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Principal Emeritus: RICHARD D. McGOEY, P.E. (NY & PA) WILLIAM J. HAUSER, P.E. (NY, NJ & PA)

TOWN OF NEWBURGH PLANNING BOARD TECHNICAL REVIEW COMMENTS

PROJECT: MADAN SUBDIVISION

PROJECT NO.: 20-06

PROJECT LOCATION: SECTION 1, BLOCK 1, LOT 132

REVIEW DATE: 29 MAY 2020 MEETING DATE: 4 JUNE 2020

PROJECT REPRESENTATIVE: MECURIO-NORTON-TAROLLI-MARSHALL ENGINEERING

- 1. Project was submitted to Orange county Planning on 11 May 2020 via email and overnight mail.
- 2. Project will be sent to Town of Plattekill once Public Hearing is scheduled.
- **3.** Highway Supt. Comments on driveway and clearing notes should be received.
- **4.** Relocation of utilities serving lot 1 must be complete prior to filing the subdivision plat.
- **5.** This office has reviewed the EAF submitted and would recommend a Negative Declaration for the minor subdivision.
- **6.** A public hearing is required for the subdivision.

Respectfully submitted,

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

Patrick J. Hines Principal

PJH/kbw





45 Main Street · P.O. Box 166 Pine Bush, New York 12566 Tel: (845) 744-3620

> Fax: (845) 744-3805 Email: mntm@mntm.co

Lawrence J. Marshall, P.E. John Tarolli, P.E., L.S.

Zachary A. Peters, P.E. Kenneth W. Vriesema, L.S.

May 28, 2020

Planning Board Town of Newburgh 308 Gardnertown Road Newburgh, NY 12550

Also via email: planningboard@townofnewburgh.org

Re: Job No. 2822-110B

Tax Parcel 1-1-32

Town of Newburgh, Orange County

757 Orchard Drive Residential Subdivision

Dear Board Members:

Enclosed please find the following items in reference to the above-captioned project:

1. Ten (10) copies of the revised Subdivision Plan

The following comments are in response to a review by Patrick Hines of McGoey, Hauser, & Edsall Consulting Engineers, dated May 7, 2020:

- 1. The proposed utility easement has been widened to 20-feet. The applicant has agreed to relocate the utility line prior to the filing of the subdivision map. We anticipate this will be a condition of approval for the maps the signed.
- 2. The Sight Distance Table on sheet 2 has been revised to specify the sight line to the left out of the proposed driveways requires minor clearing of overhanging branches and roadside brush along the project frontage. A note to this effect has been added to the referenced area on sheet 1. No major clearing is required other than trimming of vegetation that overhangs into the right-of-way. We do not believe a permanent clearing easement is required. Note 9 has been included on sheet 1 specifying individual lot owners are responsible for clearing and maintaining 13 feet from the edge of pavement along Orchard Drive to maintain adequate sight distance.
- Note 10 has been included on sheet 1 referencing the required as-built sewer certification
 prior to the issuance of a certificate of occupancy. If different wording or notation is
 required, please advise.
- 4. No response required.
- A copy of the subdivision plan has been forwarded to the Highway Superintendent for review and comment. The proposed driveway locations have also been staked in the field for his review.
- 6. No response required.





Please place this project on the next available meeting agenda for discussion.

If you have any questions or concerns, please feel free to contact me at (845) 744-3620 or by email at zpeters@mntm.co.

