

DISPOSAL AREA CROSS SECTION

Scale

Horizontal 1" = 5' ft.

Vertical 1" = 10' ft.



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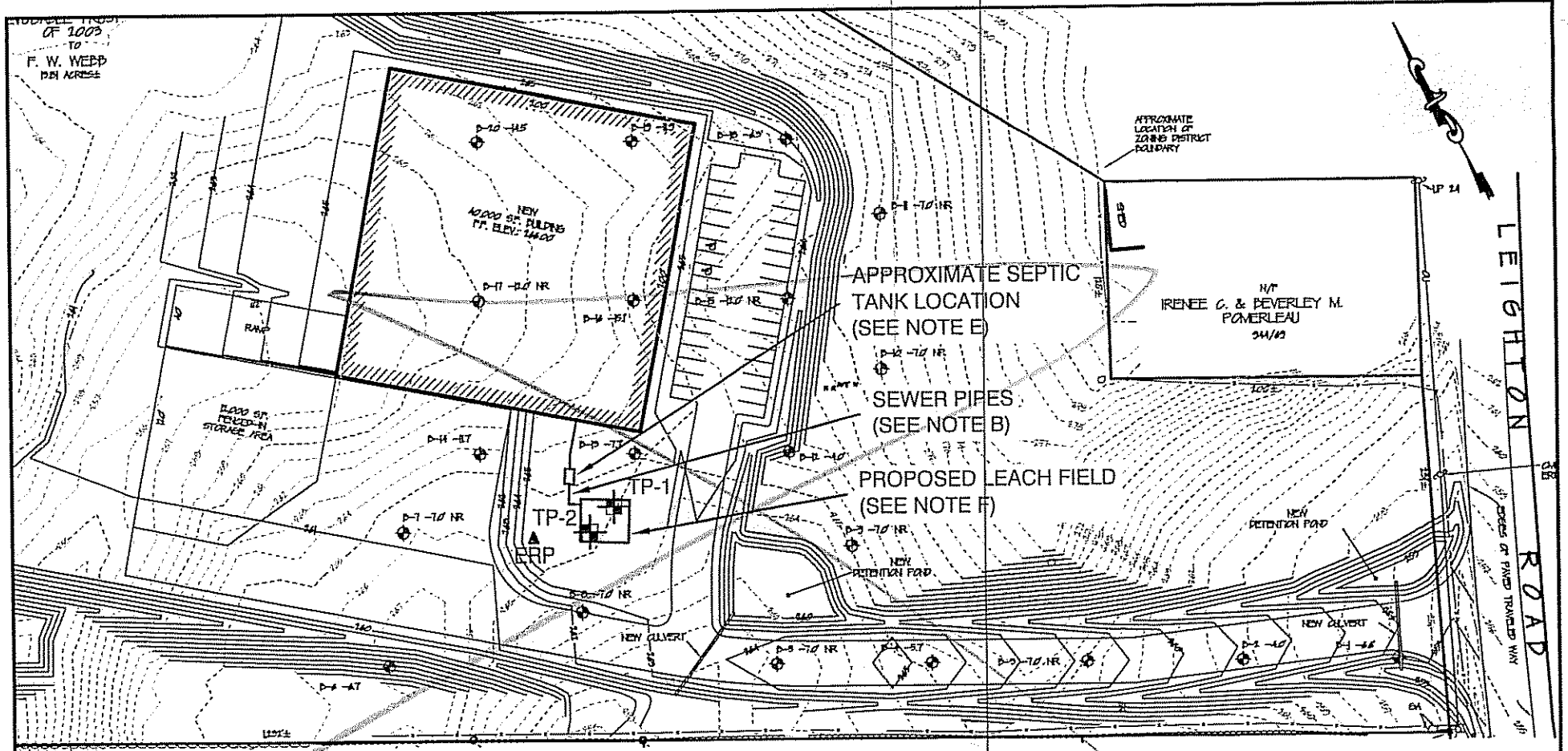

LEGEND

▲ ELEVATION REFERENCE POINT

TEST PIT LOCATION

NOTES:

1. SITE PLAN PREPARED FROM A 1"=50' SCALE PLAN OF THE SITE PROVIDED BY THAYER ENGINEERING COMPANY, INC.
2. THERE ARE NO DRINKNING WATER WELLS WITHIN 100 FEET OF SYSTEM
3. REFER TO ATTACHED SHEETS FOR DESIGN NOTES (BY LETTER) A, B, D, E, F, G & I.

S.W.COLE ENGINEERING, INC.

