



Hunterdon County Department of Health



Public Health
Prevent. Promote. Protect.

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Karen DeMarco, MPH
Health Officer/Director

April 14, 2021

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

Re: Septic System Alteration Waivers
Municipality: Clinton Township
Block: 9 Lot: 5
Location: 4 Hunters Path

Dear Carla,

This department has received septic alteration plans dated March 31, 2021 designed by E&LP to correct a malfunctioning system to an existing 3 bedroom dwelling with no expansion with the use of an Advanced Treatment Unit (ATU). This design incorporates a Hoot H-500A tank which is NSF approved according to standards 40 and 245. The design is in full conformance with the code except for following which will need to be acted on by the Board:

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

1. The proposed disposal bed will be only 97 feet from the existing well which does not meet the minimum setback requirement of 100 feet. As per 7:9A-4.3 the distance can be reduced to 50 feet provided there is 50 feet of casing. Due to the age of the well and no well record available the engineer has elected to install a Ultra Violet (UV) treatment device on the well for further protection. A water test for coliform will be done after installation of the unit.
2. The proposed system requires a Soil Replacement-Fill Enclosed installation, however due to site limitations the engineer shall explain to the Board why a Bottom-lined installation is proposed.
3. There shall be a minimum of 42 inches of separation from the bottom of the basin flood test pit and proposed level of infiltration. The design proposes only a separation of 35 inches, engineer shall explain why this cannot be done and will not affect the design of the system.

In addition, all requirements for an Advanced Treatment Unit shall be adhered to including signed service agreement for the life of the system, deed restriction, telemetry device, and NEHA certification for the installer which is stated on page 3 of the plot plan.

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

If you have any questions, please call.

Very truly yours,

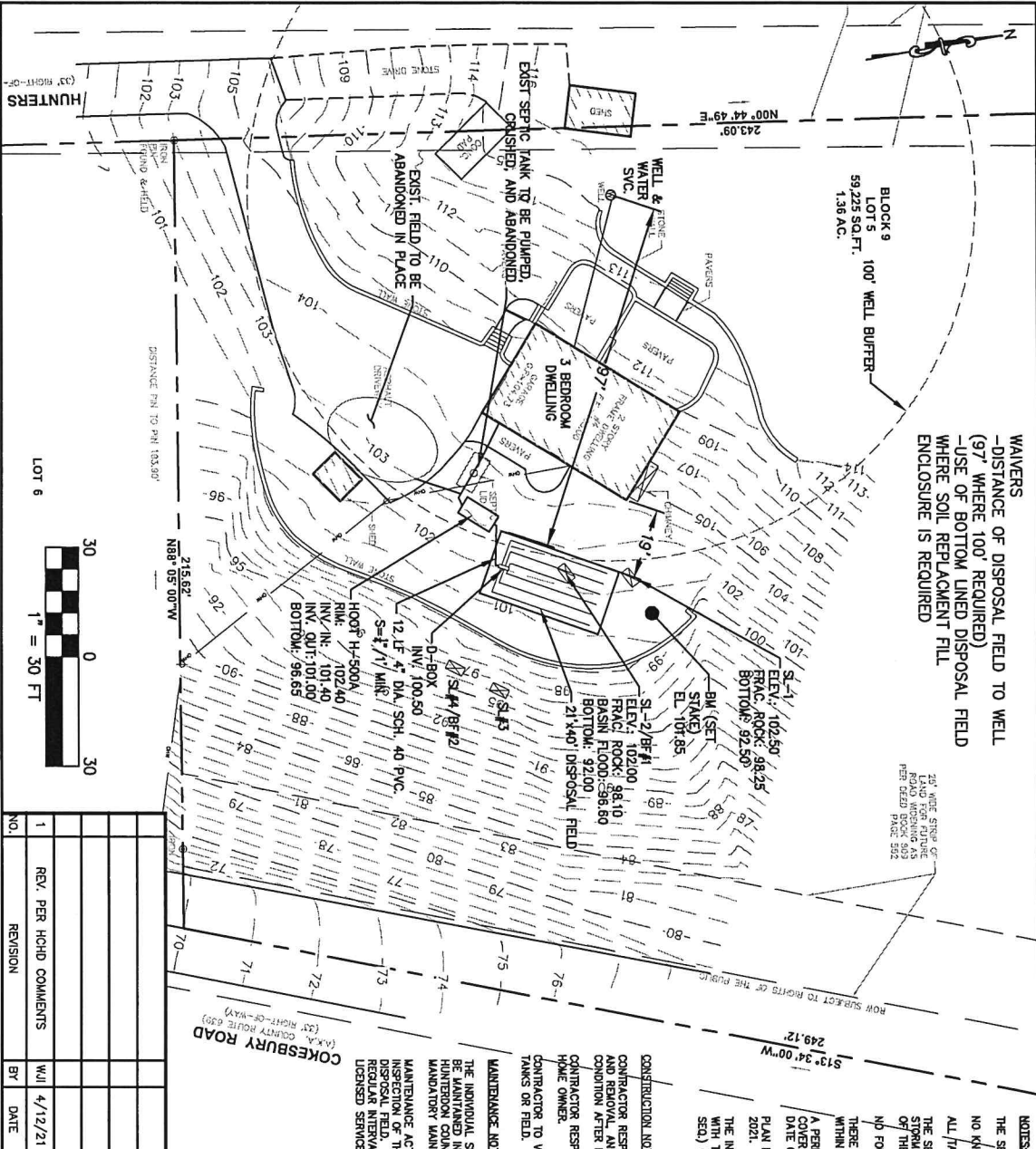
ORIGINAL IS SIGNED AND ON FILE AT HUNTERDON COUNTY HEALTH DEPARTMENT

Robert Vaccarella, REHS
Principal Environmental Health Specialist

RV:dv

cc: Wayne Ingram, PE

ct9_5



WAIVERS
 -DISTANCE OF DISPOSAL FIELD TO WELL
 (97' WHERE 100' REQUIRED)
 -USE OF BOTTOM LINED DISPOSAL FIELD
 WHERE SOIL REPLACEMENT FILL
 ENCLOSURE IS REQUIRED

BLOCK 9
 LOTS
 59,225 SQ.FT.
 1.36 AC.



NO.	REVISION	BY	DATE
1	REV. PER HCHD COMMENTS	WJL	4/12/21

NOTES:
 THE SEPTIC SYSTEM IS NOT LOCATED WITHIN ANY WETLANDS OR WETLAND BUFFERS.
 NO KNOWN UNDERGROUND STORAGE TANKS ARE PRESENT ON THE PROPERTY (PER OWNER).
 ALL TANKS TO BE TESTED FOR WATER-TIGHTNESS.
 THE SEPTIC SYSTEM HAS BEEN DESIGNED IN A MANNER THAT WILL PREVENT ANY INGRESS IN
 STRAWBAKER RUNOFF TO OR PONDING ON ADJOINING PROPERTIES AS A RESULT OF THE INSTALLATION
 OF THE SYSTEM.
 NO FOUNDATION DRAINS EXIST OR ARE PROPOSED.
 THERE ARE NO DISPOSAL FIELDS WITHIN 50' OF THE DISPOSAL FIELD. THERE ARE NO OFF-SITE WELLS
 WITHIN 100' OF THE DISPOSAL FIELD.
 A PERMANENT NON-CORROSIVE MANAGER SHALL BE ATTACHED TO THE INSIDE OF THE RESE OR
 COVER OF ALL TANKS THAT INCLUDES THE PERMIT NUMBER, SYSTEM TYPE, DESIGN CRITERIA AND
 DATE OF INSTALLATION.
 PLAN REFERENCES SURVEY PREPARED BY ENGINEERING & LAND PLANNING ASSOCIATES DATED MARCH
 2021.
 THE INDIVIDUAL SUBSURFACE SEWAGE DISPOSAL SYSTEM PROPOSED DESIGN IS IN FULL COMPLIANCE
 WITH THE STANDARDS FOR INDIVIDUAL SUBSURFACE SEWAGE DISPOSAL SYSTEMS (N.J.A.C. 7:9A-11, ET
 SEQ.) OTHER THAN AS INDICATED.

CONSTRUCTION NOTES:


CONTRACTOR RESPONSIBLE FOR SITE ACCESS, TREE TRIMMING
 AND REMOVAL, AND RESTORING SITE BACK TO PRE EXISTING
 CONDITION AFTER DISPOSAL SYSTEM CONSTRUCTION.
 CONTRACTOR RESPONSIBLE FOR COORDINATING AESTHETICS WITH
 HOME OWNER.
 CONTRACTOR TO VERIFY ALL ELEVATIONS PRIOR TO SETTING
 TANKS OR FIELD.

DESIGN CRITERIA

TYPE OF SYSTEM: GRAVITY ATU
 TYPE OF DISPOSAL BED: SRB
 DESIGN NO. OF BEDROOMS: 3
 DESIGN VOLUME OF SEWAGE: 500 GPD
 DISPOSAL BED AREA: 18' X 34.25' (616.5 SF)
 BASED ON 1,233 SF PER GAL. OF SEWAGE
 REQUIRED, 616.5 SF REQUIRED
 FILL SPEC. MATERIAL

MAINTENANCE NOTES:

THE INDIVIDUAL SUBSURFACE SEWAGE DISPOSAL SYSTEM SHALL
 BE MAINTAINED IN ACCORDANCE WITH N.J.A.C. 7:9A, THE
 HUNTERDON COUNTY HEALTH DEPARTMENT AND ANY APPLICABLE
 MANDATORY MAINTENANCE PROGRAM.
 MAINTENANCE ACTIVITIES SHALL INCLUDE, BUT NOT LIMITED TO,
 INSPECTION OF THE TANK CONNECTING PIPES AND THE
 DISPOSAL FIELD. THE TUV TANK SHALL BE PUMPED OUT AT
 REGULAR INTERVALS AND INSPECTED PERIODICALLY BY A
 LICENSED SERVICE PROVIDER.



