GENERAL CONTRACTOR NOTES

1. ALL INSTALLERS OF PRODUCTS THAT ARE NOT TRADITIONAL "STONE AND PIPE"
SYSTEMS, INCLUDING GRAVEL ALTERNATIVE PRODUCTS (INCLUDING CHAMBERS), ADVANCED WASTEWATER PRETREATMENT UNITS (INCLUDING AEROBIC TREATMENT UNITS) AND DRIP DISPERSAL SYSTEMS ARE REQUIRED TO HAVE AN AUTHORIZATION FROM THE MANUFACTURER OF THOSE PRODUCTS, BUT ALSO A CREDENTIAL FROM THE NATIONAL ENVIRONMENTAL HEALTH ASSOCIATION (NEHA). NEHA'S CERTIFIED ONSITE INSTALLER OF ENVIRONMENTAL HEALTH ASSOCIATION (NEHA). NEHA'S CERTIFIED ONSITE INSTALLER OF WASTEWATER TREATMENT SYSTEMS (CIOWTS) AT THE ADVANCED LEVEL. THE SYSTEM AND ALL ITS COMPONENT PARTS SHALL BE CONSTRUCTED AND INSTALLED TO CONFORM IN ALL DETAILS TO THE REQUIREMENTS SET FORTH IN NJAC 7:9A (UNLESS OTHERWISE SPECIFIED) THE MANUFACTURERS RECOMMENDATIONS AND TO THE ENGINEERS DESIGN WHICH HAS BEEN APPROVED BY THE ADMINISTRATIVE AUTHORITY, DEPARTURES FROM THE APPROVED DESIGN WHICH BECOME NECESSARY DUE TO CIRCUMSTANCES WHICH ARISE DURING CONSTRUCTION AND INSTALLATION SHALL BE APPROVED BY THE DESIGN ENGINEER AND THE ADMINISTRATIVE AUTHORITY IN ACCORDANCE WITH NJAC 7:9A-3.7.

CONTRACTOR TO HAVE ALL UTILITIES MARKED OUT PRIOR TO START OF CONSTRUCTION. ALL REQUIRED PERMITS TO BE OBTAINED BY CONTRACTOR PRIOR TO START OF ALL ELECTRICAL WORK TO BE PERFORMED BY A LICENSED ELECTRICIAN.

ANY INTERIOR PLUMBING ALTERATIONS TO BE PERFORMED BY A LICENSED PLUMBER.

CONTRACTOR SHALL NOTIFY CIVIL DYNAMICS, INC. FOR THE

FOLLOWING INSPECTIONS:

A. 48 HOURS PRIOR TO START OF CONSTRUCTION.

B. 24 HOURS PRIOR TO BOTTOM OF EXCAVATION INSPECTION.

24 HOURS PRIOR TO DISPOSAL BED LATERAL AND PUMP INSPECTION (IF

APPLICABLE).

24 HOURS PRIOR TO FINAL GRADING INSPECTION.

UPON COMPLETION OF INSTALLATION, INCLUDING FINISH GRADING AND SITE CLEAN-UP.

CONTRACTOR MUST PROVIDE SAMPLE AND A QUARRY CERTIFICATE FOR SUITABLE FILL MATERIAL. IF THE CONTRACTOR ELECTS TO CONTINUE WITH CONSTRUCTION PRIOR TO CONFIRMATION OF FAVORABLE SUITABLE FILL TEST RESULTS HE/SHE DOES SO AT THEIR OWN RISK.

ALL EXIST. SEPTIC COMPONENTS NOT USED IN PROPOSED SEPTIC SYSTEM MUST BE LOCATED, PUMPED AND REMOVED/ABANDONED PER NJAC 7:9A. MUST BE CONFIRMED BY LOCAL ADMINISTRATIVE AUTHORITY. BY LOCAL ADMINISTRATIVE AUTHORITY.

10. CONTRACTOR TO VERIFY ALL PLUMBING ENTERS PROPOSED SYSTEM. MULTIPLE

DISCHARGE POINTS MAY EXIST THAT ARE NOT DEPICTED ON THE PLAN.

11. CONTRACTOR TO VERIFY LOCATION AND ELLEVATION OF ALL SEWER DISCHARGE
POINTS PRIOR TO INSTALLATION OF ANY COMPONENTS.

12. IF ANY OF THE ABOVE MENTIONED REQUIREMENTS ARE NOT MET, CIVIL DYNAMICS, INC.

WILL NOT ISSUE A CERTIFICATION STATEMENT OR AS-BUILT PLAN. CONSTRUCTION SPECIFICATIONS
REATMENT TANKS
. TANKS SHALL BE WATERTIGHT AND CONSTRUCTED OF SOUND AND DURABLE
MATERIALS WHICH ARE RESISTANT TO CORROSION, DECAY, FROST DAMAGE OR TO
CRACKING OR BUCKLING DUE TO SETTLEMENT OR BACK-FILLING, ALL JOINTS BELOW
THE LIQUID LEVEL OF THE TANK OR BELOW THE SEASONALLY HIGH WATER TABLE
SHALL BE PROVIDED WITH A PERMANENT WATERTIGHT SEAL.
. SEPTIC TANKS SHALL BE PLACED UPON A FIRM AND STABLE FOUNDATION SO THAT
POTENTIAL FOR UNEVEN SETTLEMENT OR SHIFTING IS MINIMIZED. TANKS SHALL BE
CONSTRUCTED OR INSTALLED DIRECTLY ON UNDISTURBED NATURAL SOIL. IF THE
EXCAVATION IS DIEG TOO DEEP IT SHALL BE BACK-FILLED TO THE PROPER FLEVATION

CONSTRUCTED OR INSTALLED DIRECTLY ON UNDISTORBED NATURAL SOIL. IF THE EXCAVATION IS DUG TOO DEEP, IT SHALL BE BACK-FILLED TO THE PROPER ELEVATION WITH SAND OR GRAVEL.

PREFABRICATED SEPTIC TANKS THAT MAY BE FLOATED OR SHIFTED BY WATER OR PREFABRICATED SEPTIC TANKS THAT MAY BE FLOATED OR SHIFTED BY WATER OR GROUND CAVE—IN SHALL BE FILLED WITH WATER IMMEDIATELY AFTER IT IS SET IN ITS PROPER POSITION.

BACKFILL AROUND SEPTIC TANKS SHALL BE FREE OF LARGE STONES, ROOTS OR FOREIGN OBJECTS, SHALL BE PLACED IN THIN LAYERS, NOT TO EXCEED EIGHT INCHES, AND SHALL BE THOROUGHLY TAMPED IN A MANNER THAT WILL NOT PRODUCE UNDUE STRAIN ON THE TANK.