Sincerely,

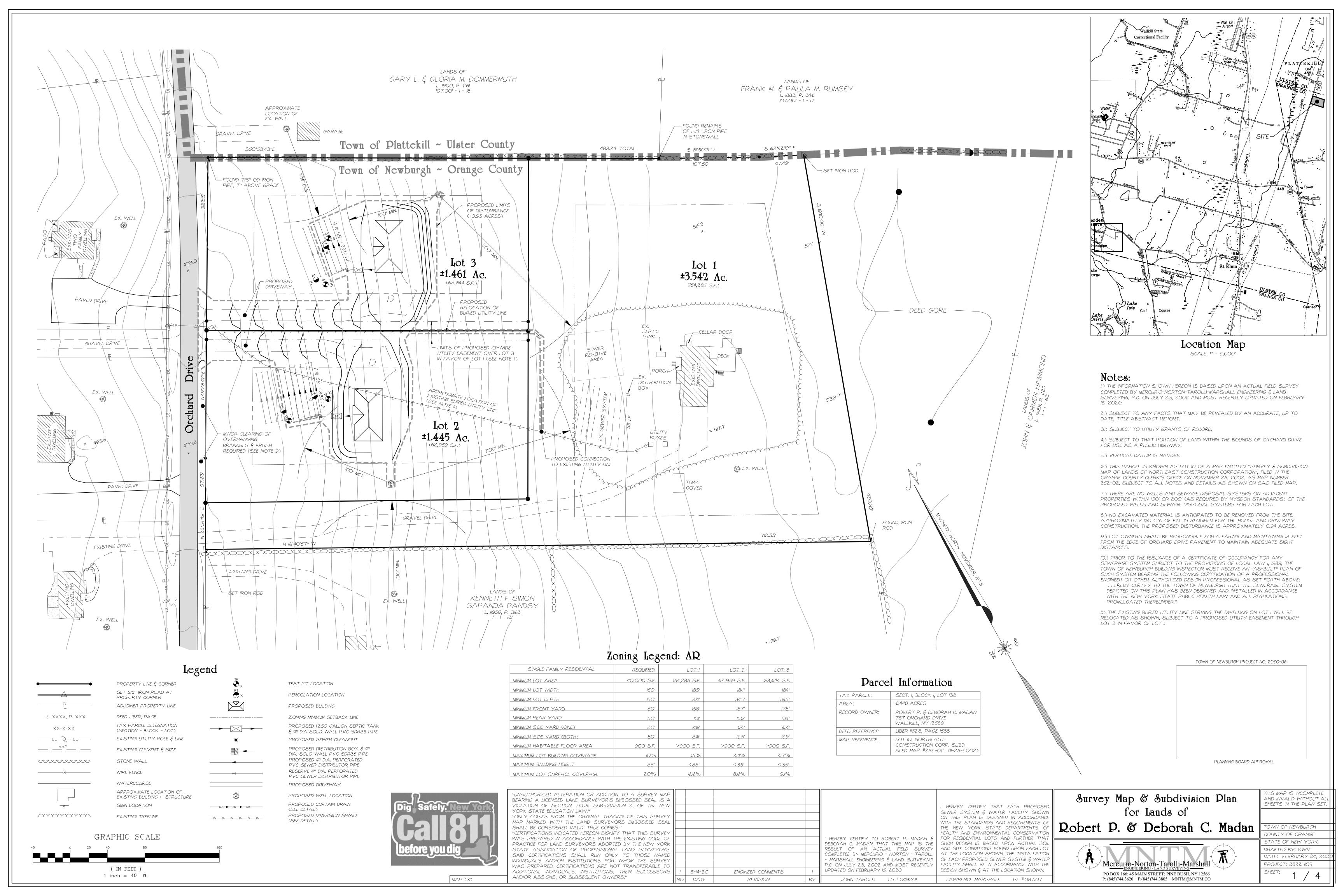
Zachary A. Peters, P.E.

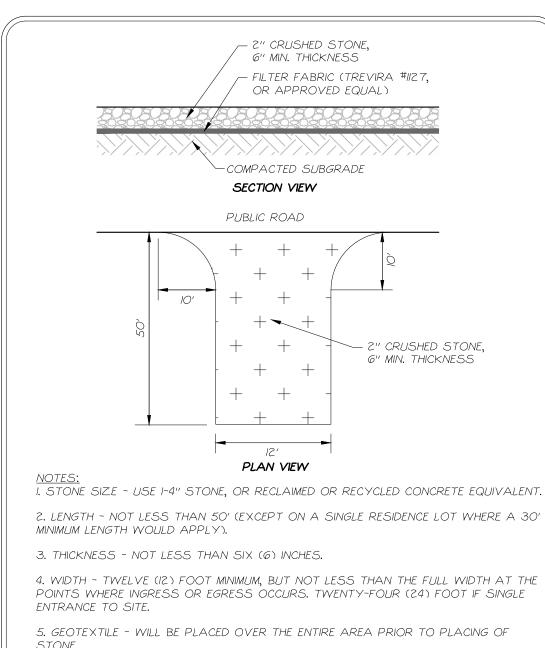
ZAP/zap Enc.