140 WEST MAIN STREET HIGH BRIDGE, NJ 08829
 (908) 239-0544 FAX: (908)238-9572
 C.O.A. #: 246A28021500
 A PROFESSIONAL ASSOCIATION

TITLE:
 RIVERA RESIDENCE
 INDIVIDUAL SUBSURFACE SEWAGE DISPOSAL SYSTEM
 CLINTON TOWNSHIP HUNTERDON COUNTY, NEW JERSEY

LOCATION:
 4 HUNTERS PATH
 BLOCK 9 LOT 5
 CLINTON TOWNSHIP
 HUNTERDON COUNTY, NJ

DATE: 3/31/21

PROJECT NO.: 0121086

DATE: 4/12/21

DESIGNED BY: ELM

CHECKED BY: WJL

SCALE: 1" = 30'

SHEET NO.: 1 OF 4

GENERAL NOTES

1. ALL CONSTRUCTION PRACTICES AND PROCEDURES SHALL BE IN COMPLIANCE WITH N.J.A.C. 7.3A. CLINTON TOWNSHIP BOARD OF HEALTH.
2. THE DESIGN HAS BEEN BASED UPON THE RESULTS OF SOIL TESTING IN THE LOCATIONS SHOWN ON THE PLAN. THE ENGINEER OR CONTRACTOR SHALL NOT BE RESPONSIBLE FOR ALTERATIONS REQUIRED DUE TO CONDITIONS NOT VISIBLE OR DETECTED DURING SOIL TESTING.

EXCAVATION

1. EXCAVATION FOR THE DISPOSAL FIELD SHALL BE IN ACCORDANCE WITH THE FOLLOWING PROCEDURES:
 - a. ADEQUATE MEASURES SHALL BE USED TO INSURE THAT THE BOTTOM OF THE DISPOSAL BED IS LEVEL.
 - b. IN SOIL TEXTURES OTHER THAN SANDS OR LOAMY SANDS, EXCAVATION WHICH EXPOSES THE INFILTRATIVE SURFACE OF THE DISPOSAL FIELD SHALL NOT BE CARRIED OUT UNTIL THE SOIL HAS SETTLED TO THE DEPTH OF THE PROPOSED EXCAVATION. CAN BE ROLLED OUT WITH THE FINGERS TO FORM A WIRE OF ROD, ONE-EIGHTH OF AN INCH IN THICKNESS, AND DOES NOT CRUMBLE WHEN HANDLED. THE SOIL IS TOO WET TO PROCEED WITH THE EXCAVATION.
 - c. EXCAVATION SHALL BE CARRIED OUT IN A MANNER THAT WILL AVOID UNNECESSARY COMPACTION OF THE DISPOSAL FIELD BOTTOM AND SIDE WALLS. HEAVY EQUIPMENT SHALL BE BULDOZERS OR FRONT-END LOADERS SHALL NOT BE DRIVEN OVER THE EXPOSED INFILTRATIVE SURFACE OF THE DISPOSAL FIELD. EXCAVATION SHOULD BE CARRIED OUT IN A MANNER THAT WILL AVOID UNNECESSARY COMPACTION OF THE DISPOSAL FIELD. IF IT BECOMES NECESSARY TO WALK ON THE DISPOSAL FIELD BOTTOM, A SUITABLE BOARD SHALL BE LAD OVER THE SOIL TO AVOID TRAMPING.
 - d. ANY CHANGES OR COMPACTED SOIL SURFACES WHICH HAVE BEEN PRODUCED ON THE BOTTOM OR SIDEWALLS OF THE EXCAVATION SHALL BE REMOVED TO EXPOSE A FRESH SOIL SURFACE WHICH IS ROUGH AND UNWEAR.
 - e. WORK SHOULD BE STOPPED SO THAT THE BOTTOM AND SIDEWALLS OF THE EXCAVATION WILL NOT BE EXPOSED TO BACKFILLING. ANY LOOSE SOIL OR DEBRIS WHICH IS WASHED INTO OR OTHERWISE DEPOSITED WITHIN THE EXCAVATION AS A RESULT OF THE EXCAVATION REMAINING OPEN TO THE ELEMENTS SHALL BE CAREFULLY REMOVED PRIOR TO BACKFILLING.

FILTER MATERIAL AND DRAINAGE FABRIC NOTES

1. FILTER MATERIAL SHALL COVER THE DISTRIBUTION LINES AND EXTEND THE FULL WIDTH OF THE TRENCH OR BED. SHALL BE 12 INCHES DEEP BENEATH THE BOTTOM OF THE DISTRIBUTION LINES AND SHALL EXTEND AT LEAST TWO INCHES ABOVE THE TOP OF THE LINES.
2. TO THE NEW JERSEY DEPARTMENT OF TRANSPORTATION STANDARD SIZES FOR COARSE AGGREGATES AS SHOWN IN FIGURE 20 OF APPENDIX A OF N.J.A.C. 7.3A. THE FILTER MATERIAL SHALL CONFORM IN SIZE AND GRADATION TO SIZE NUMBER 20 OR SIZE NUMBER THREE ON SIZE NUMBER FOUR.
3. THE FILTER MATERIAL SHALL BE COVERED WITH DRAINAGE FABRIC AS THE LAYING OF THE DISTRIBUTION LINES PROGRESSES. THE FOLLOWING REQUIREMENTS SHALL BE MET:
 - a. BOARDS OF ADJACENT SHEETS SHALL BE OVERLAPPED BY A MINIMUM OF SIX INCHES.
 - b. DRAINAGE FABRIC SHALL BE SECURED IN THE ENGINEERING DESIGN AND SHALL HAVE ADEQUATE TENSILE STRENGTH TO WITHSTAND THE WEIGHT OF THE SOIL AND BACKFILLING, ADEQUATE ANCHORAGE TO ALLOW FREE PASSAGE OF GASES, AND ADEQUATE PARTICLE RETENTION TO PREVENT DOWNWARD MIGRATION OF SOIL PARTICLES INTO THE FILTER MATERIAL.
 - c. USE OF WATERPROOF PAPERS IS PROHIBITED.
4. THE FILTER MATERIAL MAY BE LAD INTO THE EXCAVATION USING A BACKHOE, FRONT END LOADER OR PUMP TRUCK. THE FILTER MATERIAL SHALL BE WASHED GRAVEL OR CRUSHED STONE, FREE OF FINE'S, DIRT, CLAYS OR CLAY. REFER TO THE NEW JERSEY DEPARTMENT OF TRANSPORTATION STANDARD SIZES FOR COARSE AGGREGATES AS SHOWN IN FIGURE 20 OF APPENDIX A OF N.J.A.C. 7.3A. THE EQUIPMENT DOES NOT EXERT A GROUND PRESSURE IN EXCESS OF FORTY POUNDS PER SQUARE INCH. MINIMUM THICKNESS OF ONE FOOT OF FILTER MATERIAL BELOW THE VEHICLE TRACKS AT ALL TIMES.

GENERAL CONTRACTOR NOTES:

- CONTRACTOR TO OBTAIN ALL REQUIRED PERMITS PRIOR TO START OF CONSTRUCTION.
- CONTRACTOR SHALL CONTACT ENGINEERING AND LAND PLANNING ASSOCIATES, INC. (ELPA) AT LEAST 48 HOURS PRIOR TO START OF THE CONSTRUCTION FOR SCHEDULING INSPECTIONS.
- CONTRACTOR SHALL CONTACT ELPA FOR THE INSPECTION OF THE FOLLOWING STAGES OF CONSTRUCTION AT LEAST 24 HOURS PRIOR TO START OF CONSTRUCTION:
- BOTTOM OF DISPOSAL BED OR SEEPAGE PIT EXCAVATION
 - SELECT FILL SAMPLE
 - TOP OF SELECT FILL EMPACEMENT IN DISPOSAL BED
 - TOP OF SELECT FILL EMPACEMENT IN SEEPAGE PIT
 - SEPTIC PUMP TANK OR DISPOSAL FIELD INSTALLATION
 - PUMP PERFORMANCE/ALARM
 - BACK FILL AND FINAL GRADE
- CONTRACTOR MUST PROVIDE SAMPLE AND A QUARRY CERTIFICATE FOR SUITABLE FILL MATERIAL.
- CONTRACTOR SHALL COORDINATE ANY CHANGES FROM THE PLAN WITH ELPA.
- ELPA WILL STAKE OUT DISPOSAL BED AT CONTRACTOR'S REQUEST AND PER THE AGREEMENT WITH THE APPLICANT. CONTRACTOR MUST REQUEST DISPOSAL BED STAKEOUT AT LEAST 10 BUSINESS DAYS PRIOR TO START OF CONSTRUCTION.

