#91

TITLE 5
OFFICIAL INSPECTION FOR - NOT FOR VOLUNTARY ASSESSMENTS
SUBSURFACE SEWAGE DISPOSAL SYSTEM FORM
PART A
CERTIFICATION

Property Address: 91 State Street, Amherst MA

Owner's Name: Tomlan Properties
Owner's Address: POB 327
Amhest, MA 01002
Date of Inspection: December 7, 2001

Name of Inspector: *Alan E. Weiss, R.S # 933*
Company Name: *Cold Spring Environmental Inc.*
Mailing Address: *350 Old Enfield Road*
Belchertown, Massachusetts 01007
Telephone Number: (413) 323-5957 fax: 413-323-4916

CERTIFICATION STATEMENT

I certify that I have personally inspected the sewage disposal system at this address and that the information reported below is true, accurate and complete as of the time of the inspection. The inspection was performed based on my training and experience in the proper function and maintenance of on site sewage disposal systems. **I am a DEP approved system inspector pursuant to Section 15.340 of Title 5 (310 CMR 15.000).** The system:

XX Passes
___Conditionally Passes
____ Needs Further Evaluation by the Local Approving Authority
___Fails

Inspector's Signature: _____ **Date: December 7, 2001**

The system inspector shall submit a copy of this inspection report to the Approving Authority (Board of Health or DEP) within 30 days of completing this inspection. If the system is a shared system or has a design flow of 10,000 gpd or greater, the inspector and the system owner shall submit the report to the appropriate regional office of the DEP. The original should be sent to the system owner and copies sent to the buyer, if applicable, and the approving authority.

Notes and Comments:

Septic Tank, leaching area was in good condition upon inspection. D. box was level, and had no carry over, D. box liquid levels were not above any outlet inverts. Stone was good in trench area.

****This report only describes conditions at the time of inspection and under the conditions of use at that time. This inspection does not address how the system will perform in the future under the same different conditions of use.**

OFFICIAL INSPECTION FORM – NOT FOR VOLUNTARY ASSESSMENTS
SUBSURFACE SEWAGE DISPOSAL SYSTEM INSPECTION FORM
PART A
CERTIFICATION (continued)

Property Address: 91 State St

Owner: TOMLAN Prop.
Date of Inspection: 12/7/01

Inspection Summary: Check A,B,C,D or E / ALWAYS complete all of Section D

A. System Passes:

Yes I have not found any information which indicates that any of the failure criteria described in 310 CMR 15.303 or in 310 CMR 15.304 exist. Any failure criteria not evaluated are indicated below.

Comments:

B. System Conditionally Passes:

No One or more system components as described in the "Conditional Pass" section need to be replaced or repaired. The system, upon completion of the replacement or repair, as approved by the Board of Health, will pass.

Answer yes, no or not determined (Y,N,ND) in the ____ for the following statements. If "not determined" please explain.

_____ The septic tank is metal and over 20 years old* or the septic tank (whether metal or not) is structurally unsound, exhibits substantial infiltration or exfiltration or tank failure is imminent. System will pass inspection if the existing tank is replaced with a complying septic tank as approved by the Board of Health.
*A metal septic tank will pass inspection if it is structurally sound, not leaking and if a Certificate of Compliance indicating that the tank is less than 20 years old is available.

ND explain:

_____ Observation of sewage backup or break out or high static water level in the distribution box due to broken or obstructed pipe(s) or due to a broken, settled or uneven distribution box. System will pass inspection if (with approval of Board of Health):

____ broken pipe(s) are replaced
____ obstruction is removed
____ distribution box is leveled or replaced

ND explain:

_____ The system required pumping more than 4 times a year due to broken or obstructed pipe(s). The system will pass inspection if (with approval of the Board of Health):

____ broken pipe(s) are replaced
____ obstruction is removed

ND explain:

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SUBSURFACE SEWAGE DISPOSAL SYSTEM INSPECTION FORM
PART A
CERTIFICATION (continued)

Property Address: 91 State St.

Owner: TOMCAN

Date of Inspection: 12/7/01

C. Further Evaluation is Required by the Board of Health:

No Conditions exist which require further evaluation by the Board of Health in order to determine if the system is failing to protect public health, safety or the environment.