F.W. WEBB COMPANY

SITE PLAN

NEW LEIGHTON ROAD BUILDING
LEIGHTON ROAD
AUGUSTA, MAINE

Job No.	04-1226.1	Scale	1"=100'
Date :	01/03/05	Sheet	1

Design Notes for Subsurface Wastewater Disposal System Application (Form HHE-200)

Owner/Applicant:

NOTE:

A. Elevation Reference Point (ERP) location is described on page 3 of the HHE-200 form. It is to be used by the installer to place the bottom of the leachfield at the correct depth. Disposal area shall be no lower than indicated.

B. Sewer Pipes: Use 3" diameter (minimum) approved, watertight materials, schedule 40 PVC pipe. Insulate as necessary to protect from freezing; bury at least 1' deep, seed disturbed area.

1. Building Sewer: For gravity flow from building to septic tank, maintain minimum pitch of 1/4"/ft. (1/8"/ft. allowed with LPI's approval if using 4" diameter pipe). The building sewer may not be smaller than the building drain.

2. Effluent Line: For gravity flow below septic tank, maintain minimum pitch of 1/8"/ft. For pumped effluent, follow pump manufacturers specifications for pressurized effluent line.

C. Pump Needed: Gravity flow to disposal area not feasible. Follow manufacturer instructions for pump specifications.

D. Distribution Box (OPTIONAL): Serves as an access point to disposal area. Level box on a firm base, cover with insulation to protect from freezing.

E. Septic Tank: Setback requirements must be met when installing a septic tank. Applicable setbacks are stated on the design. Further information on setbacks can be found in the Maine Subsurface Wastewater Disposal Rules, Tables 700.2, 700.3 and 700.4.

F. Disposal Area: Setback requirements must be met when installing a disposal field. Applicable setbacks are stated on the design. Further information on setbacks can be found in the Maine Subsurface Wastewater Disposal Rules, Tables 700.2, 700.3 and 700.4.

G. Disposal Area Construction Details:

1. The vegetation in the proposed disposal area and fill extensions shall be removed. The area shall then be scarified to a depth of 6 to 8 inches, parallel to the topographic contour. If the backfill material is coarser than the original soil, a minimum of 4 inches of backfill materials must be mixed into the original soil to form a transitional horizon.

2. The disposal area bottom and distribution line shall be level with a maximum grade tolerance of 2in/100 ft.

3. Backfill Standards: Backfill material shall be a coarse sand to a gravelly coarse sand meeting the following requirements: the upper limit of rocks greater than 3" in diameter shall be approx. 5% by volume, and the backfill shall contain approx. 15% - 20% (by weight) coarse fragments (gravel).

4. The finished grade of the backfill over the disposal area shall be crowned from the center of the disposal area at a 3% slope extending 3 ft. beyond the edge of the disposal field (shoulder). The fill shall then be sloped at a uniform grade of at least 4 horizontal feet per 1 vertical foot drop (fill extension) unless specified by variance. For further information, see Tables 600.2, 600.3 and 600.4 of the Maine Subsurface Wastewater Disposal Rules.

5. The land adjacent to the disposal area shall be graded to prevent both the accumulation of surface water on or next to the disposal field, and the flow of surface water across it. Cellar and roof drains must be diverted away from the disposal area.

6. The finished disposal area and fill extensions shall be immediately seeded or sodded to establish vegetation to prevent erosion. Grasses and herbaceous plant material are acceptable for use over disposal fields. Woody plant material (trees and shrubs) are not acceptable on the disposal field area but may be used with herbaceous plant materials in the fill extensions. See sections 806.4 of the Maine Subsurface Wastewater Disposal Rules for specifications.

H. Bed or Trench Disposal Area Construction Details:

1. Disposal area stone depth shall extend at least 7" beneath the bottom and 1" above the top of the distribution pipes. Stone shall be washed before delivery to the site, uniform in size and free of fines, dust, clay or ashes. It shall be no smaller than 3/4" and no larger than 2 1/2" in size. See section 805.2 of the Maine Subsurface Wastewater Disposal Rules for stone requirements.

2. The disposal field stone shall be covered with a layer of filter fabric or 2" of compressed hay as the laying of the distribution pipes progresses. See section 805.3 of the Maine Subsurface Wastewater Disposal Rules for fabric requirements.

3. A minimum of 8" of backfill is required above the filter fabric or hay. This includes a cover material of 4" of soil/soil amendment mix suitable for the establishment of a good vegetative cover. See section 804.2 of the Maine Subsurface Wastewater Disposal Rules for cover requirements.

I. Chamber Disposal Area Construction Details: Install approved chambers in accordance with manufacturer specifications and Appendix B of the Maine Subsurface Wastewater Disposal Rules.

SEPTIC SYSTEM USER NOTES

1. This septic system has been designed to meet requirements of the State of Maine Subsurface Wastewater Disposal Rules, 10-144A CMR 241. Because site evaluators are not notified when local ordinances are enacted which exceed state requirements, it is the septic system owners responsibility to ensure that this septic system design (HHE-200 form) is in compliance with applicable local ordinances. This can be done by contacting your local plumbing inspector and asking about local ordinances which differ from those required in the Rules.