CONSTRUCTION NOTES

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL LINES, ELEVATIONS, AND MEASUREMENTS, EXERCISING PRECAUTION TO VERIFY ALL DIMENSIONS SHOWN ON DRAWING.
2. THESE DRAWINGS DO NOT INCLUDE THE NECESSARY COMPONENTS FOR CONSTRUCTION SAFETY. THE CONTRACTOR SHALL BE RESPONSIBLE TO INSURE ON THE JOB SAFETY FOR HIS EMPLOYEES, EMPLOYEES OF THE OWNER AND ALL OTHER PERSONS WHO MAY BE WORKING IN A SAFE MANNER AND IN COMPLIANCE WITH ALL APPLICABLE LOCAL, STATE AND FEDERAL REGULATIONS.
3. THE CONTRACTOR SHALL CONTACT THE DESIGN ENGINEER AS PRESCRIBED IN N.J.A.C. 7.3A OR WHENEVER CONSULTATION, CLARIFICATION OR INSPECTIONS ARE REQUIRED. THE CONTRACTOR SHALL CONTACT THE ENGINEER PRIOR TO EXCAVATION TO DISCUSS SPECIFIC REQUIREMENTS RELATIVE TO EXCAVATION, PLACEMENT AND CEMENTATION OF FILL, ETC.
4. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE DESIGN ENGINEER SHOULD DEPARTURES FROM THE APPROVED DESIGN BECOME NECESSARY DUE TO CIRCUMSTANCES WHICH ARISE DURING CONSTRUCTION.
5. DRAINAGE FROM BASEMENT FLOORS, ROOFS OR ROOF SHALL NOT ENTER THE DISPOSAL SYSTEM AND SHALL BE DIVERTED AWAY FROM THE AREA OF THE DISPOSAL FIELD. BACKWASH FROM WATER SOTENERS SHALL NOT BE DISPOSED OF WITHIN THE DISPOSAL SYSTEM.
6. THIS SET OF PLANS HAS BEEN PREPARED FOR THE PURPOSES OF MUNICIPAL AND AGENCY REVIEW AND APPROVAL. THIS SET OF PLANS SHALL NOT BE UTILIZED AS CONSTRUCTION DOCUMENTS UNTIL ALL CONDITIONS OF APPROVAL HAVE BEEN Satisfied ON THE DRAWINGS. ALL CHANGES MUST BE SIGNED AND SEALED BY THE DESIGN ENGINEER. CONSULTATION SHOULD UNDERGROUND STRUCTURES OR FACILITIES INTERFERE WITH PROJECT CONSTRUCTION. THE ENGINEER SHALL BE NOTIFIED BEFORE PROCEEDING WITH WORK. THE CONTRACTOR SHALL NOTIFY ALL UNDERGROUND UTILITY COMPANIES 3 DAYS PRIOR TO COMMENCEMENT OF ANY EXCAVATION FOR ACCURATE FIELD LOCATIONS. FOR UTILITY INFORMATION, CALL 1-800-472-7100.
7. THE CONTRACTOR SHALL BE RESPONSIBLE TO COORDINATE ALL INSPECTIONS AS REQUIRED BY THE ENGINEER AND THE BOARD OF HEALTH, AND ALL OTHER TOWNSHIP AGENCIES OF JURISDICTION.
8. THE ENGINEER IS TO BE NOTIFIED IF ANY CONDITIONS ARE ENCOUNTERED THAT WOULD RENDER THIS PLAN UNCONSTRUCTIBLE. THE ENGINEER SHALL ALSO BE NOTIFIED OF ANY DEVIATIONS FROM THE PLANS DURING CONSTRUCTION.
9. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING ALL INTERNAL PLUMBING LINES AND FOR THE CONNECTION OF THOSE LINES TO THE PROPOSED SYSTEM. THE OWNER SHALL BE RESPONSIBLE FOR IDENTIFYING ALL KNOWN LINES AND DESTROYING SYSTEM COMPONENTS TO THE ENGINEER AND THE CONTRACTOR.
10. THE CONTRACTOR IS RESPONSIBLE FOR MEANS AND METHODS OF CONSTRUCTION AS WELL AS RESTORATION OF THE PROPERTY UPON COMPLETION OF THE INSTALLATION.
11. ALL COMPONENTS SHALL BE INSTALLED IN THE LOCATIONS SHOWN ON THE APPROVED DRAWINGS. ANY DEVIATIONS OR INTENT TO CHANGE LOCATION SHALL BE APPROVED BY THE DESIGN ENGINEER AND THE HEALTH DEPARTMENT. SEPTIC BACKFLOW FROM THE WELL UNLESS OTHERWISE NOTED.
12. BACKFILL AND FINAL GRADING SHALL BE COMPLETED AS FOLLOWS:
 1. NO COMPONENT OF THE SEPTIC SYSTEM SHALL BE BACKFILLED UNTIL A FINAL INSPECTION HAS BEEN CONDUCTED BY THE ADMINISTRATIVE AUTHORITY OR ITS AUTHORIZED AGENT.
 2. BACKFILL AND FINAL GRADING SHALL BE COMPLETED AS FOLLOWS:
 - a. BACKFILL MATERIAL SHALL BE OF EARLY GRADES TO THAT FOUND AT THE SITE AND FREE OF LARGE STONES, TREE STUMPS, PROFOUND UNSATURATED OR OTHER WASTE CONSTRUCTION MATERIAL.
 - b. IN NO CASE SHALL BACKFILL MATERIAL BE MORE PERMEABLE THAN THE SURROUNDING SOIL.
 - c. BACKFILL SHALL COMPLETELY COVER THE ENTIRE DISPOSAL FIELD AND SHALL BE GRADED SMOOTHLY INTO THE SURROUNDING TOPOGRAPHY ON ALL SIDES.
 3. AFTER COMPLETION OF BACKFILL AND FINAL GRADING, THE BACKFILLED AREA SHALL BE SEED, OR SOBER, TO ESTABLISH A GOOD VEGETATIVE COVER AND TO PREVENT EROSION.
 4. CONTRACTOR SHALL ENSURE THAT NO DEPRESSIONS ARE LEFT IN THE WORK AREA WHICH WOULD PREVENT THE CONTINUED FLOW OF SURFACE WATER IN THE MANNER DIRECTED ON THE ENGINEERING DESIGN. SWALES OR CONVEYANCES AROUND THE SYSTEM SHALL BE PROVIDED AS REQUIRED TO FACILITATE PROPER DRAINAGE.

FILL STANDARDS (PER N.J.A.C. 7.3A-CHAPTER 2 REVISED APRIL 2, 2012)

- FILL USED IN THE ZONE OF TREATMENT AND/OR THE ZONE OF DISPOSAL SHALL MEET THE FOLLOWING REQUIREMENTS:
1. ASTM C136 TEST METHOD FOR SIEVE ANALYSIS OF FINE AND COARSE AGGREGATES MUST BE USED FOR COMPACTION TESTING THE FILL.
 2. THE MATERIAL SHALL MEET THE STANDARDS OF ASTM C1363 STANDARD SPECIFICATION FOR CONCRETE AGGREGATE, SET
 3. THE MATERIAL SHALL MEET THE FOLLOWING REQUIREMENTS:
 - A. COURSE FRACTION CONTENT (GREATER THAN THE NO. 8 SIEVE) LESS THAN 15% BY VOLUME OR LESS THAN 20% BY WEIGHT. ANALYSIS COMPOSITION, WEIGHT, OR SIZE FRACTION PASSING THE PARTICULAR SIEVE AS STATED:
 - 100% MUST PASS A 3/8" SIEVE;
 - BETWEEN 80% AND 100% MUST PASS THE NO. 8 SIEVE (2.0mm);
 - BETWEEN 60% AND 80% MUST PASS THE NO. 20 SIEVE (0.85mm);
 - BETWEEN 25% AND 60% MUST PASS THE NO. 60 SIEVE (0.25mm);
 - BETWEEN 10% AND 25% MUST PASS THE NO. 100 SIEVE (0.15mm).
 - B. PERMEABILITY FOR THESE MATERIALS IS ESTABLISHED WITHIN THE RANGE OF 6-20 INHR.
 4. SELECT FILL SHALL BE TESTED FOR FINE AND VERY FINE SAND, AND BE 25% OR LESS BY WEIGHT.
 5. SELECT FILL SHALL BE TESTED FOR FINE SAND, AND BE PERFORMED IN 1 (MAX) LIFTS.
 6. COMPACTION OF SELECT FILL MUST BE PERFORMED IN 1 (MAX) LIFTS.
 7. SELECT FILL SHALL BE DELIVERED AND STOCKPILED AT THE SITE FOR TESTING BY AN APPROVED SOIL LABORATORY AND CERTIFIED BY A PROFESSIONAL ENGINEER, INDICATING THE PERMEABILITY RATE AND TEXTURAL ANALYSIS OF THE MATERIAL. SAMPLES TO BE AT THE RATE OF 1 SAMPLE PER 5 TRUCKLOADS (60 CF) WITH A MINIMUM OF 2 SAMPLES PER SYSTEM. A MINIMUM OF 2 REBOLLATION TESTS SHALL BE CONDUCTED IN THE SUBGRADE FILL AT THE LEVEL OF EACH LIFT.


SITE SPECIFIC NOTES

1. GARBAGE DISPOSALS AND SWMP PUMPS CANNOT BE USED WITH THIS SEPTIC SYSTEM.
2. THIS SEPTIC SYSTEM IS NOT DESIGNED TO ACCOMMODATE A SERVICE EJECTOR PUMP.
3. THERE ARE NO DISPOSAL FIELDS WITHIN 50 FT. OF THE PROPOSED DISPOSAL FIELD. THERE ARE NO OFF-SITE WELLS WITHIN 100' OF THE PROPOSED DISPOSAL FIELD.
4. THERE ARE NO KNOWN UNDERGROUND STORAGE TANKS PRESENT ON SITE (PER OWNER).

DISTRIBUTION NETWORK

1. SLOPE OF DISTRIBUTION LATERALS TO BE NO GREATER THAN 2" PER 100 FT.
2. ALL JOINTS TO BE WATERTIGHT.
3. CONNECTING PIPES AND DELIVERY PIPES SHALL BE LAD ON A FIRM FOUNDATION SATISFACTORY TO THE ADMINISTRATIVE AUTHORITY, AND IN ACCORDANCE WITH PLAN DETAILS.

NO.	REV. PER HCHD COMMENTS	W/J	DATE
1	REV. PER HCHD COMMENTS	W/J	4/12/21
	REVISION	BY	DATE



140 WEST MAIN STREET HIGH BRIDGE, NJ 08829
 (908) 238-0544 FAX: (908) 238-9572
 C.O.A. #: 246A28021500
 A PROFESSIONAL ASSOCIATION