Cc: Patrick Hines (via email & mail) - w.enc
Dominic Cordisco (via email) - w.enc
Robert Madan (via email) - w.enc
Ann-Margaret Bolton (via email) - w.enc









3. THICKNESS - NOT LESS THAN SIX (6) INCHES.

4. WIDTH - TWELVE (12) FOOT MINIMUM, BUT NOT LESS THAN THE FULL WIDTH AT THE POINTS WHERE INGRESS OR EGRESS OCCURS. TWENTY-FOUR (24) FOOT IF SINGLE ENTRANCE TO SITE.

5. GEOTEXTILE - WILL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING OF STONE.

6. SURFACE WATER - ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION ACCESS SHALL BE PIPED BENEATH THE ENTRANCE. IF PIPING IS IMPRACTICAL, A MOUNTABLE BERM WITH 5:1 SLOPES WILL BE PERMITTED.

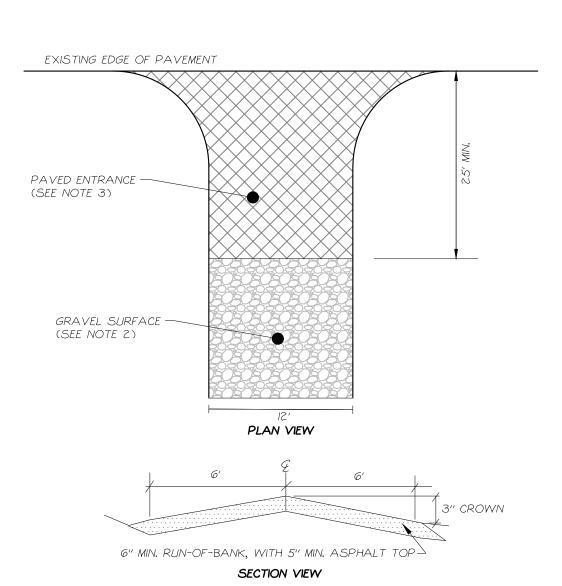
7. MAINTENANCE - THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED IMMEDIATELY.

8. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON A AREA STABILIZED WITH STONE AND WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE.

9. PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EACH RAIN.

Stabilized Construction Entrance Detail

NOT TO SCALE



NOTES:
I.) THE PROPOSED DRIVEWAY SHALL BE GRADED AT -2.0% MINIMUM FROM THE EDGE OF PAVEMENT ALONG ORCHARD DRIVE.

2.) GRAVEL DRIVEWAYS SHALL BE A MINIMUM OF 12-FEET WIDE AND CONSIST

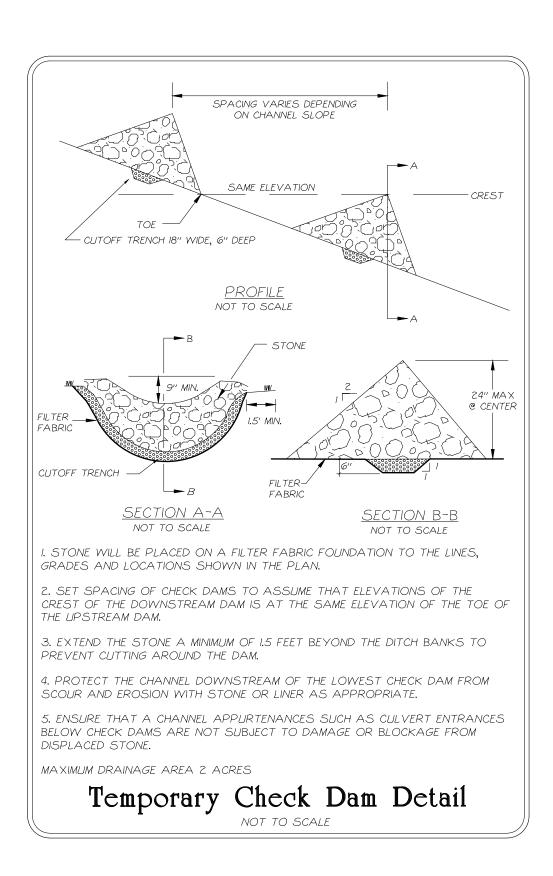
OF 8" RUN-OF-BANK GRAVEL BASE WITH 4" ITEM 4 TOP COURSE.