2. It is the septic system owner's responsibility to obtain any local, state, or federal permit(s) that may be required for the installation of this septic system (work within or adjacent to a wetland may require a state and/or federal permit). Contact the Maine Department of Environmental Protection at 287-2111 and the Army Corps of Engineers at 623-8367 if you have any questions.

3. The use of a garbage grinder on a septic system is not recommended. Depending on use patterns, they can contribute a significant amount of particulate matter and grease to the system. Excessive use may result in premature failure. If a garbage grinder is to be used, additional septic tank capacity, a multi compartment septic tank is required, and/or more frequent septic tank pumping is recommended.

4. For new construction, it is recommended that the septic system owner install low volume toilets (1 1/2 gallons per flush or less) and other flow reducing fixtures such as low volume shower heads and faucets to minimize water consumption. A reduction in water usage will generally result in extended life of your septic system.

5. It is the septic system owner's responsibility to limit water consumption and wastewater generation so that the septic system design capacity (design flow on the HHE-200 form) is not exceeded on any day. Activities which generate large amounts of wastewater should be spread out over several days where possible. Excessive use of a septic system on any day can cause the system to fail even though your use, averaged over a week or month, is below design volume.

6. Do not connect floor or roof drains to a septic system. Your septic system is not designed to handle this water and it will likely cause premature failure.

7. Do not dispose of backwash from water softeners or water treatment devices in your septic system. Large amounts of water can be generated from these devices which can overload a septic system.

8. Do not dispose of any hazardous or toxic substances in a septic system such as paint thinner, paints, varnishes, photographic solutions, pesticides, insecticides, organic solvents or degreasers and drain openers. Septic systems depend on living organisms to function properly. Toxic or hazardous material can, in effect, "kill" the system and are a threat to pollution of surface or groundwater resources. Instead of using a commercial degreaser or drain opener, which an be toxic, use one of the following:

    A. A plunger or mechanical snake; or
    B. Pour one handful of baking soda and 1/2 cup of white vinegar down the drainpipe and cover tightly for one minute. Repeat as necessary; or

C. Pour 1/2 cup salt and 1/2 cup baking soda down the drain followed by 6 cups of boiling water. Let sit for several hours or overnight, then flush with water.

9. Do not dispose of any inert or non-biodegradable substances into your septic system such as disposable diapers, cat box litter, coffee grounds, cigarette filters, sanitary napkins, facial tissues and wet strength paper towels.

10. Do not dispose of large quantities of fats or grease into your septic system unless an external grease trap has been designed for that purpose. Generally, an internal grease trap is inadequate to handle excessive amounts of grease or fat.

11. Do not add any septic tank cleaner or additive to your septic system to improve its function or prolong its useful operating life (this includes yeast, horse manure or commercial products). No effective product or material is recognized by State authorities and, in fact, some of these products can actually cause your septic system to fail.

12. Maintain your septic system by regularly having the septic tank pumped. Some biological breakdown of solids and grease occurs in septic tanks but the rate of accumulation virtually always exceeds the rate of biologic breakdown. If your septic tank is not pumped out often enough, solids and greases may build up to the point where they enter your disposal areas. Once this material reaches the disposal area, it will clog the soil surface and likely cause premature failure.

13. We recommend having your septic tank pumped or inspected after one year of use. The pumper can advise you of how often you need to have the septic tank pumped based on what he finds at this inspection (typically a septic tank will need to be pumped every two to five years). Keep in mind that you will need to adjust pumping frequency to coincide with changes in the way you use your system. The more your septic system is used, the more frequently that the septic tank should be pumped.

14. Do not drive over or store heavy materials on any part of your septic system unless it is specifically designed to handle heavy loads. Otherwise, crushed components may be the result and the system may fail.

15. Divert all surface water away from the septic tank and disposal area. Roof areas which contribute runoff water to the septic system site should have gutters installed to divert that water to another location.

16. PLEASE – If you have any questions about your septic system or how to use it, call me (848-5714) and ask for advice. You can also call the State Agency responsible for regulating septic systems, the plumbing program in the Division of Health Engineering, at 287-5689.

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Division of Health Engineering, 10 SHS
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PROPERTY LOCATION

City, Town, Plantation	AUGUSTA
Street or Road	LEIGHTON ROAD
Subdivision, Lot #	

>> CAUTION: PERMIT REQUIRED - ATTACH IN SPACE BELOW <<

The Subsurface Wastewater Disposal System *shall not* be installed until a Permit is attached HERE by the Local Plumbing Inspector. The Permit shall authorize the owner or installer to install the disposal system in accordance with this application and the Maine Subsurface Wastewater Disposal Rules.