TITLE: RIVERA RESIDENCE INDIVIDUAL SUBSURFACE SEWAGE DISPOSAL SYSTEM CLINTON TOWNSHIP HUNTERDON COUNTY, NEW JERSEY

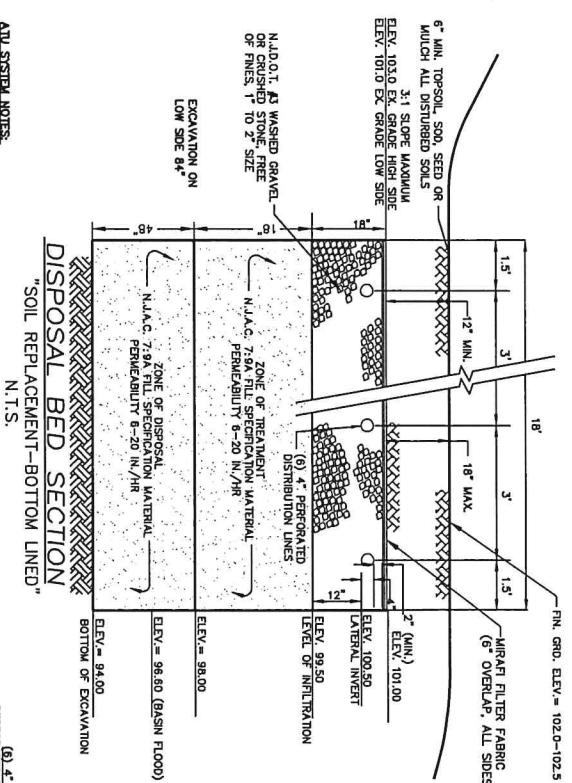
LOCATION: 4 HUNTERS PATH BLOCK 9 LOT 5 CLINTON TOWNSHIP HUNTERDON COUNTY, NJ

DATE: 3/31/21 **DATE:** 4/12/21

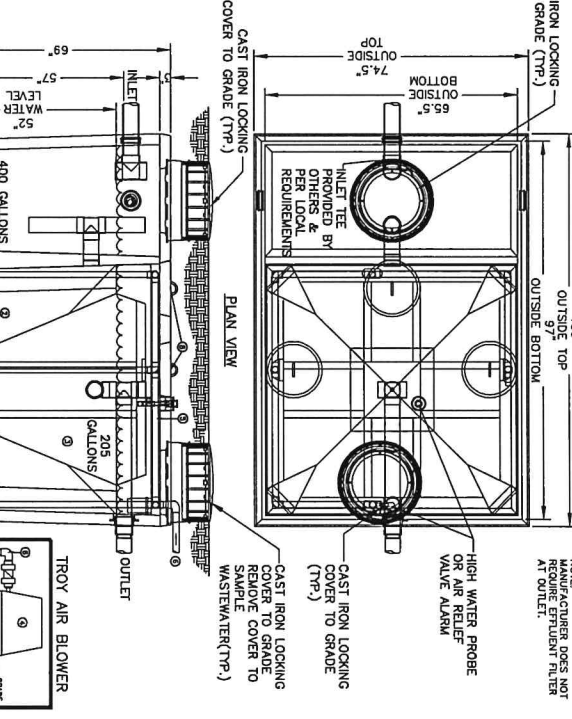
PROJECT NO.: 0121086 **DESIGNED BY:** ELM **CHECKED BY:** W/J

FILENAME: NOTES.DWG **SCALE:** N.T.S. **SHEET NO.:** 2 OF 4

DATE:	3/31/21	DATE:	4/12/21
DESIGNED BY:	ELM	CHECKED BY:	W/J
SCALE:	N.T.S.	SHEET NO.:	2 OF 4



- THE H-SERIES HOOT AERobic TREATMENT SYSTEM**
- 1) PRETREATMENT TANK - WHERE ANAEROBIC DIGESTION OCCURS AND WORKS FOR NON-BIODEGRADABLE MATERIALS.
 - 2) AERATION CHAMBER - WHERE AIR IS INTRODUCED INTO SEWAGE FOR OXIGATION, SOLIDS SETTLE OUT AND THE CLEAR EFFLUENT RISES.
 - 3) CLARIFIER - A STILL CHAMBER WHERE TROY AIR LINEAR AIR BLOWER - LONG LIFE, EFFICIENT ATMOSPHERIC AIR AND UNDER COMPRESSED DELIVERS IT TO THE TANK. MAY BE USED TO MAINTAIN 1/8\"/>



NOTE: MANUFACTURER DOES NOT REQUIRE EFFLUENT FILTER AT OUTLET.

ADU SYSTEM NOTES:

A DEED NOTICE IS REQUIRED. INSTALLER SHALL BE NEMA CERTIFIED.

FOR THE USE OF THE SYSTEM, THE OWNER OF THE SYSTEM MUST HAVE IN PLACE A PREVENTATIVE MAINTENANCE AND MONITORING CONTRACT WITH AN AUTHORIZED SERVICE PROVIDER TO ENSURE IT IS FUNCTIONING PROPERLY AND TO OPTIMIZE TREATMENT PERFORMANCE. AS PART OF THIS CONTRACT, THE AUTHORIZED SERVICE PROVIDER SHALL BE RESPONSIBLE FOR THE MAINTENANCE AND MONITORING OF THE SYSTEM. ANY TREATMENT MECHANICAL PARTS AND MAINTAIN THE COMPLETE TREATMENT SYSTEM. UPON EXPIRATION OF A MAINTENANCE AND MONITORING CONTRACT, A NEW CONTRACT, WHICH SHALL BE AT LEAST ONE YEAR IN DURATION, SHALL BE ENTERED INTO BY THE OWNER OF THE SYSTEM. THE AUTHORIZED SERVICE PROVIDER SHALL BE RESPONSIBLE FOR THE MAINTENANCE AND MONITORING CONTRACT. WRITTEN NOTIFICATION OF SUCH MUST BE DIRECTED, BY THE AUTHORIZED SERVICE PROVIDER, TO THE LOCAL ADMINISTRATIVE AUTHORITY.

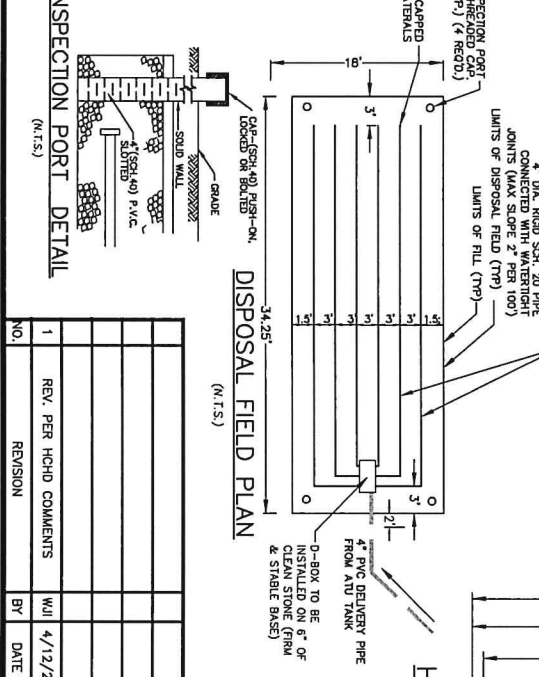
ALL ATU SYSTEMS SHALL BE MAINTAINED ACCORDING TO THE ATU MANUFACTURER'S OPERATION AND MAINTENANCE MANUAL BY AN AUTHORIZED SERVICE PROVIDER. TANK SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S REQUIREMENTS. ALL ANCHORING MECHANISMS SHALL BE IN ACCORDANCE WITH MANUFACTURER'S REQUIREMENTS. NO DEVIATIONS SHALL BE ACCEPTED.

THE AUTHORIZED INSTALLER MUST NOTIFY THE DEPARTMENT AT LEAST ONE WEEK PRIOR TO THE INSTALLATION OF THE ATU AT CHIPPENOPPE STATE LOTS AND COORDINATE INSPECTIONS WITH THE DEPARTMENT IN ADDITION TO ANY INSPECTIONS REQUIRED BY THE LOCAL ADMINISTRATIVE AUTHORITY.

ALL ATU SYSTEMS SHALL BE INSTALLED ACCORDING TO DIRECTIONS PROVIDED IN EACH ATU MANUFACTURER'S INSTALLATION MANUAL AND APPROVED ATU SYSTEM DESIGN.

ALL OPERATOR PERSONNEL INSTALLING AN ATU SYSTEM SHALL BE IN POSSESSION OF ALL NECESSARY PERMITS AND DEBRIES BEFORE ATTEMPTING ANY PORTION OF AN INSTALLATION.

AN AUTHORIZED INSTALLER MUST BE PRESENT AT ALL TIMES DURING ATU SYSTEM MANUFACTURER'S STARTUP CHECKLIST SHALL BE SUBMITTED TO THE ADMINISTRATIVE AUTHORITY BY THE AUTHORIZED SERVICE PROVIDER UPON COMPLETION.



NO.	REVISION	BY	DATE	PROJECT NO.	SCALE	SHEET NO.
1	REV. PER HOHD COMMENTS	WJL	4/12/21	0121086	N.T.S.	3 OF 4

HOOT H-500A ATU TANK

140 WEST MAIN STREET HIGH BRIDGE, NJ 08829
 (908) 238-0544 FAX: (908) 238-9572
 C.O.A. #: 240A280215100
 A PROFESSIONAL ASSOCIATION

LOCATION: 4 HUNTERS PATH BLOCK 9 LOT 5 CLINTON TOWNSHIP HUNTERDON COUNTY, NJ
 DATE: 3/31/21
 PROJECT NO.: 0121086
 FILENAME: DETAILS.DWG
 DESIGNED BY: ELM
 CHECKED BY: WJL
 SCALE: N.T.S.
 SHEET NO.: 3 OF 4

AGRONOMIC SPECIFICATIONS FOR LAWNS AND SPECIFIC SYSTEMS

GENERAL

1. All material used for any and all purposes shall conform to the specifications set forth in this manual.
2. All material used for any and all purposes shall conform to the specifications set forth in this manual.
3. All material used for any and all purposes shall conform to the specifications set forth in this manual.

SEED BED PREPARATION/ALTERNATIVES

1. The seed bed shall be prepared to a depth of 4 inches and shall be free of all clods and stones.
2. The seed bed shall be prepared to a depth of 4 inches and shall be free of all clods and stones.
3. The seed bed shall be prepared to a depth of 4 inches and shall be free of all clods and stones.

STABILIZATION WITHIN

1. The stabilization material shall be applied to a depth of 4 inches and shall be free of all clods and stones.
2. The stabilization material shall be applied to a depth of 4 inches and shall be free of all clods and stones.
3. The stabilization material shall be applied to a depth of 4 inches and shall be free of all clods and stones.

Material	Rate	Recommended application method
Prepared Topsoil	100 lbs per 1000 sq ft	1. Broadcast
Prepared Subsoil	100 lbs per 1000 sq ft	1. Broadcast
Prepared Sand	100 lbs per 1000 sq ft	1. Broadcast
Prepared Gravel	100 lbs per 1000 sq ft	1. Broadcast
Prepared Stone	100 lbs per 1000 sq ft	1. Broadcast

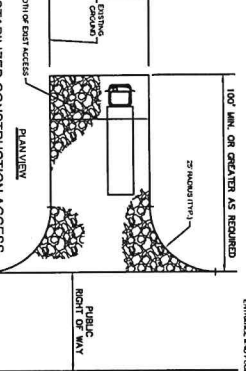
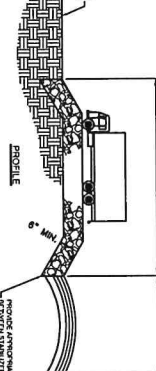
DESIGN CRITERIA
 STONE SIZE - USE ASTM C-33, SIZE 20 TO 1/2" TO 1 1/2" ON 1 1/2" TO 1" USE CLEAN CRUSHED
 ANNUAL STONE CRUSHED CONCRETE OF SIMILAR SIZE MAY BE SUBSTITUTED BUT WILL
 BE AT THE DISCRETION OF THE ARCHITECT AND CONTRACTOR.
 THICKNESS - NOT LESS THAN 3/4" (INCHES).
 WIDTH - NOT LESS THAN FULL WIDTH OF POINTS OF HEIGHTS OR EDGES.

