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**TOWN OF NEWBURGH
PLANNING BOARD
TECHNICAL REVIEW COMMENTS**

PROJECT: 233 QUAKER ST/DRIVANOS 2 FAMILY
PROJECT NO.: 18-19
PROJECT LOCATION: SECTION 2, BLOCK 1, LOT 15
REVIEW DATE: 29 NOVEMBER 2018
MEETING DATE: 6 DECEMBER 2018
PROJECT REPRESENTATIVE: MICHAEL AIELLO, P.E./LINDA ZWART, R.A.

1. Architectural details of the building façade have been provided. Two separate entrances are identified on the architectural details for each of the proposed units. Each of these entrances are on a different side of the structure. The Planning Board should review the project with regard to Section 185-48.2B, “the architecture and entrance details of the units shall provide the appearance of a single family residence.” As the entrances are located on separate sides the Board may consider the two separate entrances to comply with this requirement.
2. Submission of County to County planning as the project is located on the county line is required.
3. A Public Hearing for the two family dwelling is required.

Respectfully submitted,

***McGoey, Hauser and Edsall
Consulting Engineers, D.P.C.***

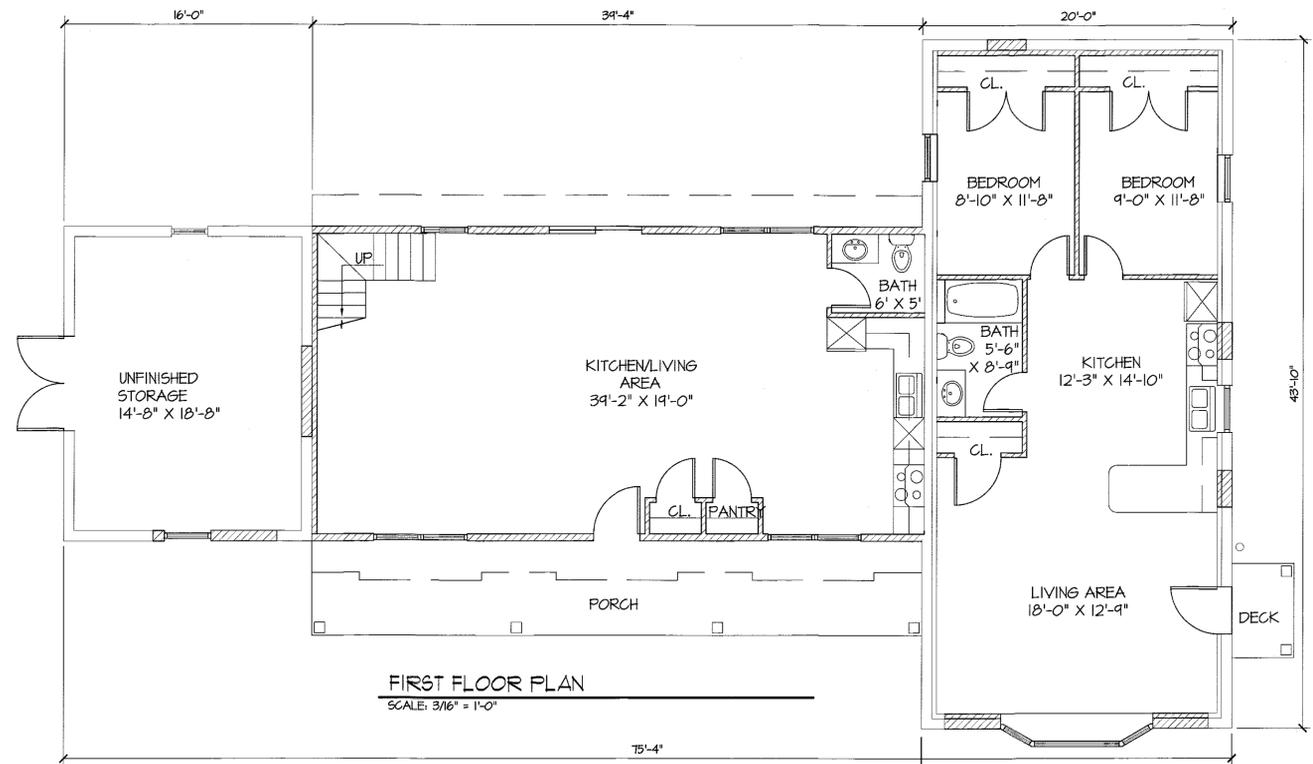