OWNER/APPLICANT INFORMATION

Name (last, first, MI): THOMPSON, TOM (F.W. Webb Co.) ☐ Owner ☑ Applicant

Mailing Address of Owner/Applicant: 34 LEIGHTON RD, AUGUSTA, ME

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Local Plumbing Inspector Signature _____ (1st) date approved _____ (2nd) date approved Apr. 3, 06

PERMIT INFORMATION

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☑ 1. First Time System
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PROFILE CONDITION DESIGN
B 1 D 1 3
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Depth 13"
of Most Limiting Soil Factor

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☐ 3. Medium---Large 3.3 sq. ft / gpd
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☐ 5. Extra Large---5.0 sq. ft. / gpd

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☐ 1. Not Required
☐ 2. May Be Required
☑ 3. Required
Specify only for engineered systems:
DOSE: _____ gallons

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Charles H. Lyman	5367	01/05/05 Revised 3/29/06 CHL Revised 4/19/06 CHL
Site Evaluator Signature	SE #	Date
CHARLES H LYMAN	622-0600	for S.W. COLE ENGINEERING, INC CLYMAN@SWCOLE.COM
Site Evaluator Name Printed	Telephone Number	E-mail Address

Note: Changes to or deviations from the design should be confirmed with the Site Evaluator.

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AUGUSTA	LEIGHTON RD	F.W. WEBB

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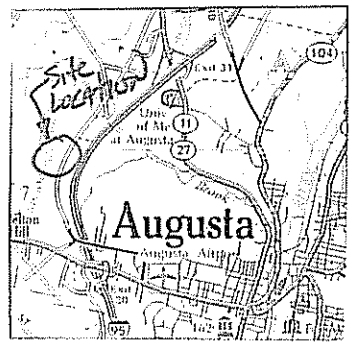

SEE ATTACHED PLAN

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown Above)

Observation Hole TP-1 ☑ Test Pit ☐ Boring
0 " Depth of Organic Horizon Above Mineral Soil

Depth Below Mineral Soil Surface (inches)	Texture	Consistency	Color	Mottling
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10–20	SILT LOAM	FIRM	DRK. Yellowish BRN; olive	FMD Pale olive; FFP lt. olive BRN; MMD Pale olive
30				LIMIT of OBSERVATIONS
40				
50				

Soil Classification	Slope	Limiting Factor	
B Profile / D Condition	0-3 %	13 "	☑ Ground Water; ☑ Restrictive Layer; [ ] Bedrock; [ ] Pit Depth

Observation Hole TP-2 ☑ Test Pit ☐ Boring
0 " Depth of Organic Horizon Above Mineral Soil

Depth Below Mineral Soil Surface (inches)	Texture	Consistency	Color	Mottling
0–10	LOAM	friable	DRK. Yellowish BRN	
10–20	SILT LOAM	FIRM	olive; olive	FFP lt. olive BRN; MMD Pale olive
30				LIMIT of OBSERVATIONS
40				
50				

Soil Classification	Slope	Limiting Factor	
B Profile / D Condition	0-3 %	14 "	☑ Ground Water; ☑ Restrictive Layer; [ ] Bedrock; [ ] Pit Depth