SOIL EROSION AND SEDIMENT CONTROL GUIDELINES FOR SEPTIC SYSTEM INSTALLATION AND ALTERATIONS IN HUNTERDON COUNTY, NJ

1. The Hunterdon County Soil Conservation District requires a detailed site plan for all septic system installations and alterations.
2. The site plan shall show the location of the septic system, the location of the building, and the location of the driveway.
3. The site plan shall show the location of the septic system, the location of the building, and the location of the driveway.

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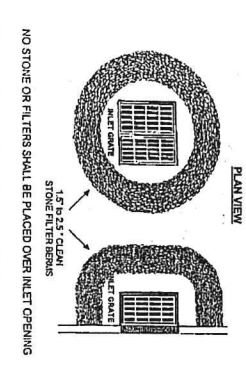
MAINTENANCE
 THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR
 FLOWING OF SEDIMENT ONTO DRIVWAYS. THIS CONDITION IS TO BE MAINTAINED THROUGHOUT
 THE LIFE OF THE SEPTIC SYSTEM. THE SEPTIC SYSTEM SHALL BE MAINTAINED AND REPAIR AND/OR
 CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SHALL BE DROPPED,
 WASHED, OR TRAPPED ONTO REMOVING PUBLIC OR PRIVATE OR OTHER NEIGHBORHOODS
 INDIVIDUALLY CLEANED OR REMOVED BY CONVENTIONAL METHODS. A POWER BROOM OR
 STREET SWEEPER WILL BE REQUIRED TO CLEAN UP ON NEIGHBORHOOD SURFACES. ALL
 OTHER ACCESS POINTS WHICH ARE NOT STABILIZED SHALL BE RECLOSED.

FINAL PROTECTION

1. The final protection shall be applied to a depth of 4 inches and shall be free of all clods and stones.
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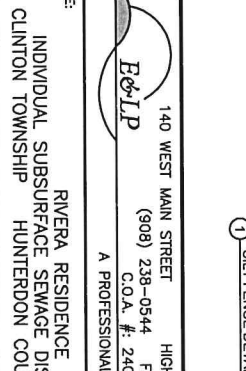
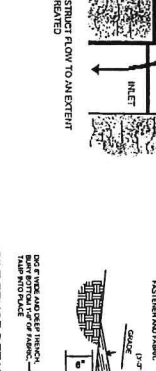
NO STONE OR FILTERS SHALL BE PLACED OVER INLET OPENING

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NO STONE OR FILTERS SHALL BE PLACED OVER INLET OPENING



140 WEST MAIN STREET
 (908) 238-0544 HIGH BRIDGE, NJ 08829
 C.O.A. # 246A28021500 FAX: (908) 238-9572
 A PROFESSIONAL ASSOCIATION

**RIVERA RESIDENCE
 INDIVIDUAL SUBSURFACE SEWAGE DISPOSAL SYSTEM
 CLINTON TOWNSHIP
 HUNTERDON COUNTY, NEW JERSEY**

LOCATION: 4 HUNTERS PATH
 BLOCK 9 LOT 5
 CLINTON TOWNSHIP
 HUNTERDON COUNTY, NJ

DATE: 3/31/21

PROJECT NO.: 0121086

DESIGNED BY: ELM

CHECKED BY: WJI

DATE: 4/12/21

SCALE: N.T.S.

SHEET NO.: 4 OF 4

NO.	REVISION	BY	DATE
1	REV. PER HOCD COMMENTS	WJI	4/12/21



Public Health
Prevent. Promote. Protect.

Karen DeMarco, MPH
Health Officer/Director

Hunterdon County Department of Health



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

April 23, 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 April 12, 2021 by Engineering & Land Planning Associates for a proposed 5,000 square foot commercial facility with a maximum of 53 employees.

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 tanks, 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_31waiver2021newconstruction

CONSTRUCTION NOTES:

CONTRACTOR RESPONSIBLE FOR SITE ACCESS, SITE TRIMMING AND REMOVAL AND RESTORING SITE BACK TO PRE EXISTING CONDITION AFTER DISPOSAL SYSTEM CONSTRUCTION.
 CONTRACTOR RESPONSIBLE FOR COORDINATING AESTHETICS WITH HOME OWNER.
 CONTRACTOR TO VERIFY ALL ELEVATIONS PRIOR TO SETTING TANKS OR FIELD.

NOTES:

THE SEPTIC SYSTEM IS NOT LOCATED WITHIN ANY WETLANDS OR WETLAND BUFFERS.
 NO KNOWN UNDERGROUND STORAGE TANKS ARE PRESENT ON THE PROPERTY (PER OWNER).
 EXISTING SEPTIC TANKS TO BE PUMPED, CRUSHED, & ABANDONED IN ACCORDANCE WITH HEALTH DEPARTMENT STANDARDS.
 TANKS SHALL BE TESTED IN FIELD FOR WATER TIGHTNESS BY TANK MANUFACTURER.
 THE SEPTIC SYSTEM HAS BEEN DESIGNED IN A MANNER THAT WILL PREVENT ANY INCREASE IN STORMWATER RUNOFF TO ADJACENT PROPERTIES. THE INSTALLATION OF THE SYSTEM SHALL BE INSPECTED BY THE HEALTH DEPARTMENT AND CERTIFIED THAT THE GRADING HAS NOT LED TO ANY OFF-SITE WATER PROBLEMS.
 ALL TREES WITHIN 10' OF THE DISPOSAL FIELD SHALL BE REMOVED.
 NO FOUNDATION DRAINS EXIST OR ARE PROPOSED.
 THERE ARE NO WELLS WITHIN 100' OF THE PROPOSED DISPOSAL FIELD. THERE ARE NO DISPOSAL FIELDS WITHIN 50' OF THE PROPOSED DISPOSAL FIELD.
 A PERMANENT NON-CORROSIVE MARKER SHALL BE SET AT THE CENTER OF EACH DISPOSAL TANK. THE PERMIT NUMBER, SYSTEM TYPE, DESIGN CRITERIA AND DATE OF INSTALLATION.
 SUMP PUMP DISCHARGES AND POOL BACKWASH WATER SHALL NOT BE CONNECTED TO THE SEPTIC SYSTEM.
 PROJECT SURVEYOR TO SET BENCHMARK PRIOR TO CONSTRUCTION.

DESIGN CRITERIA

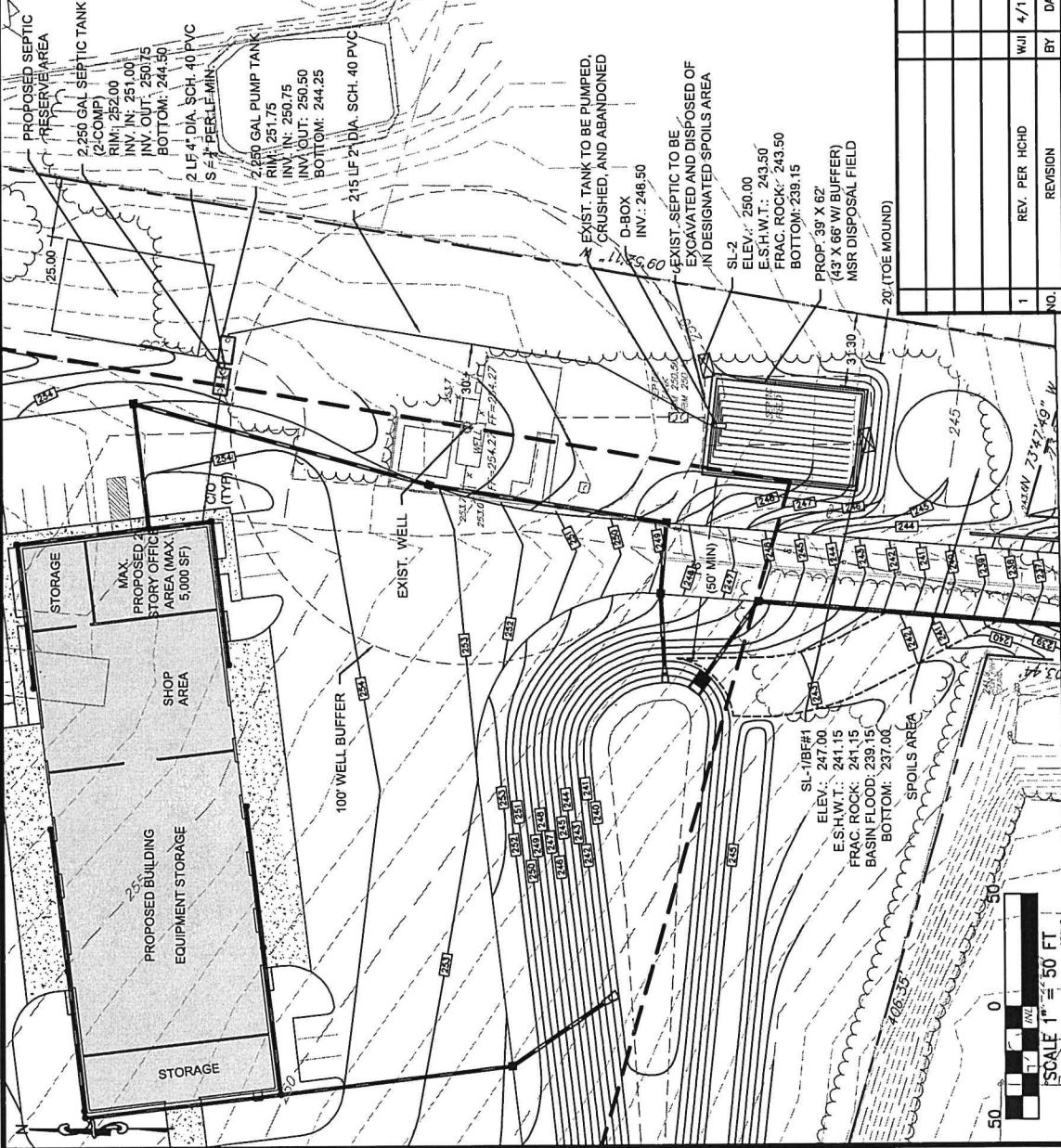
TYPE OF SYSTEM: GRAVITY DOSED
 TYPE OF DISPOSAL BED: MSR
 DESIGN VOLUME OF SEWAGE: 4,500 GPD
 5,000 SF OFFICE X 125 X 425 GPD
 WAREHOUSE/INDUSTRIAL EMPLOYEES:
 54 EMPLOYEES X 15 GPD = 810 GPD
 1,486 GPD (1,500 GPD DESIGN)
 DISPOSAL BED AREA: 38' X 62' (2,416 SF)
 (43' X 66' W/ BUFFER)
 BASED ON 1.81 SF PER GAL. OF SEWAGE
 REQUIRED 2,415 SF REQUIRED
 ZONE OF TREATMENT SOILS:
 SELECT FILL: 4" N.J.A.C. 7.9A
 FILL SPEC. MATERIAL
 ZONE OF DISPOSAL SOILS:
 SELECT FILL: 7" N.J.A.C. 7.9A
 FILL SPEC. MATERIAL
 PROP. SEPTIC TANK SIZE: 2,250 GALLONS
 (2-COMPARTMENT)
 PROP. PUMP TANK SIZE: 2,250 GALLONS