CONTRACTOR MAY SUBSTITUTE FOR PROPOSED COMPONENTS PROVIDED WRITTEN APPROVAL FROM THE DESIGN ENGINEER AND ADMINISTRATIVE AUTHORITY IS PROVIDED.

A SEPTIC SOLIDS RETAINER OR SEPTIC EFFLUENT FILTER SHALL BE INSTALLED AND MAINTAINED IN CONJUNCTION ON THE FINAL SEPTIC TANK OR COMPARTMENT PRIOR TO THE EFFLUENT DISTRIBUTION NETWORK AND IN ACCORDANCE WITH ALL MANUFACTURER'S SPECIFICATIONS. SEPTIC SOLIDS RETAINERS AND SEPTIC FEFLUENT MANUFACTURER'S SPECIFICATIONS. SEPTIC SOLIDS RETAINERS AND SEPTIC EFFLUENT FILTERS SHALL BE CERTIFIED BY, AND BEAR THE MARK OF, NSF INTERNATIONAL (NSF) UNDER NSF STANDARD 46. TANKS TO BE TESTED FOR WATER-TIGHTNESS IN ACCORDANCE WITH NJAC 7:9A.

ACCESS OPENINGS FOR SEPTIC TANKS

1. A PERMANENT, NON-CORROSIVE MARKER A MINIMUM OF SIX SQUARE INCHES IN SIZE CONTAINING THE FOLLOWING INFORMATION SHALL BE ATTACHED TO THE MANHHOLE COVER OR RISER IMMEDIATELY BELOW THE COVER:

A. THE ADMINISTRATIVE AUTHORITY NAME AND PERMIT NUMBER UNDER WHICH THE SYSTEM

WAS INSTALLED;

B. THE DATE OF INSTALLATION;
C. THE TYPE OF SYSTEM; AND D. THE TOTAL DESIGN CRITERIA IN GALLONS PER DAY.

PUMP TANKS PUMP TANKS SHALL MEET ALL THE REQUIREMENTS OF A SEPTIC TANK, AS MENTIONED ABOVE.

PUMP TANKS SHALL BE CONSTRUCTED IN A MANNER THAT WILL ALLOW VENTING OF THE TANK AND, WHERE APPLICABLE THE DISPOSAL AREA.

PUMP TANKS SHALL BE READILY ACCESSIBLE FOR SERVICE AND REPAIR. A WATERTIGHT RISER WITH A REMOVABLE WATERTIGHT MANHOLE COVER SHALL BE PROVIDED. MANHOLES AND/OR COVERS SHALL BE LOCATED DIRECTLY OVER THE . EASY OR "QUICK-DISCONNECT" COUPLINGS SHALL BE PROVIDED TO FACILITATE REMOVAL OF THE PUMP. REMOVAL OF THE PUMP.

SWITCHES SHALL BE ABLE TO WITHSTAND THE HUMID AND CORROSIVE ATMOSPHERE IN THE PUMP TANK. MERCURY OR WEIGHTED FLOAT SWITCHES ARE SUITABLE FOR THIS PURPOSE. PRESSURE—DIAPHRAGM TYPE SWITCHES ARE PROHIBITED.

THE HIGH—WATER ALARM SWITCH SHALL ACTIVATE VISIBLE AND AUDIBLE ALARMS WHICH CAN BE READILY SEEN AND HEARD BY OCCUPANTS WITHIN THE BUILDING. THE ALARM AND ITS SWITCH SHALL NOT BE ON THE SAME ELECTRICAL CIRCUIT AS THE PLIMP AND ITS SWITCHES.

. THE ALARM AND ITS SWITCH SHALL NOT BE ON THE SAME ELECTRICAL CIRCUIT AS THE PUMP AND ITS SWITCHES.

3. ALL ELECTRICAL CONTACTS AND RELAYS SHALL BE LOCATED OUTSIDE OF THE PUMP TANK AND A GAS TIGHT SEAL SHALL BE PROVIDED WHERE ELECTRICAL CONDUITS ENTER THE TANK.

3. ALL ELECTRICAL SERVICE LINES FROM THE HOME OR FACILITY TO THE PUMP CONTROL PANEL AND TO THE PUMP TANK SHALL BE PROTECTED BY ELECTRICAL CONDUIT.

DISPOSAL FIELD EXCAVATION

1. ADEQUATE MEASURES SHALL BE USED TO INSURE THAT THE BOTTOM OF THE DISPOSAL BED OR EACH INDIVIDUAL DISPOSAL TRENCH IS LEVEL.

2. IN SOIL TEXTURES OTHER THAN SANDS OR LOAMY SANDS, EXCAVATION WHICH EXPOSES THE INFILTRATIVE SURFACE OF THE DISPOSAL FIELD SHALL NOT BE CARRIED OUT WHEN THE SOIL MOISTURE CONTENT IS ABOVE THE LOWER PLASTIC LIMIT. THIS MEANS THAT WHEN A SMALL LUMP OF SOIL, TAKEN FROM THE DEPTH OF THE PROPOSED EXCAVATION, CAN BE ROLLED OUT WITH THE FINGERS TO FORM A WIRE OR ROD, ONE-EIGHTH OF AN INCH IN THICKNESS, AND DOES NOT CRUMBLE WHEN HANDLED, THE SOIL IS TOO WET TO PROCEED WITH THE EXCAVATION.

3. EXCAVATION SHALL BE CARRIED OUT IN A MANNER THAT WILL AVOID UNNECESSARY COMPACTION OF THE DISPOSAL FIELD BOTTOM AND SIDEWALLS. HEAVY EQUIPMENT SUCH AS BULLDOZERS OR FRONT-END LOADERS SHALL NOT BE DRIVEN OVER THE EXPOSED INFILTRATIVE SURFACE OF THE THE DISPOSAL FIELD. EXCAVATION SHOULD BE CARRIED OUT WITH A BACKHOE OPERATING FROM BETWEEN DISPOSAL TRENCHES OR FROM OUTSIDE THE PERIMETER OF PREVIOUSLY EXCAVATED PORTIONS OF THE SIDE THE PERIMETER OF PREVIOUSLY EXCAVATED PORTIONS OF THE ANY SMEARED OR COMPACTED SOIL SURFACES WHICH HAVE BEEN PRODUCED ON THE BOTTOM OR SIDEWALLS OF THE EXCAVATION SHALL BE REMOVED TO EXPOSE A FRESH 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 SILT BETWEEN THE TIME OF EXCAVATION AND THE TIME OF FINAL INSPECTION AND BACKFILLING, ANY LOOSE SOIL OR DEBRIS WHICH IS WASHED OR OTHERWISE DEPOSITED WITHIN THE EXCAVATION.