Charles H Lyman — Site Evaluator Signature
5367 — SE #
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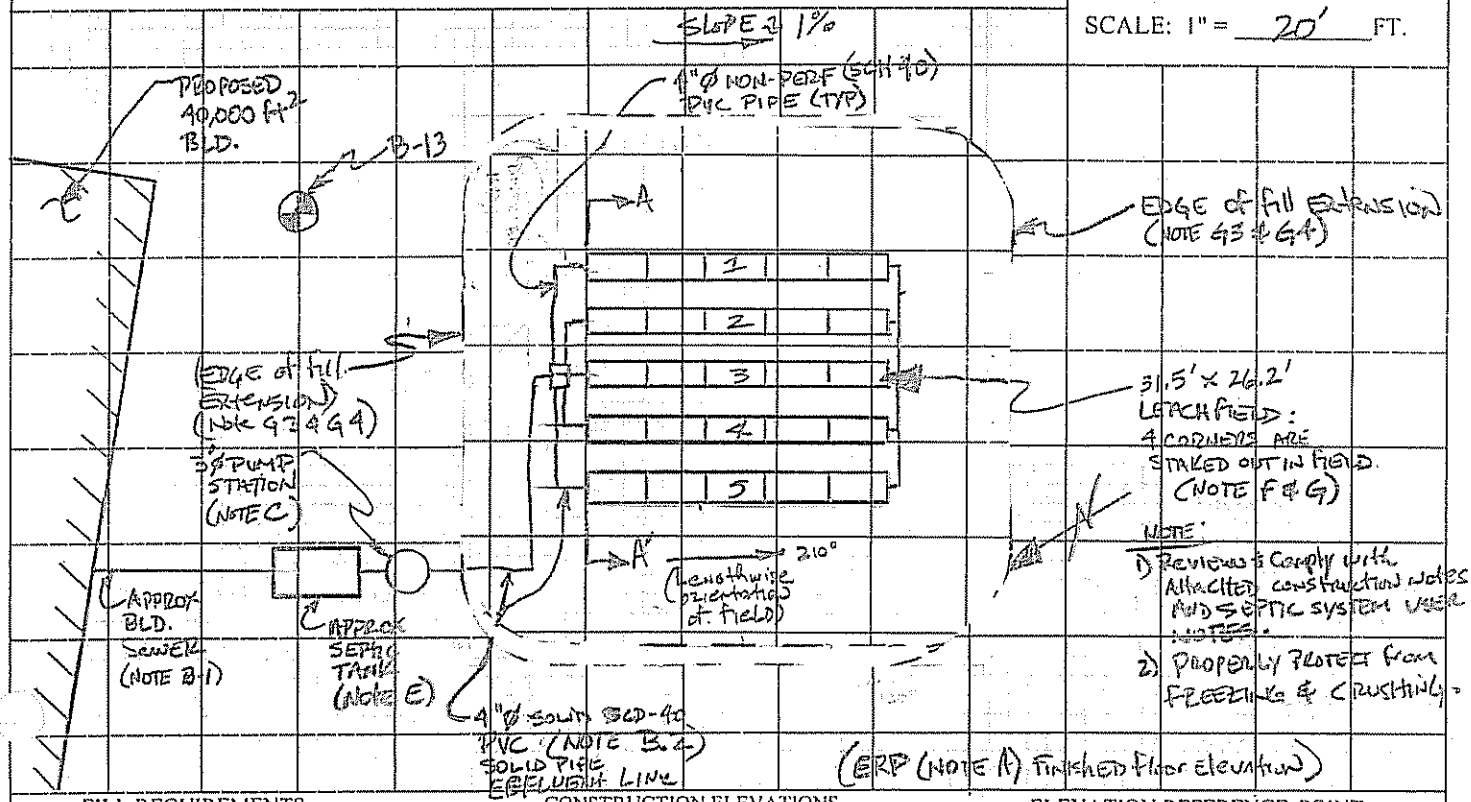
AUGUSTA	LEIGHTON RD	F.W. WEBB

SUBSURFACE WASTEWATER DISPOSAL PLAN

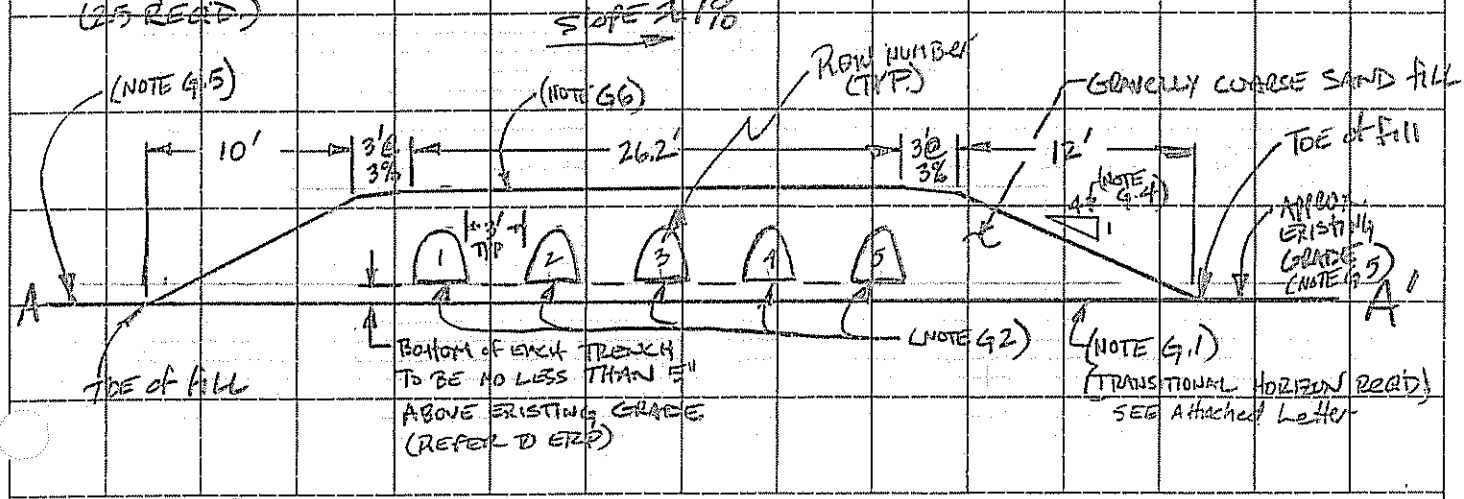
SCALE: 1" = 20' FT.



