



Hunterdon County Department of Health



Public Health
Prevent. Promote. Protect.

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

Karen DeMarco, MPH
Health Officer/Director

April 8, 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: 80.02 Lot: 5
Location: 8 Sunnyfield Drive

Dear Carla,

This department has received a septic alteration design dated March 29, 2021 by Kurt Hoffman Engineering for an existing 5 bedroom dwelling to a malfunctioning system with no expansion. Soil logs and basin flood test were conducted on March 15 and March 16, 2021. The design meets all aspects of the code except for the following item which will need to be acted on by the Board:

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 existing roadway drainage is less than the required 50 feet to the proposed disposal field. The disposal field is shown 19 feet the proposed disposal field.

Since this a malfunctioning system the Board can consider the waiver since the system, as per 7:9 3.3(e)2 ii, is in more conformance with the code.

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

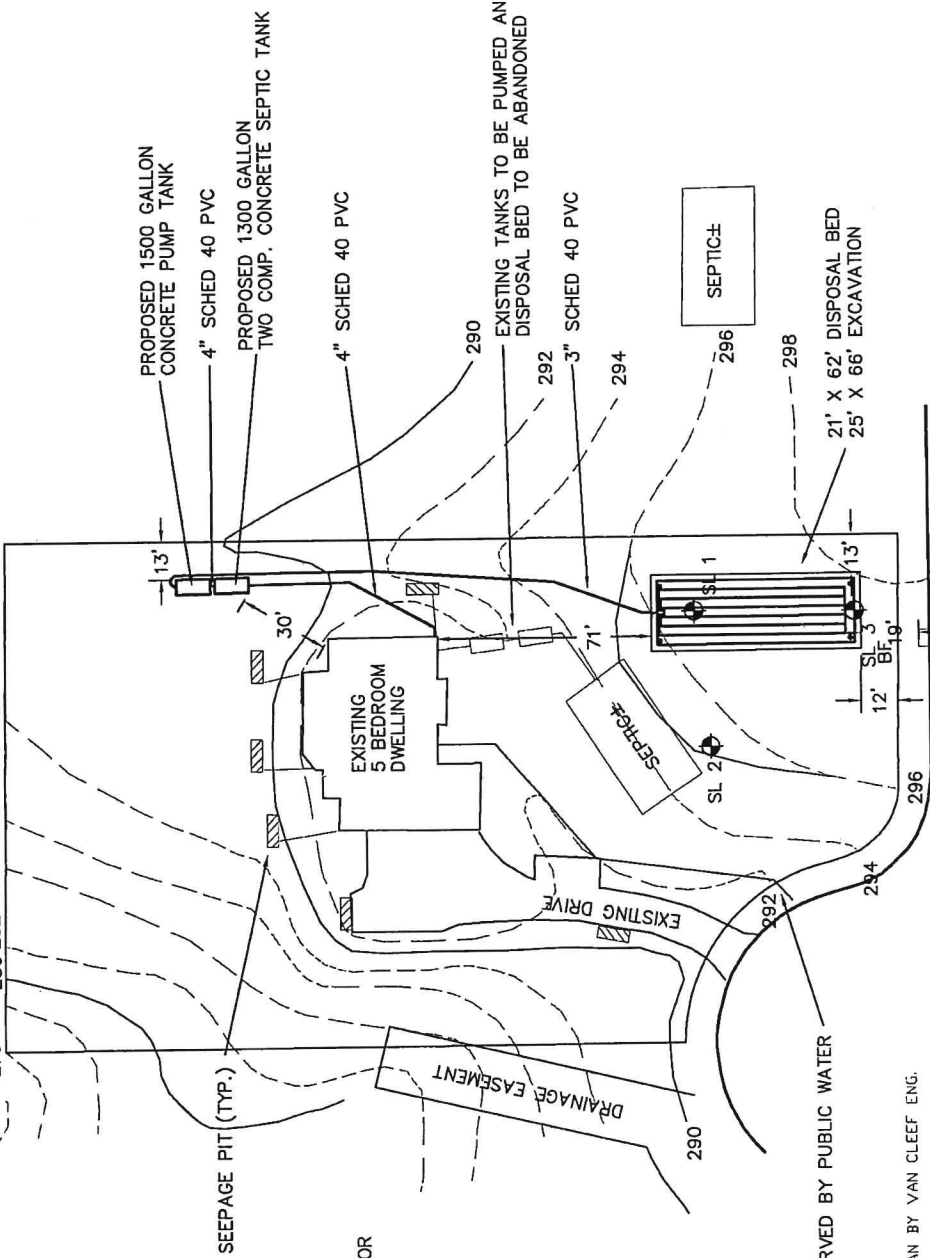
cc: Kurt Hoffman, PE - Kurt Hoffman Engineering, LLC