MAINTENANCE NOTES:

THE INDIVIDUAL SUBSURFACE SEWAGE DISPOSAL SYSTEM SHALL BE MAINTAINED IN ACCORDANCE WITH N.J.A.C. 7.9A. THE HUNTERDON COUNTY HEALTH DEPARTMENT AND ANY APPLICABLE INDUSTRY MAINTENANCE PROGRAM.
 MAINTENANCE ACTIVITIES SHALL INCLUDE, BUT NOT LIMITED TO, INSPECTION OF THE PUMPS, PIPES, AND THE DISPOSAL FIELD. THE SEPTIC TANK SHALL BE PUMPED OUT AT REGULAR INTERVALS. EFFLUENT FILTER SHALL BE MAINTAINED IN SUCH A WAY TO PREVENT BLOCKS. SUCH OTHER CONTAINABLES SHALL BE MAINTAINED IN SUCH A WAY TO PREVENT BLOCKS. THE DISTRIBUTION NETWORK AND DISPOSAL FIELD. EFFLUENT FILTER TO BE INSPECTED AND RINSED CLEAN AT TIME OF EVERY PUMP OUT. REPLACE AS NECESSARY.

SURVEY NOTES:

PLAN REFERENCES THE BOUNDARY AND TOPOGRAPHIC SURVEY PREPARED BY STIRES ASSOCIATES, PA



140 WEST MAIN STREET HIGH BRIDGE, NJ 08829
 (908) 238-0544 FAX: (908) 238-9572
 C.O.A. #: 246A28021500

EcoLP
 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: 3/3/21

PROJECT NO.: 0116383

FILENAME: SITE.DWG

DESIGNED BY: ELM
 CHECKED BY: WJI

SCALE: 1" = 50'

SHEET NO.: 1 OF 4

DATE: 4/12/21

WAYNE INGRAM, P.E. LICENSE #246804235200
 PROFESSIONAL ENGINEER

NO.	REVISION	BY	DATE
1	REV. PER HCHD	WJI	4/12/21



FILL STANDARDS: PER N.J.A.C. 7.9A-CHAPTER 10 REVISED APRIL 2, 2012)

FILL USED IN THE ZONE OF TREATMENT AND/OR THE ZONE OF DISPOSAL SHALL MEET THE FOLLOWING REQUIREMENTS:

- ASTM C-136 TEST METHOD FOR SIEVE ANALYSIS OF FINE AND COURSE AGGREGATES MUST BE USED FOR CHARACTERIZING THE SELECT FILL.
- THE MATERIAL SHALL MEET THE STANDARDS OF ASTM C33.93 STANDARD SPECIFICATION FOR CONCRETE AGGREGATE.
- THE MATERIAL SHALL MEET THE FOLLOWING REQUIREMENTS:
 - PERMEABILITY CONTENT (GREATER THAN THE NO. 30 SIEVE) LESS THAN 15% BY VOLUME OR LESS THAN 20% BY WEIGHT.
 - TEXTURAL ANALYSIS (COMPOSITION, WEIGHT, OF SIZE FRACTION PASSING THE PARTICULAR SIEVE AS STATED):
 - 100% MUST PASS A 3/8" SIEVE
 - BETWEEN 50% AND 85% MUST PASS THE NO. 8 SIEVE (2.0mm)
 - BETWEEN 25% AND 60% MUST PASS THE NO. 30 SIEVE (0.6mm)
 - BETWEEN 10% AND 30% MUST PASS THE NO. 50 SIEVE (0.3mm)
 - BETWEEN 2% AND 10% MUST PASS THE NO. 100 SIEVE (0.15mm)
 - PERMEABILITY FOR THESE MATERIALS IS ESTABLISHED WITHIN THE RANGE OF 6-20 IMPH.
 - SELECT FILL SHALL BE TESTED FOR FINE AND VERY FINE SAND, AND BE 25% OR LESS BY WEIGHT.
 - COMPACTION OF SELECT FILL MUST BE PERFORMED IN 1' (MAX.) LIFTS.
- SELECT FILL SHALL BE DELIVERED AND STOCKPILED AT THE SITE FOR TESTING BY AN APPROVED SOILS LABORATORY AND CERTIFIED BY A PROFESSIONAL ENGINEER, INDICATING THE PERMEABILITY RATE AND TEXTURAL ANALYSIS OF SAMPLES PER SYSTEM. A MINIMUM OF 2 PERCOLATION TESTS SHALL BE CONDUCTED IN THE SUITABLE FILL AT THE LEVEL OF INFILTRATION.

SITE SPECIFIC NOTES:

- GARBAGE DISPOSALS AND PUMP PUMPS CANNOT BE USED WITH THIS SEPTIC SYSTEM.
- THIS SEPTIC SYSTEM IS NOT DESIGNED TO ACCOMMODATE A SEWAGE EJECTOR PUMP.
- THERE ARE NO DISPOSAL FIELDS WITHIN 50 FT. OF THE PROPOSED DISPOSAL FIELD. THERE ARE NO WELLS WITHIN 100' OF THE PROPOSED DISPOSAL FIELD.
- THERE ARE NO KNOWN UNDERGROUND STORAGE TANKS PRESENT ON SITE (PER OWNER).

SEPTIC AND DOSING TANK:

- THE MINIMUM COMPRESSIVE STRENGTH FOR ALL CONCRETE SECTIONS SHALL BE 4000 P.S.I.
- WATERTIGHTNESS TESTING SHALL BE PERFORMED BY THE TANK SUPPLIER AT THE DIRECTION OF THE CONTRACTOR AND PROOF OF CERTIFICATION SHALL BE PROVIDED TO THE ENGINEER BY THE CONTRACTOR.

DISTRIBUTION NETWORK:

- SLOPE OF DISTRIBUTION LATERALS TO BE NO GREATER THAN 7 PER 100 FT.
- ALL JOINTS TO BE WATERTIGHT.
- CONNECTING PIPES AND DELIVERY PIPES SHALL BE LAID ON A FIRM FOUNDATION SATISFACTORY TO THE ADMINISTRATIVE AUTHORITY, AND IN ACCORDANCE WITH PLAN DETAILS.

140 WEST MAIN STREET
(908) 238-0544 FAX: (908)238-9572
C.O.A. # 24CA28021500

EeP
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: 3/3/21

4/12/21
DATE
WAYNE INGRAM, P.E. LICENSE #24G804258200
PROFESSIONAL ENGINEER

CONSTRUCTION NOTES:

- THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL LINES, ELEVATIONS, AND MEASUREMENTS, EXERCISING PRECAUTION TO VERIFY ALL DIMENSIONS SHOWN ON DRAWING.
- THESE DRAWINGS DO NOT INCLUDE THE NECESSARY COMPONENTS FOR CONSTRUCTION SAFETY. THE CONTRACTOR OR OTHER PERSONS HAVING AUTHORIZED OR UNAUTHORIZED ACCESS TO THE WORK AND THE PUBLIC, CONTRACTOR SHALL PERFORM HIS WORK IN A SAFE MANNER AND IN COMPLIANCE WITH ALL APPLICABLE LOCAL, STATE AND FEDERAL REGULATIONS.
- THE CONTRACTOR SHALL CONTACT THE DESIGN ENGINEER AS PRESCRIBED IN N.J.A.C. 7.9A OR WHENEVER CONSULTATION, CLARIFICATION OR INSPECTIONS ARE REQUIRED. THE CONTRACTOR SHALL CONTACT THE ENGINEER PRIOR TO EXCAVATION TO DISCUSS SPECIFIC REQUIREMENTS RELATIVE TO EXCAVATION, PLACEMENT AND CERTIFICATION OF FILL ETC.
- THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE DESIGN ENGINEER SHOULD DEPARTURES FROM THE APPROVED DESIGN BECOME NECESSARY DUE TO CIRCUMSTANCES WHICH ARISE DURING CONSTRUCTION.
- DRAINAGE FROM BASEMENT FLOORS, FOOTINGS OR ROOFS SHALL NOT ENTER THE DISPOSAL SYSTEM AND SHALL BE DIVERTED AWAY FROM THE AREA OF THE DISPOSAL FIELD. BACKWASH FROM WATER SOFTENERS SHALL NOT BE DISPOSED OF WITHIN THE DISPOSAL SYSTEM.
- THIS SET OF PLANS HAS BEEN PREPARED FOR THE PURPOSES OF MUNICIPAL AND AGENCY REVIEW AND APPROVAL. THIS SET OF PLANS SHALL NOT BE USED FOR ANY OTHER PROJECTS. EACH DRAWING HAS BEEN REVIEWED TO INDICATE FOR CONSTRUCTION. THE PLANS SHALL NOT BE VALID UNLESS SIGNED AND SEALED BY THE DESIGN ENGINEER.
- BEFORE EXCAVATING IN THE PROJECT AREA, THE CONTRACTOR IS TO VERIFY THE LOCATION OF ANY UNDERGROUND UTILITIES (GAS MAINS, ELECTRICAL LINES, TELEPHONE LINES, WATER AND SEWER MAINS, ETC.) THAT INTERFERE WITH CONSTRUCTION. SHOULD UNDERGROUND STRUCTURES OR FACILITIES INTERFERE WITH PROJECT CONSTRUCTION, THE ENGINEER SHALL BE NOTIFIED BEFORE PROCEEDING WITH WORK. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATIONS, FOR UTILITY WAKROUT, CALL 1-800-272-1000.
- THE CONTRACTOR SHALL BE RESPONSIBLE TO COORDINATE ALL INSPECTIONS AS REQUIRED BY THE ENGINEER AND THE BOARD OF HEALTH, AND ALL OTHER TOWNSHIP AGENCIES OF JURISDICTION.
- THE ENGINEER IS TO BE NOTIFIED IF ANY CONDITIONS ARE ENCOUNTERED THAT WOULD REVERE THIS PLAN CONSTRUCTION. THE ENGINEER SHALL ALSO BE NOTIFIED OF ANY DEVIATIONS FROM THE PLANS DURING CONSTRUCTION.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING ALL INTERNAL PLUMBING LINES AND FOR THE CONNECTION AND EXISTING SYSTEM COMPONENTS TO THE ENGINEER AND THE CONTRACTOR.
- THE CONTRACTOR IS RESPONSIBLE FOR MEANS AND METHODS OF CONSTRUCTION AS WELL AS RESTORATION OF THE PROPERTY UPON COMPLETION OF THE INSTALLATION.
- ALL COMPONENTS SHALL BE INSTALLED IN THE LOCATIONS SHOWN ON THE APPROVED DRAWINGS, ANY DEVIATIONS OR TANKS SHALL MAINTAIN A MINIMUM 5' SETBACK TO THE WELL AND DISPOSAL FIELDS SHALL MAINTAIN A MINIMUM 10' SETBACK FROM THE WELL UNLESS OTHERWISE NOTED.