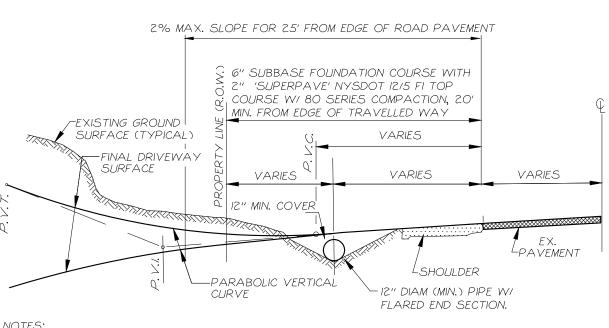
3.) PAVED DRIVEWAYS SHALL BE CONSTRUCTED WITH A MINIMUM OF 6"
RUN-OF-BANK GRAVEL FOUNDATION, 3" BINDER COURSE, AND 2" BITUMINOUS
ASPHALT TOP COURSE FOR THE FIRST 25-FEET FROM THE EDGE OF PAVEMENT.

4.) THE MAXIMUM DRIVEWAY SLOPE SHALL NOT EXCEED 10%.

5.) A TEMPORARY CONSTRUCTION ENTRANCE SHALL BE INSTALLED AT EACH PROPOSED DRIVEWAY ENTRANCE DURING THE COURSE OF CONSTRUCTION IN ACCORDANCE WITH THE ASSOCIATED DETAIL.

Private Driveway Detail





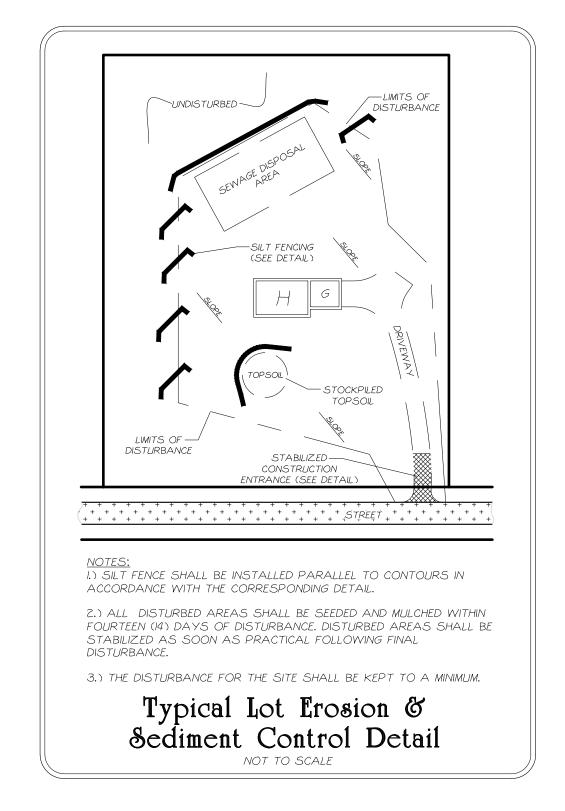
I.) DRIVEWAY SHALL BE GRADED TO DIVERT WATER INTO ROAD DRAINAGE, NOT ONTO MAIN ROAD.