cli80.02_5waiver2021kh

Physical Address: 314 State Rte 12, County Complex, Bldg. #1, 2nd Floor
Mailing Address: P O Box 2900, Flemington, NJ 08822
Tel (908) 788-1351 Fax (908) 782-7510



274 276 278 280 282 284 286 288



PROPOSED 1500 GALLON
CONCRETE PUMP TANK

4" SCHED 40 PVC

PROPOSED 1300 GALLON
TWO COMP. CONCRETE SEPTIC TANK

4" SCHED 40 PVC

EXISTING
5 BEDROOM
DWELLING

290

EXISTING TANKS TO BE PUMPED AND BACKFILLED
DISPOSAL BED TO BE ABANDONED

3" SCHED 40 PVC

292

SEPTIC±

294

21' X 62' DISPOSAL BED
25' X 66' EXCAVATION

296

SUNNYFIELD DRIVE

298

SEEPAGE PIT (TYP.)

PLUMBING TO BE REROUTED TO EXIT THE
SIDE OF THE HOME. THE EXISTING EJECTOR
PUMP IS TO BE REMOVED.

DRAINAGE EASEMENT

EXISTING DRIVE

SITE SERVED BY PUBLIC WATER

GENERAL NOTES:

1. PROPERTY LINES TAKEN FROM PLOT PLAN GRADING PLAN BY VAN CLEEF ENG. DATED 3-7-1997
2. TOPOGRAPHY IS BASED ON PLOT PLAN GRADING PLAN BY VAN CLEEF ENG. DATED 3-7-1997
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.

DATE: 3-29-2021	SCALE: 1" = 40'	
DESIGNED BY: K.R.H.	FILE #: 2021-035	
DRAWN BY: K.R.H.		
CHECKED BY: K.R.H.	SHEET 1 OF 6	REVISIONS
		DATE