SUITABLE FILL MATERIAL (OR ENGINEER APPROVED SUBSTITUTE)

1. FILL MATERIAL SHALL BE PLACED AND COMPACTED IN LAYERS ONE FOOT OR LESS IN INICKNESS.
COMPACTION TO ACHIEVE DESIRED PERMEABILITY MAY BE ACCOMPLISHED BY TAMPING, ROLLING, OR BY DRIVING OVER THE FILLED AREA IN A CONTROLLED PATTERN UNDER THE OBSERVATION OF CIVIL DYNAMICS, INC..

A MINIMUM OF ONE FOOT OF FILL MATERIAL SHALL BE MAINTAINED BELOW THE VEHICLE TRACKS OR WHEELS AND THE INFILTRATIVE SURFACE AT ALL TIMES. ZONE OF TREATMENT REQUIREMENTS PER N.J.A.C. 7:9A -10.1(f)4:

A. COARSE FRAGMENT CONTENT (GREATER THAN NO. 8 SIEVE) LESS THAN 15% BY VOL. OR 20% BY WEIGHT. B. TEXTURAL ANALYSIS (COMPOSITION, BY WEIGHT, OF SIZE FRACTION PASSING THE SIEVE AS STATED):

-BETWEEN 80% AND 100% MUST PASS A NO. 8 SIEVE (2.36 mm) -BETWEEN 50% AND 85% MUST PASS NO. 16 SIEVE (1.18 mm)
-BETWEEN 25% AND 60% MUST PASS NO. 30 SIEVE (0.6 mm) -BETWEEN 10% AND 30% MUST PASS NO. 50 SIEVE (0.3 mm) -BETWEEN 2% AND 10% MUST PASS NO. 100 SIEVE (0.15 mm)

PERMEABILITY RATE GREATER THAN 6 IN/HR. ZONE OF DISPOSAL REQUIREMENTS PER N.J.A.C. 7:9A-10.1(f)5:
A. COARSE FRAGMENT CONTENT LESS THAN 15% BY VOLUME OR LESS THAN 25% BY WEIGHT; AND B. TEXTURAL ANALYSIS (COMPOSITION, BY WEIGHT, OF SIZE FRACTION PASSING THE D. IEATURAL ANALTSIS (COMPUSITION, BY WEIGHT, OF SIZE FRACTION PASSING THE 2 MILLIMETER SIEVE): 85% OR MORE OF SAND; AND C. PERMEABILITY GREATER THAN 2 INCHES PER HOUR; OR PERCOLATION RATE FASTER THAN 30 MINUTES PER INCH,

SUITABLE FILL MATERIAL TO BE TESTED FOR PERMEABILITY OR PERCOLATION RATES UPON INSTALLATION.

ILTER MATERIAL

THE FILTER MATERIAL TO BE NUDOT STANDARD NUMBER 24, 3, OR 4. IN GENERAL

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THE FILTER MATERIAL TO BE NUMBER 24, 3, OR 4. IN GENER I. THE FILTER MATERIAL TO BE NJDOT STANDARD NUMBER 24, 3, OR 4. IN GENERAL THIS SHALL BE 3/4 — 2 1/2 INCH WASHED GRAVEL OR CRUSHED STONE, FREE OF FINES, DUST, ASHES OR CLAY.

THE FILTER MATERIAL SHALL BE COVERED WITH DRAINAGE FABRIC.

DRAINAGE FABRIC SHALL HAVE ADEQUATE TENSILE STRENGTH TO PREVENT RIPPING DURING INSTALLATION AND BACKFILLING, ADEQUATE AIR PERMEABILITY TO ALLOW FREE PASSAGE OF GASSES, AND ADEQUATE PARTICLE RETENTION TO PREVENT DOWNWARD MIGRATION OF SOIL PARTICLES INTO THE FILTER MATERIAL.

THE EDGES OF ADJACENT SHEETS SHALL BE OVERLAPPED BY A MINIMUM OF SIX INCHES.

<u>'ING</u>
ALL PIPING, INCLUDING TRANSPORT PIPES, TANK INSPECTION PORTS, VENTS, ETC.
SHALL BE SCH. 40 PVC.

BACKFILL AND FINAL GRADING

1. A MINIMUM OF 9 INCHES AND NO MORE THAN 18 INCHES OF BACKFILL SHALL BE
PLACED OVER THE TOP OF THE FILTER FABRIC UNLESS OTHERWISE SPECIFIED.

2. 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.

3. IN NO CASE SHALL THE BACKELL MATERIAL BE MORE DEPMEABLE THAN THE IN NO CASE SHALL THE BACKFILL MATERIAL BE MORE PERMEABLE THAN THE BACKFILL SHALL COMPLETELY COVER THE ENTIRE DISPOSAL BED OR EACH OF THE DISPOSAL TRENCHES AND SHALL BE GRADED SMOOTHLY INTO THE SURROUNDING 

ABANDONED SYSTEMS

I. ALL SEPTIC TANKS, DOSING TANKS, SEEPAGE PITS, DRY WELLS AND CESSPOOLS WHICH
ARE TO BE ABANDONED SHALL BE EMPTIED OF WASTES AND FILLED COMPLETELY WITH
GRAVEL, STONES, OR SOIL MATERIAL IN A MANNER WHICH IS ACCEPTABLE TO THE
ADMINISTRATIVE AUTHORITY. ADMINISIRATIVE AUTHORITY.

2. GRAVEL FILTER MATERIAL, FILL MATERIAL, SOIL OR OTHER SIMILAR MATERIAL FROM AN ABANDONED INDIVIDUAL SUBSURFACE SEWAGE DISPOSAL SYSTEM IS REMOVED FROM THE GROUND SHALL BE MANAGED AS FOLLOWS FOR RESIDENTIAL PROPERTIES:

A. PLACED INTO TRENCHES OR PITS EXCAVATED ON THE PROPERTY AND COVERED USING THE SOIL REMOVED DURING THE EXCAVATION OF THE TRENCHES OR B. DISPOSED OF, OR REUSED BENEFICIALLY, IN ACCORDANCE WITH THE NEW JERSEY SOLID WASTE MANAGEMENT ACT, N.J.S.A. 13:E-1 ET SEQ. AND IMPLEMENTING RULES AT N.J.A.C. 7:26 ILES AT N.J.A.C. 7:26

CONTRACTOR MUST LOCATE AND REMOVE/ABANDON ALL EXISTING SEPTIC COMPONENTS. ADDITIONAL SEPTIC COMPONENTS NOT SHOWN ON PLANS MAY EXIST. ALL WASTEWATER TO BE PIPED TO PROPOSED SYSTEM.