BACKFILL AND FINAL GRADING:

- NO COMPONENT OF THE SEPTIC SYSTEM SHALL BE BACKFILLED UNTIL A FINAL INSPECTION HAS BEEN CONDUCTED BY THE ADMINISTRATIVE AUTHORITY OR ITS AUTHORIZED AGENT.
- BACKFILL AND FINAL GRADING SHALL BE COMPLETED AS FOLLOWS:
 - BACKFILL MATERIAL SHALL BE OF EARTH SIMILAR TO THAT FOUND AT THE SITE AND FREE OF LARGE STONES, TREE STUMPS, BROKEN MASONRY OR OTHER WASTE CONSTRUCTION MATERIAL.
 - IN NO CASE SHALL BACKFILL MATERIAL BE MORE FERMIABLE THAN THE SURROUNDING SOIL.
 - BACKFILL SHALL COMPLETELY COVER THE ENTIRE DISPOSAL FIELD AND SHALL BE GRADED SMOOTHLY INTO THE SURROUNDING TOPOGRAPHY ON ALL SIDES.
- AFTER COMPLETION OF BACKFILL AND FINAL GRADING, THE BACKFILLED AREA SHALL BE SEDED, OR SOEDED, TO ESTABLISH A GOOD VEGETATIVE COVER AND TO PREVENT EROSION.**
- CONTRACTOR SHALL ENSURE THAT NO DEPRESSIONS ARE LEFT IN THE WORK AREA WHICH WOULD PREVENT THE CONTINUED FLOW OF SURFACE WATER IN THE MANNER DIRECTED ON THE ENGINEERED DESIGN. SWALES OR CONVEYANCES AROUND THE SYSTEM SHALL BE PROVIDED AS REQUIRED TO FACILITATE PROPER DRAINAGE.

AN AS-BUILT GRADING PLAN PREPARED BY A LICENSED NEW JERSEY LAND SURVEYOR SHALL BE PROVIDED PRIOR TO ISSUANCE OF A CERTIFICATE OF CONFORMANCE. GRADING AND ELEVATIONS SHALL BE PROVIDED AS NECESSARY TO DEMONSTRATE COMPLIANCE WITH THE APPROVAL PLAN.

THERE SHALL BE NO TREE REMOVAL EXCEPT AS SHOWN ON THE PLAN.

THE CONTRACTOR IS REQUIRED TO KEEP ROAD CLEAN DURING CONSTRUCTION. ALL CURBS, TRACKS AND ROAD SHALL BE CLEANED AND MAINTAINED BY THE CONTRACTOR ON A DAILY BASIS.

A DEFINED SWALE SHALL BE INSTALLED AROUND THE FIELD TO PREVENT INFILTRATION OF SURFACE WATER INTO THE DISPOSAL FIELD. INSPECTION AND APPROVAL OF THE GRADING IS REQUIRED PRIOR TO ISSUANCE OF A PERMANENT COC.

SILT FENCE SHALL BE INSTALLED AROUND AREA OF CONSTRUCTION PRIOR TO ANY EXCAVATION. SOIL EROSION MEASURES SHALL BE INSTALLED IF DIRECTED.

GENERAL CONTRACTOR NOTES:

CONTRACTOR TO OBTAIN ALL REQUIRED PERMITS PRIOR TO START OF CONSTRUCTION.

CONTRACTOR SHALL CONTACT ENGINEERS AND LAND PLANNING ASSOCIATES, INC. PRIOR TO START OF CONSTRUCTION FOR SCHEDULING INSPECTIONS.

CONTRACTOR SHALL CONTACT THE INSPECTOR FOR THE FOLLOWING STAGES OF CONSTRUCTION:

- BOTTOM OF DISPOSAL BED OR SEWAGE PIT EXCAVATION
- SELECT FILL SAMPLE
- TOP OF SELECT FILL/EMPHACEMENT IN DISPOSAL BED
- SEPTIC TANK OR DISPOSAL FIELD INSTALLATION
- PUMP PERFORMANCE/ALARM
- BACK FILL AND FINAL GRADE

CONTRACTOR MUST PROVIDE SAMPLE AND A QUARRY CERTIFICATE FOR SUITABLE FILL MATERIAL.

CONTRACTOR SHALL COORDINATE ANY CHANGES FROM THE PLAN WITH E&P.

E&P WILL STAKE OUT DISPOSAL BED AT CONTRACTOR'S REQUEST AND PER THE AGREEMENT WITH THE APPLICANT. CONTRACTOR MUST REQUEST DISPOSAL BED STAKEOUT AT LEAST 10 BUSINESS DAYS PRIOR TO START OF CONSTRUCTION.

GENERAL CONTRACTOR NOTES:

- EXCAVATION FOR THE DISPOSAL FIELD SHALL BE IN ACCORDANCE WITH N.J.A.C. 7.9A.
- ALL CONSTRUCTION PRACTICES AND PROCEDURES SHALL BE IN COMPLIANCE WITH THE HUNTERDON COUNTY (AND/OR CLINTON TOWNSHIP) BOARD OF HEALTH.
- THE DESIGN OR CONTRACTOR SHALL NOT BE RESPONSIBLE FOR ALTERATIONS REQUIRED DUE TO CONDITIONS NOT VISIBLE OR IDENTIFIED DURING SOIL TESTING.

EXCAVATION:

- EXCAVATION FOR THE DISPOSAL FIELD SHALL BE IN ACCORDANCE WITH THE FOLLOWING PROCEDURES:
 - ADAPTED MEASURES SHALL BE USED TO INSURE THAT THE BOTTOM OF THE DISPOSAL BED IS LEVEL.
 - IN SOIL TEXTURES OTHER THAN SANDS OR LOAMY SANDS, EXCAVATION SHOULD BE MADE WITH THE UPPER SURFACE OF EXCAVATION. WHENEVER POSSIBLE, THE EXCAVATION SHALL BE MADE WITH THE LOWER SURFACE OF EXCAVATION. CAN BE MOILED OUT WITH THE FINGERS OF SOIL A TAKEN FROM THE DEPTH OF THE PROPOSED THICKNESS, AND DOES NOT CRUMBLE WHEN HANDED. THE SOIL TO TEST TO PROCEED WITH THE EXCAVATION.
 - EXCAVATION SHALL BE CARRIED OUT IN A MANNER THAT WILL AVOID UNNECESSARY COMPACTION OF THE DISPOSAL FIELD BOTTOM AND SIDE WALLS. HEAVY EQUIPMENT SUCH AS BULLDOZERS OR FRONT-END LOADERS SHALL NOT BE USED FOR EXCAVATION. OPERATING FROM INSIDE THE PERIMETER OF PREVIOUSLY EXCAVATED PORTIONS OF THE DISPOSAL BED, IF IT BECOMES NECESSARY TO WALK ON THE DISPOSAL FIELD BOTTOM, A SUITABLE BOARD SHALL BE LAID OVER THE SOIL TO AVOID TRAMPLING.
 - ANY SWAGED OR COMPACTED SOIL SURFACES WHICH HAVE BEEN PRODUCED ON THE BOTTOM OR SIDEWALLS OF THE EXCAVATION SHALL BE REMOVED TO EXPOSE A FRESH SOIL SURFACE WHICH IS ROUGH AND UNEVEN.
 - WORK SHOULD BE SCHEDULED SO THAT THE BOTTOM AND SIDEWALLS OF THE EXCAVATION WILL NOT BE EXPOSED TO RAINFALL OR WIND-BLOWN SALT BETWEEN THE TIME OF EXCAVATION AND THE TIME OF FINAL INSPECTION AND BACKFILLING. ANY LOOSE SOIL OR DEBRIS WHICH IS WASHED INTO OR OTHERWISE DEPOSITED WITHIN THE EXCAVATION SHALL BE REMOVED FROM THE EXCAVATION REMAINING OPEN TO THE ELEMENTS SHALL BE CAREFULLY REMOVED PRIOR TO BACKFILLING.
- EXCAVATION SHALL BE CARRIED OUT IN A MANNER THAT WILL AVOID UNNECESSARY COMPACTION OF THE DISPOSAL FIELD BOTTOM AND SIDE WALLS. HEAVY EQUIPMENT SUCH AS BULLDOZERS OR FRONT-END LOADERS SHALL NOT BE USED FOR EXCAVATION. OPERATING FROM INSIDE THE PERIMETER OF PREVIOUSLY EXCAVATED PORTIONS OF THE DISPOSAL BED, IF IT BECOMES NECESSARY TO WALK ON THE DISPOSAL FIELD BOTTOM, A SUITABLE BOARD SHALL BE LAID OVER THE SOIL TO AVOID TRAMPLING.
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FILTER MATERIAL AND DRAINAGE NOTES:

- EXCAVATION SHALL COVER THE DISTRIBUTION LINES AND EXTEND THE FULL WIDTH OF THE TRENCH OR BED, SHALL BE AT LEAST TWO INCHES ABOVE THE TOP OF THE LINES.
- THE FILTER MATERIAL SHALL BE WASHED GRAVEL OR CRUSHED STONE FREE OF FINES, DUST, ASHES OR CLAY. REFER TO THE NEW JERSEY DEPARTMENT OF TRANSPORTATION STANDARD SIZES FOR COARSE AGGREGATES AS SHOWN IN FIGURE 26 OF APPENDIX A OF N.J.A.C. 7.9A. THE FILTER MATERIAL SHALL CONFORM IN SIZE AND GRADATION TO SIZE NUMBER 24, SIZE NUMBER THREE OR SIZE NUMBER FOUR.
- THE FILTER MATERIAL SHALL BE COVERED WITH DRAINAGE FABRIC AS THE LAYING OF THE DISTRIBUTION LINES PROGRESSES. THE FOLLOWING REQUIREMENTS SHALL BE MET:
 - EDGES OF ADJACENT SHEETS SHALL BE OVERLAPPED BY A MINIMUM OF SIX INCHES.
 - DRAINAGE FABRIC SHALL BE SPECIFIED IN THE ENGINEERING DESIGN AND SHALL HAVE ASSOCIATE PERMEABLE FREE PASSAGE OF GASES, AND ADEQUATE PARTICLE RETENTION TO PREVENT DOWNWARD MIGRATION OF SOIL PARTICLES INTO THE FILTER MATERIAL.
 - USE OF WATERPROOF PAPER IS PROHIBITED.
- THE FILTER MATERIAL MAY BE LAID INTO THE EXCAVATION USING A BACKHOE, FRONT END LOADER OR DUMP TRUCK. THE EXCAVATION SHALL BE WASHED GRAVEL OR CRUSHED STONE FREE OF FINES, DUST, ASHES OR CLAY. REFER TO THE NEW JERSEY DEPARTMENT OF TRANSPORTATION STANDARD SIZES FOR COARSE AGGREGATES AS SHOWN IN FIGURE 26 OF APPENDIX A OF N.J.A.C. 7.9A. THE FILTER MATERIAL SHALL CONFORM IN SIZE AND GRADATION TO SIZE NUMBER 24, SIZE NUMBER THREE OR SIZE NUMBER FOUR.