SL 1 ± SOIL LOG BY KURT HOFFMAN ENGINEERING

SEPTIC DESIGN FOR

RAFAEL BUSTOS

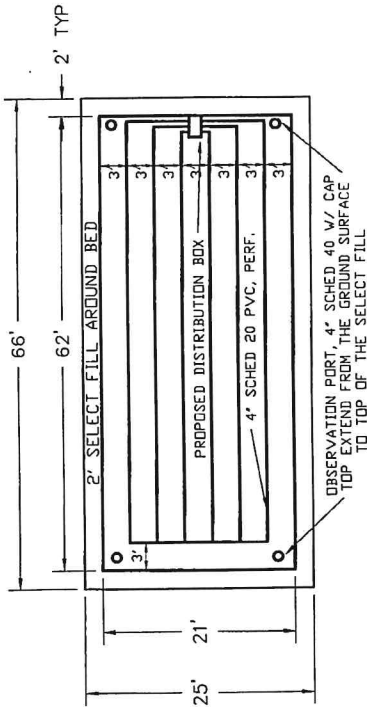
BLACK 60.02, LOT 5
CLINTON TOWNSHIP
HUNTERDON COUNTY, NJ

KH ENGINEERING, LLC
 KURT HOFFMAN
 P.O. BOX 148
 ASBURY PARK, NJ 08802
 CERTIFICATE OF AUTHORIZATION NUMBER 24C2811300

KURT HOFFMAN, P.E.
 NEW JERSEY PROFESSIONAL ENGINEER LICENSE NUMBER 0C43302

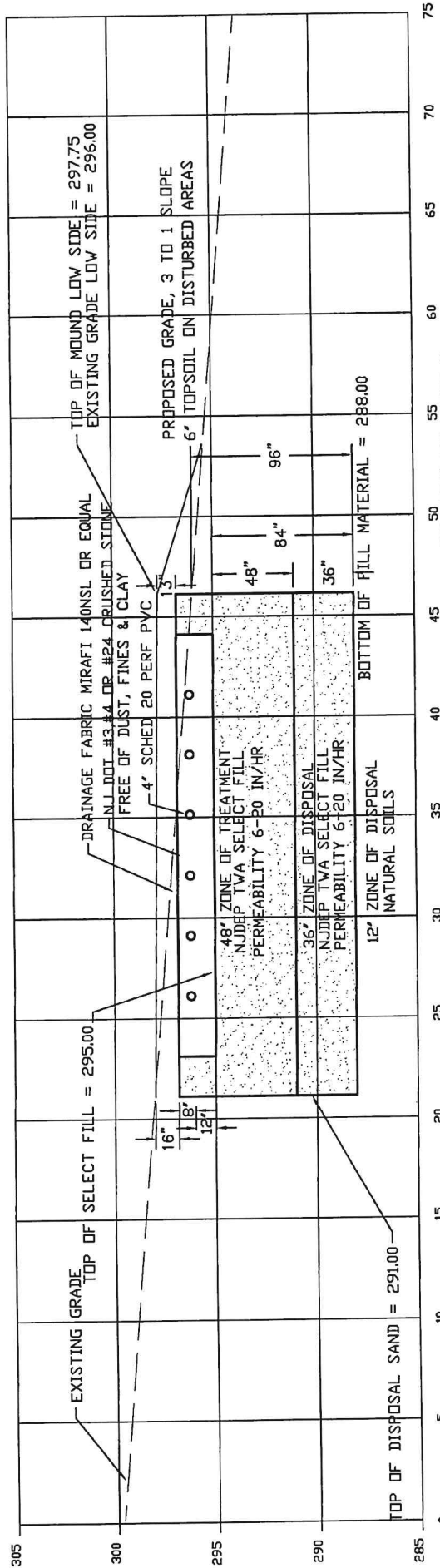
SEPTIC FACTOR	ELEVATION
INVERT OUT HOUSE	285.00
SEPTIC TANK IN INVERT	283.30
SEPTIC TANK OUT INVERT	283.25
PUMP TANK IN INVERT	283.90
PUMP TANK OUT INVERT	282.75
D-BOX IN INVERT	296.17
D-BOX OUT AND LATERAL INVERT	296.00
TOP OF BED (GRAVEL)	296.67
TOP OF SELECT FILL	295.00
TOP OF DISPOSAL SAND	291.00
BOTTOM OF SELECT FILL (BOTTOM EXCAVATION)	288.00
EXISTING GROUND ELEV - HIGH SIDE	298.00
EXISTING GROUND ELEV - LOW SIDE	296.00
TOP OF MOUND - HIGH SIDE	297.75
TOP OF MOUND - LOW SIDE	296.00
REGIONAL WATER TABLE - HIGH SIDE	NA
REGIONAL WATER TABLE - LOW SIDE	NA

DESIGN CALCULATIONS
 5 Bedroom Dwelling Septic Design
 First Bedroom(200) + Additional Bedrooms 4(150) = 800 GPD
 Design Permeability = K4 (1.61 SF/GPD)
 Bed Area Required = 1,61 X 800 = 1288 SF
 Bed Area Provided = 1302 SF



PROPOSED SEPTIC FIELD - 21' X 62'
 NOT TO SCALE

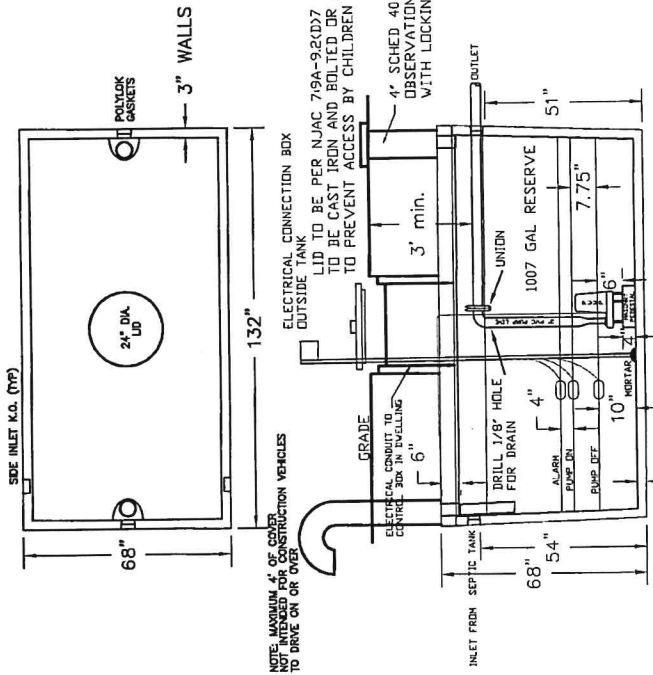
SELECT FILL MUST BE DELIVERED AND STOCKPILED AT THE SITE FOR TESTING AND CERTIFICATION BY A PROFESSIONAL ENGINEER.