Patrick J. Hines
Principal

PJH/kbw

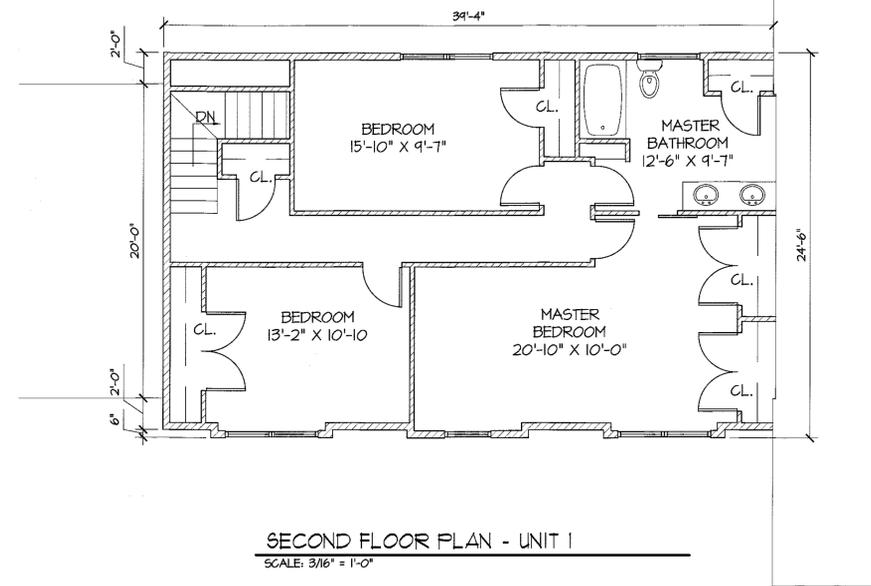
IT IS A VIOLATION OF THE LAW FOR ANY PERSON, UNLESS ACTING UNDER THE DIRECTION OF A LICENSED ARCHITECT, TO ALTER OR ADD TO THIS PLAN IN ANY WAY PER 8 NYCRR 64.56

GENERAL NOTES

UNIT 1	
1ST FLOOR	740 SQ. FT.
2ND FLOOR	960 SQ. FT.
TOTAL	1700 SQ. FT.
UNIT 2	
1ST FLOOR	875 SQ. FT.



FIRST FLOOR PLAN
SCALE: 3/16" = 1'-0"



SECOND FLOOR PLAN - UNIT 1
SCALE: 3/16" = 1'-0"

LEGEND

- EXISTING TO REMAIN
- NEW FRAME CONSTRUCTION



FRONT ELEVATION
SCALE: 3/16" = 1'-0"



RIGHT ELEVATION
SCALE: 3/16" = 1'-0"



REAR ELEVATION
SCALE: 3/16" = 1'-0"



LEFT ELEVATION
SCALE: 3/16" = 1'-0"

ENTRANCE TO UNIT 1
ENTRANCE TO UNIT 2

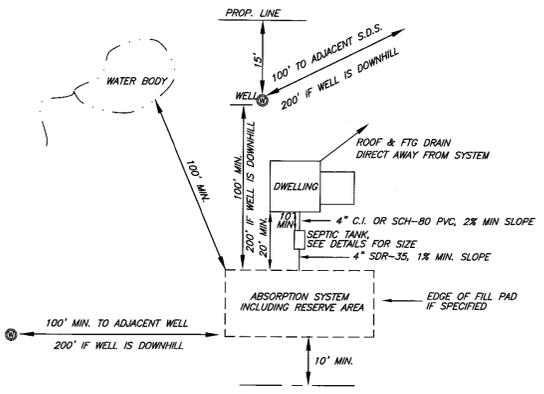
THESE PLANS ARE NOT VALID FOR A BUILDING PERMIT UNLESS ORIGINALLY SIGNED AND SEALED BY ARCHITECT. BLUEPRINTS OR PHOTO COPIES OF SEAL AND SIGNATURE ARE INVALID. THESE PLANS ARE FOR THE CONSTRUCTION OF ONE BUILDING ONLY BY THE PERSONS WHOSE NAME APPEARS ON THE PLANS

LINDA J. ZWART
ARCHITECT
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MONTGOMERY, NY 12544
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LICENSED: NEW YORK STATE