1. **System will pass unless Board of Health determines in accordance with 310 CMR 15.303(1)(b) that the system is not functioning in a manner which will protect public health, safety and the environment:**

___ Cesspool or privy is within 50 feet of a surface water
___ Cesspool or privy is within 50 feet of a bordering vegetated wetland or a salt marsh

2. **System will fail unless the Board of Health (and Public Water Supplier, if any) determines that the system is functioning in a manner that protects the public health, safety and environment:**

___ The system has a septic tank and soil absorption system (SAS) and the SAS is within 100 feet of a surface water supply or tributary to a surface water supply.

___ The system has a septic tank and SAS and the SAS is within a Zone 1 of a public water supply.

___ The system has a septic tank and SAS and the SAS is within 50 feet of a private water supply well.

___ The system has a septic tank and SAS and the SAS is less than 100 feet but 50 feet or more from a private water supply well**. Method used to determine distance _____

**This system passes if the well water analysis, performed at a DEP certified laboratory, for coliform bacteria and volatile organic compounds indicates that the well is free from pollution from that facility and the presence of ammonia nitrogen and nitrate nitrogen is equal to or less than 5 ppm, provided that no other failure criteria are triggered. A copy of the analysis must be attached to this form.

3. **Other:**

_____
_____
_____

OFFICIAL INSPECTION FORM – NOT FOR VOLUNTARY ASSESSMENTS
SUBSURFACE SEWAGE DISPOSAL SYSTEM INSPECTION FORM
PART A
CERTIFICATION (continued)

Property Address: 91 State

Owner: TOMLeN

Date of Inspection: 12/7/01

D. System Failure Criteria applicable to all systems:
You must indicate "yes" or "no" to each of the following for all inspections:

Yes No

___ No Backup of sewage into facility or system component due to overloaded or clogged SAS or cesspool

___ No Discharge or ponding of effluent to the surface of the ground or surface waters due to an overloaded or clogged SAS or cesspool

___ No Static liquid level in the distribution box above outlet invert due to an overloaded or clogged SAS or cesspool

___ No Liquid depth in cesspool is less than 6" below invert or available volume is less than ½ day flow

___ No Required pumping more than 4 times in the last year NOT due to clogged or obstructed pipe(s). Number of times pumped ____.

___ No Any portion of the SAS, cesspool or privy is below high ground water elevation.

___ No Any portion of cesspool or privy is within 100 feet of a surface water supply or tributary to a surface water supply.

___ No Any portion of a cesspool or privy is within a Zone 1 of a public well.

___ No Any portion of a cesspool or privy is within 50 feet of a private water supply well.

___ No Any portion of a cesspool or privy is less than 100 feet but greater than 50 feet from a private water supply well with no acceptable water quality analysis. [This system passes if the well water analysis, performed at a DEP certified laboratory, for coliform bacteria and volatile organic compounds indicates that the well is free from pollution from that facility and the presence of ammonia nitrogen and nitrate nitrogen is equal to or less than 5 ppm, provided that no other failure criteria are triggered. A copy of the analysis must be attached to this form.]

No (Yes/No) The system fails. I have determined that one or more of the above failure criteria exist as described in 310 CMR 15.303, therefore the system fails. The system owner should contact the Board of Health to determine what will be necessary to correct the failure.

E. Large Systems:
To be considered a large system the system must serve a facility with a design flow of 10,000 gpd to 15,000 gpd.
You must indicate either "yes" or "no" to each of the following:
(The following criteria apply to large systems in addition to the criteria above)

yes no

___ ___ the system is within 400 feet of a surface drinking water supply

___ ___ the system is within 200 feet of a tributary to a surface drinking water supply

___ ___ the system is located in a nitrogen sensitive area (Interim Wellhead Protection Area – IWPA) or a mapped Zone II of a public water supply well

If you have answered "yes" to any question in Section E the system is considered a significant threat, or answered "yes" in Section D above the large system has failed. The owner or operator of any large system considered a significant threat under Section E or failed under Section D shall upgrade the system in accordance with 310 CMR 15.304. The system owner should contact the appropriate regional office of the Department.