2.) THE INSTALLATION OF ALL PROPOSED DRIVEWAY CULVERTS WILL BE PROPERLY COORDINATED TO ASSURE POSITIVE DRAINAGE IS ACHIEVED.

3.) BACKFILL MATERIAL WITHIN 8' OF THE EDGE OF PAVEMENT SHALL CONSIST OF ITEM NO. 4 (ITEM 304,IZ SUBBASE COURSE TYPE 2).

4.) EXCAVATED MATERIAL MAY BE USED AS BACKFILL MATERIAL BEYOND 8' FROM THE EDGE OF PAVEMENT. NO BOULDERS/ROCKS OVER IZ" ARE ALLOWED TO BE USED AS BACKFILL.

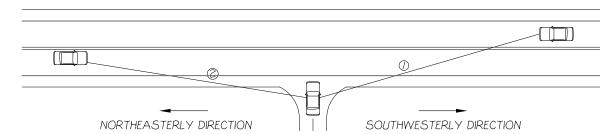
Driveway Entrance Profile Detail

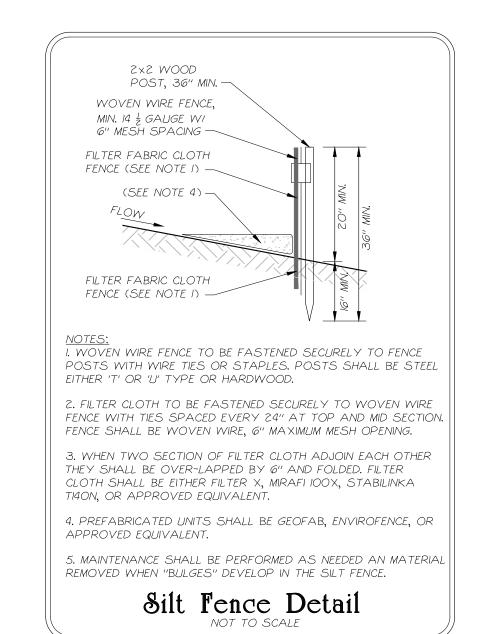


Sight Distance Table

MEASUREMEN	NTS RECORDED	BY: R. SMITHEM		DATE: FEBRUARY 19, 2020				
SPEED LIMIT ALONG ORCHARD ROAD = 30 MPH								
LOCATION	SIGHT LINE	DISTANCE	NOTES					
LOT 2	1	± 600′	LIMITED BY VERTICAL CURVE					
	2	±570′	MINOR CLEARING OF OVERHANGING BRANCHE. ROADSIDE BRUSH REQUIRED ALONG PROJEC FRONTAGE (SEE NOTE 9, SHEET 1)					
LOT 3	1	±570′	LIMITED BY VERTICAL CURVE					
	2	±605′	MINOR CLEARIN ROADSIDE BE FRONTA	NG OF OVERHANGING BRANCHES É RUSH REQUIRED ALONG PROJECT AGE (SEE NOTE 9, SHEET 1)				

 \star NO CHANGES TO THE EXISTING LOT I DRIVEWAY PROPOSED OR REQUIRED.





Erosion & Sediment Control Notes:

I.) DUST CONTROL SHALL BE PROVIDED IN TIMES OF DRY WEATHER. AREAS SHALL BE SPRAYED WITH WATER TO PREVENT DUST FROM TRANSFERRING TO ADJACENT PROPERTIES.

2.) THE PROPOSED AREA OF DISTURBANCE IS APPROXIMATELY 0.94 ACRES.

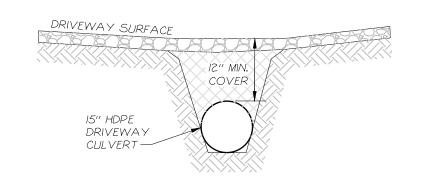
3.) IDLE DISTURBED AREAS SHALL BE STABILIZED IN ACCORDANCE WITH THE TEMPORARY STABILIZATION REQUIREMENTS IN THE NEW YORK STATE STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL, JULY 2016 EDITION. TEMPORARY STABILIZATION SPECIFICATIONS INCLUDE:

- ANNUAL OR PERENNIAL RYEGRASS SEEDING WITH STRAW MULCHING AT
- A RATE OF 30 LBS PER ACRE.