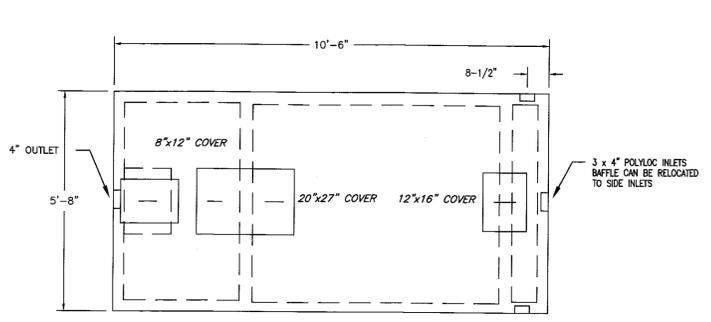
233 QUAKER STREET
ADDITION & RENOVATIONS FOR:
DRIVANOS
TOWN OF NEWBURGH
ORANGE COUNTY, NY

FLOOR PLANS & ELEVATIONS

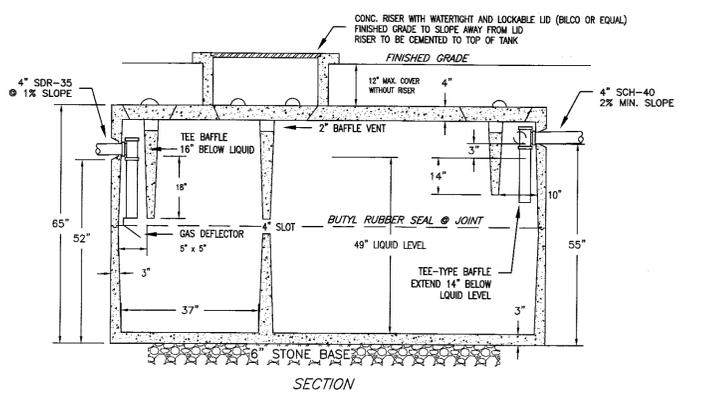
DATE: 1 NOV 2018
JOB# 1215



TYPICAL LOT LAYOUT
FOR REFERENCE ONLY
REFER TO SITE PLAN FOR ACTUAL LAYOUT

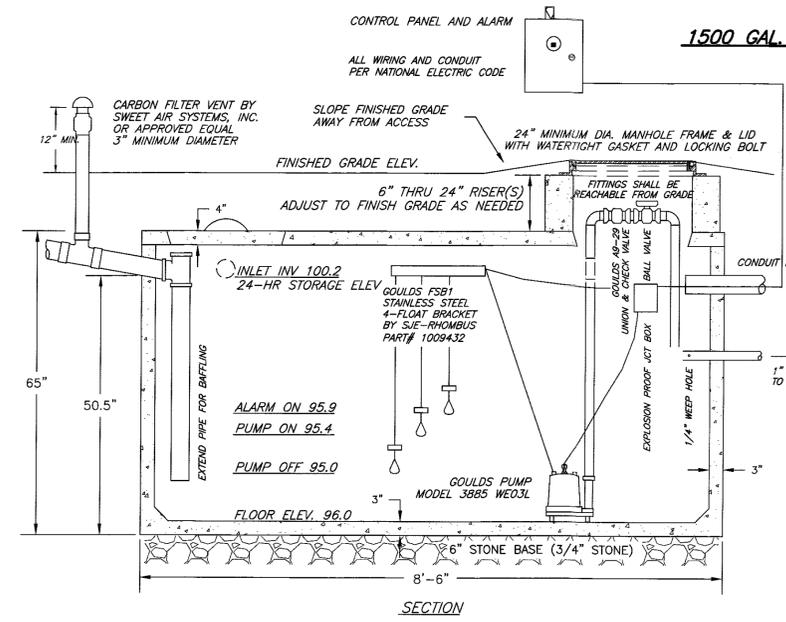


PLAN VIEW



SECTION

1500 GAL. PRECAST SEPTIC TANK DETAIL



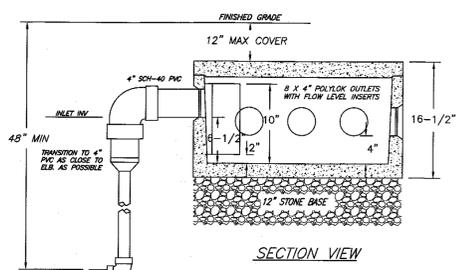
SECTION

CONCRETE PUMP CHAMBER DETAIL

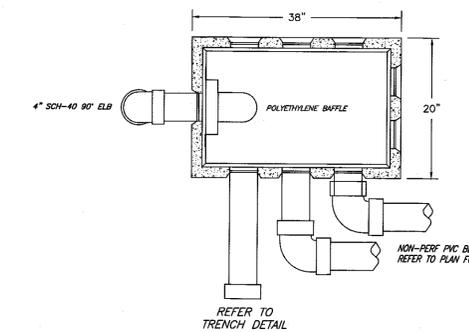
- NOTES**
- USE GT-1000 BY WOODARDS CONCRETE PRODUCTS AS PUMP CHAMBER.
 - PUMPS AND ACCESSORIES BY GOULDS PUMPS, INC.
 - ALL PUMPS AND ACCESSORIES SHALL BE INSTALLED PER MANUFACTURER'S INSTRUCTIONS.
 - ONLY PUMPS SPECIFIED SHALL BE USED. PUMPS WITH PRESET FLOAT SWITCHES ARE NOT ACCEPTABLE.
 - MORTAR BASE SHALL BE FORMED AROUND BASE OF PUMP TO COUNTER TORQUE OF MOTOR.
 - JOINTS SHALL BE SEALED WITH BUTYL RUBBER GASKETS AND TESTED FOR WATER TIGHTNESS.
 - PIPE PENETRATIONS OF CHAMBER WALL SHALL HAVE RUBBER GASKET AND BE SEALED WITH MORTAR.
 - USE GOULDS SIMPLEX "A" SERIES CONTROL PANEL, MODEL # A3-2012 OR RK SERIES PRESSURE BELL SYSTEM BY CSI CONTROLS.