OFFICIAL INSPECTION FORM – NOT FOR VOLUNTARY ASSESSMENTS
SUBSURFACE SEWAGE DISPOSAL SYSTEM INSPECTION FORM
PART C
SYSTEM INFORMATION

Property Address: 91 STATE

Owner: TOMLAN Prop.
Date of Inspection: 12/7/01

FLOW CONDITIONS

RESIDENTIAL
Number of bedrooms (design): 3 Number of bedrooms (actual): 3
DESIGN flow based on 310 CMR 15.203 (for example: 110 gpd x # of bedrooms): 330
Number of current residents: 4
Does residence have a garbage grinder (yes or (no)): ___
Is laundry on a separate sewage system (yes or (no)) ___ [if yes separate inspection required]
Laundry system inspected (yes or no): ___
Seasonal use: (yes or no): No
Water meter readings, if available (last 2 years usage (gpd)): _____
Sump pump (yes or no): N
Last date of occupancy: Current

COMMERCIAL/INDUSTRIAL
Type of establishment: N/A
Design flow (based on 310 CMR 15.203): _____ gpd
Basis of design flow (seats/persons/sqft,etc.): _____
Grease trap present (yes or no): ___
Industrial waste holding tank present (yes or no): ___
Non-sanitary waste discharged to the Title 5 system (yes or no): ___
Water meter readings, if available: _____
Last date of occupancy/use: _____

OTHER (describe): _____

GENERAL INFORMATION

Pumping Records
Source of information: Pumper
Was system pumped as part of the inspection ((yes) or no): ___
If yes, volume pumped: _____ gallons -- How was quantity pumped determined? _____
Reason for pumping: _____

TYPE OF SYSTEM
✓ Septic tank, distribution box, soil absorption system
___ Single cesspool
___ Overflow cesspool
___ Privy
___ Shared system (yes or no) (if yes, attach previous inspection records, if any)
___ Innovative/Alternative technology. Attach a copy of the current operation and maintenance contract (to be obtained from system owner)
___ Tight tank ___ Attach a copy of the DEP approval

___ Other (describe): _____

Approximate age of all components, date installed (if known) and source of information:
3 yrs. (1998) - No permit papers at Health Dept.

Were sewage odors detected when arriving at the site (yes or no): No

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PART B
CHECKLIST

Property Address: 91 STATE

Owner: TOMLAN PROP.

Date of Inspection: 12/7/01

Check if the following have been done. You must indicate "yes" or "no" as to each of the following:

Yes No

yes ___ Pumping information was provided by the owner, occupant, or Board of Health

___ No Were any of the system components pumped out in the previous two weeks ?

yes ___ Has the system received normal flows in the previous two week period ?

___ No Have large volumes of water been introduced to the system recently or as part of this inspection ?

yes ___ Were as built plans of the system obtained and examined? (If they were not available note as N/A)

yes ___ Was the facility or dwelling inspected for signs of sewage back up ?

yes ___ Was the site inspected for signs of break out ?

yes ___ Were all system components, excluding the SAS, located on site ?

yes ___ Were the septic tank manholes uncovered, opened, and the interior of the tank inspected for the condition of the baffles or tees, material of construction, dimensions, depth of liquid, depth of sludge and depth of scum ?

yes ___ Was the facility owner (and occupants if different from owner) provided with information on the proper maintenance of subsurface sewage disposal systems ?

The size and location of the Soil Absorption System (SAS) on the site has been determined based on:

Yes no

yes ___ Existing information. For example, a plan at the Board of Health.

yes ___ Determined in the field (if any of the failure criteria related to Part C is at issue approximation of distance is unacceptable) [310 CMR 15.302(3)(b)]

OFFICIAL INSPECTION FORM – NOT FOR VOLUNTARY ASSESSMENTS
SUBSURFACE SEWAGE DISPOSAL SYSTEM INSPECTION FORM
PART C
SYSTEM INFORMATION (continued)

Property Address: 91 STATE

Owner: TOMLAN PROP.
Date of Inspection: 12/7/01

BUILDING SEWER (locate on site plan)

Depth below grade: 14"
Materials of construction: ___cast iron ✓ 40 PVC ___other (explain): _____
Distance from private water supply well or suction line: _____
Comments (on condition of joints, venting, evidence of leakage, etc.):
_____

SEPTIC TANK: yes (locate on site plan)

