

OCEAN COUNTY HEALTH DEPARTMENT

Date 02/27/13 P.O. BOX 2191
TOMS RIVER, N.J. 08754-2191
(732) 341-9700

No. 045119

BOARD OF HEALTH OF LAKewood

CERTIFICATE OF COMPLIANCE

Issued to ACCURATE BUILDERS, LLC
(Owner or Contractor)

THIS IS TO CERTIFY That the

INDIVIDUAL SEWAGE SYSTEM AS PER ENGINEERS CERTIFI-

CATION
~~INDIVIDUAL WATER SYSTEM~~

Installed at Block No. 12.07

Lot No. 9 is in compliance with the

Application for Permit to Locate and Construct or

Alter Such Systems.

No. 045119 dated 10/24/2012

The issuance of this certification shall not be construed as a guarantee that the system will function satisfactorily nor shall it in any way restrict the powers or responsibilities of the Board of Health in the enforcement of any law or ordinance relating to public health.

FINAL

Lauren G. Gifford
LAURENCE GIFFORD

H.D. 79

RECEIVED
2012 OCT 17 A 10:11
OCEAN COUNTY
HEALTH DEPT.
TOMS RIVER HEALTH

OCEAN COUNTY HEALTH DEPARTMENT
P.O. Box 2191, Sunset Avenue
Toms River, NJ 08754-2191

APPLICATION FOR A PERMIT TO INSTALL A SEPTIC SYSTEM
AND/OR A WATER SUPPLY SYSTEM

10/24/2012
APPROVED
OCEAN COUNTY
HEALTH DEPARTMENT
NO. 045119
PLAN APPROVED 10/24/2012
DATE 10/24/2012

<u>Lakewood Township</u> MUNICIPALITY	☐ (A) To construct both a septic & water supply system	☐ (A) Potable Non-Public
Comm. Code <u>15</u> Official Use Only	☐ (B) To construct a water supply system	☐ (B) Potable Public Non-Community
Block <u>1207</u>	☐ (C) To replace or alter a water supply system	☐ (C) Non-Potable
Lot(s) <u>9</u>	☒ (D) To construct or alter a septic system	☒ (D) Public Community System
	☐ (E) To replace or repair a septic system	

(Current address of applicant required. All information must be completed.)

NAME OF APPLICANT Accurate Builders, LLC PHONE NO. 551-206-0341
ADDRESS 184 Smart Road Place CITY Lakewood STATE NJ ZIP 08701
DIRECTIONS TO LOCATION Central Ave to Valley Drive, lot on left

WELL APPLICATION

TYPE OF CASING: Material N/A Diameter _____ Grade _____ Thickness _____

TYPE AND METHODS OF SEALING JOINTS: Type _____ Method _____

METHOD OF INSTALLATION _____ If Rotary or Auger, size of hole _____

GROUTING MATERIAL _____ Depth & Method of grouting: Depth _____

Method _____

STORAGE TANK CAPACITY _____ Model No. _____

WELL DRILLER _____ (Print) _____ Lic # _____ Driller Phone # _____

DRILLER _____ (Signature) _____ State Well Permit # _____

NOTE: Copy of NJDEP "Permit to Drill Well" must be attached. Hose bibs are prohibited on non-potable well, unless such well is sampled. NJDEP's "Well Record" must be immediately submitted to the Health Department upon installation of well.

SEPTIC APPLICATION

TYPE OF BUILDING TO BE SERVED Residential Dwelling Unit: No. of Bedrooms 7

EXPANSION ATTIC, DEN OR REC. ROOM: Yes _____ No X If yes, calculate as additional bedroom _____

PERCOLATION TEST PERFORMED BY N/A Soils Alternator Bottom Lined Date _____ Phone _____

WEATHER CONDITIONS AT TIME OF TEST _____

ENGINEER'S SIGNATURE AND SEAL Don D. [Signature]

NOTE: All engineering date relating to soils, percolation & system design must be on engineer's drawing. Engineer's drawings must be signed & sealed by the engineer.

STATEMENT: Submit four (4) complete legible copies of applications, including engineer's & well driller's submissions. Final approval will only be granted after all inspections are completed, "as-built" drawings are submitted (where required) and satisfactory water analysis received, and all fees are paid. Permit is valid for one (1) year from date of issuance.

OCEAN COUNTY/ LAKEWOOD TOWNSHIP

Form 1

General Information

1. Type of Permit Needed (Check applicable categories):

- ☒ New Construction ☐ Alteration/No Expansion or Change of Use
☐ Alteration/Expansion or Change in Use
☐ Alteration/Malfunctioning System
☐ Deviation from Standards ☐ Repairs to Existing System

2. Location of Project:

Municipality Lakewood Township Block No. 12.07 Lot No. 9

Street Address Zip 775 Valley Drive, Lakewood, NJ 08701

3. Name of Applicant (print): Accurate Builders, LLC

4. Applicant's Present Address: 184 Stratford Place, Lakewood, NJ 08701

5. Applicant's Phone Number: 551-206-0341

6. Type Of Facility:

- ☒ Residential
☐ Commercial/Institutional

Specify Type of Establishment:

7. Type of Wastes to be Discharged:

- ☒ Sanitary Sewage
☐ Industrial Wastes
☐ Other—Specify Type

8. Other Approvals/Certification/Waivers/Exemptions (Attach to Application):

- ☐ Pinelands Commission
☐ U.S. Army Corps of Engineers
☐ NJDEP—Bureau of Flood Plain Management
☐ Other—Specify:

9. I hereby certify that the information furnished on Form 1 of this application is true. I am aware that false swearing is a crime in this State and subject to prosecution.

Signature of Applicant  Date _____

FOR AGENCY USE ONLY

☐ Application Denied—Reason for Denial/Citation of Rules Violated: _____

☐ Application Approved

☐ Application Approved Subject to Approval by NJDEP _____

Date of Action ☐ Signature of Authorized Agent _____

Name and Title

LAKEWOOD TOWNSHIP/ OCEAN COUNTY

Form 2a

General Site Evaluation Data

Lot 9 Block 12.07

1. Name of Site Evaluator (print): Glenn D. Lines

2. Business Address of Site Evaluator: 212 Second Street, Suite 401A
Lakewood, NJ 08701

3. Business Phone Number of Site Evaluator: (732) 961-6846

4. Special Site Limitations Identified (Check appropriate Categories): N/A

☐ Flood Plains ☐ Bedrock Outcrops ☐ Wetlands
☐ Excessively Stony ☐ Disturbed Ground ☐ Sink Holes
☐ Sand Dunes ☐ Steep Slopes
☐ Other—Specify

5. Soil Logs—Enter on Form 2b—Use one sheet for each soil log.

6. Considerations Relating to Disturbed Ground: N/A

a) Type of Disturbance (Check appropriate categories):

☐ Filled Area ☐ Excavated Area ☐ Re-graded Area
☐ Subsurface Drains ☐ Other—Specify

b) Pre-existing Natural Ground Surface

Elevation Relative to Existing Ground Surface

Method of Identification

c) Suitability of Disturbed Ground

☐ Unsuitable: Objects Subject to Disintegration or Change in Volume
☐ Excessively Coarse
☐ Proctor Test performed _____ % Standard Proctor Density = _____

7. Hydraulic Head Test:

a) Hydraulically Restrictive Horizon: Depth Top to Bottom _____

b) Piezometer A: Depth to Bottom _____ Depth of Water Level (24 hrs)

c) Piezometer B: Depth to Bottom _____ Depth of Water Level (24 hrs)

d) Witnessed by _____ Signature _____ Date

8. Attachments (Check items included):

☒ Site Plan

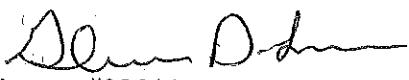
☒ Key Map Showing Location of Site On U.S.G.S. Quadrangle or Other Accurate Map

☒ Key Map Showing Location of Site on U.S.D.A. Soil Survey Map

☐ Other—Specify

9. I hereby certify that the information furnished on Form 2a of this application (and the attachments thereto) is true and accurate. I am aware that falsification of data is a violation of the Water Pollution Control Act (N.J.S.A. 58:10A-1 et seq.) and is subject to penalties as prescribed in N.J.A.C. 7:14-8.

Signature of Soil Evaluator Date


Signature of Professional Engineer License #33011

OCEAN COUNTY/LAKEWOOD TOWNSHIP
APPLICATION FOR PERMIT TO CONSTRUCT/ALTER/REPAIR AN INDIVIDUAL
SUBSURFACE
SEWAGE DISPOSAL SYSTEM

Form 2b—Soil Log and Interpretation Lot 9 Block 12.07

1. Log Number TP 1 Method (Check One): X Profile Pit Boring

2. Soil Log

Depth (inches)

0" - 6" very dark brown (10yr2/2) fine sandy loam; sub-angular blocky; moist; friable,
0% coarse

6" - 28" yellowish brown (10yr5/8) loamy sand; angular blocky; moist; friable, 0%
coarse.

28" - 120" dark yellowish brown (10yr4/6) loamy sand; angular blocky; moist; friable;
5% coarse

Munsell Color Name and Symbol; Estimated Textural Class: Estimated Volume % Coarse
Fragment,

If Present; Structure; Moist or Dry Consistence; Mottling—Abundance, Size and Contrast, If
Present

3. Ground Water Observations: NONE

__ Seepage—Indicate Depth _____

__ Pit/Boring Flooded—Depth after Hours _____

4. Soil Limiting Zones (Check Appropriate Categories): N/A

__ Fractured Rock Substratum—Depth to Top _____

__ Massive Rock Substratum—Depth to Top _____

__ Excessively Coarse Horizon—Depth Top to Bottom _____

__ Excessively Coarse Substratum—Depth to Top _____

__ Hydraulically Restrictive Horizon—Depth Top to Bottom _____

__ Hydraulically Restrictive Substratum—Depth to Top _____

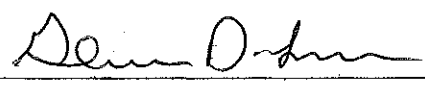
__ Perched Zone of Saturation—Depth Top to Bottom _____

__ Regional Zone of Saturation—Depth to Top _____

5. Soil Suitability Classification: 1

6. I hereby certify that the information furnished on Form 2b of this application is true and
accurate. I am aware that falsification of data is a violation of the Water Pollution Control Act
(N.J.S.A. 58:10A-1 et seq.) and is subject to penalties as prescribed in N.J.A.C. 7:14-8.

Signature of Site Evaluator _____ Date _____

Signature of Professional Engineer  License # 33011

Signature of Professional Engineer  License # 33011

OCEAN COUNTY/ LAKEWOOD TOWNSHIP
APPLICATION FOR PERMIT TO CONSTRUCT/ALTER/REPAIR AN INDIVIDUAL
SUBSURFACE

SEWAGE DISPOSAL SYSTEM

Form 3a. Soil Permeability Data Lot 9 Block 12.07

Assign a number for each test and a letter for each test replicate. Show test data and calculations on Form 3b, 3c, 3d, 3e, 3f or 3g. Use one sheet for each separate test or test replicate.

1. Summary of Data—Enter data for each test replicate on a separate line.

Type of Test Test (number) Replicate (letter) Depth (inches) Result*

* For tube permeameter, pit-bailing and piezometer tests report results in inches per hour.

For Soil permeability

class rating give soil permeability class number. For percolation test report result in minutes per inch. For basin

flooding test report result as positive if basin drains completely within 24 hours after second filing, negative

otherwise.

2. Design Permeability/Percolation Rate: Specify Test Number _____

___ Average of Test Replicates

___ Single Replicate

___ Slowest of Replicates

Type of Limiting Zone Identified Test Number

4. Attachments (Check items included):

___ Form 3b—Tube Permeameter Test Data—Number of Sheets 2

___ Form 3c—Soil Permeability Class Rating Test Data—Number of Sheets _____

___ Form 3d—Percolation Test Data—Number of Sheets _____

___ Form 3e—Pit-Bailing Test Data—Number of Sheets _____

___ Form 3f—Piezometer Test Data—Number of Sheets _____

___ Form 3g—Basin Flooding Test Data—Number of Sheets _____

5. I hereby certify that the information furnished on Form 3a of this application (and the attachments

thereto) is true and accurate. I am aware that falsification of data is a violation of the Water Pollution

Control Act (N.J.S.A. 58:10A-1 et seq.) and is subject to penalties as prescribed in N.J.A.C. 7:14-8.