 - CONTROL PANEL SHALL BE INSTALLED INSIDE OR OUTDOORS ONLY IF PANEL IS ALL-WEATHER RATED.
 - DUE TO CHECK VALVE IN PIPING, A WEEP HOLE IS REQUIRED INSIDE CHAMBER TO ALLOW DRAINING OF FORCEMAIN DURING TIMES OF FROST.
 - NO ELECTRICAL CONNECTIONS, INCLUDING SPLICES OR JUNCTION BOXES, SHALL BE MADE WITHIN THE PUMP CHAMBER UNLESS EXPLOSION PROOF.
 - THE FORCEMAIN SHALL MAINTAIN A CONTINUOUS, UP-GRADE SLOPE UPON EXITING THE CHAMBER.
 - PRIOR TO ISSUANCE OF CERTIFICATE OF OCCUPANCY, A LICENSED ELECTRIC INSPECTOR SHALL CERTIFY WIRING AND INSTALLATION MEETS NATIONAL ELECTRIC CODE (N.E.C.).

PUMP CHAMBER
DOSING 100% OF 208' ELJEN PIPE VOLUME:
17.9 CF = 133 GAL.
DOSING 70' OF 1" FORCE MAIN:
0.4 CF = 3 GAL.
USING GT-1000 CHAMBER:
DRAW DEPTH
(133 GAL + 3 GAL) / (26.1 GAL PER INCH) = 5"
24-HR STORAGE DEPTH:
DEPTH = 550 GAL / (26.1 GAL PER INCH) = 21"

PUMP DESIGN
STATIC HEAD:
I.E. DISTRIBUTION BOX = 104.0'
PUMP OFF ELEV. = 95.0'
HEAD = 104.0' - 95.0' = 9.0'
VELOCITY HEAD:
70 LF FORCE MAIN RUN
EQUIVALENT LENGTH OF ELB.'S = 5 FT.
ASSUMING 15 GPM DISCHARGE,
HEAD = 75' x 14.6' / 100' = 11.0'
TOTAL DYNAMIC HEAD:
9.0' + 11.0' = 20.0'
USE GOULDS PUMP MODEL 3885 WE03L