ADVANCED WASTEWATER PRETREATMENT DEVICE INSTALLATION <u>REQUIREMENTS</u> . An authorized installer shall be physically present at all times DURING INSTALLATION OF AN ADVANCED WASTEWATER PRETREATMENT DEVICE AND EITHER INSTALL OR DIRECTLY OVERSEE THE INSTALLATION OF

THE ADVANCED WASTEWATER PRETREATMENT DEVICE. 2 THE AUTHORIZED INSTALLER SHALL ENSURE THAT THE PROPERTY OWNER HAS BEEN PROVIDED WITH A COPY OF THE SERVICE CONTRACT AND AGREES TO COMPLY WITH THE REQUIREMENTS THEREIN BY OBTAINING THEIR WRITTEN ACKNOWLEDGEMENT VIA SIGNATURE PRIOR TO THE INSTALLATION OF ANY SYSTEM THAT INCORPORATES AN ADVANCED WASTEWATER PRETREATMENT DEVICE. 3. ALL ADVANCED WASTEWATER PRETREATMENT DEVICES SHALL BE

WASTEWATER PRETREATMENT DEVICE MANUFACTURER'S INSTALLATION MANUAL AND THE APPROVED SYSTEM DESIGN. 4.THE AUTHORIZED INSTALLER SHALL BE IN POSSESSION OF ALL NECESSARY PERMITS, APPROVALS AND LICENSES BEFORE ATTEMPTING ANY PORTION OF AN INSTALLATION. ALL DOCUMENTATION MUST BE LOCATED AT THE INSTALLATION SITE FOR THE DURATION OF THE INSTALLATION AND MADE AVAILABLE UPON REQUEST BY THE ADMINISTRATIVE AUTHORITY OR THE DEPARTMENT. 5. THE WATERTIGHTNESS OF ANY TANKS SPECIFIED IN THE DESIGN MUST BE WATERTIGHT TESTED AT THE INSTALLATION SITE AFTER THE TANK HAS BEEN INSTALLED, IN ACCORDANCE WITH THE SAME REQUIREMENTS

ADVANCED WASTEWATER PRETREATMENT DEVICE START-UP REQUIREMENTS THE AUTHORIZED SERVICE PROVIDER SHALL COMPLETE A MANUFACTURER'S SYSTEM START-UP CHECKLIST 2. THE AUTHORIZED SERVICE PROVIDER SHALL PROVIDE THE COMPLETED START-UP CHECKLIST TO THE ADMINISTRATIVE AUTHORITY.

3. THE AUTHORIZED INSTALLER THAT INSTALLED THE ADVANCED WASTEWATER PRETREATMENT DEVICE SHALL BE PRESENT AT THE TIME OF START-UP.

MAINTENANCE AND MONITORING REQUIREMENTS FOR ADVANCED WASTEWATER PRETREATMENT DEVICES
THE OWNER OF A SYSTEM THAT INCLUDES AN ADVANCED WASTEWATER PRETREATMENT DEVICE OR DRIP DISPERSAL SYSTEM SHALL HAVE IN PLACE A SERVICE CONTRACT, THROUGHOUT THE LIFE OF THE SYSTEM, WITH AN AUTHORIZED SERVICE PROVIDER.

AUTHORIZED SERVICE PROVIDER MUST BE IN PLACE PRIOR TO ISSUANCE OF ANY CERTIFICATION OR ANY SIGN OFF BY CIVIL DYNAMICS, INC 3. FAILURE TO BE IN POSSESSION OF A VALID SERVICE CONTRACT SHALL CONSTITUTE A VIOLATION OF THE WATER POLLUTION CONTROL ACT, N.J.S.A. 58:10A-1 ET SEQ. AND A NONCOMPLIANCE VIOLATION OF N.J.A.C. 7:9A-3.4.4.UPON EXPIRATION OF A SERVICE CONTRACT, A NEW CONTRACT, WHICH SHALL BE AT LEAST ONE YEAR IN DURATION, SHALL BE ENTERED INTO BY THE PROPERTY OWNER WITH AN AUTHORIZED SERVICE PROVIDER. IF THE PROPERTY OWNER CHOOSES TO ENTER INTO A SERVICE CONTRACT WITH A DIFFERENT AUTHORIZED SERVICE PROVIDER THAN UNDER THE EXPIRING CONTRACT, A COPY OF THE NEW, FULLY-EXECUTED SERVICE CONTRACT SHALL BE SUBMITTED TO THE ADMINISTRATIVE AUTHORITY BY THE PROPERTY OWNER WITHIN 14 DAYS AFTER THE EXPIRATION OF THE PREVIOUS CONTRACT THE NEW SERVICE CONTRACT MUST DEMONSTRATE THAT SERVICE FOR THE SYSTEM UNDER AN AUTHORIZED SERVICE PROVIDER HAS BEEN CONTINUOUS 5.IF A PROPERTY OWNER FAILS TO RENEW THE SERVICE CONTRACT,

AUTHORIZED SERVICE PROVIDER SHALL PROVIDE WRITTEN NOTIFICATION OF THE SERVICE CONTRACT EXPIRATION WITHIN 30 AFTER THE EXPIRATION TO E ADMINISTRATIVE AUTHORITY 6.ALL ADVANCED WASTEWATER PRETREATMENT DEVICES AND DRIP DISPERSAL SYSTEMS SHALL BE MAINTAINED ACCORDING TO THE MANUFACTURER'S/SYSTEM INTEGRATOR'S MAINTENANCE REQUIREMENTS. CURRENT MAINTENANCE MANUALS SHALL BE OBTAINED BY THE AUTHORIZED SERVICE PROVIDER PRIOR TO PERFORMING MAINTENANCE. 7. ADVANCED WASTEWATER PRETREATMENT DEVICES AND DRIP DISPERSAL SYSTEMS SHALL BE INSPECTED BY AN AUTHORIZED SERVICE PROVIDER ON THE FOLLOWING SCHEDULE, AT A MINIMUM: i. ONCE WITHIN 30 DAYS FOLLOWING SYSTEM STARTUP;

ii. SUBSEQUENT TO INITIAL INSPECTION UNDER (E)21 ABOVE, TWICE PER

YEAR FOR THE FIRST TWO YEARS OF SYSTEM OPERATION, ONCE PER

YEAR THEREAFTER; AT THE TIME OF TRANSFER OF THE PROPERTY WITH THE NEW SYSTEM OWNER: AND INSPECTIONS SHALL BE CONDUCTED ON A MORE FREQUENT BASIS REQUIRED BY THE MANUFACTURER OR SYSTEM INTEGRATOR, AS 8. ALL INSPECTION RESULTS SHALL BE RECORDED ON AN INSPECTION FORM, COPIES OF WHICH SHALL BE MADE AVAILABLE BY THE