FILL REQUIREMENTS		CONSTRUCTION ELEVATIONS		ELEVATION REFERENCE POINT
Depth of Fill (Upslope)	3.3'	Finished Grade Elevation	267.5'	Location & Description: Finished floor elevation
Depth of Fill (Downslope)	3.3'	Top of Distribution Pipe or Proprietary Device	266.5'	Reference Elevation: 2106'
		Bottom of Disposal Area	265.4'	

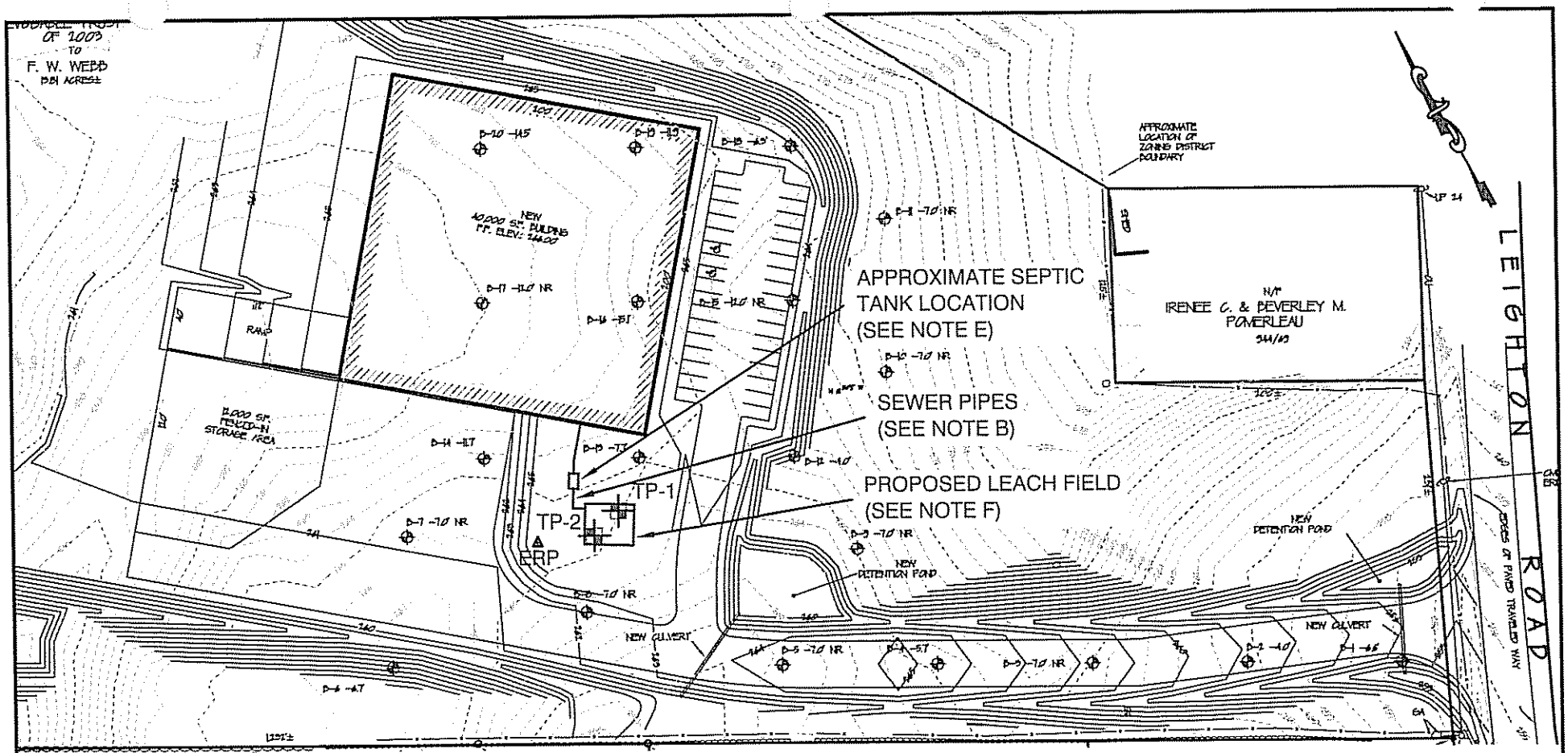
DISPOSAL AREA CROSS SECTION

Scale
Horizontal 1" = 5' ft.
Vertical 1" = 10' ft.



Charles H. Lyons — S367 — 01/05/05
Site Evaluator Signature — SE # — Date

Note: Revised orientation of Leachfield



LEGEND

△ ELEVATION REFERENCE POINT

⌖ TEST PIT LOCATION

NOTES:

1. SITE PLAN PREPARED FROM A 1"=50' SCALE PLAN OF THE SITE PROVIDED BY THAYER ENGINEERING COMPANY, INC.

2. THERE ARE NO DRINKNING WATER WELLS WITHIN 100 FEET OF SYSTEM

3. REFER TO ATTACHED SHEETS FOR DESIGN NOTES (BY LETTER) A, B, D, E, F, G & I.

S.W.COLE ENGINEERING, INC.