SECTION VIEW



PLAN VIEW

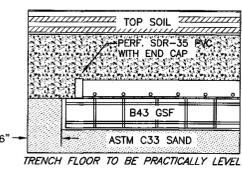
- NOTES**
- USE DB-9 DISTRIBUTION BOX BY WOODARD'S CONCRETE, BULLVILLE, NY OR APPROVED EQUAL.
 - CONCRETE SHALL HAVE 4,000 PSI MIN. COMPRESSIVE STRENGTH.
 - BOX SHALL BE SET LEVEL, ON A MINIMUM OF 12" OF GRAVEL OR CRUSHED STONE.
 - BOX SHALL BE PLUMBED SUCH THAT ANY UNUSED OUTLETS CAN BE ACCESSED TO PRACTICALLY SERVE FUTURE EXPANSION OF THE ABSORPTION FIELD.
 - ALL JOINTS AND PIPE PENETRATIONS SHALL BE SEALED.
 - FLOW LEVELERS SHALL BE INSERTED IN THE PIPES AT ALL OUTLETS SUCH THAT INVERTS ARE IDENTICAL IN ORDER TO EQUALIZE WATER DISTRIBUTION TO THE LATERALS.
 - ANY OUTLETS NOT BEING UTILIZED SHALL BE PLUGGED AND SEALED.
 - IF GROUND COVER OVER THE BOX WILL EXCEED 12 INCHES, THEN A RISER SHALL BE PLACED ON TOP OF THE BOX WITH ITS LID POSITIONED NO MORE THAN 12 INCHES BELOW THE FINISHED GRADE.