ENGINEER TO TEST SELECT FILL FROM SITE FOR CONFORMANCE WITH SPECIFICATIONS ON SHEET 3

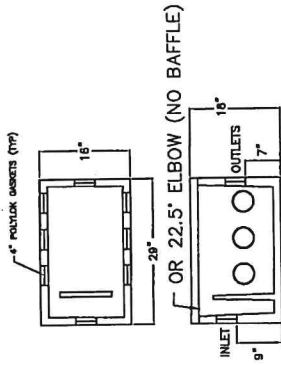
CROSS SECTION - PROPOSED DISPOSAL BED

DATE: 3-29-2021	SCALE: 1" = 40'	SEPTIC DESIGN FOR	KURT HOFFMAN ENGINEERING, LLC
DESIGNED BY: KR.H.	FILE #: 2021-035	RAFAEL BUSTOS	P.O. BOX 149 ASBURY PARK, NJ 08802
DRAWN BY: KR.H.	SHEET 2 OF 6	BLACK 80.02, LOT 6 CLINTON TOWNSHIP HUNTERDON COUNTY, NJ	CERTIFICATE OF AUTHORIZATION NUMBER 24G2811300
CHECKED BY: KR.H.	REVISIONS	KURT HOFFMAN, P.E. NEW JERSEY PROFESSIONAL ENGINEER LICENSE NUMBER 064332	



PUMP TANK NOTES:

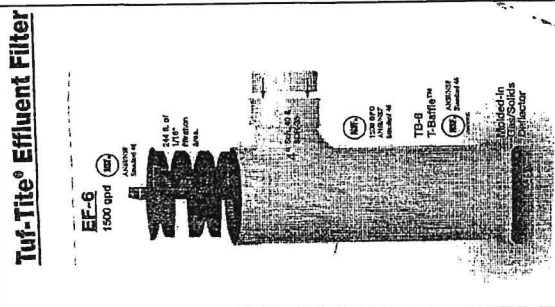
1. THE PUMP SHALL BE COULDS WE0511HH WITH 3" DISCHARGE OR APPROVED EQUAL.
2. THE PUMP DISCHARGE LINE SHALL BE SET AT A MINIMUM DEPTH OF THIRTY SIX (36) INCHES.
3. ALL ELECTRICAL CONTACTS AND RELAYS SHALL BE LOCATED IN A SEPARATE ABOVE GROUND WEATHER PROOF ENCLOSURE ADJACENT TO THE PUMP/DOSING TANK OR WITHIN THE BUILDING BEING SERVED BY THE SYSTEM.
4. ON/OFF AND ALARM SWITCHES SHALL BE MERCURY FLOAT TYPE.
5. THE HIGH WATER ALARM SHALL BE AN AUDIBLE ALARM AND A LIGHT. THE ALARM SHALL BE LOCATED WITHIN OR ADJACENT TO A LIVING AREA IN THE BUILDING BEING SERVED BY THE SYSTEM.
6. IT IS THE INSTALLERS RESPONSIBILITY TO HAVE AND BE FAMILIAR WITH THE ADMINISTRATIVE CODE COVERING THE PUMP AND PRESSURE DOSING SYSTEM (NUAC 7:9A-9.2, 9.3, AND 9.6 ET. SEC.)
7. THE ALARM AND PUMP SWITCHES SHALL BE ON SEPARATE CIRCUIT BREAKERS ON THE CONTROL PANEL AND MEET ALL ELECTRICAL CODES.