MANUFACTURER/SYSTEM INTEGRATOR. THE FORMS MUST BE SIGNED BY THE AUTHORIZED SERVICE PROVIDER AND SHALL BE SUBMITTED TO THE ADMINISTRATIVE AUTHORITY WITHIN 30 DAYS AFTER THE INSPECTION. AT EACH REGULARLY SCHEDULED MAINTENANCE VISIT THE AUTHORIZED SERVICE PROVIDER SHALL, AT MINIMUM, OBSERVE, MONITOR AND RECORD: I. THE WASTEWATER LEVEL IN THE TANKS; II. ANY EFFLUENT/PUMP FILTER FOR CLOGGING AND CLEAN AS NEEDED:

IV. THE FINAL EFFLUENT FOR ODOR;
V. ALL TANKS FOR OILY FILM; VI. ALL TANKS FOR FOAM: VII. THE PH OF FINAL EFFLUENT; VIII. THE PONDING OF EFFLUENT AROUND THE ADVANCED WASTEWATER PRETREATMENT DEVICE AND/OR DISPOSAL AREA;
IX. PUMP CYCLE AND RUN TIME METERS; X. THE CONDITION OF DRIP DISPERSAL SYSTEM FILTERS AND SERVICE AS NEEDED: AND XI. ANY OTHER REQUIREMENT ESTABLISHED BY THE MANUFACTURER OR SYSTEM INTEGRATOR.

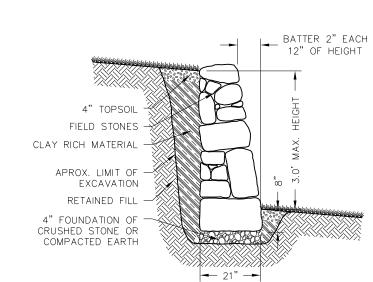
10. AT LEAST ONCE PER YEAR THE AUTHORIZED SERVICE

III. CLARITY IN NTUS;

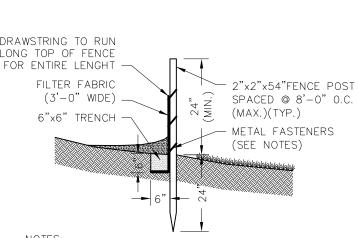
PROVIDER SHALL, AT A MINIMUM:

I. MEASURE THE SLUDGE AND SCUM LEVELS IN THE SEPTIC TANK AND NOTIFY THE HOMEOWNER IF THE TANK IS IN NEED OF PUMPING; AND II. CHECK THE EFFLUENT FILTER FOR CLOGGING AND CLEAN, AS 1 THE AUTHORIZED SERVICE PROVIDER SHALL HAVE PROPER EQUIPMENT AND TRAINING TO ACCESS AND PROGRAM ANY SYSTEM CONTROL PANEL ON SITE.

12. THE AUTHORIZED SERVICE PROVIDER SHALL MONITOR THE TELEMETRY CONTROL PANEL OR AUTO DIALER ALARMS REQUIRED BY N.J.A.C. 7:9A-8.3(B)6 AND RESPOND TO ANY ALARM CONDITION IN THE MANNER SPECIFIED BY THE MANUFACTURER OF THE ADVANCED WASTEWATER PRETREATMENT DEVICE AND/OR SYSTEM INTEGRATOR OF A



TYPICAL STONE RETAINING WALL



1. FILTER FABRIC TO BE MIRAFI 100X OR APPROVED 2. BURY BOTTOM 12" OF FILTER FABRIC IN 6"x6" TRENCH AND TAMP IN PLACE. 3. SECURE FILTER FABRIC TO POSTS WITH METAL FASTENERS AND REINFORCEMENT BETWEEN FABRIC

AND FASTENER.

4. ENDS OF INDIVIDUAL ROLLS OF FILTER FABRIC TO BE WRAPPED AROUND A COMMON POST TWICE AND SECURELY FASTENED 5. FOR HEAVY DUTY SILT FENCE, INSTALL WIRE MESH (14 GA W/ 4" OPENINGS) BEHIND FILTER FABRIC. SECURE WITH WIRE TIES OR STAPLES.