DISTRIBUTION BOX DETAIL
SEPTIC SYSTEM NOTES

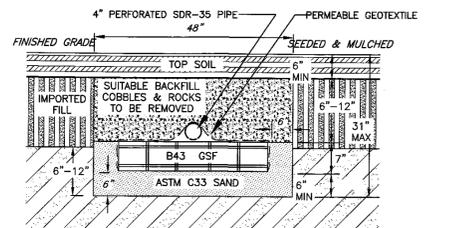
- INSTALLATION OF THIS SYSTEM SHALL BE MADE UNDER THE DIRECT SUPERVISION OF AN ENGINEER EXPERIENCED IN SMALL SANITARY FLOWS AND LICENSED TO PRACTICE IN NEW YORK STATE (NYS). THE ENGINEER SHALL CERTIFY, IN WRITING AND PRIOR TO THE OCCUPANCY, THAT THE CONSTRUCTION, INCLUDING THAT THE SEPTIC TANK JOINTS HAVE BEEN SEALED AND TESTED FOR WATER-TIGHTNESS, AND THAT THE TANK WAS INSTALLED IN ACCORDANCE WITH APPENDIX 75-A, DIRECTLY TO THE BUILDING DEPARTMENT AND REVIEWING AGENCY.
- THIS OFFICE CANNOT BE RESPONSIBLE FOR THE CONSTRUCTION OF ANY WASTEWATER DISPOSAL SYSTEM UNLESS IT IS INVOLVED IN ITS ACTUAL AND DIRECT INSTALLATION SUPERVISION.
- THE SANITARY FACILITIES ON THESE PLANS ARE NOT TO BE RELOCATED OR REDESIGNED WITHOUT APPROVAL BY THE REVIEWING AGENCY.
- THIS SYSTEM(S) WAS NOT DESIGNED TO ACCOMMODATE GARBAGE GRINDERS, JACUZZI TYPE SPA TUBS OVER 100 GALLONS OR WATER TREATMENT CONDITIONERS. AS SUCH, THESE ITEMS SHALL NOT BE INSTALLED UNLESS THE SYSTEM IS REDESIGNED TO ACCOUNT FOR THEM AND RE-APPROVED BY THE REVIEWING AGENCY.
- ALL CONSTRUCTION SHALL CONFORM TO THE REQUIREMENTS SET FORTH IN "INDIVIDUAL RESIDENTIAL WASTEWATER TREATMENT SYSTEM DESIGN HANDBOOK, 2012".
- NO GRADING IS PERMITTED IN THE VICINITY OF THE ABSORPTION FIELD, EXCEPT FOR THAT WHICH IS SPECIFIED AND APPROVED ON THESE PLANS.
- TOP SOIL SHALL NOT BE STRIPPED FROM ABOVE THE ABSORPTION FIELD.
- THE PERIMETER OF THE ABSORPTION FIELD SHALL BE GRADED TO DIVERT RUNOFF AWAY FROM THE DISPOSAL AREA.
- HEAVY EQUIPMENT SHALL BE KEPT OFF THE AREA OF THE ABSORPTION FIELD(S) EXCEPT DURING ACTUAL CONSTRUCTION. THERE SHALL BE NO UNNECESSARY MOVEMENT OF CONSTRUCTION EQUIPMENT IN THE AREA OF ABSORPTION FIELD(S) BEFORE, DURING OR AFTER CONSTRUCTION.
- ALL PORTIONS OF THE ABSORPTION FIELD SHALL BE A MINIMUM DISTANCE OF 200 FT UP-GRADE AND 100 FT DOWN-GRADE FROM ANY WELL.
- CELLAR DRAINS, ROOF DRAINS AND FOOTING DRAINS SHALL NOT BE DISCHARGED IN THE VICINITY OF ANY WELL OR THE SANITARY DISPOSAL SYSTEM. ALL DRAIN PIPES MUST EXTEND TO DAYLIGHT AND DISCHARGE IN THE VICINITY OF EXISTING SWALES OR DRAINAGE IMPROVEMENTS.
- DRIVEWAYS OR PARKING AREAS SHALL NOT BE CONSTRUCTED OVER THE ABSORPTION FIELD AFTER ITS INSTALLATION.
- NO SWIMMING POOLS OR STRUCTURES THAT MIGHT COMPACT THE SOIL SHALL BE LOCATED OVER ANY PORTION OF THE ABSORPTION FIELD FOLLOWING ITS INSTALLATION.
- THE SEPTIC TANK SHALL BE LOCATED AT LEAST 10 FT FROM ANY FOUNDATION OR PROPERTY LINES.
- THERE MUST BE UNINTERRUPTED POSITIVE SLOPE FROM THE SEPTIC TANK (OR ANY PUMPING OR DOSING CHAMBER) TO THE BUILDING, THEREBY ALLOWING GASES TO DISCHARGE THROUGH THE STACK VENT.
- THE HOUSE OR BUILDING SEWER SHALL BE 4" I.D. SCH-40 PVC OR CAST IRON AND BE SLOPED A MINIMUM PITCH OF 1/4" PER FOOT (2%).
- THE SEWER PIPE SHALL PENETRATE THE FOUNDATION THROUGH A CORE-DRILLED OPENING AT LEAST 2 (TWO) NOMINAL PIPE SIZES LARGER (8") WITH THE VOID SPACE GROUTED AFTER PIPE INSTALLATION.
- NO PIPE JOINT SHALL BE WITHIN 36" OF THE FOUNDATION WALL.
- THE PIPE FROM THE SEPTIC TANK TO THE DISTRIBUTION BOX, PUMPING OR DOSING CHAMBERS SHALL BE 4" SDR-35 PVC AND BE SLOPED AT A MINIMUM PITCH OF 1/8" PER FOOT (1%). IF ANY PORTION OF THIS PIPE RUNS BENEATH A VEHICULAR TRAVELED WAY IT MUST BE OF SCH-40 PVC STRENGTH OR STRONGER, OR BE SLEEVED.
- BENDS SHALL BE USED WHEN ENTRANCE OR EXIT FROM THE SEPTIC TANK, CHAMBERS OR DISTRIBUTION BOX(ES) IS NOT STRAIGHT. IF BENDS ARE USED AT POINTS OTHER THAN ENTRANCES OR EXITS THEN CLEANOUTS ARE REQUIRED AT THESE POINTS.
- ALL PIPE PENETRATIONS IN TANKS, CHAMBERS OR BOXES SHALL BE GROUTED.
- THE HOMEOWNER(S) SHALL BE PROVIDED WITH A COPY OF THE APPROVED PLANS AND AN ACCURATE "AS-BUILT" RECORD DRAWING OF THE WATER SUPPLY AND WASTEWATER TREATMENT FACILITIES.

ASTM C-33 SAND

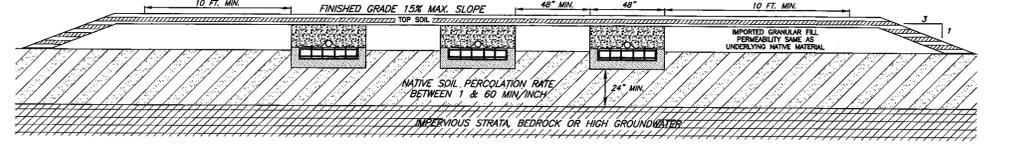
SIEVE SIZE	PERCENT PASSING
3/8 INCH	100%
NO. 4	95% - 100%
NO. 8	80% - 100%
NO. 16	50% - 85%
NO. 30	25% - 60%
NO. 50	5% - 30%
NO. 100	<10%
NO. 200 (WET)	<5%