Depth below grade: 16"
Material of construction: ✓ concrete ___metal ___fiberglass ___polyethylene
___other(explain)_____
If tank is metal list age: ___ Is age confirmed by a Certificate of Compliance (yes or no): ___ (attach a copy of certificate)
Dimensions: 10' x 5.5' x 4.5' D
Sludge depth: 4"
Distance from top of sludge to bottom of outlet tee or baffle: 36
Scum thickness: 4"
Distance from top of scum to top of outlet tee or baffle: 6"
Distance from bottom of scum to bottom of outlet tee or baffle: 10"
How were dimensions determined: Meas.
Comments (on pumping recommendations, inlet and outlet tee or baffle condition, structural integrity, liquid levels as related to outlet invert, evidence of leakage, etc.):
Good Condition
_____

GREASE TRAP: N (locate on site plan)

Depth below grade: ___
Material of construction: ___concrete ___metal ___fiberglass ___polyethylene ___other (explain):_____
Dimensions: _____
Scum thickness: _____
Distance from top of scum to top of outlet tee or baffle: _____
Distance from bottom of scum to bottom of outlet tee or baffle: _____
Date of last pumping: _____
Comments (on pumping recommendations, inlet and outlet tee or baffle condition, structural integrity, liquid levels as related to outlet invert, evidence of leakage, etc.):
_____

OFFICIAL INSPECTION FORM – NOT FOR VOLUNTARY ASSESSMENTS
SUBSURFACE SEWAGE DISPOSAL SYSTEM INSPECTION FORM
PART C
SYSTEM INFORMATION (continued)

Property Address: 91 STATE

Owner: TOMLAN
Date of Inspection: 12/7/01

TIGHT or HOLDING TANK: N/A (tank must be pumped at time of inspection)(locate on site plan)

Depth below grade: _____
Material of construction: ____concrete ____metal ____fiberglass ____polyethylene ____other(explain):
_____
Dimensions: _____
Capacity: _____gallons
Design Flow: _____gallons/day
Alarm present (yes or no): _____
Alarm level: _____ Alarm in working order (yes or no): ____
Date of last pumping: _____
Comments (condition of alarm and float switches, etc.):
_____
_____

DISTRIBUTION BOX: Yes (if present must be opened)(locate on site plan)

Depth of liquid level above outlet invert: at invert
Comments (note if box is level and distribution to outlets equal, any evidence of solids carryover, any evidence of leakage into or out of box, etc.):
OK. condition;
_____
_____

PUMP CHAMBER: N/A (locate on site plan)

Pumps in working order (yes or no): –
Alarms in working order (yes or no): –
Comments (note condition of pump chamber, condition of pumps and appurtenances, etc.):
_____
_____

OFFICIAL INSPECTION FORM – NOT FOR VOLUNTARY ASSESSMENTS
SUBSURFACE SEWAGE DISPOSAL SYSTEM INSPECTION FORM
PART C
SYSTEM INFORMATION (continued)

Property Address: 91 State

Owner: TOMLAN PROP.
Date of Inspection: 12/7/01

SOIL ABSORPTION SYSTEM (SAS): Yes (locate on site plan, excavation not required)

If SAS not located explain why:
Good Condition

Type
____ leaching pits, number: ___
____ leaching chambers, number: ____
____ leaching galleries, number: ____
____ leaching trenches, number, length: _____
____ leaching fields, number, dimensions: _____
____ overflow cesspool, number: ____
____ innovative/alternative system Type/name of technology: _____
Comments (note condition of soil, signs of hydraulic failure, level of ponding, damp soil, condition of vegetation, etc.):

CESSPOOLS: N (cesspool must be pumped as part of inspection)(locate on site plan)

Number and configuration: _____
Depth – top of liquid to inlet invert: _____
Depth of solids layer: _____
Depth of scum layer: _____
Dimensions of cesspool: _____
Materials of construction: _____
Indication of groundwater inflow (yes or no): ____
Comments (note condition of soil, signs of hydraulic failure, level of ponding, condition of vegetation, etc.):

PRIVY: N (locate on site plan)

Materials of construction: _____
Dimensions: _____
Depth of solids: _____
Comments (note condition of soil, signs of hydraulic failure, level of ponding, condition of vegetation, etc.):

OFFICIAL INSPECTION FORM – NOT FOR VOLUNTARY ASSESSMENTS
SUBSURFACE SEWAGE DISPOSAL SYSTEM INSPECTION FORM
PART C
SYSTEM INFORMATION (continued)