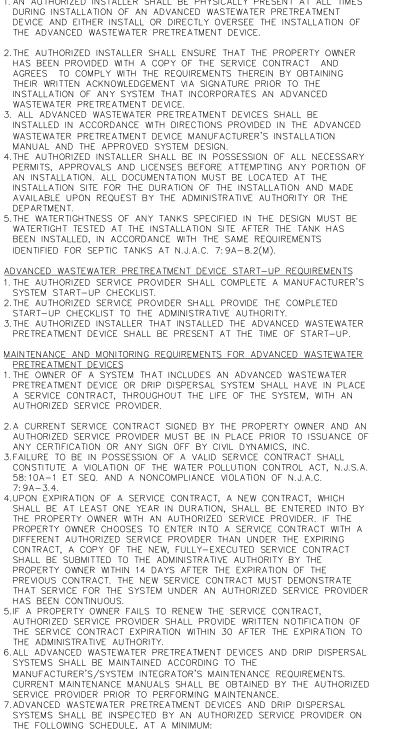
PROTECT YOURSELF

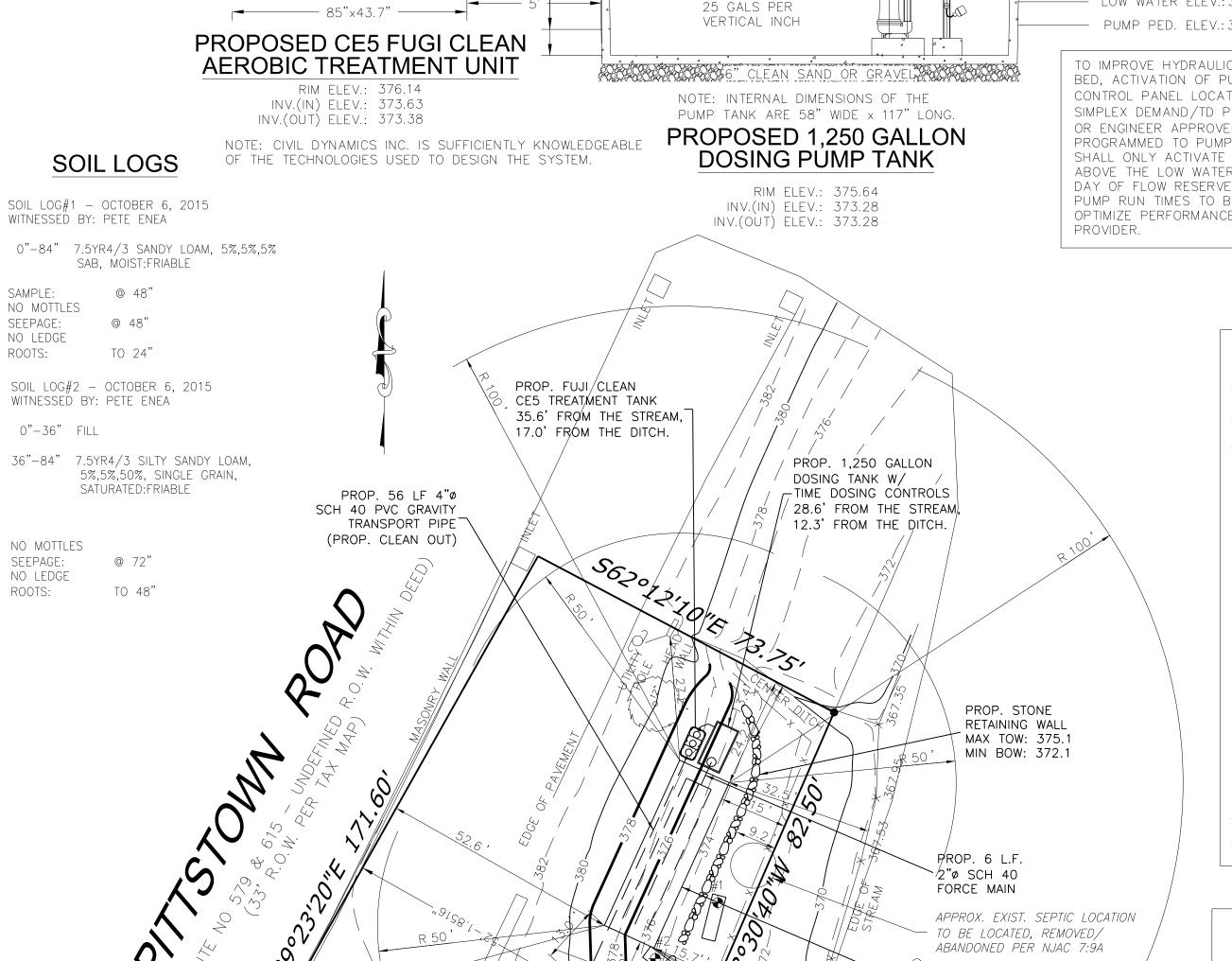
CAN BE YOUR INSURANCE POLICY

WHAT YOU DON'T KNOW CAN HURT YOU.

SILT FENCE DETAIL

NOT TO SCALE





- 4" PVC CARBON FILTER

TO BE LOCATED IN

REMOTE LOCATION.

\_ LOCKED, LID TO

GRADE

VENT WITH RAIN HOOD

ELECTRICAL CONDUIT TO

RESERVE VOLUME:

550 GALLONS

CONTROLS IN HOUSE

MAX. WATER LVL.

2" PVC FLOAT

SUPPORT

PROPOSED SAMPLING PORT -

1. SEDIMENTATION

4. CLARIFICATION

2. ANAEROBIC

3. AEROBIC

NOTES: MINIMUM SLOPE ON ALL

GRAVITY LINES - .0208 FT/FT

ASSUMED INVERT

ELEV.:374.80

4" SCHED.

9. 40 PVC

/ ELECTRICAL RELAY BOX

UNION

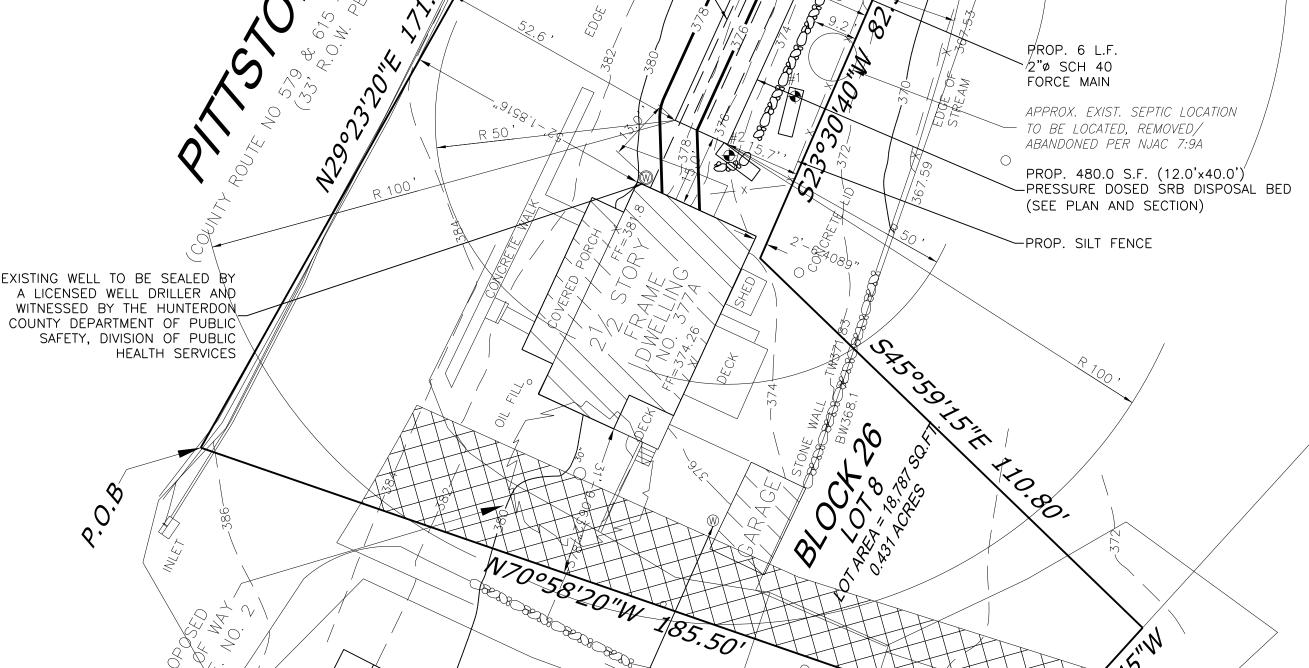
GRADE (TYP.)

- LOCKED, CAST IRON LID TO

/ NON-SHRINK GROUT (TYP.)

SEAL WATER-TIGHT

— 1/8"ø WEEPHOLE



PROPOSED WELL

75 FEET FROM

THE DISPOSAL BED.