ELJEN GSF SHALLOW TRENCH PROFILE



ELJEN GSF SHALLOW TRENCH SECTION



ELJEN GRAVELLESS SAND FILTER (GSF) SHALLOW FILL PAD SECTION

NOTES:

- PROPERTY OWNERS AND CONTRACTORS ARE ADVISED THAT UNDER NO CIRCUMSTANCES IS THE PROPOSED LEACH FIELD AREA TO BE DISTURBED.
- IN THE EVENT THAT TREE AND HEAVY BRUSH MUST BE REMOVED, IT SHALL BE ACCOMPLISHED WITH A BRUSH HOG AND MANUAL TREE CUTTING AT AT GRADE ONLY. LOW STUMPS AND ROOTS SHALL NOT BE DISPLACED OR REMOVED UNLESS IT IS IN THE DIRECT LINE OF AN ABSORPTION TRENCH.
- PRIOR TO ANY CONSTRUCTION ON THE SITE, THE ABSORPTION FIELD AND RESERVE AREA SHALL BE ACCURATELY IDENTIFIED BY FIELD STAKES AND ALL CONTRACTORS SHALL BE INSTRUCTED TO AVOID ANY DISTURBANCE INCLUDING VEHICLE PARKING AND ANY AND ALL STORAGE INCLUDING STOCKPILED SOIL THAT HAS BEEN EXCAVATED.
- TRENCHES SHALL NOT BE CONSTRUCTED WHEN SOIL IS WET OR SATURATED.
- TRENCHES SHALL BE SET PARALLEL TO GRADE CONTOURS AND NOT, NECESSARILY, PARALLEL TO EACH OTHER.
- TRENCHES SHALL BE SPACED A MINIMUM OF 8 (EIGHT) FEET ON CENTER.
- A MINIMUM OF 48" OF UNDISTURBED SOIL SHALL REMAIN BETWEEN TRENCH WALLS.
- A MINIMUM OF 24" UNDISTURBED SOIL SHALL REMAIN BETWEEN TRENCH BOTTOMS AND GROUNDWATER, LEDGE ROCK OR ANY IMPERVIOUS SOIL.
- TRENCH BOTTOMS SHALL BE SET PRACTICALLY LEVEL.
- SIDES AND BOTTOM OF TRENCHES SHALL BE RAKED IMMEDIATELY PRIOR TO PLACEMENT OF ASTM C-33 SAND.
- EXTREME CARE MUST BE TAKEN DURING ACTUAL CONSTRUCTION TO AVOID UNDUCE COMPACTION RESULTING IN A CHANGE OF THE ABSORPTION CAPACITY.
- BELL ENDS OF PIPES SHALL BE INSTALLED AT THE UPSTREAM DIRECTION OF FLOW.
- ENDS OF LATERALS SHALL BE CAPPED.
- TOP SOIL USED FOR FINISHED GRADING SHALL BE SLIGHTLY MOUND TO ACCOUNT FOR SETTLING, THEN SEED WITH GRASS AND STABILIZED WITH STRAW MULCH.
- THE OWNER/APPLICANT SHALL BE ADVISED OF ANY ROUTINE OR SPECIAL MAINTENANCE PROCEDURES THAT MAY BE NECESSARY. THESE PROCEDURES CAN BE FOUND ON WITHIN THE RESIDENTIAL ONSITE WASTEWATER TREATMENT SYSTEMS DESIGN HANDBOOK (2012).
- THE OWNER/APPLICANT SHALL ALSO BE ADVISED THAT ELJEN SPECIFICALLY EXCLUDES ITS IN-DRAIN UNITS FROM WARRANTY COVERAGE IF USED IN A COMMERCIAL APPLICATION.

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DATE: SEPTEMBER 30, 2018
REV. DATE: NONE THIS SHEET
REVISION DESCRIPTION: NONE THIS SHEET

UNAUTHORIZED ALTERATION OR ADDITION TO THIS DOCUMENT IS A VIOLATION OF SECTION 7209-2 OF THE NYS EDUCATION LAW.

SANITARY DETAILS
FOR LANDS OF
DRIVANOS

TAX MAP # 2-1-15 233 QUAKER STREET TOWN OF NEWBURGH
COUNTY OF ORANGE STATE OF NEW YORK DWG # 2008-0920
DRAWN BY: MJA N.T.S. SHEET # 2 OF 3

STATE OF NEW YORK
MICHAEL J. AIELLO
14586-1
PROFESSIONAL ENGINEER