F.W. WEBB COMPANY

SITE PLAN

NEW LEIGHTON ROAD BUILDING
LEIGHTON ROAD
AUGUSTA, MAINE

Job No.	04-1226.1	Scale	1"=100'
Date :	01/03/05	Sheet	1

Design Notes for Subsurface Wastewater Disposal System Application (Form HHE-200)

Owner/Applicant:

NOTE:

A. Elevation Reference Point (ERP) location is described on page 3 of the HHE-200 form. It is to be used by the installer to place the bottom of the leachfield at the correct depth. Disposal area shall be no lower than indicated.

B. Sewer Pipes: Use 3" diameter (minimum) approved, watertight materials, schedule 40 PVC pipe. Insulate as necessary to protect from freezing; bury at least 1' deep, seed disturbed area.

1. Building Sewer: For gravity flow from building to septic tank, maintain minimum pitch of 1/4"/ft. (1/8"/ft. allowed with LPI's approval if using 4" diameter pipe). The building sewer may not be smaller than the building drain.

2. Effluent Line: For gravity flow below septic tank, maintain minimum pitch of 1/8"/ft. For pumped effluent, follow pump manufacturers specifications for pressurized effluent line.

C. Pump Needed: Gravity flow to disposal area not feasible. Follow manufacturer instructions for pump specifications.

D. Distribution Box (OPTIONAL): Serves as an access point to disposal area. Level box on a firm base, cover with insulation to protect from freezing.

E. Septic Tank: Setback requirements must be met when installing a septic tank. Applicable setbacks are stated on the design. Further information on setbacks can be found in the Maine Subsurface Wastewater Disposal Rules, Tables 700.2, 700.3 and 700.4.

F. Disposal Area: Setback requirements must be met when installing a disposal field. Applicable setbacks are stated on the design. Further information on setbacks can be found in the Maine Subsurface Wastewater Disposal Rules, Tables 700.2, 700.3 and 700.4.

G. Disposal Area Construction Details:

1. The vegetation in the proposed disposal area and fill extensions shall be removed. The area shall then be scarified to a depth of 6 to 8 inches, parallel to the topographic contour. If the backfill material is coarser than the original soil, a minimum of 4 inches of backfill materials must be mixed into the original soil to form a transitional horizon.

2. The disposal area bottom and distribution line shall be level with a maximum grade tolerance of 2in/100 ft.

3. Backfill Standards: Backfill material shall be a coarse sand to a gravelly coarse sand meeting the following requirements: the upper limit of rocks greater than 3" in diameter shall be approx. 5% by volume, and the backfill shall contain approx. 15% - 20% (by weight) coarse fragments (gravel).

4. The finished grade of the backfill over the disposal area shall be crowned from the center of the disposal area at a 3% slope extending 3 ft. beyond the edge of the disposal field (shoulder). The fill shall then be sloped at a uniform grade of at least 4 horizontal feet per 1 vertical foot drop (fill extension) unless specified by variance. For further information, see Tables 600.2, 600.3 and 600.4 of the Maine Subsurface Wastewater Disposal Rules.

5. The land adjacent to the disposal area shall be graded to prevent both the accumulation of surface water on or next to the disposal field, and the flow of surface water across it. Cellar and roof drains must be diverted away from the disposal area.

6. The finished disposal area and fill extensions shall be immediately seeded or sodded to establish vegetation to prevent erosion. Grasses and herbaceous plant material are acceptable for use over disposal fields. Woody plant material (trees and shrubs) are not acceptable on the disposal field area but may be used with herbaceous plant materials in the fill extensions. See sections 806.4 of the Maine Subsurface Wastewater Disposal Rules for specifications.

H. Bed or Trench Disposal Area Construction Details:

1. Disposal area stone depth shall extend at least 7" beneath the bottom and 1" above the top of the distribution pipes. Stone shall be washed before delivery to the site, uniform in size and free of fines, dust, clay or ashes. It shall be no smaller than 3/4" and no larger than 2 1/2" in size. See section 805.2 of the Maine Subsurface Wastewater Disposal Rules for stone requirements.

2. The disposal field stone shall be covered with a layer of filter fabric or 2" of compressed hay as the laying of the distribution pipes progresses. See section 805.3 of the Maine Subsurface Wastewater Disposal Rules for fabric requirements.

3. A minimum of 8" of backfill is required above the filter fabric or hay. This includes a cover material of 4" of soil/soil amendment mix suitable for the establishment of a good vegetative cover. See section 804.2 of the Maine Subsurface Wastewater Disposal Rules for cover requirements.