**1500 GALLON PUMP TANK
MONOLITHIC SEPTIC TANKS**
NOT TO SCALE

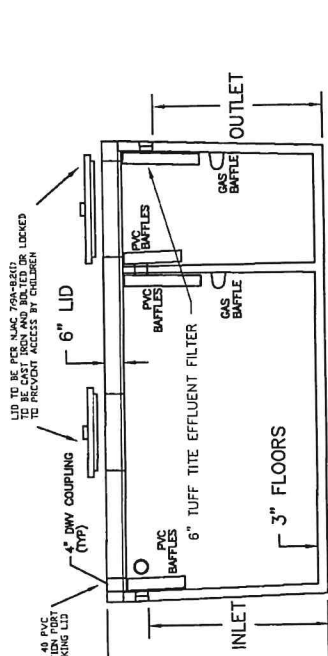
PUMP TANK DETAIL & NOTES

DATE: 3-29-2021	SCALE: 1" = 40'	SEPTIC DESIGN FOR	KURT HOFFMAN ENGINEERING, LLC
DESIGNED BY: K.R.H.	FILE #: 2021-035	RAFAEL BUSTOS	P.O. BOX 149 ASBURY PARK, NJ 08802
DRAWN BY: K.R.H.	CHECKED BY: K.R.H.	BLOCK 80.02, LOT 5 CLINTON TOWNSHIP HUNTERDON COUNTY, NJ	CERTIFICATE OF AUTHORIZATION NUMBER 24C2811300
	REVISIONS		
	DATE		



- 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 BACKSHOE OUTSIDE OF THE PERIMETER OF THE PREVIOUSLY EXCAVATED PORTIONS OF THE DISPOSAL SYSTEM.
 - COMPACTATION OF FILL OUTSIDE THE DISPOSAL SYSTEM SHALL BE TO 90% OF MAXIMUM DRY DENSITY AS DETERMINED BY A.S.T.M. D868-78, METHOD D.
 - COMPACTION OF SELECT FILL WHEN PLACED BELOW THE DISPOSAL SYSTEM SHALL BE APPROVED BY AN ENGINEER. COMPACTATION 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, OWNER'S 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.

1300 GALLON TWO COMPARTMENT MONOLITHIC SEPTIC TANK



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	H	INLET	OUTLET
1300	142"	102"	32"	57"	66"	54"	51"	51"

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 50-65%
 - # 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.
 - 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.
- NOTES: OWNER TO OBTAIN PERMIT TO DRIVE ON OR OVER CONSTRUCTION VEHICLES

SEPTIC DESIGN FOR RAFAEL BUSTOS

1300 GALLON TWO COMPARTMENT MONOLITHIC SEPTIC TANK

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

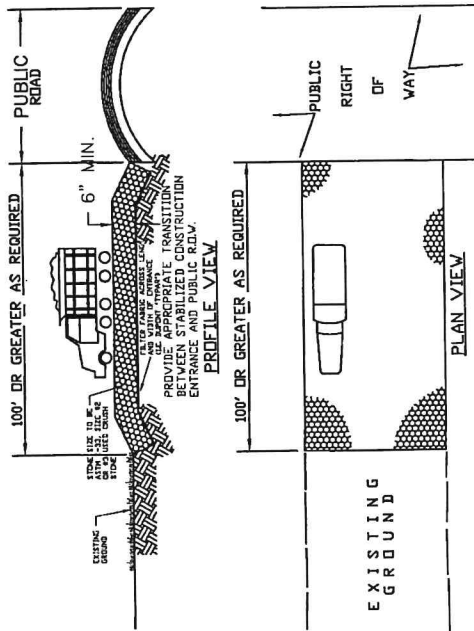
DATE:	SCALE:	1" = 40'
DESIGNED BY: K.R.H.	FILE #:	2021-035
DRAWN BY: K.R.H.	SHEET:	4 OF 6
CHECKED BY: K.R.H.	REVISIONS:	DATE