 COARSE WOOD CHIPS AT A RATE OF 500 LBS PER ACRE.
- WOOD FIBER HYDROMULCH, AS PER MANUFACTURERS SPECIFICATIONS.

 4.) ALL DISTURBED AREAS NOT ENCUMBERED BY LANDSCAPING MULCH,
 PAVEMENT, CONCRETE, OR OTHER IMPERVIOUS COVER BE STABILIZED WITH
 BLUE GRASS BLEND, WITH THE FOLLOWING SPECIFICATIONS:
- 25% FESTUCA RUBRA COMMUTATA (CHEWINGS FESCUE)
 15% LOLIUM PERENNE (PERENNIAL RYEGRASS)
- 60% POA PRATENSIS (KENTUCKY BLUEGRASS)

 5.) SEEDING SHALL BE PERFORMED AT A RATE OF FIVE (5) LBS. PER ACRE.



Typical Culvert Detail

"UNAUTHORIZED ALTERATION OR ADDITION TO A SURVEY MAP					Γ
BEARING A LICENSED LAND SURVEYOR'S EMBOSSED SEAL IS A					\parallel
VIOLATION OF SECTION 7209, SUB-DIVISION 2, OF THE NEW					1
YORK STATE EDUCATION LAW." "ONLY COPIES FROM THE ORIGINAL TRACING OF THIS SURVEY					1
MAP MARKED WITH THE LAND SURVEYORS EMBOSSED SEAL					-
SHALL BE CONSIDERED VALID, TRUE COPIES."					∥
"CERTIFICATIONS INDICATED HEREON SIGNIFY THAT THIS SURVEY					Ш
WAS PREPARED IN ACCORDANCE WITH THE EXISTING CODE OF					1
PRACTICE FOR LAND SURVEYORS ADOPTED BY THE NEW YORK					1
STATE ASSOCIATION OF PROFESSIONAL LAND SURVEYORS.					╢
SAID CERTIFICATIONS SHALL RUN ONLY TO THOSE NAMED INDIVIDUALS AND/OR INSTITUTIONS FOR WHOM THE SURVEY					╢
WAS PREPARED, CERTIFICATIONS ARE NOT TRANSFERABLE TO					Ш
ADDITIONAL INDIVIDUALS, INSTITUTIONS, THEIR SUCCESSORS	1	5-14-20	ENGINEER COMMENTS	ZAP	1
AND/OR ASSIGNS, OR SUBSEQUENT OWNERS."	NO.	DATE	REVISION	ВУ	

Construction Detail Sheet for Robert P. & Deborah C. Madan

THIS MAP IS INCOMPLETE
AND INVALID WITHOUT ALL
SHEETS IN THE PLAN SET.

TOWN OF NEWBURGH
COUNTY OF ORANGE
STATE OF NEW YORK
DRAFTED BY: ZAP
DATE: FEBRUARY 24, 2020
PROJECT: 2822-110B

Mercurio-Norton-Tarolli-Marshall
PO BOX 166; 45 MAIN STREET; PINE BUSH, NY 12566
P: (845)744.3620 F: (845)744.3805 MNTM@MNTM.CO

Deep Soils Testing Results

DEEP TEST 2' - 24" - 2' - 2' - 2' - 2' - 2' - 2' - 2' - 2	TEST HOLE #	1	2	3	4
TOPSOIL O'	TESTING DATE:	2-19-20	2-19-20	2-19-20	2-19-20
1	TESTER:	RTS	RTS	RTS	RTS
	SOIL LOG *NO WATER OR ROCK	1' SILT LOAM 2' - 3' SILT LOAM W. SHALE FRAGMENTS 5' - 63" - 63" - 6" - 7" - 6"		3' — 9" — 3' — 42" — 42" — 42" — 5ILT LOAM W. RIPPABLE SHALE 5' — 63" — 6' — 7' — 6'	3' — 36" — 31T LOAM 4' — W. RIPPABLE 5' — 63" —

General Notes:

I.) PIPE JOINTS TO BE SEALED WITH ASPHALTIC MATERIAL OR EQUIVALENT.