Signature of Soil Evaluator _____

SOIL REPLACEMENT – BOTTOM-LINED

Signature of Professional Engineer  License # 33011

Form 4

General Design Data

1. Volume of Sanitary Sewage, gal. 1,100

X Residential: No. of Dwelling Units 1 Total No. of Bedrooms 7 with no garbage disposal

 Commercial/Institutional —Indicate type of establishment and show method of calculation. If estimate is based on water meter data, indicate source of data, frequency of readings, average daily flow, and maximum recorded daily reading

2. Alterations or Repairs

a) Reason for Alteration or Repair (Check appropriate categories):

 Expansion or Change in Use Upgrade Existing Facilities

 Correct Malfunctioning System Other Specify

b) Describe Nature of Alteration or Repairs:

3. System Components:

a) Grease Trap Capacity, gals

Show Calculation Used:

b) Septic Tank Capacities, gals: 2000 First Compartment Second Compartment
Third Compartment

c) Effluent Distribution

Method: X Gravity Flow Gravity Dosing Pressure Dosing

Dosing Device: Pump Siphon

d) Dosing Tank Capacities, gals: Total Capacity Dose Volume (V_d) Reserve Capacity

e) Laterals: Number 20 Total Length 553' Pipe Diameter 4" Spacing 36"

f) Connecting Pipe: Diameter 4" Length

g) Manifold: Diameter 4" Length

h) Disposal Field: Type of Installation Soil Replacement – Bottom Lined

Design Permeability (Percolation Rate) 6-20 in/hr

Trenches: Width Total Length Bed: Area 1,776 SF

i) Seepage Pits: Design Percolation Rate

Number of Pits Total Percolating Area Provided

4. Attachments (Check items included):

X General Plan of System Showing Location of All System Components

X X-Sections of Each System Component Including Grease Trap, Septic Tank, Dosing Tank, Disposal Field, Seepage Pits and Interceptor Drains

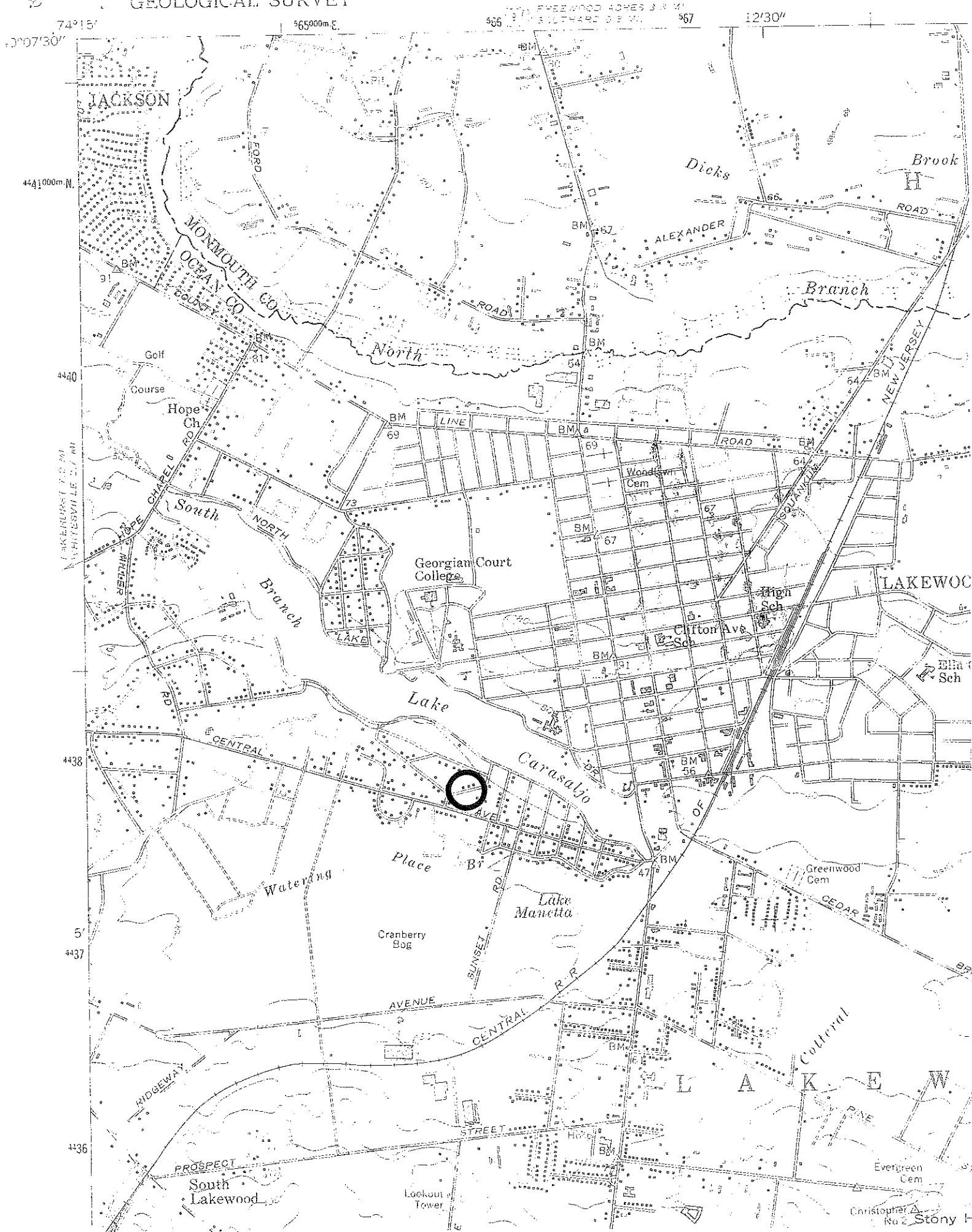
 Pump Performance Curve

 Other—Specify

5. I hereby certify that the information furnished on Form 4 of this application (and attachments thereto) is true and accurate. I am aware that falsification of data is a violation of the Water Pollution Control Act (N.J.S.A.58:10A-1 et seq.) and is subject to penalties as prescribed in N.J.A.C. 7:14-8.

Signature of Professional Engineer License No. 33011 Date 10/16/12

DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY



Soil Map—Ocean County, New Jersey



MAP LEGEND

MAP INFO

Area of Interest (AOI)

 Area of Interest (AOI)

Soils

 Soil Map Units

Special Point Features

-  Blowout
-  Borrow Pit
-  Clay Spot
-  Closed Depression
-  Gravel Pit
-  Gravelly Spot
-  Landfill
-  Lava Flow
-  Marsh or swamp
-  Mine or Quarry
-  Miscellaneous Water
-  Perennial Water
-  Rock Outcrop
-  Saline Spot
-  Sandy Spot
-  Severely Eroded Spot
-  Sinkhole
-  Slide or Slip
-  Sodic Spot
-  Spoil Area
-  Stony Spot



Very Stony Spot



Wet Spot



Other

Special Line Features



Gully



Short Steep Slope



Other

Political Features



Cities

Water Features



Streams and Canals

Transportation



Rails



Interstate Highways



US Routes



Major Roads



Local Roads

Map Scale: 1:6,000 if printed on A

The soil surveys that comprise you

Warning: Soil Map may not be vali

Enlargement of maps beyond the :
misunderstanding of the detail of n
placement. The maps do not show
soils that could have been shown :

Please rely on the bar scale on ea
measurements.

Source of Map: Natural Resourc

Web Soil Survey URL: <http://websoilsurvey.sc.egov.usda.gov/>

Coordinate System: UTM Zone

This product is generated from the
the version date(s) listed below.

Soil Survey Area: Ocean County

Survey Area Data: Version 10, A

Date(s) aerial images were photog

The orthophoto or other base map
compiled and digitized probably di
imagery displayed on these maps.
of map unit boundaries may be ev



Natural Resources
Conservation Service

Web Soil Survey
National Cooperative Soil Survey

Map Unit Legend

Ocean County, New Jersey (NJ029)			
Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
EveB	Evesboro sand, 0 to 5 percent slopes	0.3	71.0%
EveC	Evesboro sand, 5 to 10 percent slopes	0.1	29.0%
Totals for Area of Interest		0.5	100.0%

DETAILED DATA SHEET

OCEAN COUNTY HEALTH DEPARTMENT
ENVIRONMENTAL HEALTH SERVICES

CONTINUATION SHEET

Establishment Trading Name <i>Bk 127 Lot 9 / 775 Valley Drive</i>	Establishment License No. <i>045119</i>	Date <i>10/24/2012</i>
Signature of Inspecting Official <i>Lawrence J. Ferri</i>	Municipality <i>LAKEWOOD</i>	Time - (2400 Hours) Begin <i>1015 HRS</i>
REG. NO.	REMARKS (Please specify area)	
	SEPTIC-WELL PERMIT REVIEW	
	S# <i>045119</i>	
	BLOCK <i>12,07</i> LOT <i>9</i>	
	MUNICIPALITY <i>LAKEWOOD</i>	
	APPROVED WITH STIPULATIONS;	
	ENGINEER MUST CERTIFY BY SIGNATURE AND SEAL USING APPENDIX B, PARTS A AND B, THAT	
	SYSTEM HAS BEEN LOCATED, CONSTRUCTED AND INSTALLED AS PER APPROVED PLAN.	
	A SATISFACTORY OCEAN COUNTY HEALTH DEPARTMENT ORDINANCE 94-1 WATER ANALYSIS AND	
	WELL HEAD AND TANK INSPECTIONS ARE REQUIRED FOR APPROVAL.	
	THIS DEPARTMENT SHALL BE NOTIFIED 24 HOURS PRIOR TO WELL INSTALLATION FOR WITNESSING	
	PURPOSES.	
	OTHER;	
	<i>Lawrence J. Ferri</i>	
	<i>LAURENCE G. FERRI</i>	
	<i>10/24/2012</i>	

(Attach additional sheets if necessary)

Page

of

Pages

045119

Lines Engineering, LLC

Phone: (732) 961-6846

212 Second Street, Suite 401A, Lakewood, NJ 08701

Fax: (732) 961-6847

File No. 12568

Standard Forms For Certificate Of Compliance

Ocean County/Municipality of Lakewood Township

Part A— General Information

1. Permitted Activities (Check applicable categories):

Permit Number _____

☒ New Construction

☐ Alteration/No Expansion or Change of Use

☐ Alteration/Expansion or Change in Use

☐ Alteration/Malfunctioning System

☐ Deviation from Standards

☐ Repairs to Existing System

☐ Abandonment

2. Location of Project:

Municipality Lakewood Lot 9 Block 12.07

Street Address 775 Valley Drive, Lakewood, NJ

3. Name and Present Address of Applicant: Accurate Builders, LLC, 184 Stratford Place,
Lakewood, NJ 08701

Applicant's Phone Number 551-206-0341

Part B—Professional Engineers Certification

I certify under penalty of law that the subsurface sewage disposal system identified in Part A has been located, constructed, installed or altered in compliance with the requirements of N.J.A.C. 7:9A-1 and the Application to Construct/Alter/Repair an Individual Subsurface Sewage Disposal System which was approved by the administrative authority. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.



(Signature)

SEAL

Name Glenn D. Lines, License # 33011

Date: 1-24-13

For Agency Use Only

Date Received:

Form Determined To Be: ☐ Complete ☒ Incomplete

Date Returned

Date Received

Date Certification Approved:

Authorized Signature:

JAN 24 2013 5:00 PM 3 TH

ISDS NOTES GENERAL:

1. All construction practices and procedures shall be in compliance with N.J.A.C. 7:9A.
2. Building sewer is to be in conformance with the Uniform Construction Code N.J.A.C. 5:23.
3. The criteria for estimating the volume of sanitary sewage is in conformance with 7:9A-7.4.
4. The installer shall contact the design engineer as prescribed in N.J.A.C. 7:9A or whenever consultation, clarification or inspection is required. It is the applicant and installer's responsibility to contact the engineer prior to any installation.
5. The installer shall notify the Administrative Authority and the design engineer should conditions other than those noted be encountered during installation.
6. Drainage from basement floors, footings, roofs, sumps and water conditioners shall not enter the disposal system. Garbage disposal units shall not be utilized unless specifically noted otherwise in these plans.
7. The installer shall verify that the existing, proposed and finished elevations are such that the disposal system will receive proper flow from the proposed or existing premises.
8. The installer shall verify that the proposed or existing premises will not or does not exceed the design capacity of the disposal system. The installer shall recommend the use of water saving fixtures to the property owner whenever possible.
9. The installer shall verify the location of all dwellings, septic systems, wells and other improvements (including underground improvements) within a 150 foot radius of the new disposal system. Any discrepancies from these plans shall be reported to the Administrative Authority and the design engineer prior to initiating any installation efforts. Special attention should be given to any new construction which may have occurred subsequent to the preparation of these plans.
10. The installer shall insure that the property owner is aware of the location and operation of all system components.
11. The installer shall instruct the property owner on the operation, maintenance & inspection requirements of this system.

SEPTIC TANK:

1. Sides and bottom of precast concrete tank shall be a minimum of 3" thick and adequately reinforced. The tank specified on the septic tank detail meets this criteria.
2. Tank shall be of sufficient weight to prevent floating. The tank specified on the septic tank detail meets this criteria.
3. Tank shall have a minimum diameter of 52". The tank specified on the septic tank detail meets this criteria.
4. The bottom of the inlet baffle shall extend below the liquid level 25-33% of liquid depth.
5. The invert elevation of the inlet shall not be less than 2" higher than the invert elevation of the outlet.
6. The outlet baffle opening shall extend below the liquid level 25-40% of the total liquid depth.
7. The manhole and access opening on the tank shall have a minimum diameter of 24". The cover and tank specified on the septic tank detail meet this criteria.
8. Inspection port(s) shall be 4' cast iron or PVC.
9. Backfill around septic tank shall be placed in thin 8" layers.
10. Septic tank provided by manufacturer shall have ACI certification displayed on tank.
11. All internal concrete surfaces shall be sealed with two (2) coatings of an appropriate inert sealer.
12. Inspection port(s) shall be 4" cast iron or PVC and shall have a locked or bolted cap.

CONNECTING PIPES:

1. Connecting and delivery pipes shall be of a diameter as shown SDR-26, ABS ASTM 2661 or cast iron.
2. Pipe joints in connecting and/or delivery pipes shall be water-tight and protected against damage by roots.
3. Connecting pipe shall have a minimum grade of 0.25" per foot.
4. Connecting and/or delivery pipes shall be laid on a firm foundation, shall be laid in a continuous grade in as straight a line as possible, and shall utilize drop manholes if necessary; all as determined by the Administrative Authority.
5. Horizontal bends, where required, shall not be greater than 45 degrees. The inside angle between adjacent sections of pipe shall be less than 135 degrees.

DISTRIBUTION BOXES:

1. Distribution box shall be as specified using water-tight and sound material.
2. Distribution box shall be set perfectly level upon a layer of gravel or concrete footing extending downward below the maximum expected depth of frost. (See distribution box detail)
3. Distribution box shall have adequate means of access and shall prevent the entrance of outside water. Access to the box shall be extended, as required, to within 12" to 18" of finished grade

DISTRIBUTION NETWORK:

1. The distribution network shall consist of lengths of DEP approved ADS.

DISPOSAL FIELD:

1. Adequate measures shall be used to insure that the bottom of the disposal field and/or excavations are level.
2. Excavation shall be performed in a manner that will avoid excessive compaction of fill. Heavy equipment (e.g. bulldozers or front end loaders) shall not be utilized for compaction of fill. Excavation shall be performed by a backhoe operating from outside the perimeter of the disposal field. No foot traffic is permitted on the bottom of any excavation. Any loose soil or debris which is washed into or deposited within any excavation

4" DIA. PERFORATED PVC LATERAL
TOTAL # OF LATERALS = 10
TOTAL LENGTH OF ALL LATERALS =

60.75 MIN. X

60.00 —

59.50 INV. —

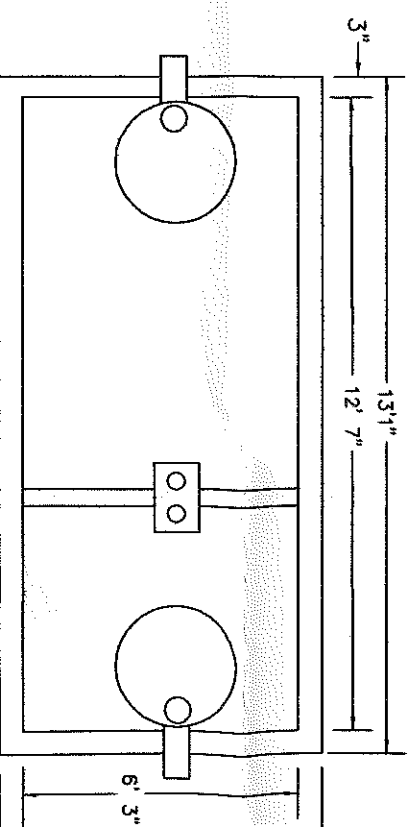
58.50 —

24

54.50 —

50.50 —

As Manufactured by Mershon Concrete — Bordentown, NJ or
(1-800-MERSHON)



2000 GAL DUAL COMPARTMENT SEPTIC TANK
NOT TO SCALE

R-12 ZONE REQUIREMENTS

REQUIRED

1. Tank shall be of sufficient weight to prevent floating. The tank specified on the septic tank detail meets this criteria.
3. Tank shall have a minimum diameter of 52". The tank specified on the septic tank detail meets this criteria.
4. The bottom of the inlet baffle shall extend below the liquid level 25-33% of liquid depth.
5. The invert elevation of the inlet shall not be less than 2" higher than the invert elevation of the outlet.

6. The outlet baffle opening shall extend below the liquid level 25-40% of the total liquid depth.
7. The manhole and access opening on the tank shall have a minimum diameter of 24". The cover and tank specified on the septic tank detail meet this criteria.
8. Inspection port(s) shall be 4' cast iron or PVC.
9. Backfill around septic tank shall be placed in thin 8" layers.
10. Septic tank provided by manufacturer shall have ACI certification displayed on tank.
11. All internal concrete surfaces shall be sealed with two (2) coatings of an appropriate inert sealant.
12. Inspection port(s) shall be 4" cast iron or PVC and shall have a locked or bolted cap.

CONNECTING PIPES:

1. Connecting and delivery pipes shall be of a diameter as shown SDR-26, ABS ASTM 2661 or cast iron.
2. Pipe joints in connecting and/or delivery pipes shall be water-tight and protected against damage by roots.
3. Connecting pipe shall have a minimum grade of 0.25" per foot.
4. Connecting and/or delivery pipes shall be laid on a firm foundation, shall be laid in a continuous grade in as straight a line as possible, and shall utilize drop manholes if necessary; all as determined by the Administrative Authority.
5. Horizontal bends, where required, shall not be greater than 45 degrees. The inside angle between adjacent sections of pipe shall be less than 135 degrees.

DISTRIBUTION BOXES:

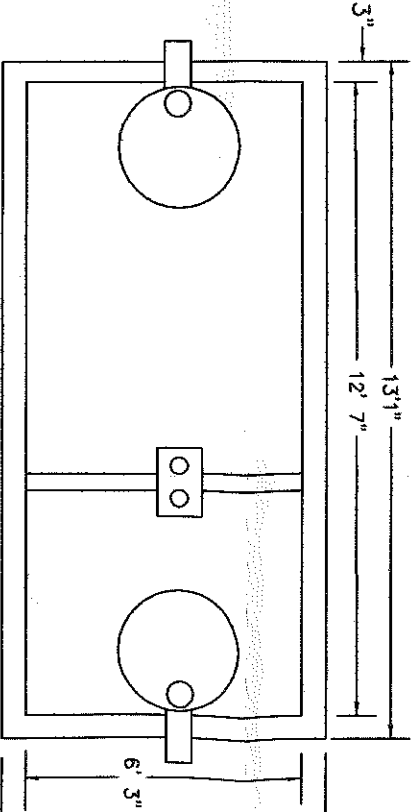
1. Distribution box shall be as specified using water-tight and sound material.
2. Distribution box shall be set perfectly level upon a layer of gravel or concrete footing extending downward below the maximum expected depth of frost. (See distribution box detail)
3. Distribution box shall have adequate means of access and shall prevent the entrance of outside water. Access to the box shall be extended, as required, to within 12' to 18' of finished grade

DISTRIBUTION NETWORK:

1. The distribution network shall consist of lengths of DEP approved ADS.

DISPOSAL FIELD:

1. Adequate measures shall be used to insure that the bottom of the disposal field and/or excavations are level.
2. Excavation shall be performed in a manner that will avoid excessive compaction of fill. Heavy equipment (e.g. bulldozers or front end loaders) shall not be utilized for compaction of fill. Excavation shall be performed by a backhoe operating from outside the perimeter of the disposal field. No foot traffic is permitted on the bottom of any excavation. Any loose soil, or debris which is washed into or deposited within any excavation shall be removed prior to depositing fill.
3. Edges of adjacent sheets of drainage fabric, when utilized, shall be overlaid by a minimum of 6 inches.
4. When applicable, filter material shall be laid into the excavation from the sides using a backhoe, front end loader or dump truck.
5. When applicable, tracked equipment may be used in large beds providing that the equipment does not exert a ground pressure in excess of 8 psi and providing that the filter material is pushed in front of the vehicle while maintaining a minimum thickness of one foot of filter material below the vehicle tracks at all
6. Backfill material shall be of earth similar to that found at the site and shall be free of stones, stumps or waste material. Backfill shall not be more permeable than surrounding soil. Backfill shall completely cover the entire disposal field and shall be graded into the surrounding topography on all sides. Backfill shall be seeded or sodded or otherwise stabilized in a manner acceptable to the Administrative Authority. Topsoil will be lightly compacted by tamping or rolling to prevent settlement.
7. Select fill shall be spread and compacted in layers 1 foot or less in thickness.
8. Compaction of select fill shall be accomplished manually or mechanically by tamping, rolling, or driving over fill in a controlled pattern.
9. The installer shall verify that soil conditions are as noted on the soil logs. The installer shall perform a percolation test at the bottom of any excavated area to insure proper drainage.
10. Backfill and final grading shall extend a minimum of 5 feet beyond the disposal field perimeter.
11. All fill and compaction thereof must be tested and certified by a licensed engineer, and these certifications shall be provided to the Administrative Authority. The installer shall be responsible for obtaining these certifications, along with any other inspections and/or certifications which may be required. These services can be provided by the design engineer by separate agreement.
12. Excavations and fill material shall not be exposed to rain, heavy winds, or other extreme conditions. Excavations that have been exposed to the elements may have smeared surfaces which must be raked and roughened by hand prior to installation of fill. Fill exposed to the elements may lose uniformity of silt and clay content, and must be thoroughly mixed and retested prior to installation.



As Manufactured by Mershon Concrete - Bordentown, NJ or
(1-800-MERSHON)

2000 GAL DUAL COMPARTMENT SEPTIC TANK
NOT TO SCALE

R-12 ZONE REQUIREMENTS

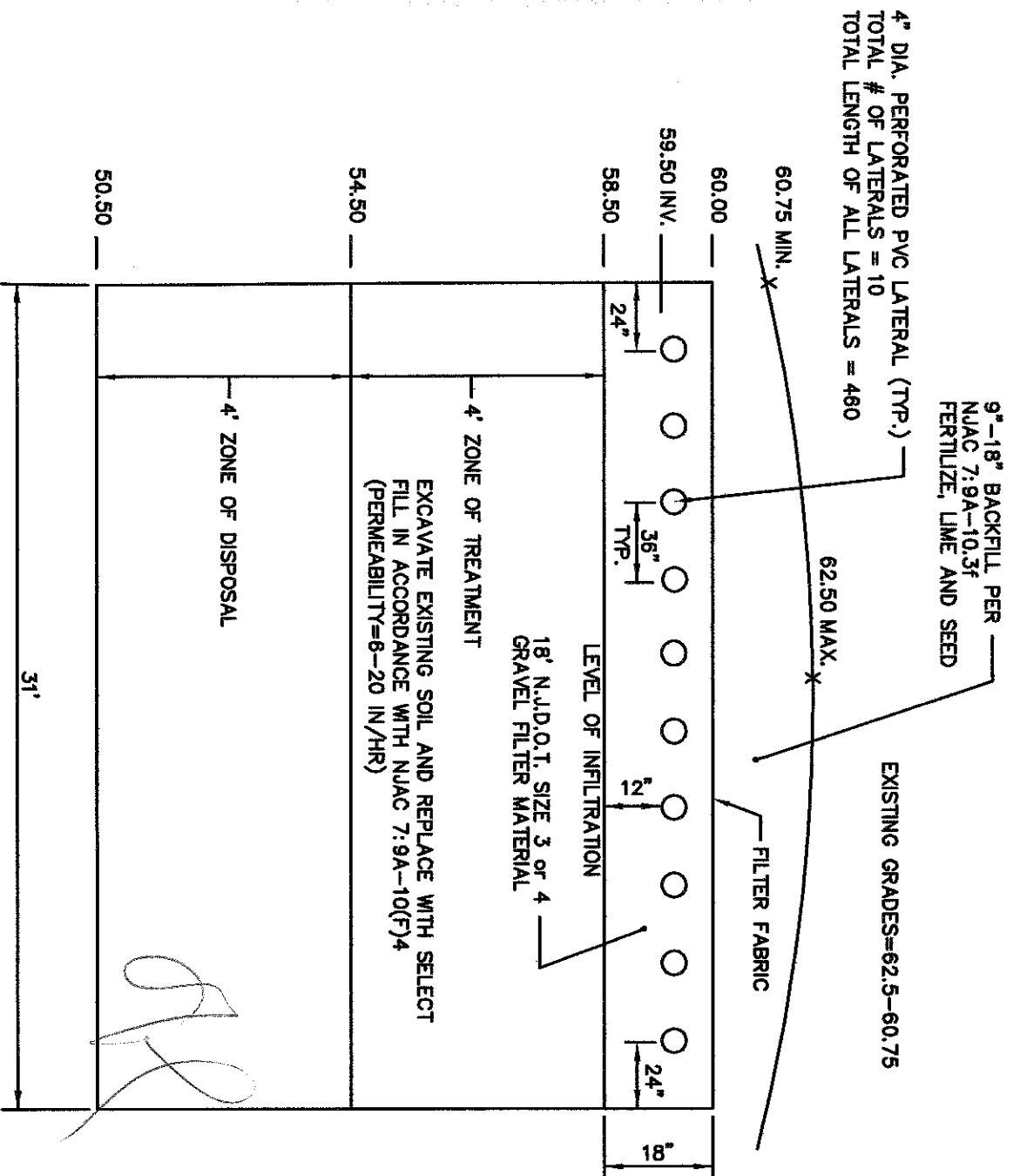
	REQUIRED
LOT AREA	12,000 SF
LOT WIDTH	90 FT
FRONT SETBACK	30 FT
REAR SETBACK	20 FT
SIDE SETBACK	10 FT
BOTH SIDES	25 FT
MAX BUILDING COV	25%
MAX BLDG. HEIGHT	35 FT
MIN. # PARKING	4 SPACES

*EXISTING NON-CONFORMANCE

NOTES:

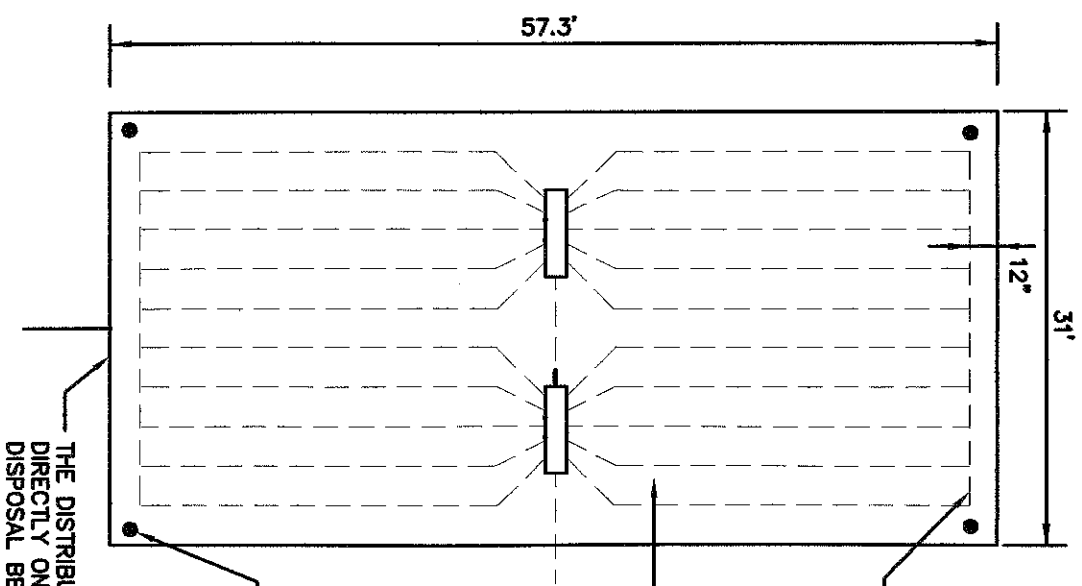
1. BOUNDARY AND TOPOGRAPHIC INFORMATION
SURVEY BY CLEARPOINT SERVICES, DATE
2. OWNER/APPLICANT

DESIGN: 7 BEDROOM
200 GPD (FIRST BEDROOM)
900 GPD (6 ADDITIONAL BEDROOMS @ 150 GPD
200+900=1100 GPD TOTAL
1100 GPD X 1.61 = 1,771 S.F. DISPOSAL AREA
31X57.3 = 1776 S.F. DISPOSAL AREA PROVIDED



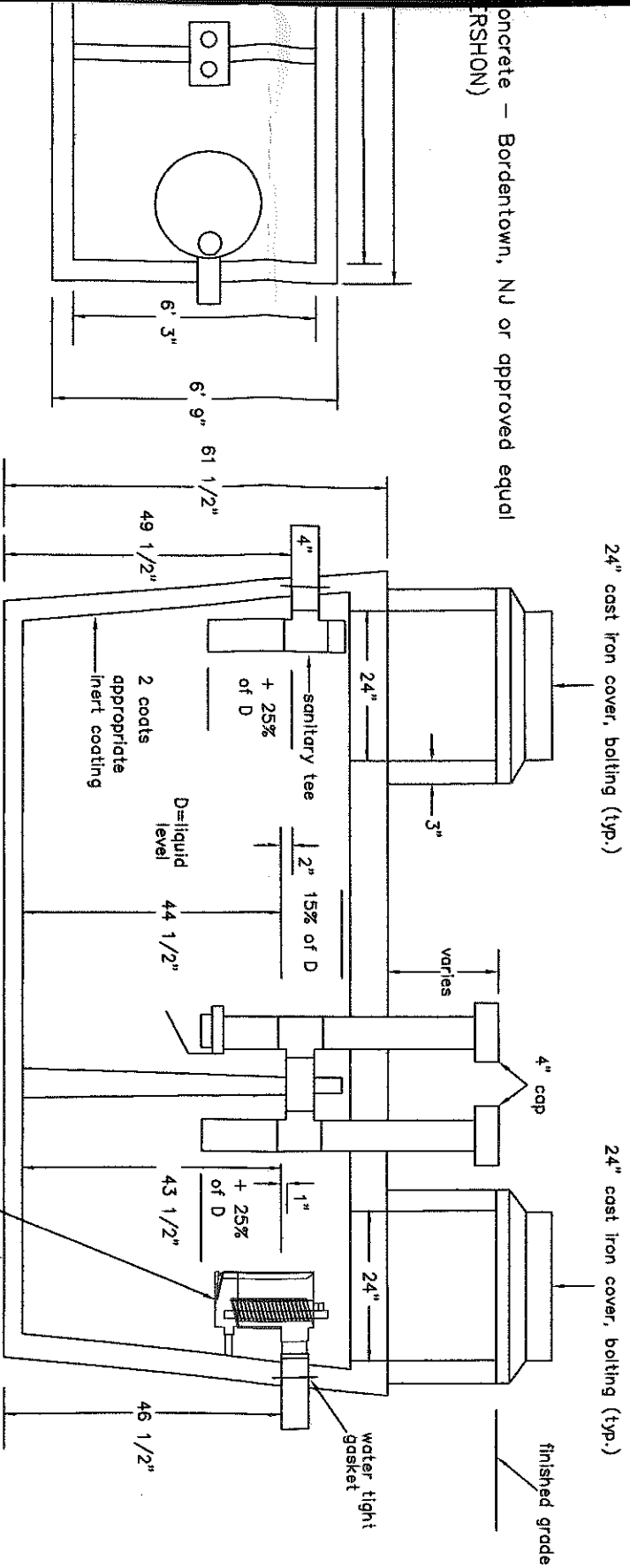
DISPOSAL FIELD CROSS SECTION

N.T.S.



DISPOSAL FIELD PLAN VIEW

N.T.S.



DUAL COMPARTMENT SEPTIC TANK W/ EFFLUENT FILTER

NOT TO SCALE

PROP. 2.0
SEP 20

REQUIREMENTS

REQUIRED

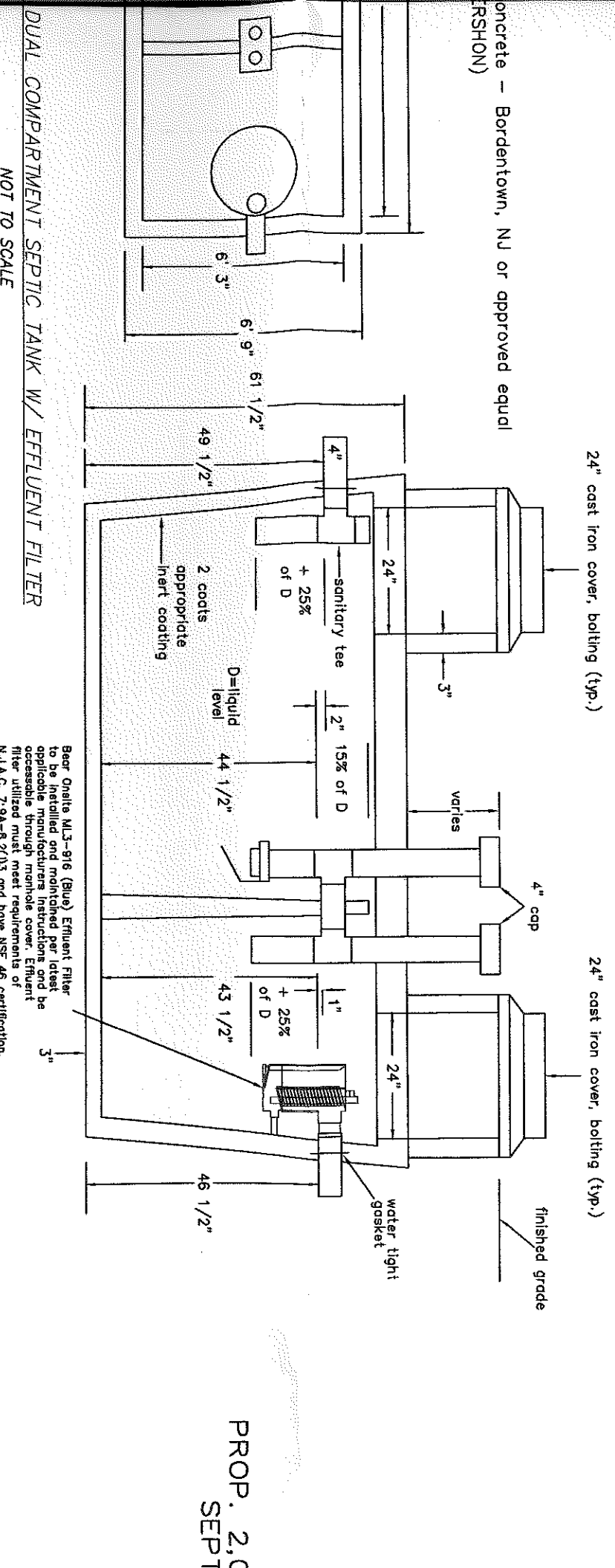
PROVIDED

DISPOSAL FIELD CROSS SECTION

N.T.S.

DISPOSAL FIELD PLAN VIEW

N.T.S.



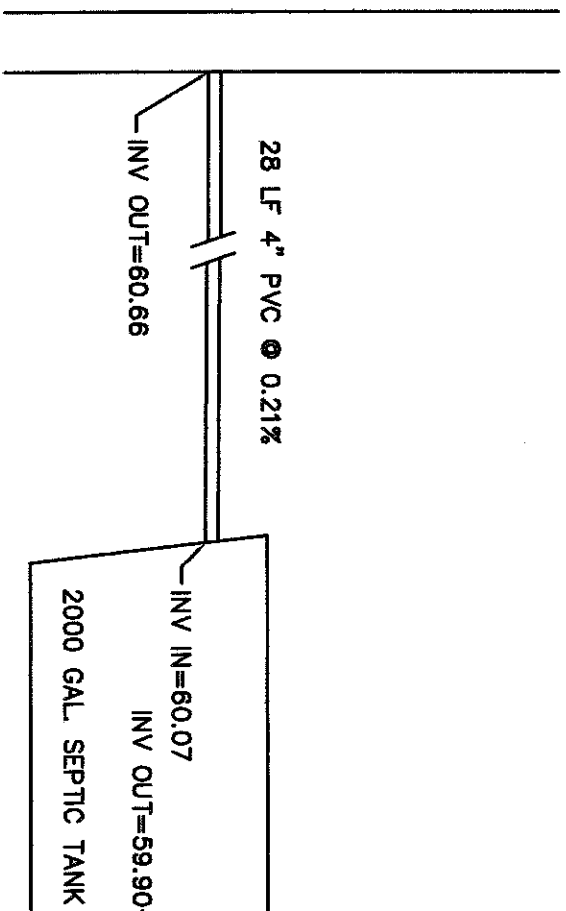
REQUIREMENTS

REQUIRED	PROVIDED
12,000 SF	13,066 SF
90 FT	77.40 FT*
30 FT	36.00 FT
20 FT	65.10 FT
10 FT	12.50 FT
25 FT	25.07 FT
25%	21.2%
OV	35 FT
HT	<35 FT
4 SPACES	4 SPACES
CONFORMANCE	

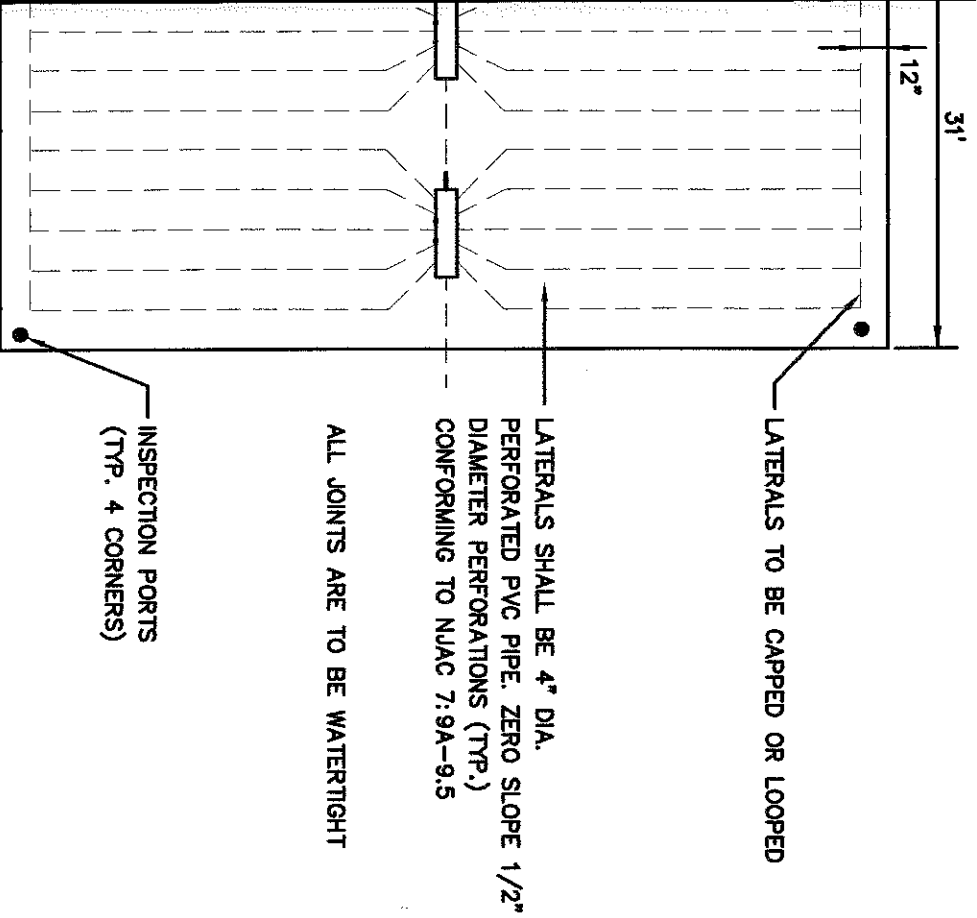
AND TOPOGRAPHIC INFORMATION FROM
ARPOINT SERVICES, DATED 8-31-12.

ICANT

EDROOM)
ONAL BEDROOMS @ 150 GPD EACH)
D TOTAL
= 1,771 S.F. DISPOSAL AREA REQUIRED
F. DISPOSAL AREA PROVIDED

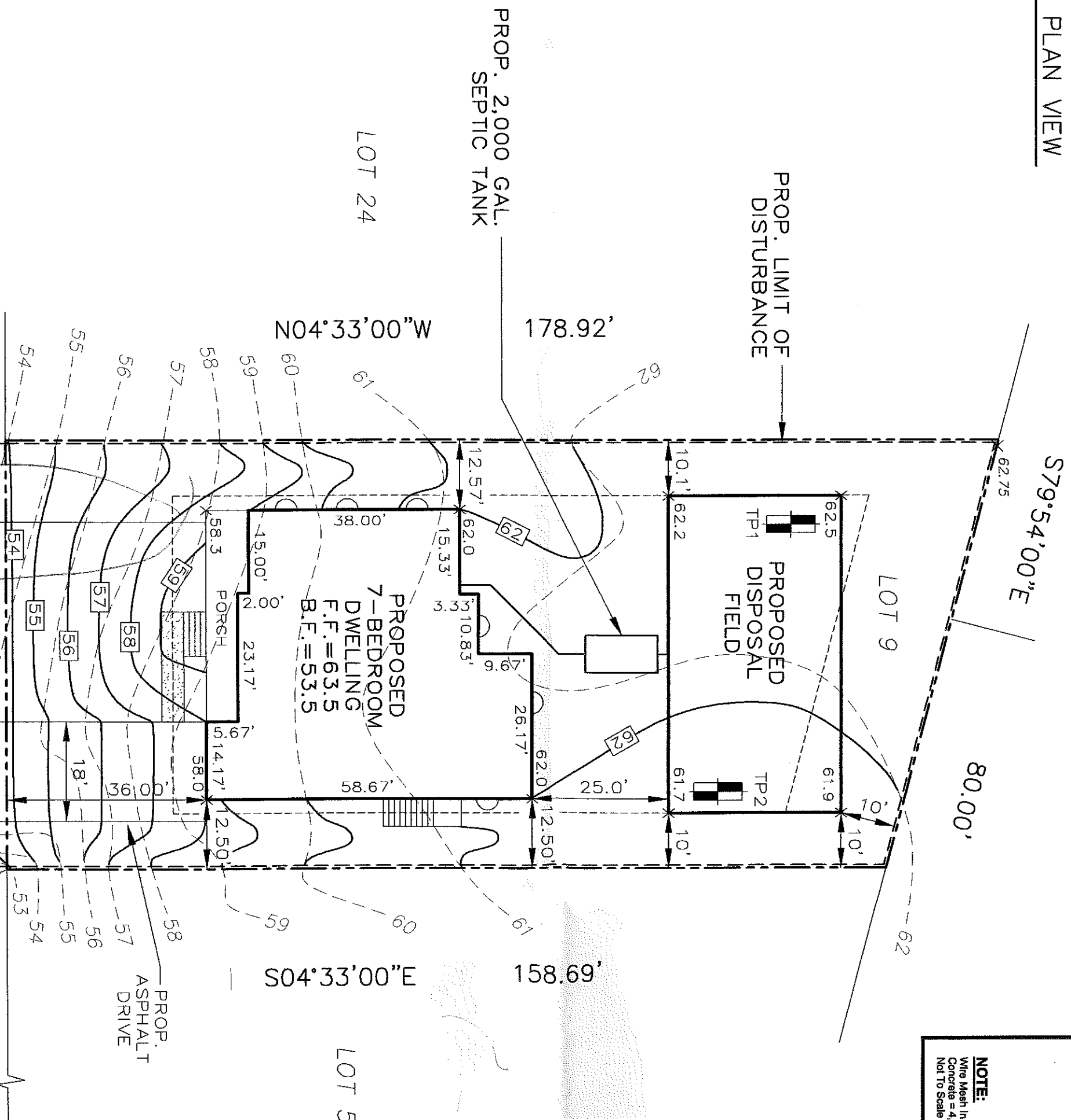


PROFIL
NOT TO SCA



AL FIELD PLAN VIEW

N.T.S.



NOTE:
Wire Mesh In
Concrete = 4,
Not To Scale



2010

NOT TO SCALE

LOT 4

7-WAY	6	1.5	21	11	12	2	3	18	1.5
10-WAY SHORT	12.5	1.5	27	15.5	12.5	3.5	4.50	24	2
10-WAY LONG	15.5	3	66	21.5	21.5	5	7	60	4
17-WAY	15.5	3	66	21.5	21.5	6	7	60	4

NOTE:
Wire Mesh In Walls, Base and Top
Concrete = 4,000 P.S.I.
Not To Scale



DISTRIBUTION BOX

J. F. Gillespie, Inc.
2547 Brunetta Drive, Vineland, NJ 08360
Phone: 856-692-2233 Fax: 856-692-5457



80.00'

62

10'

10'

61.9

10'

61.7

10'

25.0'

62.0

12.50'

26.17'

58.67'

58.0

14.17'

58.0

12.50'

58.0

18'

56

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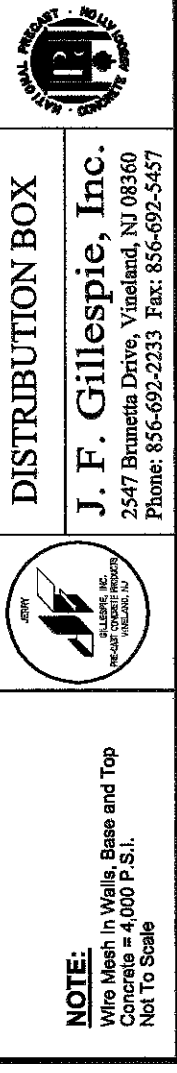
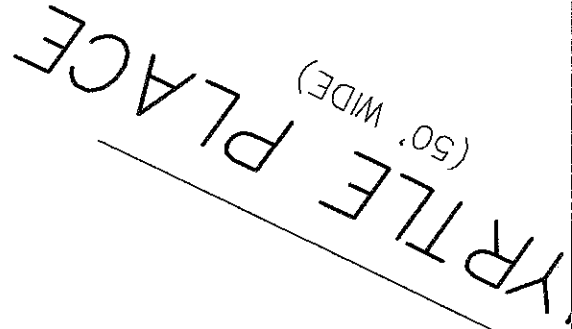
11

10

9

8

7



ISDS NOTES GENERAL:

1. All construction practices and procedures shall be in compliance with N.J.A.C. 7:9A.
2. Building sewer is to be in conformance with the Uniform Construction Code N.J.A.C. 5:23.
3. The criteria for estimating the volume of sanitary sewage is in conformance with 7:9A-7.4.
4. The installer shall contact the design engineer as prescribed in N.J.A.C. 7:9A or whenever consultation, clarification or inspection is required. It is the applicant and installer's responsibility to contact the engineer prior to any installation.
5. The installer shall notify the Administrative Authority and the design engineer should conditions other than those noted be encountered during installation.
6. Drainage from basement floors, footings, roofs, sumps and water conditioners shall not enter the disposal system. Garbage disposal units shall not be utilized unless specifically noted otherwise in these plans.
7. The installer shall verify that existing, proposed and finished elevations are such that the disposal system will receive proper flow from the proposed or existing premises.
8. The installer shall verify that the proposed or existing premises will not or does not exceed the design capacity of the disposal system. The installer shall recommend the use of water saving fixtures to the property owner whenever possible.
9. The installer shall verify the location of all dwellings, septic systems, wells and other improvements (including underground improvements) within a 150 foot radius of the new disposal system. Any discrepancies from these plans shall be reported to the Administrative Authority and the design engineer prior to initiating any installation efforts. Special attention should be given to any new construction which may have occurred subsequent to the preparation of these plans.
10. The installer shall insure that the property owner is aware of the location and operation of all system components.
11. The installer shall instruct the property owner on the operation, maintenance & inspection requirements of this system.

SEPTIC TANK:

1. Sides and bottom of precast concrete tank shall be a minimum of 3" thick and adequately reinforced. The tank specified on the septic tank detail meets this criteria.
2. Tank shall be of sufficient weight to prevent floating. The tank specified on the septic tank detail meets this criteria.
3. Tank shall have a minimum diameter of 52". The tank specified on the septic tank detail meets this criteria.
4. The bottom of the inlet baffle shall extend below the liquid level 25-33% of liquid depth.
5. The invert elevation of the inlet shall not be less than 2" higher than the invert elevation of the outlet.
6. The outlet baffle opening shall extend below the liquid level 25-40% of the total liquid depth.
7. The manhole and access opening on the tank shall have a minimum diameter of 24". The cover and tank specified on the septic tank detail meet this criteria.
8. Inspection port(s) shall be 4" cast iron or PVC.
9. Backfill around septic tank shall be placed in thin 8" layers.
10. Septic tank provided by manufacturer shall have ACI certification displayed on tank.
11. All internal concrete surfaces shall be sealed with two (2) coatings of an appropriate inert sealant.
12. Inspection port(s) shall be 4" cast iron or PVC and shall have a locked or bolted cap.

CONNECTING PIPES:

1. Connecting and delivery pipes shall be of a diameter as shown SDR-26, ABS ASTM 2661 or cast iron.
2. Pipe joints in connecting and/or delivery pipes shall be water-tight and protected against damage by roots.
3. Connecting pipe shall have a minimum grade of 0.25" per foot.
4. Connecting and/or delivery pipes shall be laid on a firm foundation, shall be laid in a continuous grade in as straight a line as possible, and shall utilize drop manholes if necessary; all as determined by the Administrative Authority.
5. Horizontal bends, where required, shall not be greater than 45 degrees. The inside angle between adjacent sections of pipe shall be less than 135 degrees.

DISTRIBUTION BOXES:

1. Distribution box shall be as specified using water-tight and sound material.
2. Distribution box shall be set perfectly level upon a layer of gravel or concrete footing extending downward below the maximum expected depth of frost. (See distribution box detail)
3. Distribution box shall have adequate means of access and shall prevent the entrance of outside water. Access to the box shall be extended, as required, to within 12" to 18" of finished grade

DISTRIBUTION NETWORK:

1. The distribution network shall consist of lengths of DEP approved ADS.

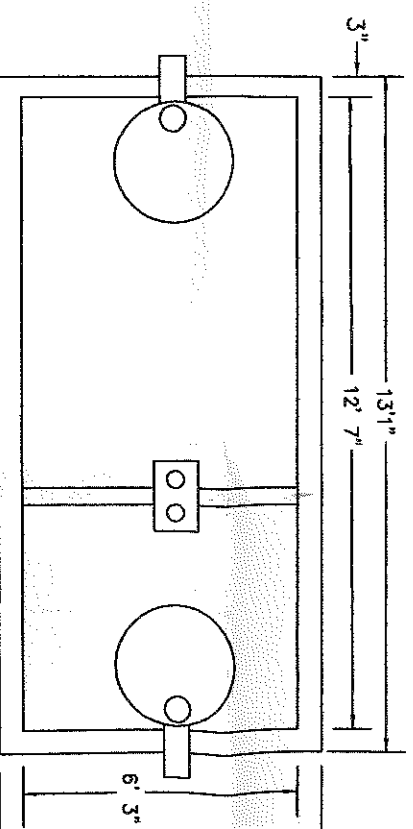
DISPOSAL FIELD:

1. Adequate measures shall be used to insure that the bottom of the disposal field and/or excavations are level.
2. Excavation shall be performed in a manner that will avoid excessive compaction of fill. Heavy equipment (e.g. bulldozers or front end loaders) shall not be utilized for compaction of fill. Excavation shall be performed by a backhoe operating from outside the perimeter of the disposal field. No foot traffic is permitted on the bottom of any excavation. Any loose soil or debris which is washed into or deposited within any excavation

4" DIA. PERFORATED PVC LATE
TOTAL # OF LATERALS = 10
TOTAL LENGTH OF ALL LATERALS

60.75 MIN.	60.00	
59.50 INV.	59.50	24
58.50		
54.50		
50.50		

As Manufactured by Mershon Concrete - Bordentown, NJ or
(1-800-MERSHON)



2000 GAL DUAL COMPARTMENT SEPTIC TANK
NOT TO SCALE

R-12 ZONE REQUIREMENTS

REQUIRED

3. Tank shall have a minimum diameter of 52". The tank specified on the septic tank detail meets this criteria.
4. The bottom of the inlet baffle shall extend below the liquid level 25-33% of liquid depth.
5. The invert elevation of the inlet shall not be less than 2" higher than the invert elevation of the outlet.

6. The outlet baffle opening shall extend below the liquid level 25-40% of the total liquid depth.
7. The manhole and access opening on the tank shall have a minimum diameter of 24". The cover and tank specified on the septic tank detail meet this criteria.
8. Inspection port(s) shall be 4' cast iron or PVC.
9. Backfill around septic tank shall be placed in thin 8" layers.
10. Septic tank provided by manufacturer shall have ACI certification displayed on tank.
11. All internal concrete surfaces shall be sealed with two (2) coatings of an appropriate inert sealer.
12. Inspection port(s) shall be 4" cast iron or PVC and shall have a locked or bolted cap.

CONNECTING PIPES:

1. Connecting and delivery pipes shall be of 8" diameter as shown SDR-26, ABS ASTM 2661 or cast iron.
2. Pipe joints in connecting and/or delivery pipes shall be water-tight in protected against damage by roots.
3. Connecting pipe shall have a minimum grade of 0.25" per foot.
4. Connecting and/or delivery pipes shall be laid on a firm foundation, shall be laid in a continuous grade in as straight a line as possible, and shall utilize drop manholes if necessary; all as determined by the Administrative Authority.
5. Horizontal bends, where required, shall not be greater than 45 degrees. The inside angle between adjacent sections of pipe shall be less than 135 degrees.

DISTRIBUTION BOXES:

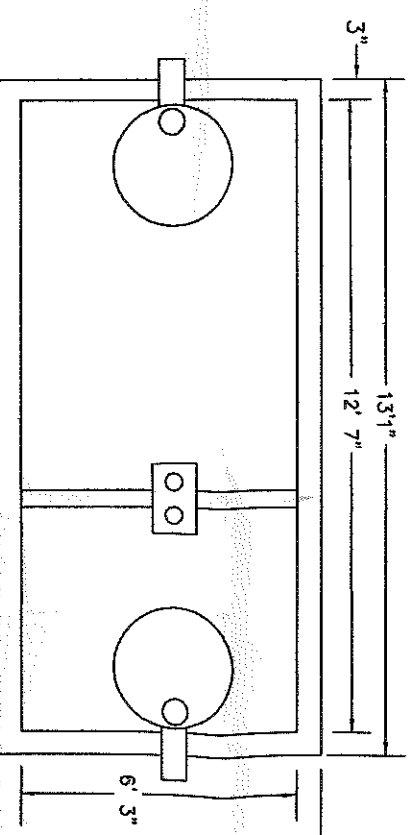
1. Distribution box shall be as specified using water-tight and sound material.
2. Distribution box shall be set perfectly level upon a layer of gravel or concrete footing extending downward below the maximum expected depth of frost. (See distribution box detail)
3. Distribution box shall have adequate means of access and shall prevent the entrance of outside water. Access to the box shall be extended, as required, to within 12" to 18" of finished grade

DISTRIBUTION NETWORK:

1. The distribution network shall consist of lengths of DEP approved ADS.

DISPOSAL FIELD:

1. Adequate measures shall be used to insure that the bottom of the disposal field and/or excavations are level.
2. Excavation shall be performed in a manner that will avoid excessive compaction of fill. Heavy equipment (e.g. bulldozers or front end loaders) shall not be utilized for compaction of fill. Excavation shall be performed by a backhoe operating from outside the perimeter of the disposal field. No foot traffic is permitted on the bottom of any excavation. Any loose soil, or debris which is washed into or deposited within any excavation shall be removed prior to depositing fill.
3. Edges of adjacent sheets of drainage fabric, when utilized, shall be overlaid by a minimum of 6 inches.
4. When applicable, filter material shall be laid into the excavation from the sides using a backhoe, front end loader or dump truck.
5. When applicable, tracked equipment may be used in large beds providing that the equipment does not exert a ground pressure in excess of 8 psi and providing that the filter material is pushed in front of the vehicle while maintaining a minimum thickness of one foot of filter material below the vehicle tracks at all
6. Backfill material shall be of earth similar to that found at the site and shall be free of stones, stumps or waste material. Backfill shall not be more permeable than surrounding soil. Backfill shall completely cover the entire disposal field and shall be graded into the surrounding topography on all sides. Backfill shall be seeded or sodded or otherwise stabilized in a manner acceptable to the Administrative Authority. Topsoil will be lightly compacted by tamping or rolling to prevent settlement.
7. Select fill shall be spread and compacted in layers 1 foot or less in thickness.
8. Compaction of select fill shall be accomplished manually or mechanically by tamping, rolling, or driving over fill in a controlled pattern.
9. The installer shall verify that soil conditions are as noted on the soil logs. The installer shall perform a percolation test at the bottom of any excavated area to insure proper drainage.
10. Backfill and final grading shall extend a minimum of 5 feet beyond the disposal field perimeter.
11. All fill and compaction thereof must be tested and certified by a licensed engineer, and these certifications shall be provided to the Administrative Authority. The installer shall be responsible for obtaining these certifications, along with any other inspections and/or certifications which may be required. These services can be provided by the design engineer by separate agreement.
12. Excavations and fill material shall not be exposed to rain, heavy winds, or other extreme conditions. Excavations that have been exposed to the elements may have smeared surfaces which must be raked and roughened by hand prior to installation of fill. Fill exposed to the elements may lose uniformity of silt and clay content, and must be thoroughly mixed and retested prior to installation.



As Manufactured by Mershon Concrete - Bordentown, NJ or
(1-800-MERSHON)

2000 GAL DUAL COMPARTMENT SEPTIC
NOT TO SCALE

R-12 ZONE REQUIREMENTS

LOT AREA	REQUIRED
LOT WIDTH	12,000 SF
FRONT SETBACK	90 FT
REAR SETBACK	30 FT
SIDE SETBACK	20 FT
BOTH SIDES	10 FT
MAX BUILDING COV	25 FT
MAX BLDG. HEIGHT	25%
MIN. # PARKING	35 FT
	4 SPACES

*EXISTING NON-CONFORMANCE

NOTES:

1. BOUNDARY AND TOPOGRAPHIC INFORMATION SURVEY BY CLEARPOINT SERVICES, DATE
2. OWNER/APPLICANT

DESIGN: 7 BEDROOM

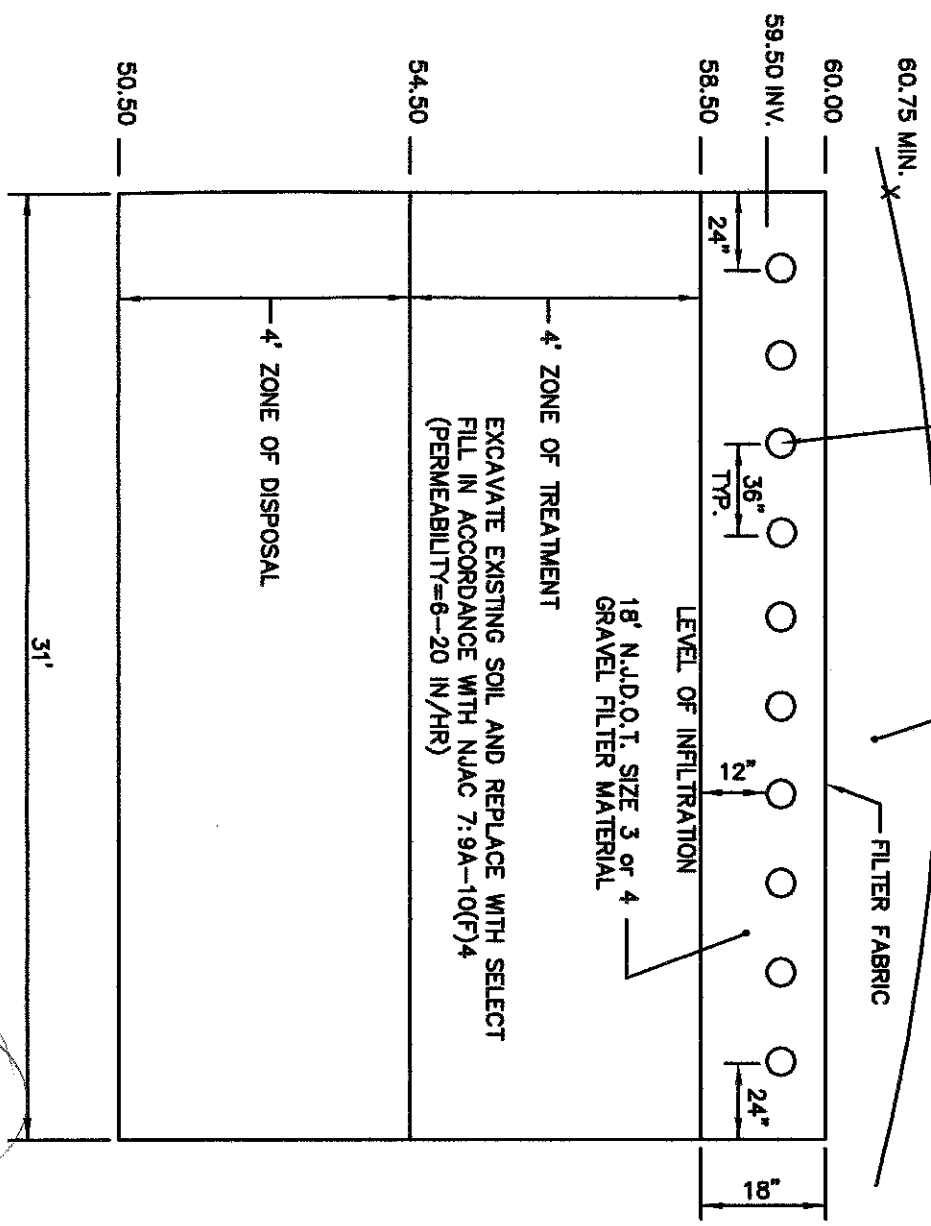
200 GPD (FIRST BEDROOM)

900 GPD (6 ADDITIONAL BEDROOMS @ 150 GPD

200+900=1100 GPD TOTAL

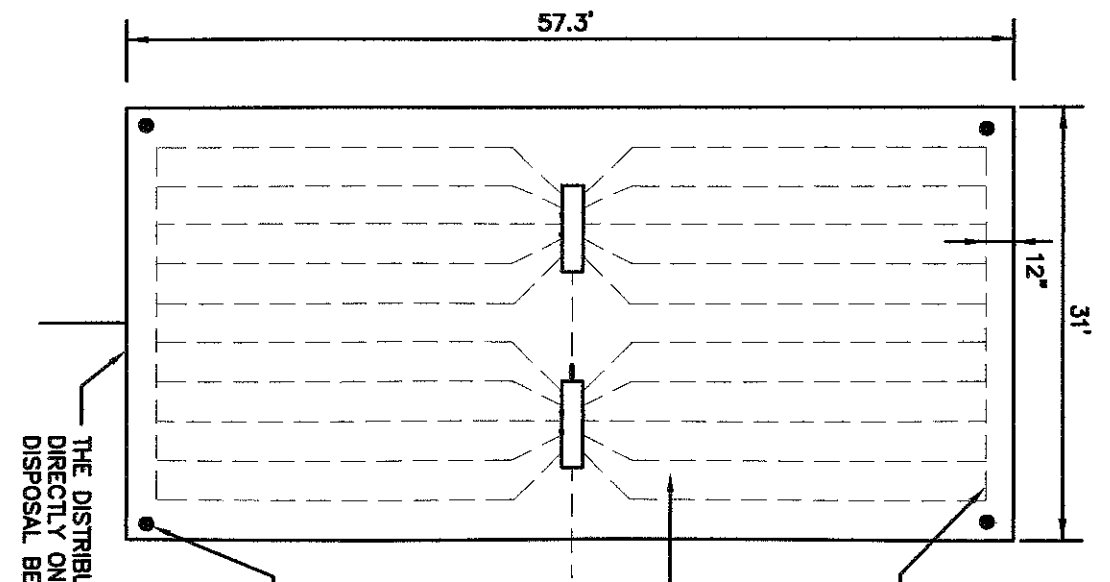
1100 GPD X 1.61 = 1,771 S.F. DISPOSAL AREA
31X57.3 = 1776 S.F. DISPOSAL AREA PROVIDED

9"-18" BACKFILL PER
NJAC 7:9A-10.3f
FERTILIZE, LIME AND SEED
EXISTING GRADES=62.5-60.75
4" DIA. PERFORATED PVC LATERAL (TYP.)
TOTAL # OF LATERALS = 10
TOTAL LENGTH OF ALL LATERALS = 460



DISPOSAL FIELD CROSS SECTION
N.T.S.

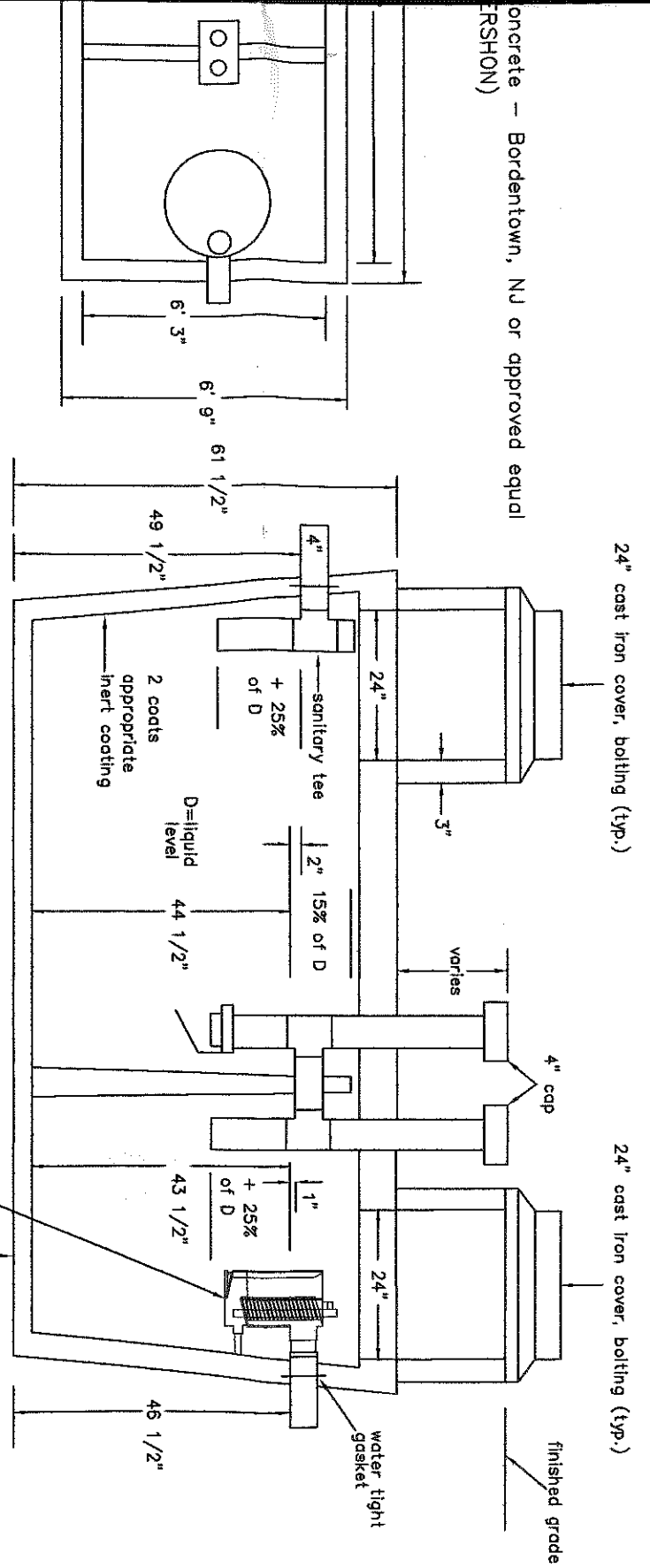
OK



DISPOSAL FIELD PLAN VIEW
N.T.S.

V

concrete - Bordentown, NJ or approved equal (PERSHON)



DUAL COMPARTMENT SEPTIC TANK W/ EFFLUENT FILTER
NOT TO SCALE

Bar Oneite M-3-916 (Blue) Effluent Filter to be installed and maintained per latest applicable manufacturers instructions and be accessible through manhole cover. Effluent filter utilized must meet requirements of N.J.A.C. 7:9A-8.2(3) and have NSF 46 certification.

PROP. 2.00
SEPTIC
OK

REQUIREMENTS

REQUIRED

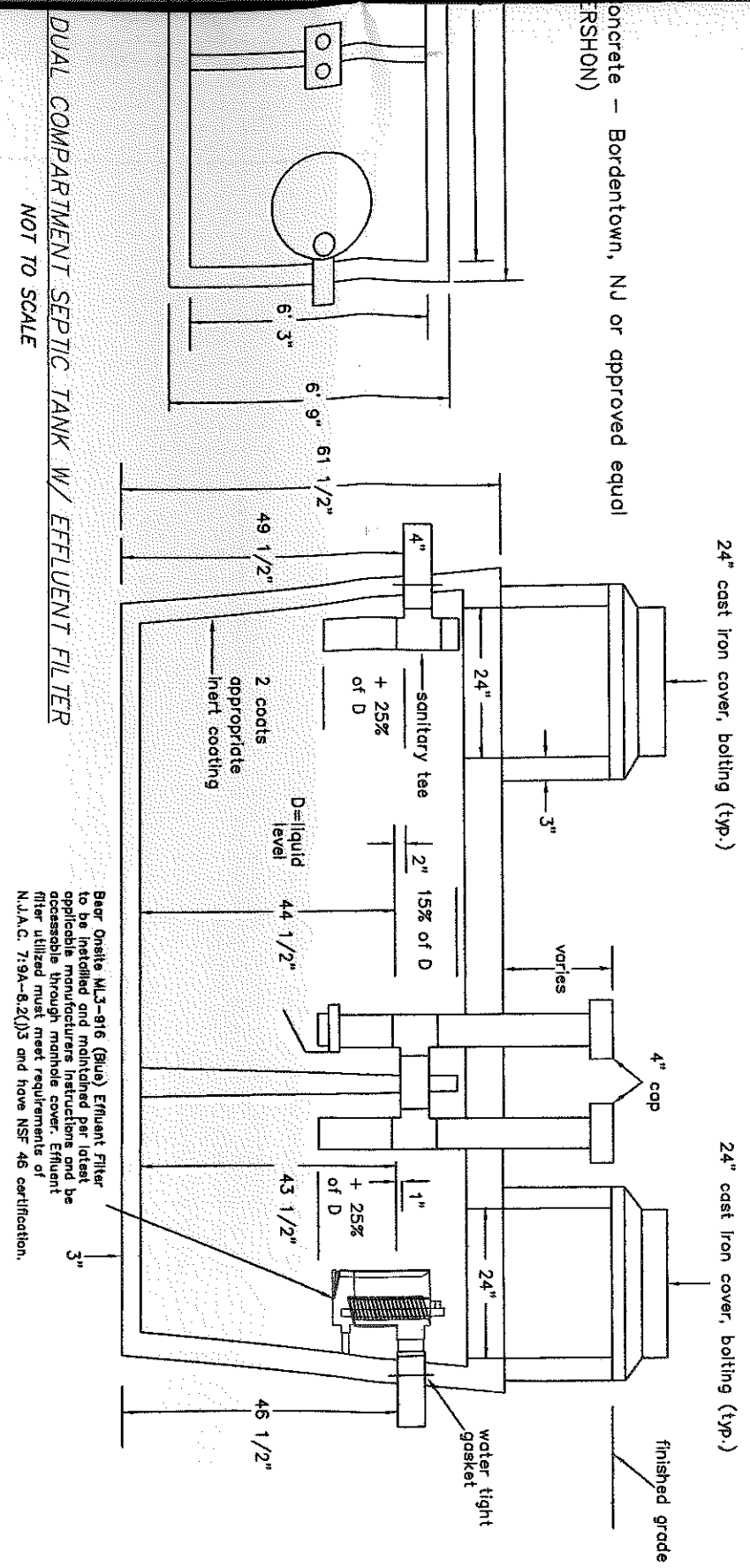
PROVIDED

DISPOSAL FIELD CROSS SECTION

N.T.S.

DISPOSAL FIELD PLAN

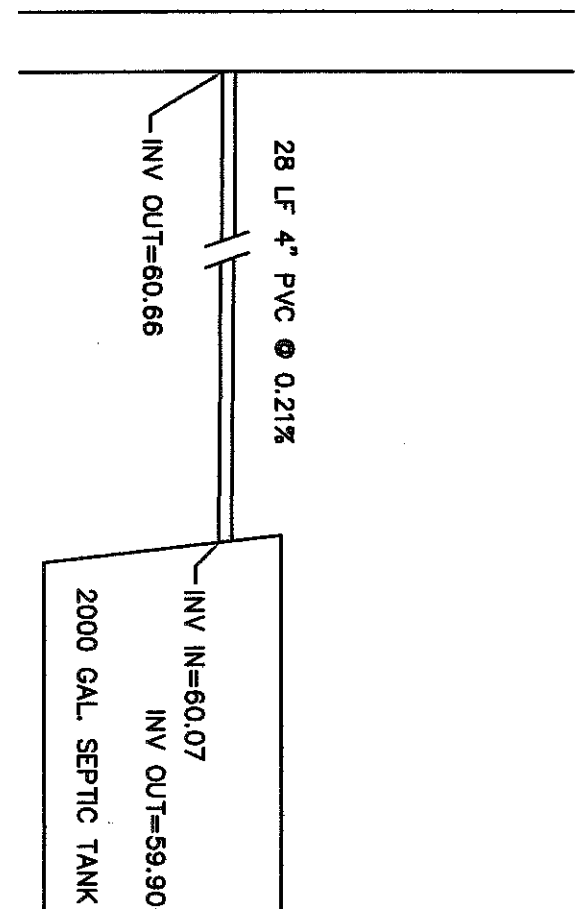
N.T.S.



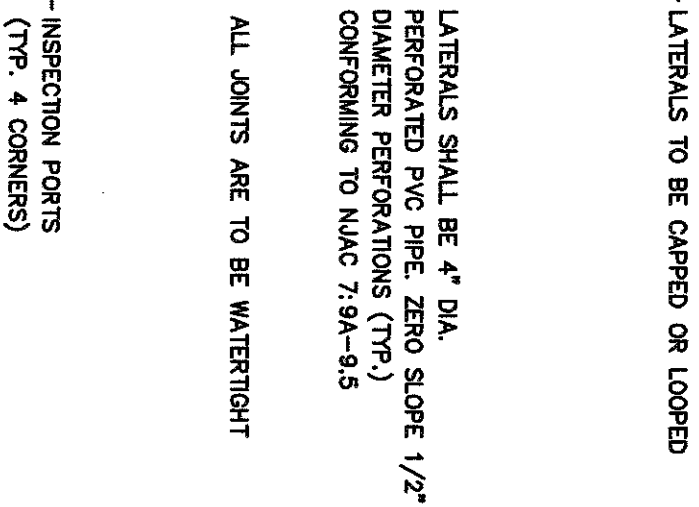
REQUIREMENTS	
REQUIRED	PROVIDED
12,000 SF	13,066 SF
90 FT	77.40 FT*
30 FT	36.00 FT
20 FT	65.10 FT
10 FT	12.50 FT
25 FT	25.07 FT
25%	21.2%
OV 35 FT	<35 FT
HT 4 SPACES	4 SPACES
CONFORMANCE	

AND TOPOGRAPHIC INFORMATION FROM
ARPOINT SERVICES, DATED 8-31-12.
CANT

EDROOM)
ONAL BEDROOMS @ 150 GPD EACH)
D TOTAL
= 1,771 S.F. DISPOSAL AREA REQUIRED
F. DISPOSAL AREA PROVIDED



PROFILE
NOT TO SCALE



THE DISTRIBUTION BOX SHALL BE INSTALLED DIRECTLY ON THE FILTER MATERIAL WITHIN THE DISPOSAL BED.

LOT 11

LOT 4

FIELD PLAN VIEW

N.T.S.

S79°54'00"E

80.00

LOT 8

PROP. LIMIT OF
DISTURBANCE

PROP. 2,000 GAL.
SEPTIC TANK

LOT 24

N04°33'00"W

178.92'

PROPOSED
7-BEDROOM
DWELLING
F.F. = 63.5
B.F. = 53.5

S04°33'00"E

158.69'

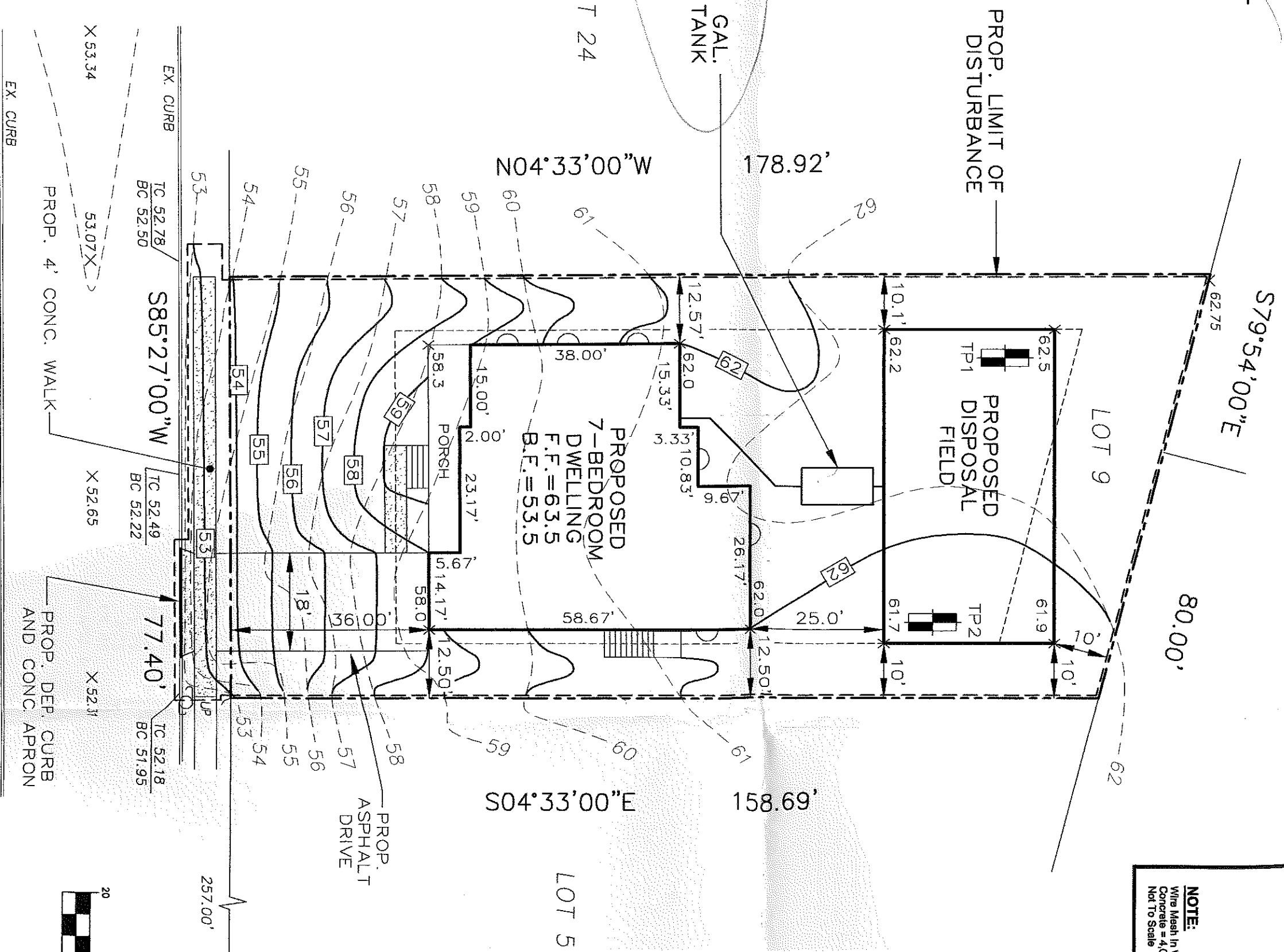
PROP.
ASPHALT
DRIVE

LOT 5

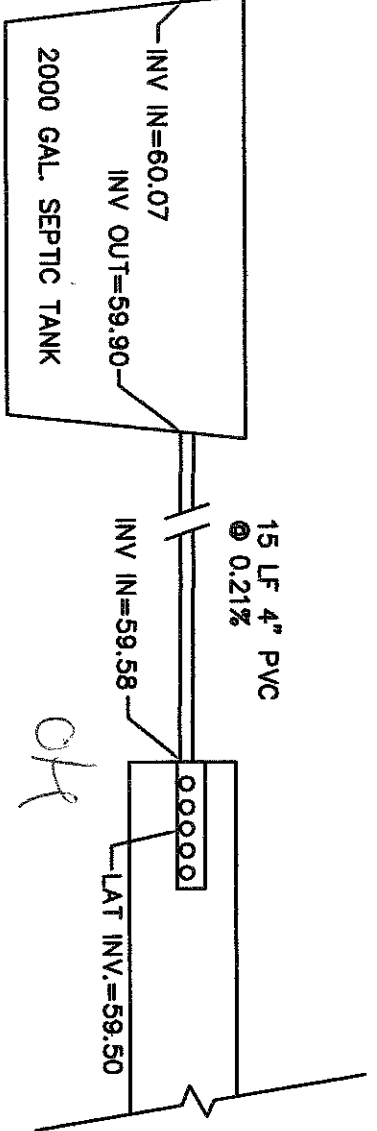
NOTE:
Wire Mesh in
Concrete = 4,0
Not To Scale



NOTE:
Wire Mesh in
Concrete = 4.0
Not To Scale



VALLEY DRIVE (50' WIDE)



PROFILE
NOT TO SCALE

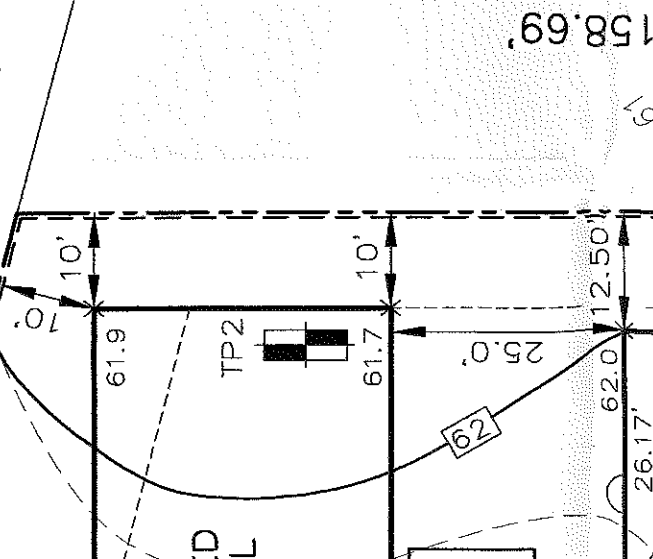
GLEN
LICENSED PROFESSIONAL
STATE OF NEW JERSEY

LOT 4

10-WAY SHORT	12.5'	1.5'	27'	15.5'	12.5'	3.5'	4.50'	24'	2'
10-WAY LONG	15.5'	3'	65'	21.5'	21.5'	5'	7'	60'	4'
17-WAY	15.5'	3'	65'	21.5'	21.5'	5'	7'	60'	4'

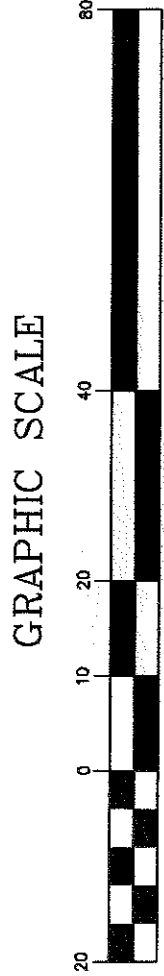
80.00'

62



LOT 5

MYRTLE PLACE
(50' WIDE)



1 inch = 20 ft.

RIVE (50' WIDE)

PLOT PLAN & SEPTIC DESIGN BERNEY-#775 VALLEY DRIVE LOT 9, BLOCK 12.07

LAKEWOOD TOWNSHIP, OCEAN COUNTY, NEW JERSEY

Lines Engineering, LLC
212 Second Street, Suite 401A
Lakewood, New Jersey 08701
Phone (732) 961-6846 Fax (732) 961-6847

GLENN D. LINES, P.E., P.P.

Glenn D. Lines 9/10/12
DATE

LICENSED PROFESSIONAL ENGINEER AND PLANNER
STATE OF NEW JERSEY LICENSE NO. 33011 (P.E.) 4066 (P.P.)

PROJECT NO.	12568
SCALE	1" = 20'
DATE	9-10-12
SHEET	1 OF 1

DISTRIBUTION BOX

J. F. Gillespie, Inc.
2547 Brunetta Drive, Vineland, NJ 08360
Phone: 856-692-2233 Fax: 856-692-5457



NOTE:
Wire Mesh in Walls, Base and Top
Concrete = 4,000 P.S.I.
Not To Scale