SEPTIC DESIGN FOR RAFAEL BUSTOS

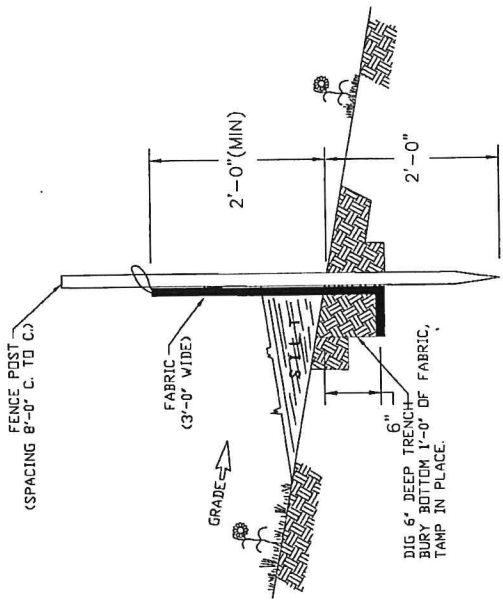
1300 GALLON TWO COMPARTMENT MONOLITHIC SEPTIC TANK

KURT HOFFMAN, P.E.
NEW JERSEY PROFESSIONAL ENGINEER LICENSE NUMBER 0643302

KURT HOFFMAN
KH ENGINEERING, LLC
P.O. BOX 149
ASBURY PARK, NJ 08802
908-735-0464
CERTIFICATE OF AUTHORIZATION NUMBER 24G2811300



STABILIZED CONSTRUCTION ENTRANCE
NOT TO SCALE



SILT FENCE DETAIL
NOT TO SCALE

- NOTES**
1. THERE ARE TO NO SLOPES STEEPER THAN 2:1 (HORIZONTAL:VERTICAL). SLOPES BETWEEN 2:1 AND 3:1 REQUIRE TEMPORARY EROSION CONTROL WAITING FOR STABILIZATION.
 2. SILT FENCE OR HALFBAIL BURN TO BE INSTALLED DOWN GRADIENT OF ANY EXCAVATED OR FILLED AREAS.
 3. A REPORT OF COMPLIANCE IS REQUIRED FROM THE HUNTERDON COUNTY SOIL CONSERVATION DISTRICT AT THE COMPLETION OF THE PROJECT.
 4. IF EXCESS FILL IS TO BE REMOVED FROM THE SITE, THE PROJECT OWNER/APPLICANT SHALL BE RESPONSIBLE FOR ITS PROPER DISPOSAL AND WILL NOTIFY THE HUNTERDON COUNTY SOIL CONSERVATION DISTRICT AS TO THE PLANNED DISPOSAL SITE LOCATION. IF APPLICABLE, 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.
 5. 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)
 6. ADDITIONAL SOIL EROSION AND SEDIMENT CONTROL MEASURES MAY BE REQUIRED BY SOIL CONSERVATION DISTRICT OR TOWNSHIP ENGINEER IF FIELD CONDITIONS WARRANT THEM.
 7. 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.

SCHEDULE OF WORK

DESCRIPTION OF WORK	2021	1	2	3	4	5	6	7	8	9	10	11	12
STABILIZE EXISTING DISTURBED AREAS													
TEMPORARY EROSION AND SEDIMENT CONTROLS													
SITE CLEARING													
CUT/ FILL/GRADE PROPERTY/IMPROVEMENTS													
FINAL GRADE SEED & MULCH													
PERMANENT STABILIZATION													

KH ENGINEERING, LLC
KURT HOFFMAN
P.O. BOX 149
ASBURY, NJ 08802
908-735-8464
CERTIFICATE OF AUTHORIZATION NUMBER 2462811300

SEPTIC DESIGN FOR
RAFAEL BUSTOS
BLOCK 80.02, LOT 5
CLINTON TOWNSHIP
HUNTERDON COUNTY, NJ

KURT HOFFMAN, P.E.
NEW JERSEY PROFESSIONAL ENGINEER LICENSE NUMBER GE14302

DATE: 3-29-2021	SCALE: 1' = 40'	REVISIONS	DATE
DESIGNED BY: K.R.H.	FILE #: 2021-035		
DRAWN BY: K.R.H.	SHEET 5 OF 6		
CHECKED BY: K.R.H.			

AGRONOMIC SPECIFICATIONS FOR LAWNS AND CONSTRUCTION SITES

- All disturbed areas that are not being graded, not under active construction, or not scheduled to be permanently seeded within 30 days must be temporarily stabilized as per specifications below.
- All exposed areas which are to be permanently vegetated, are to be seeded and mulched within 10 days of final grading.
- Straw mulch (hay mulch may be used if approved by the district) is to be applied to all seedings at a rate of 1-1/2 to 2 tons per acre (approx. 100-130 bales per acre).
- Mulch anchoring is required after mulching to minimize loss by wind or water. This is to be done using one of the methods (crimping, liquid mulch binders, netting, etc.) in the "standards for soil erosion and sediment control in New Jersey".
- Existing weedy and poorly vegetated areas with less than 80 percent perennial grass cover must receive permanent stabilization (as specified on back).
- All bags need to be saved for lime, fertilizer, seed, and liquid mulch binder (if mulch anchoring method). Such proofs need to be submitted to the district inspector for verification of materials and quantities used for all seedings.
- An additional fee of \$125.00 per inspection will be assessed on those sites where additional inspections are necessitated as a result of non-compliance with the approved plan. This includes additional inspections performed after the failure of an initial report of compliance inspection. The entire project site is inspected at the time of a request for report of compliance.