I. Chamber Disposal Area Construction Details: Install approved chambers in accordance with manufacturer specifications and Appendix B of the Maine Subsurface Wastewater Disposal Rules.

SEPTIC SYSTEM USER NOTES

1. This septic system has been designed to meet requirements of the State of Maine Subsurface Wastewater Disposal Rules, 10-144A CMR 241. Because site evaluators are not notified when local ordinances are enacted which exceed state requirements, it is the septic system owners responsibility to ensure that this septic system design (HHE-200 form) is in compliance with applicable local ordinances. This can be done by contacting your local plumbing inspector and asking about local ordinances which differ from those required in the Rules.

2. It is the septic system owner's responsibility to obtain any local, state, or federal permit(s) that may be required for the installation of this septic system (work within or adjacent to a wetland may require a state and/or federal permit). Contact the Maine Department of Environmental Protection at 287-2111 and the Army Corps of Engineers at 623-8367 if you have any questions.

3. The use of a garbage grinder on a septic system is not recommended. Depending on use patterns, they can contribute a significant amount of particulate matter and grease to the system. Excessive use may result in premature failure. If a garbage grinder is to be used, additional septic tank capacity, a multi compartment septic tank is required, and/or more frequent septic tank pumping is recommended.

4. For new construction, it is recommended that the septic system owner install low volume toilets (1 1/2 gallons per flush or less) and other flow reducing fixtures such as low volume shower heads and faucets to minimize water consumption. A reduction in water usage will generally result in extended life of your septic system.

5. It is the septic system owner's responsibility to limit water consumption and wastewater generation so that the septic system design capacity (design flow on the HHE-200 form) is not exceeded <u>on any day</u>. Activities which generate large amounts of wastewater should be spread out over several days where possible. Excessive use of a septic system on any day can cause the system to fail even though your use, averaged over a week or month, is below design volume.

6. Do not connect floor or roof drains to a septic system. Your septic system is not designed to handle this water and it will likely cause premature failure.

7. Do not dispose of backwash from water softeners or water treatment devices in your septic system. Large amounts of water can be generated from these devices which can overload a septic system.

8. Do not dispose of any hazardous or toxic substances in a septic system such as paint thinner, paints, varnishes, photographic solutions, pesticides, insecticides, organic solvents or degreasers and drain openers. Septic systems depend on living organisms to function properly. Toxic or hazardous material can, in effect, "kill" the system and are a threat to pollution of surface or groundwater resources. Instead of using a commercial degreaser or drain opener, which an be toxic, use one of the following:

    A. A plunger or mechanical snake; or
    B. Pour one handful of baking soda and 1/2 cup of white vinegar down the drainpipe and cover tightly for one minute. Repeat as necessary; or

C. Pour 1/2 cup salt and 1/2 cup baking soda down the drain followed by 6 cups of boiling water. Let sit for several hours or overnight, then flush with water.

9. Do not dispose of any inert or non-biodegradable substances into your septic system such as disposable diapers, cat box litter, coffee grounds, cigarette filters, sanitary napkins, facial tissues and wet strength paper towels.

10. Do not dispose of large quantities of fats or grease into your septic system unless an external grease trap has been designed for that purpose. Generally, an internal grease trap is inadequate to handle excessive amounts of grease or fat.

11. Do not add any septic tank cleaner or additive to your septic system to improve its function or prolong its useful operating life (this includes yeast, horse manure or commercial products). No effective product or material is recognized by State authorities and, in fact, some of these products can actually cause your septic system to fail.

12. Maintain your septic system by regularly having the septic tank pumped. Some biological breakdown of solids and grease occurs in septic tanks but the rate of accumulation virtually always exceeds the rate of biologic breakdown. If your septic tank is not pumped out often enough, solids and greases may build up to the point where they enter your disposal areas. Once this material reaches the disposal area, it will clog the soil surface and likely cause premature failure.

13. We recommend having your septic tank pumped or inspected after one year of use. The pumper can advise you of how often you need to have the septic tank pumped based on what he finds at this inspection (typically a septic tank will need to be pumped every two to five years). Keep in mind that you will need to adjust pumping frequency to coincide with changes in the way you use your system. The more your septic system is used, the more frequently that the septic tank should be pumped.

14. Do not drive over or store heavy materials on any part of your septic system unless it is specifically designed to handle heavy loads. Otherwise, crushed components may be the result and the system may fail.

15. Divert all surface water away from the septic tank and disposal area. Roof areas which contribute runoff water to the septic system site should have gutters installed to divert that water to another location.

16. PLEASE – If you have any questions about your septic system or how to use it, call me (848-5714) and ask for advice. You can also call the State Agency responsible for regulating septic systems, the plumbing program in the Division of Health Engineering, at 287-5689.