GENERAL CONTRACTOR NOTES:

CONTRACTOR TO OBTAIN ALL REQUIRED PERMITS PRIOR TO START OF CONSTRUCTION.

CONTRACTOR SHALL CONTACT ENGINEERS AND LAND PLANNING ASSOCIATES, INC. PRIOR TO START OF CONSTRUCTION FOR SCHEDULING INSPECTIONS.

CONTRACTOR SHALL CONTACT THE INSPECTOR FOR THE FOLLOWING STAGES OF CONSTRUCTION:

- BOTTOM OF DISPOSAL BED OR SEWAGE PIT EXCAVATION
- SELECT FILL SAMPLE
- TOP OF SELECT FILL/EMPHACEMENT IN DISPOSAL BED
- SEPTIC TANK OR DISPOSAL FIELD INSTALLATION
- PUMP PERFORMANCE/ALARM
- BACK FILL AND FINAL GRADE

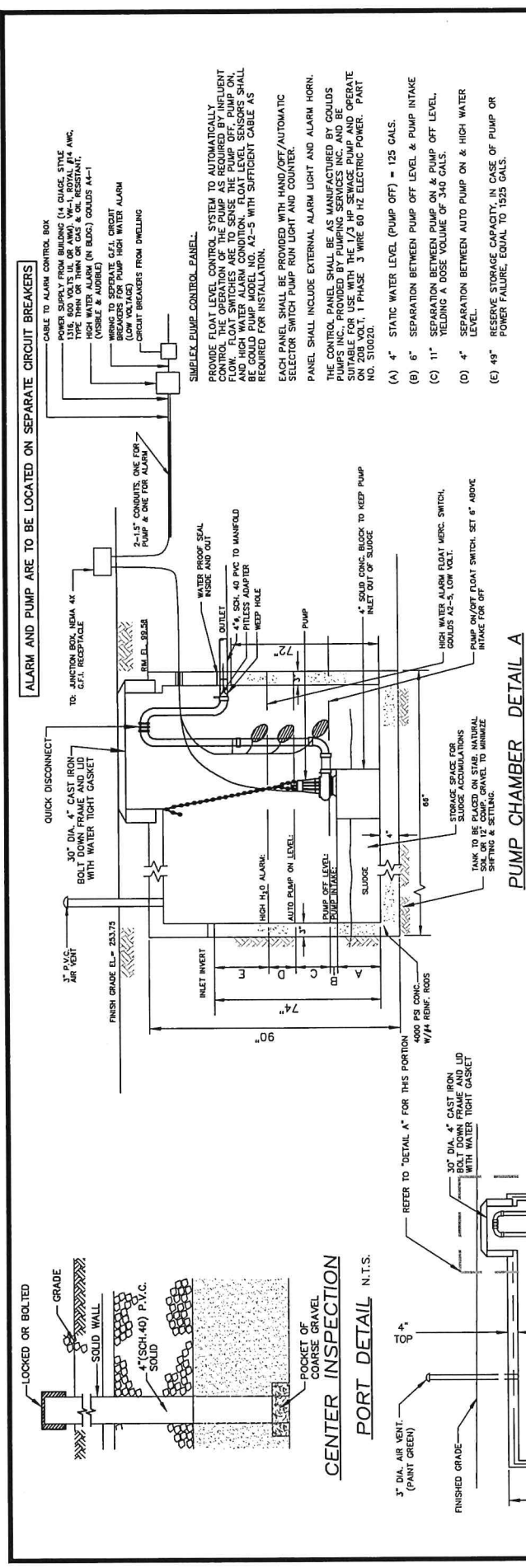
CONTRACTOR MUST PROVIDE SAMPLE AND A QUARRY CERTIFICATE FOR SUITABLE FILL MATERIAL.

CONTRACTOR SHALL COORDINATE ANY CHANGES FROM THE PLAN WITH E&P.

E&P WILL STAKE OUT DISPOSAL BED AT CONTRACTOR'S REQUEST AND PER THE AGREEMENT WITH THE APPLICANT. CONTRACTOR MUST REQUEST DISPOSAL BED STAKEOUT AT LEAST 10 BUSINESS DAYS PRIOR TO START OF CONSTRUCTION.

NO.	REVISION	DATE	BY
1	REV. PER HCHD	4/12/21	WJI

PROJECT NO.:	0116383	DESIGNED BY:	ELM	CHECKED BY:	WJI
FILENAME:	NOTES-DWG	SCALE:	N.T.S.	SHEET NO.:	2 OF 4



ALARM AND PUMP ARE TO BE LOCATED ON SEPARATE CIRCUIT BREAKERS

CABLE TO ALARM CONTROL BOX

POWER SUPPLY FROM BUILDING (14 GAUGE, STYLE 1316, 500 VOLTS UL OR AWG) VP-1, ROVAL #14 AWG. TYPE IRON OR THIN OR GAS & OIL RESISTANT, 1/4" (16 BOGS) GOULDS #A-1.

WIRING TO SEPARATE G.F.I. CIRCUIT BREAKERS FOR PUMP HIGH WATER ALARM CIRCUIT BREAKERS FROM DWELLING

30" DIA. 4" CAST IRON BOLT DOWN FRAME AND LID WITH WATER TIGHT GASKET

QUICK DISCONNECT

FINISH GRADE EL. = 233.75

TO JUNCTION BOX, NEMA 4X G.F.I. RECEPTACLE

RM. EL. 39.25

WATER PROOF SEAL INSIDE AND OUT

OUTLET

INLET

KEEP HOLE

PUMP

4" SOLID CONC. BLOCK TO KEEP PUMP INLET OUT OF SLUDGE

HIGH WATER ALARM FLOAT MERC. SWITCH, GOULDS A2-5, LOW VOLT.

PUMP RUN/OFF FLOAT SWITCH, SET 6" ABOVE INTAKE FOR OFF

STORAGE SPACE FOR SLUDGE ACCUMULATIONS

TANK TO BE COATED ON STD. MANUFACTURING SHIPING & SETTING

68"

6"

4"

4000 PSI CONC. W/H REINFC. RODS

INLET INVERT

7'4"

9"

3" DIA. AIR VENT (PAINT GREEN)

FINISHED GRADE

REFER TO "DETAIL A" FOR THIS PORTION

30" DIA. 4" CAST IRON BOLT DOWN FRAME AND LID WITH WATER TIGHT GASKET

76"

3"

LOW WATER LEVEL

6" x 6" (10/16) REINFC. MESH (TYP.)

INLET

3" TYP ALL SIDES

2,250 GAL PUMP TANK AS MANUFACTURED BY FLEMINGTON PRECAST SUB-782-3246 OR APPROVED EQUAL.

PUMP SPECIFICATIONS

ELECTRIC SUBMERSIBLE PUMP GOULDS MODEL 3886-WS0311B DESIGN POINT ~55 GPM @ 13.8 TDH, 1/3 HP 2" DISCHARGE, 1 PHASE ELECTRIC POWER. PUMP SHALL BE AS MANUFACTURED BY GOULDS PUMP INC., SENECA FALLS, NY AND DISTRIBUTED BY PUMPING SERVICES INC. MIDDLESEX, NJ (732) 469-4540.

GENERAL NOTES:

- ALL ELECTRICAL WORK TO CONFORM TO NEC STATE AND LOCAL ELECTRICAL CODES FOR HUNTERDON COUNTY, (CLINTON TOWNSHIP).
- ALL FITTINGS ARE SCHEDULE 80
- SOLVENT WELDED FOR PRESSURE CONDITIONS
- ALL ELECT. MATERIALS & WORK SHALL CONFORM TO NA. ELECT. CODE NFPA 70-CURRENT ED. AND LOCAL CODES
- ALL SWITCHES MUST BE CORROSION & HUMIDITY PROOF
- DISCONNECT BOX TO BE INSTALLED AT CONTROL PANEL.

PUMP CHAMBER DETAIL A
N.T.S.

POWER EQUIPMENT:

PUMP MOTOR SHALL BE PROVIDED WITH A CIRCUIT BREAKER AND A HP RATE CONTACTOR. THE CONTROL CIRCUIT SHALL BE PROVIDED WITH A CONTROL CIRCUIT BREAKER AND A CAPACITOR. CAPACITOR AND RELAY SHALL BE MOUNTED IN CONTROL PANEL.

2,250 GAL PUMP TANK (WITH PUMP SYSTEM)

30" DIAMETER OPENING

4" INLET SEAL (TYP)

4" OUTLET (TYP)

		140 WEST MAIN STREET HIGH BRIDGE, NJ 08829 (908) 238-0544 FAX: (908)238-9572 C.O.A. #: 24GA28021500 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: 3/3/21 DESIGNED BY: ELM CHECKED BY: WJI SCALE: N.T.S. SHEET NO.: 4 OF 4
PROJECT NO.: 0116383 FILENAME: DETAILS.DWG		DATE: 4/12/21 BY: WJI REVISION:	DATE: 4/12/21 BY: WJI REVISION: