



Public Health
Prevent. Promote. Protect.

Karen DeMarco, MPH
Health Officer/Director

Hunterdon County Department of Health



www.co.hunterdon.nj.us/health.html

May 25, 2021

Carla Conner, Secretary
Clinton Township Board of Health
1225 Route 31, Suite 411
Lebanon, NJ 08833

Re: Septic System Waiver Request
Municipality: Clinton Township
Block: 4.03 Lot: 31
Location: 1070 Route 22

Dear Carla,

This department has received a new construction septic design dated March 3, 2021 with a revision date of May 14, 2021 by Engineering & Land Planning Associates for a proposed 1,924 square foot commercial facility with 15 employees and 6 delivery personnel.

The design is in full conformance with the code except for the following waiver request, which will need to be acted on by the Board:

1. The proposed septic tank, disposal bed and the reserve area are all outside the building envelope.

The design engineer shall arrange to be at the next available Board meeting to present the design and waiver request to the Board.

If you have any questions, please call.

Very truly yours,

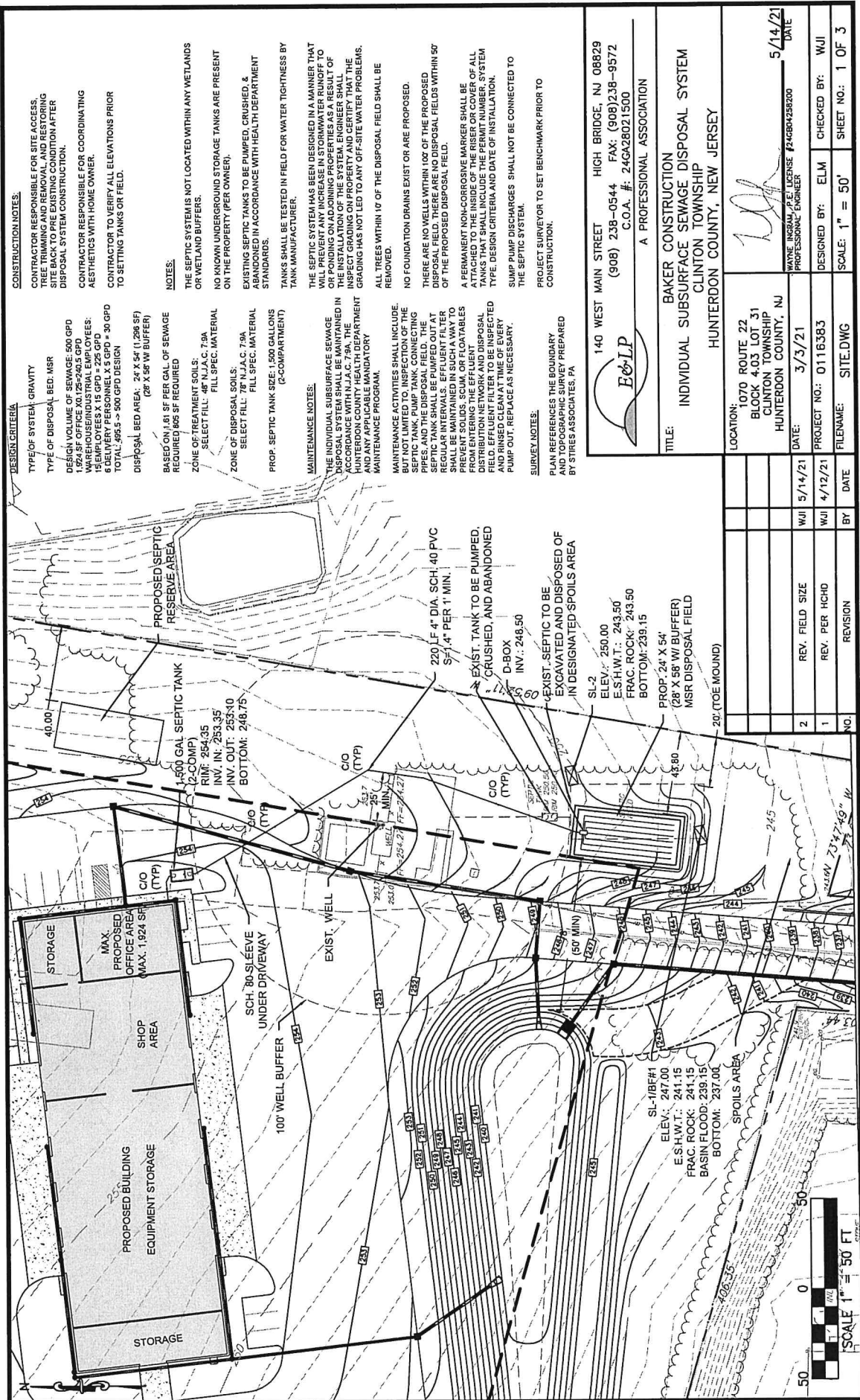
ORIGINAL IS SIGNED AND ON FILE AT HUNTERDON COUNTY HEALTH DEPARTMENT

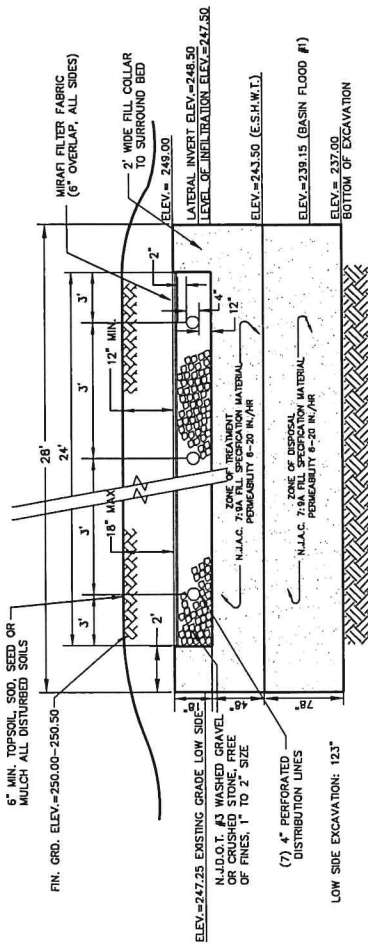
Dawn Faltings, REHS
Principal Environmental Health Specialist

DF:dv

cc: Wayne Ingram, PE - Engineering and Land Planning Associates
Denise Filardo, Zoning Officer

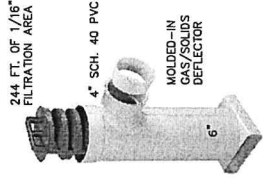
cli4.03_31waiver2021newconstructionREVISED





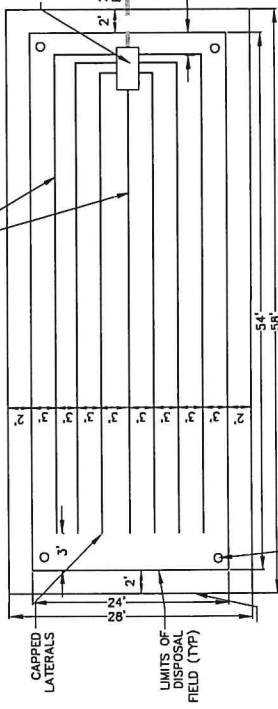
DISPOSAL BED SECTION
"MOUNDED SOIL REPLACEMENT"

N.T.S.

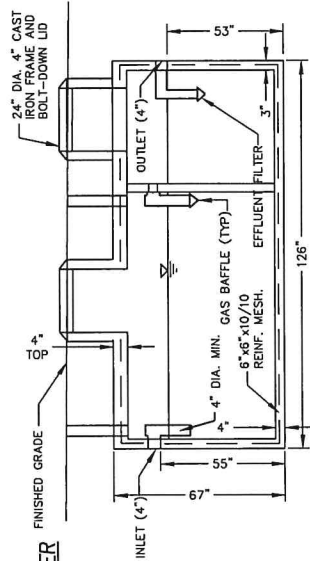
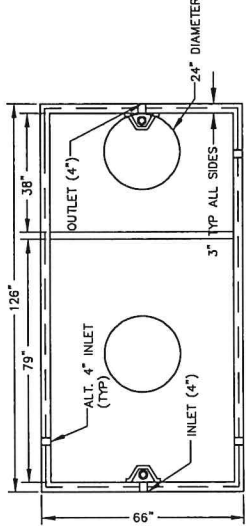


(1) TUF-TITE EF-6 EFFLUENT FILTER
(NSF CERTIFIED) (N.T.S.)
(INSTALL ON SEPTIC TANK OUTLET)

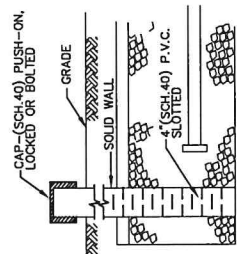
1,500 GAL. SEPTIC TANK
AS MANUFACTURED BY
FLEMINGTON PRECAST AND
SUPPLY, L.L.C.,
FLEMINGTON, N.J.
508-782-3246 OR
APPROVED EQUAL



DISPOSAL FIELD PLAN
(N.T.S.)



1,500 GAL SEPTIC TANK
2 COMPARTMENT
(N.T.S.)



INSPECTION PORT DETAIL
(N.T.S.)

140 WEST MAIN STREET HIGH BRIDGE, NJ 08829
(908) 238-0544 FAX: (908) 238-9572
C.O.A. #: 24G428021500
E&LP
A PROFESSIONAL ASSOCIATION

TITLE: **BAKER CONSTRUCTION**
INDIVIDUAL SUBSURFACE SEWAGE DISPOSAL SYSTEM
CLINTON TOWNSHIP
HUNTERDON COUNTY, NEW JERSEY

LOCATION:	1070 ROUTE 22 BLOCK 4.03 LOT 31 CLINTON TOWNSHIP HUNTERDON COUNTY, NJ	DATE:	5/14/21	DESIGNED BY:	WJI	SCALE:	N.T.S.	SHEET NO.:	3 OF 3
DATE:	3/3/21	PROJECT NO.:	0116383	FILENAME:	DETAILS.DWG	BY:	DATE		
REV.	FIELD SIZE	WJI	5/14/21	REV.	PER HCHD	WJI	4/12/21		
NO.	REVISION								

1070 ROUTE 22
BLOCK 4.03 LOT 31
CLINTON TOWNSHIP
HUNTERDON COUNTY, NJ

DATE: 5/14/21
PROJECT NO.: 0116383
FILENAME: DETAILS.DWG

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BLOCK 4.03 LOT 31
CLINTON TOWNSHIP
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May 27, 2021

Carla Conner Secretary
Clinton Township Board of Health
1225 Route 31, Suite 411
Lebanon, NJ 08833

Re: Septic System Alteration Waiver
Municipality: Clinton Township
Block: 46.01 Lot: 3
Location: 5 John Dr.

Dear Carla,

This department has received septic alteration plans with the most recent revision date of May 26, 2021 designed by Kurt Hoffman, PE, to correct a malfunctioning system to an existing 4 bedroom dwelling with no expansion. The design is in full conformance with the code except for following which will need to be acted on by the Board:

The following waiver will need to be acted on by the Board:

1. The proposed disposal bed will be only 20 feet from the existing water course which does not meet the minimum setback requirement of 50 feet according to state code. The engineer has proposed a 10 ml pvc liner on the two sides of the bed nearest the water course for further protection.

There are wetlands or transition areas near where the proposed disposal system will be located which will require a GP24 Permit from the DEP. The Board can conditionally approve the application with the applicant obtaining the Permit.

The engineer shall be at the next available Board meeting to present the waiver request to the Board.

If you have any questions, please call.

Very truly yours,

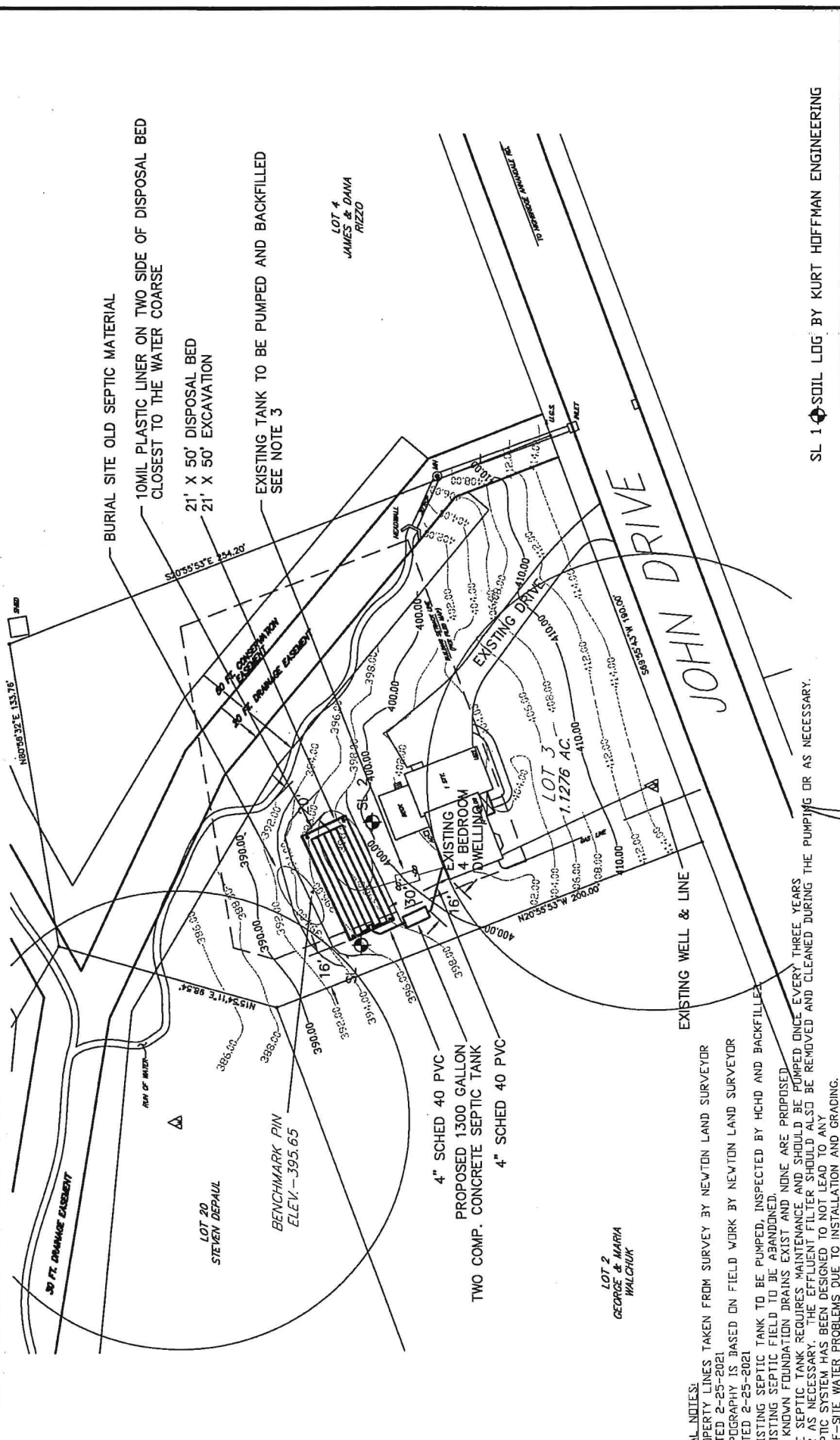
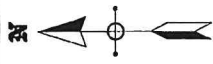
ORIGINAL IS SIGNED AND ON FILE AT HUNTERDON COUNTY HEALTH DEPARTMENT

Robert Vaccarella, REHS
Principal Environmental Health Specialist

RV:dv

cc: Kurt Hoffman, PE

ct4601_3



- GENERAL NOTES:**
1. PROPERTY LINES TAKEN FROM SURVEY BY NEWTON LAND SURVEYOR DATED 2-25-2021
 2. TOPOGRAPHY IS BASED ON FIELD WORK BY NEWTON LAND SURVEYOR DATED 2-25-2021
 3. EXISTING SEPTIC TANK TO BE PUMPED, INSPECTED BY HCHD AND BACKFILLED. EXISTING SEPTIC FIELD TO BE ABANDONED.
 4. NO KNOWN FOUNDATION DRAINS EXIST AND NONE ARE PROPOSED.
 5. THE SEPTIC TANK REQUIRES MAINTENANCE AND SHOULD BE PUMPED ONCE EVERY THREE YEARS OR AS NECESSARY. THE EFFLUENT FILTER SHOULD ALSO BE REMOVED AND CLEANED DURING THE PUMPING OR AS NECESSARY.
 6. SEPTIC SYSTEM HAS BEEN DESIGNED TO NOT LEAD TO ANY OFF-SITE WATER PROBLEMS DUE TO INSTALLATION AND GRADING.

SL 1 SOIL LOG BY KURT HOFFMAN ENGINEERING

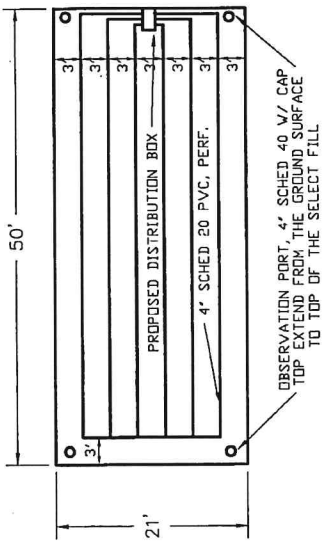
DATE: 3-23-2021	SCALE: 1" = 40'	SEPTIC DESIGN FOR	
DESIGNED BY: K.R.H.	FILE #: 2020-190	JUSTIN FINNIGAN	
DRAWN BY: K.R.H.	PER HCHD	BLOCK 46.01, LOT 3 CLINTON TOWNSHIP HUNTERDON COUNTY, NJ	
CHECKED BY: K.R.H.	SHEET 1 OF 5	REVISIONS	
		DATE	
		5-26-2021	

KH
ENGINEERING, LLC
P.O. BOX 149
ASBURY, NJ 08802
908-735-6464
CERTIFICATE OF AUTHORIZATION NUMBER 24CAB11330

KURT HOFFMAN
ENGINEERING
SL 1 SOIL LOG BY KURT HOFFMAN ENGINEERING

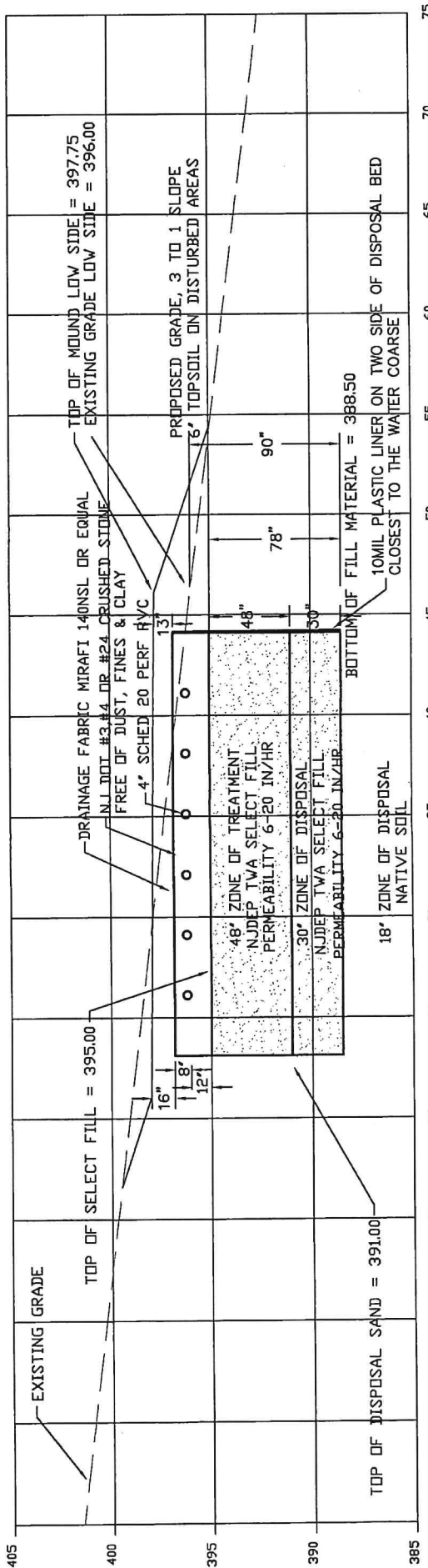
SEPTIC FACTOR	ELEVATION
INVERT OUT HOUSE	398.00
SEPTIC TANK IN INVERT	397.25
PUMP TANK IN INVERT	397.00
PUMP TANK OUT INVERT	NA
D-BOX IN INVERT	396.17
D-BOX OUT AND LATERAL INVERT	396.00
TOP OF BED (GRAVEL)	396.67
TOP OF SELECT FILL	395.00
TOP OF DISPOSAL SAND	391.00
BOTTOM OF SELECT FILL (BOTTOM EXCAVATION)	388.50
EXISTING GROUND ELEV. - HIGH SIDE	399.00
EXISTING GROUND ELEV. - LOW SIDE	396.00
TOP OF MOUND - HIGH SIDE	397.75
REGIONAL WATER TABLE - HIGH SIDE	NA
REGIONAL WATER TABLE - LOW SIDE	NA

DESIGN CALCULATIONS
 4 Bedroom Dwelling Septic Design
 First Bedroom(200) + Additional Bedrooms(150) = 650 GPD
 Design Permeability = K4 (1.61 SF/GPD)
 Bed Area Required = 1.61 X 650 = 1046.5 SF
 Bed Area Provided = 1050 SF



PROPOSED SEPTIC FIELD - 21' X 50'
 NOT TO SCALE

SELECT FILL MUST BE DELIVERED AND STOCKPILED AT THE SITE FOR TESTING AND CERTIFICATION BY A PROFESSIONAL ENGINEER.



CROSS SECTION - PROPOSED DISPOSAL BED
 NOT TO SCALE

DATE: 3-23-2021	SCALE: 1" = 40'	SEPTIC DESIGN FOR	KURT HOFFMAN KH ENGINEERING, LLC
DESIGNED BY: K.R.H.	FILE #: 2020-190	JUSTIN FINNIGAN	P.O. BOX 149 ASBURY, NJ 08802
DRAWN BY: K.R.H.	PER HCHD	BLOCK 48.01, LOT 3 CLINTON TOWNSHIP	NEW JERSEY PROFESSIONAL ENGINEER LICENSE NUMBER 2462811300
CHECKED BY: K.R.H.	SHEET 2 OF 5	REVISIONS	HUNTERDON COUNTY, NJ

CONSTRUCTION NOTES:

- DO NOT USE THIS PLAN UNLESS IT HAS BEEN CERTIFIED BY THE APPROPRIATE APPROVING AGENCY AND STAMPED ACCORDINGLY.
- THE ENGINEER IS TO BE NOTIFIED IF ANY DIMENSION OR CONDITION IS FOUND WHICH WOULD RENDER THIS PLAN INCAPABLE OF BEING CONSTRUCTED AS SHOWN.
- IT IS THE CONTRACTOR'S RESPONSIBILITY TO HAVE AND BE FAMILIAR WITH THE REQUIREMENTS OF THE ADMINISTRATIVE CODE AND N.J.A.C. 7:9A ET. SEC.
- THE PROPOSED DISPOSAL SYSTEM SHOWN ON THIS PLAN SHALL BE CONSTRUCTED, OPERATED AND MAINTAINED IN STRICT CONFORMANCE WITH N.J.A.C. 7:9A ET. SEC. AND THESE NOTES.
- IT IS THE OWNER'S OR CONTRACTOR'S RESPONSIBILITY TO VERIFY LOCATIONS OF ALL ABOVE GROUND AND UNDER GROUND STRUCTURES AND UTILITIES PRIOR TO CONSTRUCTION. LOCATIONS OF ALL STRUCTURES SHOWN ON PLAN ARE APPROXIMATE.
- THE SOILS INVESTIGATIONS PERFORMED FOR THIS DESIGN ARE APPLICABLE ONLY TO THE CONDITIONS AT THE LOCATIONS OF THOSE INVESTIGATIONS.
- THIS SYSTEM IS NOT DESIGNED FOR THE USE WITH A GARBAGE DISPOSAL UNIT OR ANY "EJECTOR" TYPE PUMPS. FLUSH WATER FROM WATER SOFTENERS SHALL NOT BE DISCHARGED INTO THIS SYSTEM. OWNER AND EXCAVATOR TO VERIFY ALL EFFLUENT IS DIRECTED TO THE PROPOSED SYSTEM.
- TOPSOIL SHALL BE STRIPPED FROM ALL AREA TO BE EXCAVATED, FILLED OR DISTURBED AND SHALL BE STOCKPILED ON SITE. BACKFILL MATERIAL OVER THE DISPOSAL SHALL BE TOPSOIL FORM THE STRIPPING.
- THE CONNECTING PIPE SHALL HAVE A MINIMUM GRADE OF ONE-QUARTER INCH PER FOOT.
- THE SLOPE OF THE DISTRIBUTION LINES SHALL BE NO GREATER THAN TWO INCHES PER 100 FEET.
- PIPE USED IN GRAVITY DISPOSAL BED/TRENCH FROM DISTRIBUTION BOX TO BEGINNING OF ALL LATERALS AND LOOPING PIPE SHALL BE 4" SCHEDULE 20 SOLID PIPE.
- NO EQUIPMENT SHALL BE DRIVEN OVER OR OPERATED ON THE INFILTRATIVE SURFACE OF THE DISPOSAL SYSTEM. ALL EXCAVATION SHALL BE CARRIED OUT WITH A BACKHOE OUTSIDE OF THE PERIMETER OF THE PREVIOUSLY EXCAVATED PORTIONS OF THE DISPOSAL SYSTEM.
- COMPACTION OF FILL OUTSIDE THE DISPOSAL SYSTEM SHALL BE TO 90% OF MAXIMUM DRY DENSITY AS DETERMINED BY A.S.T.M. D968-78, METHOD D.
- COMPACTION OF SELECT FILL WHEN PLACED BELOW THE DISPOSAL SYSTEM SHALL BE APPROVED BY AN ENGINEER. COMPACTION SHALL BE BY MECHANICAL MEANS ONLY.
- THE END OF ALL LATERALS SHALL BE CAPPED WITH CAPS OF THE SAME MATERIAL AS THE LATERALS OR SHALL BE CONNECTED ACROSS THE END AS SHOWN ON THE PLAN.
- AN INSPECTION PORT EXTENDING TO FINISHED GRADE SHALL BE PROVIDED OVER EACH TANK OR COMPARTMENT INLET AND OUTLET WHICH IS NOT DIRECTLY BELOW A MANHOLE. TANK INSPECTION PORTS SHALL BE CONSTRUCTED OF 4" SCHEDULE 40 PVC AND SHALL HAVE A LOCKING OR BOLTED CAP.
- INSPECTION PORTS SHALL BE LOCATED AS SHOWN ON PLAN AND SHALL BE CONSTRUCTED OF 4" SCHEDULE 40 PVC PERFORATED PIPE AND SHALL HAVE A REMOVABLE CAP. THE INSPECTION PORT SHALL EXTEND FROM THE LEVEL OF INFILTRATION TO THE FINISHED GRADE SURFACE.
- AFTER COMPLETION OF BACKFILLING AND FINAL GRADING, ALL DISTURBED AREAS SHALL HAVE TOPSOIL REPLACED AND SHALL BE SEED TO ESTABLISH A VEGETATIVE COVER IN A MANNER ACCEPTABLE TO THE ADMINISTRATIVE AUTHORITY.
- ADJOINING WELLS WITHIN 150' OF THE PROPOSED DISPOSAL SYSTEM HAVE BEEN LOCATED ON THE PLAN.
- ADJOINING DISPOSAL SYSTEMS WITHIN 150' OF THE PROPOSED DISPOSAL SYSTEM HAVE BEEN LOCATED ON THE PLAN.
- IT SHALL BE THE OWNER'S RESPONSIBILITY TO VERIFY THE PRESENCE OF ANY FLOOD PLAINS, WETLANDS OR WETLAND TRANSITION AREAS WITHIN THE AREA OF CONSTRUCTION OF ANY ITEM ON THIS PLAN.
- THE ENGINEER'S LIABILITY FOR THIS DESIGN ENDS AT ITS ACCEPTANCE OR CERTIFICATION BY THE ADMINISTRATIVE AUTHORITY UNLESS THE ENGINEER IS RETAINED TO INSPECT THE INSTALLATION OF THE ENTIRE SYSTEM. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR THE SAFETY OF ANY PERSONS DUE TO THE PERFORMANCE OF WORK BY THE OWNER, OWNERS' AGENT, CONTRACTOR OR BUILDER.
- THIS PLAN IS NOT A SURVEY AND IS TO BE USED FOR CONSTRUCTION OF A SEPTIC SYSTEM ONLY. IT IS NOT INTENDED TO BE USED AS A PLOT PLAN FOR CONSTRUCTION OF ANY STRUCTURES OR PROPOSED IMPROVEMENTS.
- PROPERTY LINE INFORMATION HAS BEEN OBTAINED FROM A SURVEY PLAN PROVIDED BY OWNER.
- PRIOR TO START OF ANY INSTALLATION THE INSTALLER MUST VERIFY ALL WASTE LINES ARE DIRECTED TO THE PROPOSED DISPOSAL SYSTEM.

6" EFFLUENT FILTER OR LARGER

Requirements for fill material - Zone of Treatment & Zone of Disposal

- Textual analysis (composition, by weight of size fraction passing each sieve)

# 8 sieve	80-100%
# 16 sieve	50-85%
# 30 sieve	25-60%
# 50 sieve	10-30%
# 100 sieve	2-10%

- Coarse fragment (material retained on the #8 sieve) content less than 15 percent by volume or 20 percent by weight.

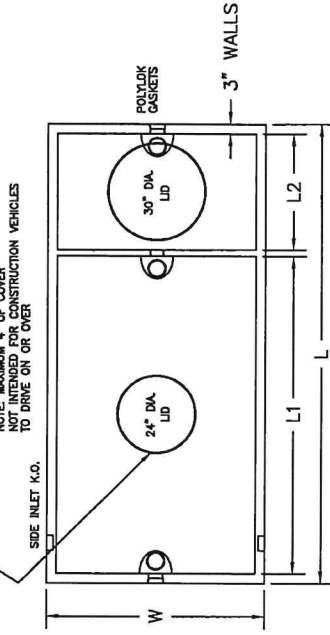
- Permeability rate from 6 to 20 inches per hour or percolation rate from 3 to 15 minutes per inch.

Compaction of fill material -

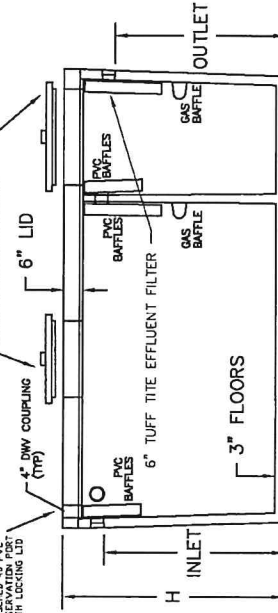
- Fill material shall be spread and compacted in layers one foot or less in thickness.
- Compaction may be accomplished manually or mechanically, by tamping or rolling, or by driving over the filled area in a controlled pattern using tracked vehicles.

- OWNER'S SURVEYOR TO PROVIDE BENCHMARK PRIOR TO START OF CONSTRUCTION.
- CONTRACTOR TO CALL FOR MARKOUT PRIOR TO START OF CONSTRUCTION.
- BUILDING SETBACKS TO BE VERIFIED BY OWNER PRIOR TO CONSTRUCTION.
- CONTRACTOR TO VERIFY ALL GRADES PRIOR TO START OF ANY CONSTRUCTION.

TAG TO BE LOCATED INSIDE RISER WITH THE FOLLOWING INFORMATION - SYSTEM TYPE, SIZE, APPROVAL DATE, ADMINISTRATIVE AUTHORITY, PERMIT NUMBER, AND INSTALL DATE.
NOTE: MAXIMUM 4" OF COVER NOT INTENDED FOR CONSTRUCTION VEHICLES TO DRIVE ON OR OVER



4" SCHEDULE 40 PVC TO BE CAST IRON AND BOLTED OR LOCKED TO PREVENT ACCESS BY CHILDREN



TANK TO BE CERTIFIED WATER TIGHT ONCE INSTALLED WITH ALL RISERS ON SITE. COPY OF CERTIFICATION TO BE PROVIDED TO HEALTH DEPARTMENT.

TANK SIZE	L	L1	L2	W	H	INLET	OUTLET
1300	142"	102"	30"	57"	65"	54"	51"

1300 GALLON TWO COMPARTMENT MONOLITHIC SEPTIC TANK

DATE: 3-23-2021 SCALE: 1" = 40'

DESIGNED BY: K.R.H.

FILE #: 2020-190

DRAWN BY: K.R.H.

SHEET 3 OF 5

CHECKED BY: K.R.H.

REVISIONS

DATE

SEPTIC DESIGN FOR JUSTIN FINNIGAN

BLOCK 48.01, LOT 3
CLINTON TOWNSHIP
HUNTERDON COUNTY, NJ

KH KURT HOFFMAN ENGINEERING, LLC

P.O. BOX 149
ASBURY, NJ 08802
908-725-6464
CERTIFICATE OF AUTHORIZATION NUMBER 24C02813300

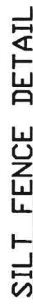
KURT HOFFMAN, P.E.
NEW JERSEY PROFESSIONAL ENGINEER LICENSE NUMBER 0641302



NOT TO SCALE

STABILIZED CONSTRUCTION ENTRANCE

NOT TO SCALE



NOT TO SCALE

SCHEDULE OF SITE DEVELOPMENT

[illegible]

NOTES

1. THERE ARE TO BE NO SLOPES STEEPER THAN 2:1 (HORIZONTAL:VERTICAL). SLOPES BETWEEN 2:1 AND THERE ARE TO BE NO SLOPES STEEPER THAN 2:1 (HORIZONTAL:VERTICAL).
2. REQUIRE TEMPORARY EROSION CONTROL MATING FOR STABILIZATION.
3. SILT FENCE OR HALFBAI BURN TO BE INSTALLED DOWN GRADIENT OF ANY EXCAVATED OR FILLED AREAS
4. REPORT OF COMPLIANCE IS REQUIRED FROM THE HUNTERDON COUNTY SOIL CONSERVATION DISTRICT AT THE COMPLETION OF THE PROJECT
5. IF EXCESS FILL IS TO BE REMOVED FROM THE SITE, THE PROJECT OWNER/APPLICANT SHALL BE RESPONSIBLE FOR ITS PROPER DISPOSAL. NOTIFY THE HUNTERDON COUNTY SOIL CONSERVATION DISTRICT OF THE PLANNED DISPOSAL SITE. OBTAIN A SOIL EROSION AND SEDIMENT CONTROL PLAN MUST BE SUBMITTED TO REVIEWED AND CERTIFIED BY THE HUNTERDON COUNTY SOIL CONSERVATION DISTRICT PRIOR TO ANY FILL REMOVAL FROM THE PROJECT SITE.
6. IT SHALL BE THE OWNER'S RESPONSIBILITY TO VERIFY THE PRESENCE OF ANY FLOOD PLAINS, WETLANDS OR WETLAND TRANSITION AREAS WITHIN THE AREA OF CONSTRUCTION OF ANY ITEM ON THIS PLAN. (PERMITS TO BE OBTAINED AS NECESSARY)
7. ADDITIONAL SOIL EROSION AND SEDIMENT CONTROL MEASURES MAY BE REQUIRED BY SOIL CONSERVATION DISTRICT OR TOWNSHIP ENGINEER IF FIELD CONDITIONS WARRANT THEM.
8. ANY PLAN REVISIONS (FOR ANY REASON) IS TO BE REVIEWED BY THE SOIL EROSION DISTRICT BEFORE AND AFTER CERTIFICATION. ANY UNDOCUMENTED CHANGES TO THE CERTIFIED PLAN WILL NULLIFY THE DISTRICT'S CERTIFICATION.

DATE: 3-23-2021

SCALE: 1" = 40'

DESIGNED BY: K.R.H.

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DRAWN BY: K.R.H.

וורד #. 0707-061

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CHECKED BY: K.R.H.

SHEET 4 OF 5

REVISIONS

DATE _____

**SEPTIC DESIGN
FOR
JUSTIN FINNIGAN**

KH
KURT HOFFMAN
ENGINEERING, INC.

BLOCK 48.01, LOT 3

P.O. BOX 149
NY, NJ 08802

CLINTON TOWNSHIP
HUNTERDON COUNTY, NJ

800-733-0404
AUTHORIZATION NUMBER 24CA28113300



Public Health
Prevent. Promote. Protect.

Hunterdon County Department of Health



www.co.hunterdon.nj.us/health.html

Karen DeMarco, MPH
Health Officer/Director

May 14, 2021

Carla Conner, Secretary
Clinton Township Board of Health
1225 Route 31, Suite 411
Lebanon, NJ 08833

Re: Septic System Waiver Request
Municipality: Clinton Township
Block: 43 Lot: 6
Location: 26 Hamilton Road

Dear Carla,

This department has received septic alteration plans dated May 4, 2021 prepared by Erica Busch, PE to an existing 2 bedroom dwelling with no expansion as stated on the application. Soil logs and soil permeability class rating tests were conducted on April 27, 2021. The proposed system is a pressure dosed, mounded soil replacement installation.

In addition, a survey by licensed surveyor Eldon D. Allen, LS, dated November 23, 2009 has also been included with the application.

The Board will need to act on the following item:

1. The toe of the mound will be less than the required 10 feet to the property line. The engineer shall inspect the final grading and provide certification that the grading does not adversely impact off-site conditions.

The design engineer shall arrange to be at the next available meeting to present the design and waiver request to the Board.

Please contact me if you have any questions.