GENERAL NOTES FOR SOIL EROSION AND SEDIMENTATION CONTROL

- Plan topsoil and excavation material from any excavation on the downhill side of the site whenever possible to trap runoff from scalped areas.
- All soil erosion and sedimentation control practices on this plan are to be done in accordance with the STANDARDS FOR SOIL EROSION AND SEDIMENT CONTROL IN NEW JERSEY, supplemental criteria supplied by the local Soil Conservation District. A minimum of two weeks written notice shall be given to the appropriate Soil Conservation District and/or municipal engineer prior to any land disturbance.
- All soil erosion and sediment control devices shall be in place prior to any major soil disturbance and shall be maintained and checked on a regular basis.
- Temporary stabilization with mulch only:
Straw mulch or equivalent spread uniformly at the rate of 2-2 1/2 tons per acre (total ground surface coverage). This practice is applicable in areas where the season or other conditions may not be suitable for establishing vegetative cover. Mulch only is to be used only for short periods and will require maintenance and renewal.
Temporary Vegetative Cover- for soil to be exposed for a period of up to 6 months:
Plant as follows:
Winter Cereal Rye 112 lbs. per acre
Perennial Ryegrass 100 lbs. per acre
German or Hungarian Millet 30 lbs. per acre
Spring Oats 86 lbs. per acre
Pearl Millet 20 lbs. per acre
Winter Barley 96 lbs. acre
May 1st. to Sept. 1st
Spring before May 1st
& Aug. 15th to Oct. 1st
Sept. 1st to Oct. 20th
March 1st to May 15th & Aug. 15th to Oct. 1st

STABILIZATION WITH SOO
Stabilization with sod is permitted in areas where maintenance and irrigation are adequate to insure proper establishment and longevity. Seeded preparation is to be consistent with any other stabilization requirements. (lime and fertilizer bags are to be retained for district inspections) On slopes greater than 3 to 1, sod must be properly anchored to the slope in accordance with the NJ standards for soil erosion and sediment control.

PERMANENT SEEDING
A. Seed is to be incorporated into the soil to a depth of 1 1/4" to 1 1/2".
B. Lawn seedings are to be mixture of Kentucky bluegrass, turf-type fescues, and tall fescue. Seedings are to be made in late fall, and durability. No seed shall be applied with a germination test date of more than 12 months.
C. Professional seed mixtures are recommended rather than mixing seeds yourself.
D. Seed mixture (as specified below) is to be applied at a minimum rate of 200 lbs. per acre of perennial seed.
E. Optimum seeding period for HUNTERDON County is from March 1 to May 15 and August; 15 to October 1. Outside those periods, the seeding rates are to be increased by 50%.
F. Seedings should receive an application of fertilizer such as 10-10-10 or equivalent at 400 lbs. per acre approximately 6 months after first application.

GENERAL SEEDING rate and mixture (ex. - lawn)
40% turf type tall fescue or 50% Kentucky bluegrass
10% creeping red fescue or 20% turf type perennial ryegrass
10% chewing fescue or 20% cewings fescue
30% turf type perennial ryegrass
HIGH TRAFFIC AND CRITICAL AREA SEEDING rate and mixture
(ex. - athletic fields, waterways, diversions, etc.). This mixture may be also used for lawns but has a coarser texture than mixture above. Rate of 200 lbs. per acre of Athletic field mixture or the equivalent containing 80% Turf Type Tall Fescue 10% Kentucky Blue Grass 10% Turf Type Perennial Ryegrass

DATE:	SCALE:	1' = 40'
DESIGNED BY: K.R.H.	FILE #:	2021-035
DRAWN BY: K.R.H.	SHEET:	6 OF 6
CHECKED BY: K.R.H.	REVISIONS:	

HUNTERDON COUNTY SOIL CONSERVATION DISTRICT NOTES

REPORTS OF COMPLIANCE: These are issued when a site or individual lot or permanently stabilized. Permanent stabilization means that the entire project area or lot is final graded, topsoiled, fertilized, seeded and mulched. All other items specified in the certified Soil Erosion and Sediment Control plan (swales, rip-rap, special grading, etc.) must also be completed. Individual lots must also have driveways either paved or stabilized with stone.