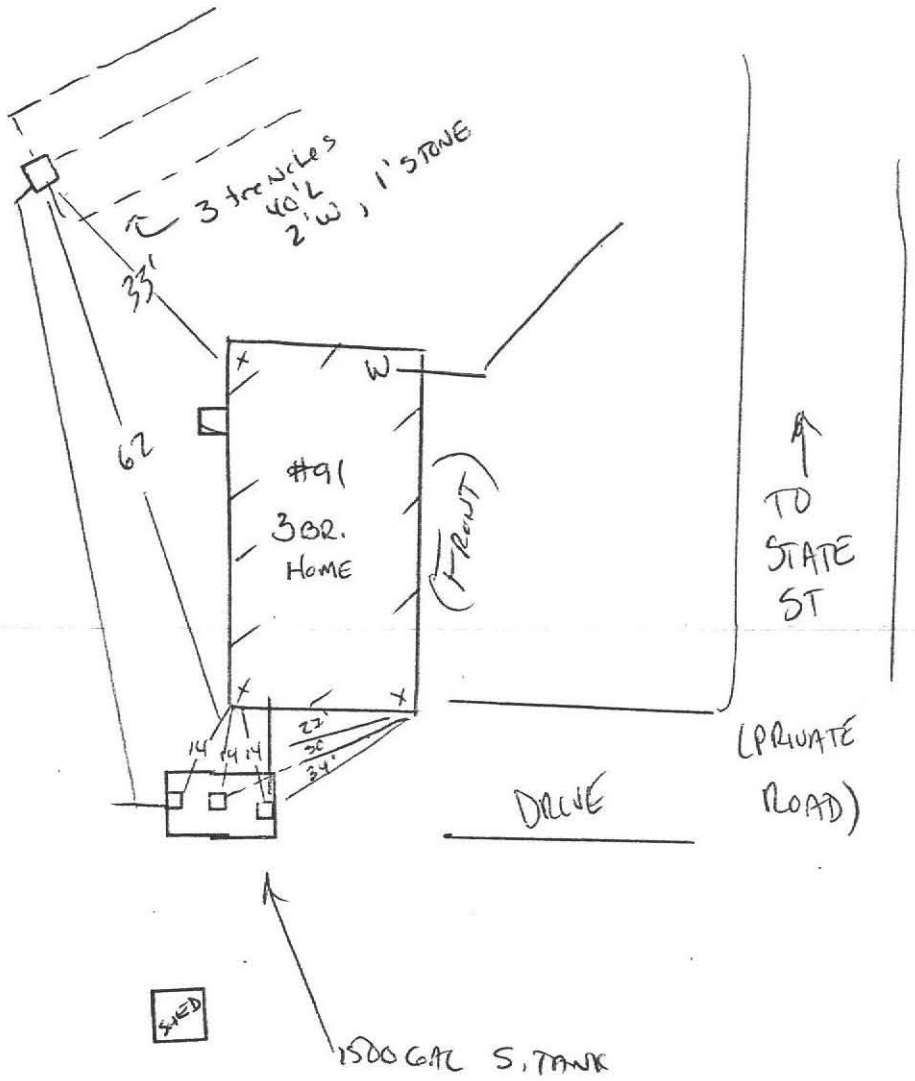
Property Address: 91 STATE

Owner: TOMCAN

Date of Inspection: 12/7/01

SKETCH OF SEWAGE DISPOSAL SYSTEM

Provide a sketch of the sewage disposal system including ties to at least two permanent reference landmarks or benchmarks. Locate all wells within 100 feet. Locate where public water supply enters the building.



OFFICIAL INSPECTION FORM – NOT FOR VOLUNTARY ASSESSMENTS
SUBSURFACE SEWAGE DISPOSAL SYSTEM INSPECTION FORM
PART C
SYSTEM INFORMATION (continued)

Property Address: 91 STATE

Owner: TOMLAN PROP.