FRESHWATER WETLAND NOTES:

**GRAPHIC SCALE** 

SCALE: 1'' = 20'

1 BASED ON A REVIEW OF THE NUDEP IMAP THE PROPOSED SEPTIC MAI

BASED ON EXISTING SITE CONDITIONS, THE PROPOSED SEPTIC

LOCATION IS THE MOST SUITABLE LOCATION FOR THE PROPERTY.

BE WITHIN A FRESHWATER WETLAND TRANSITION AREA.

3. A NJDEP FWW GENERAL PERMIT 25 IS REQUIRED.

..EINISH GRADE 4" TOP SOIL ELEV.: 374.89 FILL TO BE FREE ELEV.: 374.64 OF LARGE STONES TRANSPORT PIPE SEE PLAN FOR SIZE & LOCATION CLEAN FILL 9" MIN. DEPTH

ELEV.: 373.64 ◆ELEV.: 369.64

PIPE INVERTS

376 —

372 —

EVEL OF INFILTRATION

THIS DETAIL TO BE USED FOR ALL PIPES

#### EXCEPT FOR IN DISPOSAL FIELD TRANSPORT PIPE DETAIL

NOT TO SCALE

TIMER OVERIDE/ ALARM ELEV.: 371.67-29'

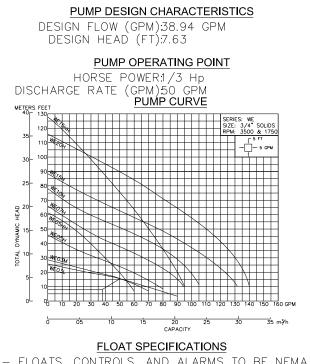
- LOW WATER ELEV.:370.28-12" — PUMP PED. ELEV.:369.95—8"

TO IMPROVE HYDRAULIC PERFORMANCE OF THE PROPOSED DISPOSAL BED, ACTIVATION OF PUMP IS TO BE CONTROLLED BY A TIME DOSED CONTROL PANEL LOCATED IN THE HOUSE (IFS SINGLE PHASE SIMPLEX DEMAND/TD PANEL AS MANUFACTURED BY SJE RHOMBUS OR ENGINEER APPROVED EQUAL). THE PANEL IS TO BE INITIALLY PROGRAMMED TO PUMP 2 MINUTES EVERY TWO HOURS. THE PUMP SHALL ONLY ACTIVATE IF THE LIQUID LEVEL WITHIN THE TANK IS ABOVE THE LOW WATER FLOATS. THE TANK SHALL PROVIDE ONE DAY OF FLOW RESERVE CAPACITY AFTER THE ALARM ACTIVATION. PUMP RUN TIMES TO BE FIELD ADJUSTED AS NECESSARY TO OPTIMIZE PERFORMANCE FOR ACTUAL USE BY THE SERVICE

# **PUMP INFORMATION**

PUMP SPECIFICATIONS - GOULDS WE SERIES MODEL 3885 OR APPROVED EQUAL, W/ 2" NPT DISCHARGE

- PUMP TO BE CAPABLE OF RUNNING DRY WITHOUT DAMAGE TO COMPONENTS. - PUMP MOTOR: 115 VOLT / SINGLE PHASE OR 230 VOLT / SINGLE PHASE



FLOATS, CONTROLS, AND ALARMS TO BE NEMA GOULDS SES SERIES OR APPROVED EQUAL. FLOATS TO BE ANCHORED TO 2" PVC SUPPORT THROUGH HOLES AT DESIGNATED ELEVATIONS.

## **DESIGN CRITERIA**

VOLUME OF SANITARY SEWAGE, Q (DESIGN FLOW) - EXIST: 3 BEDROOM DWELLING = 500 GPD

TANK CAPACITY - REQUIRED: 1,000 GALLONS - PROVIDED: 550 GALLONS (ADVANCE TREATMENT

STANDARD DISPOSAL BED SIZING PRESSURE DOSED: 1.33 S.F/GPD - 500 GPD x 1.33 FT/GPD = 665.0 S.F

ADVANCED TREATMENT DEVICE BED SIZING - PRESSURE DOSED: 0.956 S.F/GPD - 500 GPD x 0.956 FT/GPD = 478.0 S.F

PROPOSED DISPOSAL BED = 480.0 S.F. - 12.0' X 40.0'

-SLOPE GREATER THAN 10%

4"ø THREADED CAP

4"ø PERFORATED

PVC PIPE TO PROP.

4"ø SOLID

FINISHED GRADE

PVC PIPE

**INSPECTION PORT DETAIL** 

NOT TO SCALE

<u>DEVIATIONS FROM NJAC 7:9A STANDARDS:</u>
-SEPARATION DISTANCE TO WATER COURSE -DISPOSAL BED TYPE -RESERVE AREA -SEPARATION DISTANCE TO WELL

ZONE OF TREATMENT SUITABLE FILL MATERIAL BOTTOM OF EXCAVATION 370 — ZONE OF DISPOSAL HIGHEST REGIONAL WATER \_\_NATIVE K4 SOIL\_\_\_\_ 368 — BOTTOM ZONE OF DISPOSAL REFER TO NJAC 7:9A(e)2 366 — NOTE: CONTRACTOR TO PROVIDE UNIT PRICE FOR ADDITIONAL SOIL REPLACEMENT IN THE EVENT IT IS DEEMED NECESSARY BY CIVIL DYNAMICS OR HEALTH DEPARTMENT.

FINISH

GRADE

## DISPOSAL AREA - REPRESENTATIVE SECTION

FILTER MATERIAL

1"ø PVC SCH.40

36" ON CENTER

- FILTER FABRIC

(SEE CONST. SPEC.)