Very truly yours,

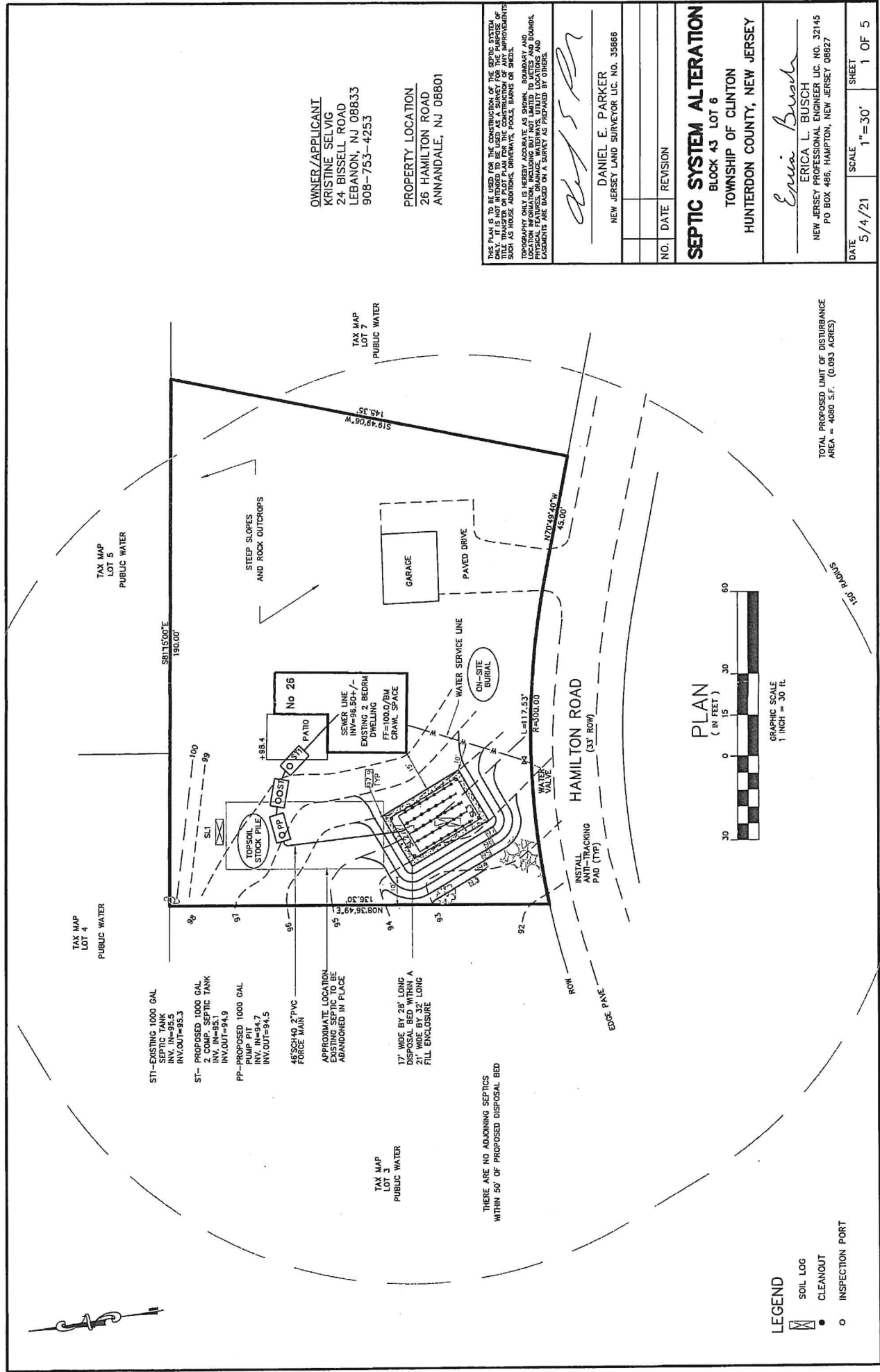
ORIGINAL IS SIGNED AND ON FILE AT HUNTERDON COUNTY HEALTH DEPARTMENT

Dawn Faltings, REHS
Principal Environmental Health Specialist

DF:dv

cc: Erica Busch, PE

cli43_6waiver2021ebtoe



1. SURVEY BOUNDARY INFORMATION OBTAINED FROM PLAN OF SURVEY PREPARED BY ELDON B ALLEN, NJPLS NUMBER 14457, DATED NOV 23, 2009
2. TOPOGRAPHIC SURVEY INFORMATION OBTAINED FROM FIELD MEASUREMENTS TAKEN ON APRIL 27, 2021

20. CONTRACTOR SHALL SUPPLY C-33 SHIPPING RECEIPTS TO DESIGN ENGINEER.



USDA WEB SOIL SURVEY MAP

SOILS MAPPED AS Gk₀₀B. GLADSTONE GRAVELLY LOAM. 3-8% SLOPES[illegible]

GENERAL NOTES:

1. LOCATION OF DISPOSAL SYSTEM AND COMPONENTS SHALL BE STAKED OUT BY DESIGN ENGINEER
2. EXCAVATION PRIOR TO THE PLACEMENT OF FILL MATERIAL SHALL BE CARRIED OUT IN ACCORDANCE WITH THE REQUIREMENTS OF N.J.A.C. 7:9-10.3(c)
 - A. CONSTRUCTION SHALL NOT TAKE PLACE WHEN THE SOIL MOISTURE CONTENT IS ABOVE THE LOWER PLASTIC LIMIT.
 - B. IF HEAVY EXCAVATING EQUIPMENT IS OPERATED WITHIN THE DISPOSAL BED THE EQUIPMENT SHALL NOT BE DRIVEN DIRECTLY ON THE INFILTRATIVE SURFACE OF THE EXCAVATION. A MINIMUM OF ONE FOOT OF FILL MATERIAL SHALL BE MAINTAINED BELOW THE VEHICLE TRACKS AT ALL TIMES.
 - C. ALL SIDEWALL AND BOTTOM AREAS SHALL BE SCARIFIED BEFORE PLACEMENT OF FILTER MATERIAL
 - D. ALL SIDEWALL AND BOTTOM AREAS SHALL BE CLEANED OF SILT DEPOSITED WITHIN THE EXCAVATION DUE TO RAIN OR SNOW.
3. AN EXCAVATION SHALL BE MADE TO THE REQUIRED DEPTH EXTENDING THROUGHOUT THE ENTIRE AREA TO BE OCCUPIED BY THE DISPOSAL FIELD AND BEYOND THE PERIMETER OF THE DISPOSAL FIELD A MINIMUM OF TWO FEET IN ALL DIRECTIONS FOR SRC, FILL ENCLOSED DISPOSAL BEDS
4. THE EXCAVATION SHALL BE FILLED WITH SUITABLE FILL MATERIAL AND FOR SRE AND MSR THE FILL MATERIAL UP OVER THE EXCAVATION A MINIMUM OF TWO FEET BEYOND THE PARAMETER OF THE DISPOSAL FIELD.
5. FILL MATERIAL USED IN THE ZONE OF DISPOSAL AND ZONE OF TREATMENT SHALL MEET THE REQUIREMENTS OF NJAC:9A-10.1(04) AND 5

B. COARSE FRAGMENT (MATERIAL RETAINED ON THE #8 SIEVE) CONTENT LESS THAN 15% BY VOLUME

% SIEVE	100% SIEVE
#16 SIEVE	50-100%
#30 SIEVE	50-85%
#50 SIEVE	25-60%
#100 SIEVE	10-30%
	2-10%

C. PERMEABILITY RATE FROM 6-20 IN/HR OR PERCOLATION RATE FROM 3-15 MIN/IN.

6. PLACEMENT AND COMPACTION OF FILL MATERIAL SHALL MEET THE REQUIREMENTS AS SPECIFIED BY

AC 7:9A-10.1(f).

A. INSTALL FILTER MATERIAL IN 8" - 12" LIFTS AND COMPACT LIGHTLY WITH A TRACKED VEHICLE. RUBBER TIRE EQUIPMENT SHALL NOT BE USED TO COMPACT THE FILL

B. THE FILL MATERIAL IS TO BE SAMPLED AND TESTED BY THE ENGINEER TO INSURE COMPLIANCE WITH NJDEP SPECIFICATIONS. A COMPOSITE SAMPLE SHALL BE OBTAINED BY SAMPLING AN ON-SITE STOCKPILE PRIOR TO INSTALLATION. THE TESTING SHALL INCLUDE A MECHANICAL ANALYSIS TEST INCLUDING SIEVE AND HYDROMETER TESTING.

C. PLACEMENT AND COMPACTION OF APPROVED FILL MATERIAL SHALL BE UNDER THE OBSERVATION AND APPROVAL OF THE DESIGN ENGINEER. COMPACTION OF THE FILL SHALL BE SUFFICIENT TO ADEQUATELY PREVENT FAILURE OF ANY COMPONENT OF THE SYSTEM DUE TO EXCESSIVE SETTLEMENT OR DIFFERENTIAL SETTLEMENT. THE ENGINEER SHALL PERFORM PERCOLATION TESTS IN THE FILTER MATERIAL AS IT IS BEING INSTALLED.

7. A PROFESSIONAL ENGINEER SHALL CERTIFY BY SIGNATURE AND SEAL THE TEXTURAL ANALYSIS AND AND COMPACTION OF THE FILL

8. THE FILTER MATERIAL SHALL BE WASHED GRAVEL OR CRUSHED STONE FREE OF FINES, DUST, ASHES, OR CLAY. FILTER MATERIAL SHALL CONFORM IN SIZE AND GRADATION TO NUDOT NUMBERS 3, 4, OR 24 STONE.

9. SLOPE OF PIPE IN THE DISPOSAL BED IS TO BE 0" - 2" / 100 FEET. TWO ROW PERFORATED PVC PIPE TO BE IN ACCORDANCE WITH ASTM - D5973. PERFORATIONS SHALL BE EVENLY SPACED ALONG TWO ROWS RUNNING THE LENGTH OF THE PIPE. ON EACH MIDWAY BETWEEN THE INVERT AND THE CENTER LINE WHICH SEPARATES THE UPPER AND LOWER HALVES OF THE PIPE, INSTALL ENDOCAPS AT THE END OF ALL DISPOSAL LINES.

10 INSTALL 4" SCH. 40 PVC (PERFORATED) INSPECTION PORTS AT ALL CORNERS OF THE DISPOSAL BED.

~~11 THE MANIFOLD PIPE/5 FROM THE DISTRIBUTION BOX MUST BE SOLID PIPE.~~

12. FILTER MATERIAL SHALL BE COVERED WITH FILTER FABRIC. (MIRAFI # 140 OR EQUIV.) EDGES OF ADJACENT SHEETS OF FILTER FABRIC SHALL OVERLAP 6 INCHES.

13. THE SIDE SLOPES OF THE DISPOSAL BED SHALL BE CONSTRUCTED WITH SLOPES OF THREE TO ONE OR LESS

14. FILL BERM MATERIAL SHALL BE

A PERMEABILITY OF <0.2 IN/Hr

15. BACKFILL MATERIAL SHALL BE TOPSOIL FREE OF LARGE STONES, SLUMPS, AND OTHER WASTE MATERIALS.

16. PROVIDE GRAVING OF THE
FROM THE DISPOSAL AREA.



DISPOSAL SYSTEM PLAN VIEW

NOT TO SCALE

SEPTIC SYSTEM DESIGN:

DESIGNED FOR A 2 BEDROOM HOUSE
TOTAL DAILY SEWAGE VOLUME = 350 GPD
DESIGN PERMEABILITY RATE = 6-20 IN./HR.
REQUIRED BOTTOM AREA/DAY = 1.33 S.F./GAL./DAY = 465.5 S.F.
350 GAL./DAY X 1.33 S.F./GAL./DAY = 465.5 S.F.
CONSTRUCT A 17' WIDE BY 28' LONG DISPOSAL BED
WITHIN A 21' WIDE BY 32' LONG FILL ENCLOSURE

[illegible]

TANK/PUMP PIT

GENERAL NOTES:

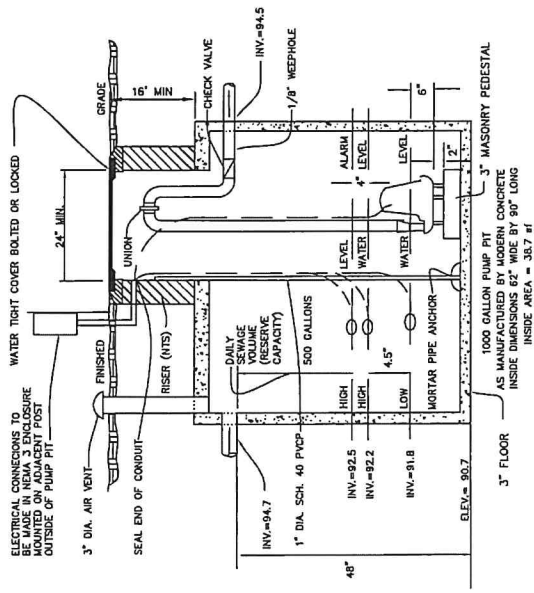
1. ALL INSIDE SURFACES OF TANKS SHALL BE SEALED WITH TWO COATINGS OF AN APPROPRIATE INERT COATING TO MINIMIZE CORROSION. COATING OF PRECAST TANKS SHALL BE APPLIED
2. SEPTIC TANKS SHALL BE PLACED UPON A FIRM AND STABLE FOUNDATION SO THAT THE POTENTIAL FOR UNEVEN SETTLEMENT OR SHIFTING IS MINIMIZED. TANKS ARE TO BE INSTALLED DIRECTLY ON UNDISTURBED NATURAL SOIL. IF THE EXCAVATION IS TOO DEEP, IT SHALL BE BACKFILLED TO THE PROPER ELEVATION WITH COMPACTED SAND. COMPACTED SAND IS TO BE OBSERVED BY THE DESIGN ENGINEER PRIOR TO INSTALLATION OF TANK.
3. OUTLET BAFFLES OR TEES SHALL BE PROVIDED WITH GAS DEFLECTION BAFFLE.
4. ALL MANHOLES SHALL BE EXTENDED FLUSH WITH FINISHED GRADE BY MEANS OF A RISER FITTED WITH A REMOVABLE WATER TIGHT COVER. COVERS SHALL BE BOLTED OR LOCKED.
5. AN INSPECTION PORT EXTENDING TO FINISHED GRADE SHALL BE PROVIDED FOR EACH TANK OR COMPARTMENT INLET OR OUTLET WHICH IS NOT DIRECTLY BELOW A MANHOLE. INSPECTION PORTS SHALL EXTEND TO FINISHED GRADE AND SHALL BE CONSTRUCTED OF 4" CAST IRON OR PVC PIPE WITH BOLTED CAP.
6. THE INSTALLATION OF ALL TANKS SHALL PREVENT FLOTATION.
7. ALL SEPTIC TANK CONNECTIONS AND ALL RISERS, SHALL BE SEALED WITH AN EXPANDING WATERPROOF CEMENT. IN ADDITION, TAR GASKETS ARE REQUIRED UNDER ALL CAST IRON MANHOLE COVERS
8. MAXIMUM OF 4" COVER OVER THE SEPTIC TANK.
9. INSTALL EFFLUENT FILTER IN OUTLET BAFFLE OF SEPTIC TANK IN ACCORDANCE WITH NJAC7:9A-8.2(j)(3)
10. ALL NEW TANKS SHALL BE TESTED FOR WATER TIGHTNESS IN ACCORDANCE WITH NJAC7:9A-8.2(m)
11. A PERMANENT, NON-CORROSIVE MARKER, MINIMUM OF 8 SON SHALL BE ATTACHED TO THE MANHOLE COVER OR RISER IMMEDIATELY BELOW THE COVER WITH THE FOLLOWING INFORMATION:
 1. DATE OF INSTALLATION
 2. DATE OF SYSTEM
 3. TYPE OF SYSTEM
 4. TOTAL DESIGN CRITERIA IN GALLONS PER DAY
12. PROPOSED SEPTIC TANK SHALL HAVE INSTALLED AN NSF CERTIFIED SEPTIC SOLID RETAINER OR SEPTIC EFFLUENT FILTER IN ACCORDANCE WITH NJAC 7:9A-8.2(j)(3)
13. SEPTIC TANK, RISER AND INSPECTION PORT SHALL BE TESTED FOR WATER TIGHTNESS AFTER INSTALLATION AND BEFORE BACKFILLING USING HYDROSTATIC OR VACUUM TEST.

PUMP

GENERAL NOTES:

1. CONTRACTOR MUST CONTACT DEPARTMENT OF HEALTH PRIOR TO ELECTRICAL WIRING AND INSTALLATION OF COMPONENTS.
2. ALL ELECTRICAL SERVICE LINES FROM THE HOME TO THE PUMP PIT SHALL BE PROTECTED BY ELECTRICAL CONDUIT.
3. ELECTRICAL CONNECTIONS FOR PUMP TO BE MADE OUTSIDE OF THE PUMP PIT IN NEMA 3 ENCLOSURE MOUNTED ON ADJACENT POST.
4. A GAS TIGHT SEAL SHALL BE PROVIDED WHERE THE ELECTRICAL CONDUIT ENTERS THE PUMP PIT, AND THE BUILDING.
5. PROVIDE HIGH WATER ALARM (BELL AND LIGHT) INSIDE BUILDING WITH AUTOMATIC RESET SILENCING SWITCH.
6. PUMP AND ALARM TO EACH HAVE THEIR OWN SEPARATE DEDICATED CIRCUITS. ALL ELECTRIC WORK TO BE DONE IN ACCORDANCE WITH NEC.
7. PUMP PIT TO CONTAIN SINGLE PUMP WITH THE FOLLOWING SPECIFICATIONS:

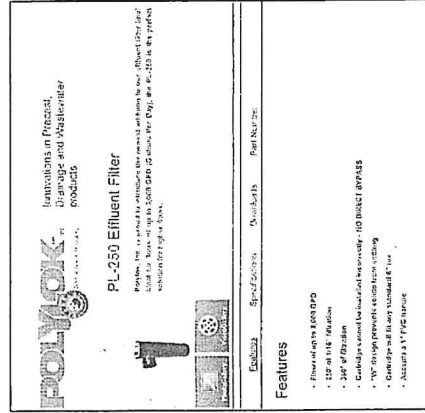
MAKE:	COULDS
MODEL:	3807 MED3
VOLTAGE:	208 OR 230
HORSEPOWER:	1/2
8. PUMP TO BE CAPABLE OF 60 G.P.M. AT 12.5' T.O.H.
9. PROVIDE LEVEL CONTROLS AT HEIGHTS INDICATED FOR PUMP PIT.
10. ON/OFF FLOAT SETTINGS ARE BASED UPON A PUMP PIT WITH AN INTERIOR BOTTOM AREA OF 8.27 SQ. FT. THE DESIGN ENGINEER SHALL BE NOTIFIED IMMEDIATELY IF THERE IS A CHANGE IN THE DESIGN VALUE AND THE ACTUAL AREA OF THE PUMP PIT TO BE USED.
11. CONTRACTOR MUST SECURE ALL NECESSARY ELECTRICAL PERMITS FOR CONNECTION OF THE PUMP PIT



NOTE: GROUND COVER ABOVE THE TANK SHALL NOT EXCEED 4'-0".

PUMP PIT DETAIL

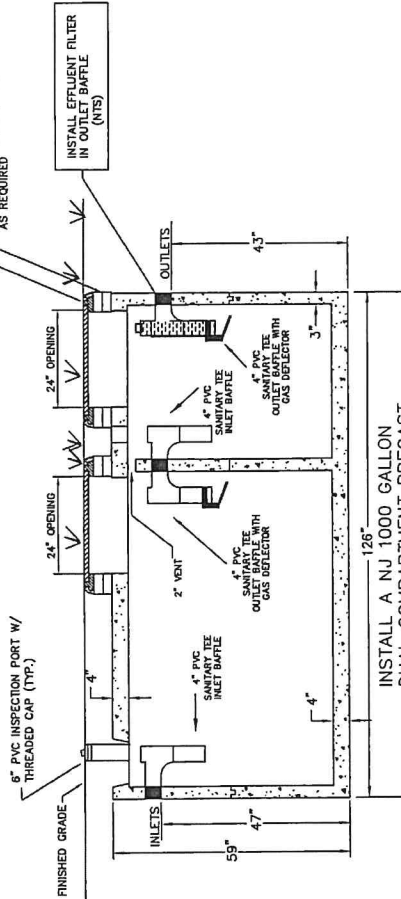
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RAISE TO FINISHED GRADE W/ CONC/ MANHOLE BLOCKS AS REQUIRED

MANHOLE FRAME AND COVER FOUNDRY NO. 1454 (LOCKING TYPE)

MORTAR FRAME INTO PLACE AS REQUIRED



INSTALL A NJ 1000 GALLON DUAL COMPARTMENT PRECAST CONCRETE SEPTIC TANK

NOTE: GROUND COVER ABOVE THE TANK SHALL NOT EXCEED 4'-0".

SEPTIC TANK FILTER DETAIL

NOT TO SCALE

NO. DATE REVISION

SEPTIC SYSTEM ALTERATION

BLOCK 43 LOT 6

TOWNSHIP OF CLINTON

HUNTERDON COUNTY, NEW JERSEY

Erica Bush

ERICA L. BUSCH
NEW JERSEY PROFESSIONAL ENGINEER LIC. NO. 32145
PO BOX 486, HAMPTON, NEW JERSEY 08827
(908) 202-4477

DATE 5/4/21

SCALE AS SHOWN

SHEET

4 OF 5

SOIL EROSION AND SEDIMENT CONTROL NOTES:

- ### AGRONOMIC SPECIFICATIONS FOR LAWNS AND CONSTRUCTION SITES:

- SEED BED PREPARATION FOR ALL SEEDINGS:

TOPSOILING: AREAS TO BE SEEDDED SHOULD HAVE A MINIMUM OF 5" OF TOPSOIL FREE OF OBJECTIONABLE STONES AND DEBRIS.

LIMING/FERTILIZING: APPLY LIMESTONE AND FERTILIZER TO SOIL TEST RECOMMENDATIONS OR AS FOLLOWS:

- TEMPORARY STABILIZATION WITH MULCH ONLY:**

TEMPORARY SEEDING SPECIFICATIONS:

TEMPORARY SEEDING IS TO BE USED ON ALL DISTURBED AREAS WHERE PERMANENT STABILIZATION WILL NOT BE ACCOMPLISHED FOR A PERIOD UP TO 6 MONTHS.

STABILIZATION WITH SOD:

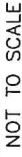
PERMANENT SEEDING SPECIFICATIONS:

- SEEDING MIXTURES FOR GENERAL SEEDINGS:

SEEDING MIXTURES FOR HIGH TRAFFIC AND CRITICAL AREAS:

(EXAMPLE: ATHLETIC FIELDS, WATERWAYS, DIVERSIONS ETC.)

- OTHER SEED MIXTURES, SUCH AS BLENDED VARIETIES OF PERENNIAL TURF-TYPE RYEGRASSES, TURF-TYPE TALL FESCUES, OR BLUEGRASSES MAY ALSO BE ACCEPTABLE IF APPROVED BY THE DISTRICT.



SEPTIC SYSTEM ALTERATION
BLOCK 43 LOT 6
TOWNSHIP OF CLINTON
HUNTERDON COUNTY, NEW JERSEY

Erica Busch
ERICA L. BUSCH
NEW JERSEY PROFESSIONAL ENGINEER LIC. NO. 32145
PO BOX 486, HAMPTON, NEW JERSEY 08827

DATE	5/4/21	SCALE	1"=30'	SHEET	5 OF 5
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