Date of Inspection: 12/7/01

SITE EXAM

✓ Slope

Surface water

✓ Check cellar

Shallow wells

Estimated depth to ground water 6' + feet

Please indicate (check) all methods used to determine the high ground water elevation:

___✓ Obtained from system design plans on record - If checked, date of design plan reviewed: _____

___✓ Observed site (abutting property/observation hole within 150 feet of SAS)

___ Checked with local Board of Health-explain: _____

___ Checked with local excavators, installers- (attach documentation)

___ Accessed USGS database-explain: _____

You must describe how you established the high ground water elevation:

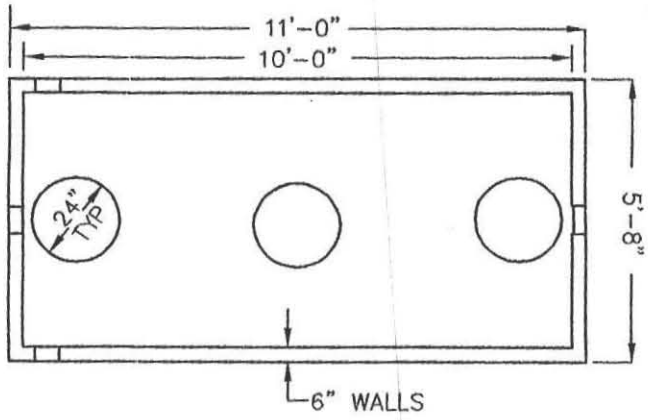
TODD tuegit. + 1998 plans

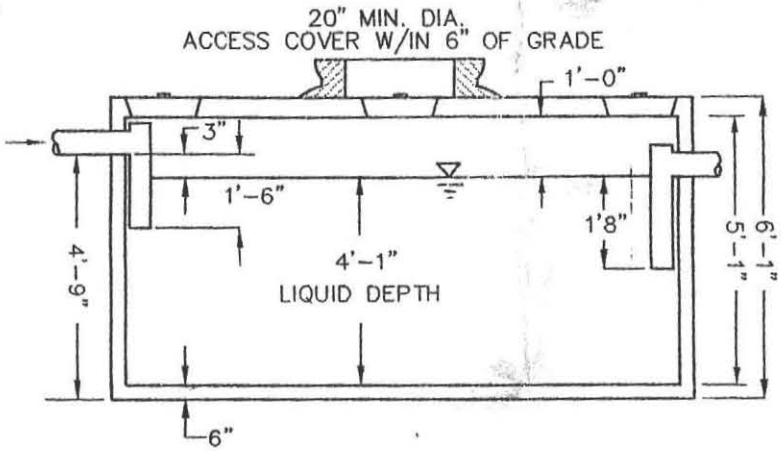
SEPTIC TANK DETAIL

NOT TO SCALE

NOTES:

1. ALL CONSTRUCTION TO BE WATERTIGHT.
2. SEPTIC TANK TO BE A SINGLE COMPARTMENT WITH MIN. CAPACITY OF 1500 GALLONS
3. SEPTIC TANK TO HAVE 3 MANHOLES, ONE CENTERED OVER EACH TEE FOR CLEANING, AND ONE AT CENTER OF TANK. ONE MANHOLE COVER TO BE WITHIN 6" OF FINISH GRADE.
4. SEPTIC TANK TO BE A PRECAST ROTONDO 1,500 GAL. CAPACITY OR APPROVED EQUAL.
5. SEPTIC TANK CONSTRUCTION TO COMPLY WITH TITLE 5 REQUIREMENTS.
6. OUTLET TEE TO BE EQUIPPED WITH CORROSION RESISTANT GAS BAFFLE.





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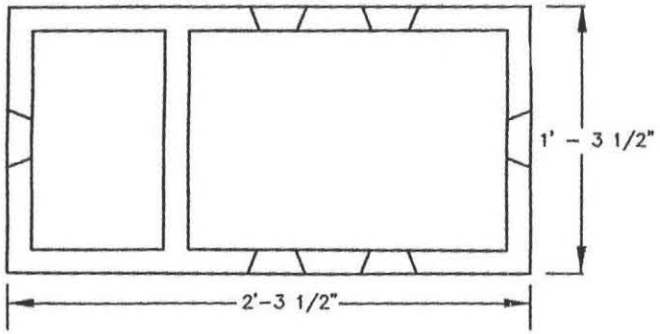
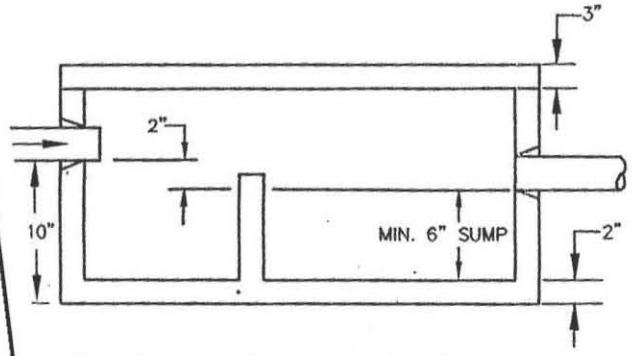
DISTRIBUTION BOX DETAIL