- LATERALS W/ 1/4" HOLES

4"ø SCH 40 PVC

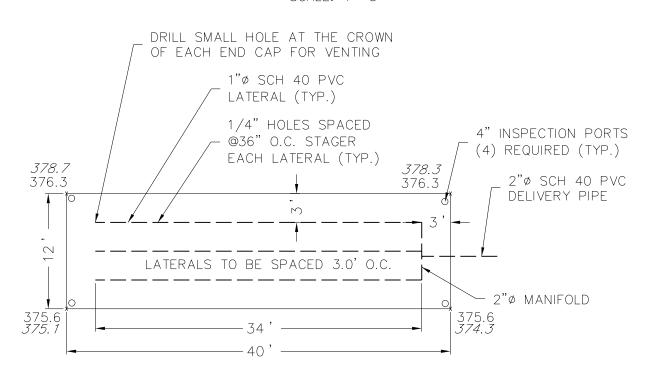
INSPECTION PORT

- RETAINING WALL

T.O. WALL EL. 375.1

EX<u>IST. GR</u>ADE

SCALE: 1"=5"



### **DISPOSAL BED - PLAN** SCALE: 1"=10'

/ PROJECT AREA m Jacobi Billiard Manufacturing

**KEY MAP** 



/ PROJECT AREA

(LbmD) Lansdale Loam GENERAL NOTES

1. THIS DESIGN WAS PREPARED IN ACCORDANCE WITH EXISTING STATE AND LOCAL REGULATIONS, NO GUARANTEE IS MADE OR THE SEPTIC OF THE

IMPLIED SINCE SUCCESSFUL OPERATION IS RELIED IN LARGE PART ON PROPER USAGE AND MAINTENANCE OF THE SEPTIC 2. THIS DESIGN IS BASED ON CONDITIONS WHICH WERE PRESENT AT THE TIME OF SITE EVALUATION AND SOIL LOGS. THE DESIGN ENGINEER IS NOT RESPONSIBLE FOR DIFFERING OR UNFORESEEN SITE CONDITIONS. THESE CONDITIONS MAY NECESSITATE

REVISIONS TO THE DESIGN INCLUDING RELOCATION OF TANKS OR OTHER SYSTEM ELEMENTS. ANY SUCH CHANGES REQUIRED BY THE ENGINEER OR ADMINISTRATIVE AUTHORITY MAY BE SUBJECT TO ADDITIONAL COSTS AT THE OWNER'S EXPENSE.

3. NO CHANGES SHALL BE MADE TO THIS DESIGN WITHOUT THE WRITTEN PERMISSION FROM A LICENSED PROFESSIONAL ENGINEER AND THE ADMINISTRATIVE AUTHORITY. 4. THERE ARE NO KNOWN ADJACENT WELLS WITHIN 100 FEET OR SEPTIC SYSTEMS WITHIN 50 FEET OF THE PROPOSED SEPTIC

SYSTEM OTHER THAN THOSE SHOWN ON THE DRAWINGS. 5. ALL EXISTING TREES WITHIN 10 FEET OF THE SEPTIC SYSTEM ARE RECOMMENDED FOR REMOVAL. CONSTRUCTION OF THE SEPTIC SYSTEM MAY DISTURB THE ROOT STRUCTURE OF THE TREES OR EFFECT THE GROUND WATER CONDITIONS OF SURROUNDING

TREES CAUSING THEM TO DIE. IF ANY TREES DIE, IT IS CONSIDERED AN ACT OF NATURE AND NEITHER THE ENGINEER NOR THE CONTRACTOR CAN BE HELD RESPONSIBLE. 6. ALL SEWAGE (GRAY AND BLACK) MUST BE DISPOSED OF IN THE PROPOSED SEPTIC SYSTEM.

7. NO WATER SOFTENER, ROOF, FLOOR, OR ANY OTHER DRAINS SHALL BE CONNECTED TO THE SYSTEM. 8. THIS SEPTIC SYSTEM WAS NOT DESIGNED FOR USE WITH A GARBAGE DISPOSAL SYSTEM. 9. UNDERGROUND WATERING/SPRINKLER SYSTEMS ARE NOT TO BE INSTALLED WITHIN 10 FEET OF SYSTEM COMPONENTS. 10. TOPOGRAPHIC ELEVATION DATA IS BASED ON APPROXIMATE FIELD MEASUREMENTS AND IS MEANT SOLELY FOR THE CONSTRUCTION OF THE PROPOSED SEPTIC SYSTEM ALTERATION. THE DATA IS BASED ON AN ASSUMED DATUM AND SHOULD NOT

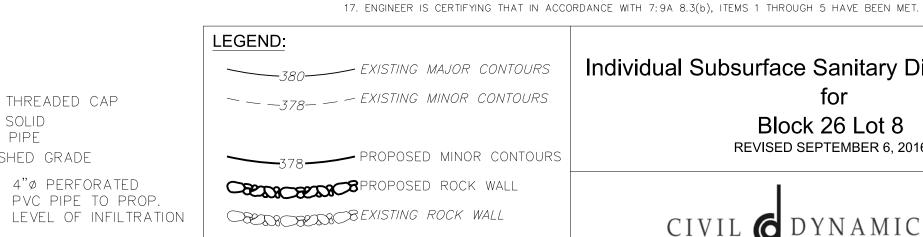
BE RELIED ON FOR ANY OTHER PURPOSES. 11. ROOF LEADER AND DOWN SPOUT DRAINS ARE TO BE MODIFIED AS NECESSARY TO DIRECT WATER AWAY FROM THE SEPTIC

BOUNDARY & PARTIAL TOPOGRAPHICAL SURVEY PREPARED BY: ALFRED A. STEWART JR. NJ PLS LIC. 24GB03588300, DATED NOVEMBER 29, 2015.

13. A DEED NOTICE STATING THE TYPE OF ADVANCED TECHNOLOGY AND MAINTENANCE REQUIREMENTS FOR THE LIFE OF THE SYSTEM SHALL BE RECORDED WITH THE COUNTY CLERK.

14. ENGINEER TO INSPECT THE ENTIRE SYSTEM AND PROVIDE A CERTIFICATE OF COMPLIANCE AND FINAL AS—BUILT TO THE HUNTERDON COUNTY DEPARTMENT OF PUBLIC SAFETY, DIVISION OF PUBLIC HEALTH SERVICES.
 15. ENGINEER TO INSPECT THE FINAL GRADING AND CERTIFY THAT THE GRADING ON THE PROPERTY HAS NOT LED TO ANY OFF—SITE

16. ENGINEER IS CERTIFYING THAT IN ACCORDANCE WITH 7:9A 10.5(E), 5i THROUGH 5iii HAVE BEEN MET. CONSTRUCTION OF THE RETAINING WALL SHALL BE SUPERVISED BY THE ENGINEER AND SHALL PROVIDE CERTIFICATION THAT CONSTRUCTION IS IN ACCORDANCE WITH THE APPROVED PLAN.



EXISTING TREE . TEST HOLE + LOCATION TO BE REMOVED XXX.X EXISTING GRADE

XXX.X PROPOSED GRADE

**®** EXISTING WELL

Individual Subsurface Sanitary Disposal System for

Block 26 Lot 8 REVISED SEPTEMBER 6, 2016



CHRISTOPHER S. ADAMS, P.E. N.J. PROFESSIONAL ENGINEER No. 24GE03130000

109A County Rte. 515, P.O.Box 760, Stockholm, N.J. 07460-0760 Phone (973) 697-3496 Fax (973) 697-1678