TOPSOILING: Areas to be seeded should have a minimum of 5" of topsoil free of objectionable stones and debris.

FINAL GRADING: Grading is to be smooth of ruts and free of objectionable stones, depressions and rough edges.

PERMANENT SEEDING: All areas are to be limed and fertilized as per plan specifications. The seed mixture is to consist of perennial lawn type seed. Mixtures are specified in your plan. Seed mixtures that have a high percentage of annual seed (annual ryegrass, etc.), sometimes labeled "contractor's mix", are not acceptable. Certified seed is to be used. The seed, fertilizer, lime, etc. labels/slips are to be saved, so that the labels/slips may need to be presented at the time of the compliance inspection.

HYDROSEEDING/HYDROMULCHING: These are not acceptable practices in Hunterdon County due to the high failure rate of seeding, steep topography, poor seed to soil contact and poor ground surface coverage. All seed must be incorporated into the soil. Hydroseeding equipment may be used in conjunction with straw/hay mulch for the purpose of anchoring the mulch with liquid mulch binders.

MULCH: All seeding (permanent or temporary) are to be mulched with straw or hay. This mulch is to be applied at a rate of 1 1/2 to 2 tons per acre (approximately 100-130 bales/acre) in order to achieve a minimum of 90 percent ground surface coverage.

MULCH ANCHORING: All mulch must be anchored immediately after mulching to minimize loss by wind or water. This is to be done by one of the methods (crimping, liquid mulch binders, netting, etc.) in the "Standards for Soil Erosion and Sediment Control in New Jersey". If the mulch washes or blows off the seeding prior to District inspection, it will not pass. You are responsible to see to it that the mulch properly is anchored.

WEEDY AND POORLY VEGETATED AREA: (if applicable) Any area with less than 75 percent perennial grass cover must receive permanent stabilization (as specified above), if they are within the property boundaries of the project or lot. These areas must be properly scarified prior to seeding to assure seed to soil contact.

COMPLIANCE INSPECTION: You are responsible for calling the District office to schedule a compliance inspection, a minimum of 2 working days in advance (4 to 5 days would be appreciated). We cannot guarantee an inspection if less than 100 percent completed. You are also responsible for concealing inspections work (sheds, etc.) in at least 100 percent completed, or act of nature (rain, wind, etc.) has disturbed stabilization efforts. A \$175 reinspection will be assessed for each additional inspection required until the project lot is stabilized satisfactorily. When an inspection is requested for an individual lot in a project, the remaining project area will be looked at for deficiencies in following the Erosion and Sediment Control Practices such as tracking pad, inlet protection, keeping roads clean of sediment, silt fence, etc., will constitute a compliance failure on the requested individual lot.

TEMPORARY REPORTS OF COMPLIANCE: The District accepts seeding (permanent stabilization) at all times of the year as long as the lot/project area can be properly final graded. When seeding out of the optimal seeding periods (March 1 - May 15 or August 15 - October 1), seeding rates are to be increased by 50 percent. A temporary report of compliance is issued when a cash performance guarantee is posted to assure stabilization (severe winter months only). The bonding period, determined by the District Board, and based on the amount of acres disturbed (one acre being the minimum and rounded to the nearest acre thereafter). Bonding is only for stabilization. Permanent improvements such as rip-rap, piping, paving, etc. cannot be bonded. The disturbed acreage must be mulched (as a minimum) and maintained throughout the winter months as a temporary stabilization practices. Other practices (silt fences, hay bales, etc.) may also be required if field conditions warrant.

You are encouraged to get as much site/lot stabilization as possible completed during favorable weather.

SEPTIC DESIGN FOR
RAFAEL BUSTOS
BLOCK 80.02, LOT 6
CLINTON TOWNSHIP
HUNTERDON COUNTY, NJ

KH ENGINEERING, LLC
KURT HOFFMAN
P.O. BOX 149
ASBURY PARK, NJ 08802
CERTIFICATE OF AUTHORIZATION NUMBER 2462811300

KURT HOFFMAN, P.E.
NEW JERSEY PROFESSIONAL ENGINEER LICENSE NUMBER CE44302