NOT TO SCALE



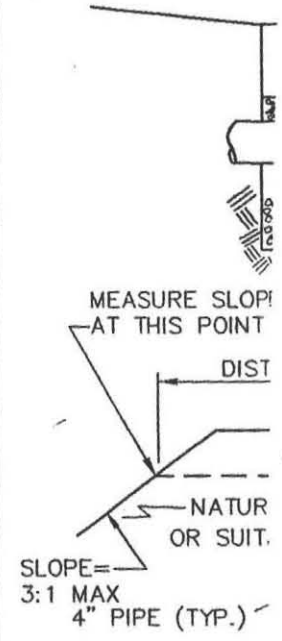
NOTES:

1. 3 OUTLETS REQUIRED
2. FIRST TWO FEET OF PIPE OUT OF DISTRIBUTION BOX TO BE LAID LEVEL.
3. ALL OUTLETS TO BE AT THE SAME ELEVATION.
4. DISTRIBUTION BOX TO BE A PRECAST ROTONDO DB-5 OR APPROVED EQUAL.



TRENCH DE

NOT TO SCALE



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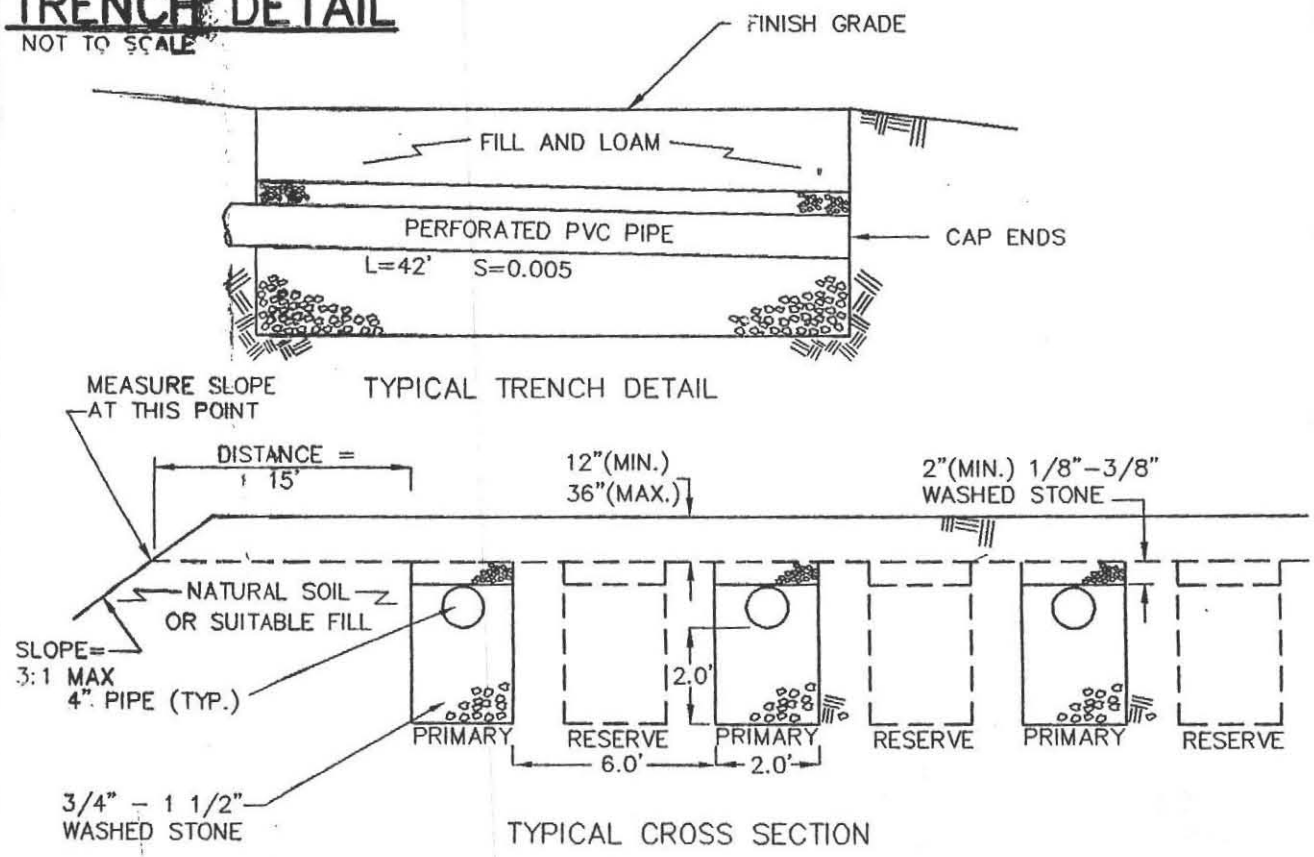
TRENCH DETAIL

NOT TO SCALE



TYPICAL TRENCH DETAIL

TYPICAL CROSS SECTION

INV/ELEV TAB

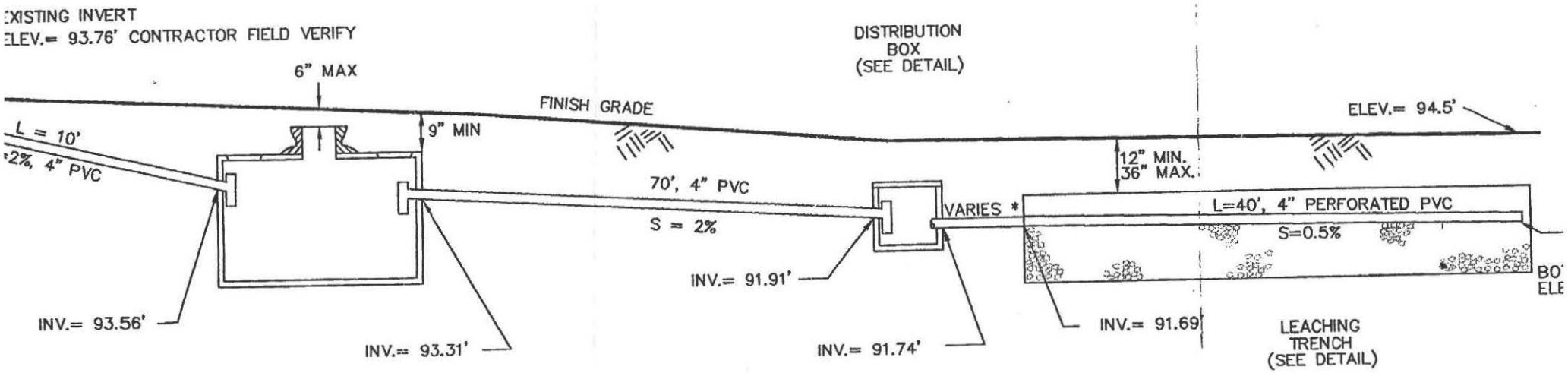
@ HOUSE

INV(out)	93.7
SEPTIC TANK(in)	93.5
SEPTIC TANK(out)	93.3
DIST. BOX(in)	91.91
DIST. BOX(out)	91.74
LEACHING TRENCH (in)	91
LEACHING TRENCH (end)	91
LEACHING SYSTEM (bottom)	89.48

GROUNDWATER NOT ENCOU

SEPTIC SYSTEM PROFILE

NOT TO SCALE



1,500 GAL SEPTIC TANK
(SEE DETAIL)

*NOTE: FIRST 2 FEET OF PIPE TO BE LAID LEVEL

G.W. NOT ENCOUNTERED

SOIL LOGS

Depth from Surface (in)	Soil Horizon	Soil Texture (USDA)	Soil Color (Munsell)	Soil Mottling	(Structure, Consisten
0 - 13	Ap	Sandy Loam	10YR3/2		
13 - 26	Bw	Sand	10YR5/6		Gravel; Cobl

LEGEND

PLAN SHOWING SEWAGE DISPOSAL