2.) ALL 4" OUTLET PIPES (SOLID WALL) LEAVE DISTRIBUTION BOX AT SAME ELEVATION ON A MINIMUM SLOPE OF 1/8" PER FOOT UP TO A DISTRIBUTOR LATERAL.

3.) SEWAGE DISPOSAL SYSTEMS LOCATED OF NECESSITY UPGRADE IN THE GENERAL PATH OF DRAINAGE TO A WELL MUST BE SPACED 200' OR MORE AWAY.

4.) NO DRIVEWAY, ROADWAY, PARKING AREA OR ABOVE GROUND SWIMMING POOL IS TO BE CONSTRUCTED OVER ANY PORTION OF THE SEWER SYSTEM. HEAVY EQUIPMENT SHALL BE KEPT OUT OF THE ABSORPTION

5.) ALL DISTRIBUTOR LINES (PERFORATED) SHALL BE OF EQUAL LENGTH.

6.) ALL TREES TO BE CUT & REMOVED FROM SEWAGE DISPOSAL AREA IN A MANNER THAT WILL NOT DISTURB THE VIRGIN SOIL LAYER.

7.) MAXIMUM GROUND SLOPE OF TILE FIELD AREA SHALL NOT EXCEED 15%.

8.) NO BASEMENT FIXTURES ARE PERMITTED WITHOUT A SPECIAL DESIGN FOR SEWAGE DISPOSAL.

9.) NO COMPONENT PART OF ANY SEWAGE DISPOSAL SYSTEM SHALL BE LOCATED OR MAINTAINED WITHIN 100' OF ANY SPRING, RESERVOIR, BROOK, MARSH OR ANY OTHER BODY OF WATER.

10.) NO ROOF, CELLAR OR FOOTING DRAINS ARE TO BE DISCHARGED IN THE SEWAGE DISPOSAL SYSTEM.

11.) FLOW EQUALIZERS SHALL BE USED FOR SYSTEMS WHOSE SIDE SLOPES ARE BETWEEN 10-15% AND ARE

RECOMMENDED FOR ALL SYSTEMS

12.) SLOPE BETWEEN SEPTIC TANK OR PUMPING CHAMBER AND THE HOUSE SHALL BE POSITIVE AND

UNINTERRUPTED, AS TO ALLOW SEPTIC GASSES TO DISCHARGE THROUGH THE STACK VENT.

13.) THE SEWER PIPE RUNNING FROM THE HOUSE TO THE SEPTIC TANK MUST BE LAID ON SUITABLY COMPACTED EARTH OR VIRGIN SOIL WITH THE FIRST WATERTIGHT JOINT LOCATED AT LEAST 3' FROM THE HOUSE. THE PIPE SHALL BE SCH 80 PVC OR CAST IRON.

14.) THE DESIGN AND LOCATION OF SANITARY FACILITIES (WELL, SEPTIC TANK, AND LEACH FIELD) SHALL NOT BE CHANGED. ANY RELOCATION OF THE SEPTIC SYSTEMS OR WELLS SHOWN, TO AREAS OTHER THAN AS SHOWN ON THE APPROVED PLANS, MUST BE APPROVED BY THE DESIGN ENGINEER.

15.) ALL WELLS AND SEPTIC SYSTEMS WITHIN 200 FEET THAT IMPACT SEPARATION DISTANCES FOR THE PROPOSED WELLS AND SEPTIC SYSTEMS ARE SHOWN ON THE PLANS.

16.) THERE SHALL BE NO REGRADING, EXCEPT AS SHOWN ON THE APPROVED PLANS, IN THE AREA OF THE ABSORPTION FIELDS.

17.) HEAVY EQUIPMENT SHALL BE KEPT OFF THE AREA OF THE ABSORPTION FIELDS EXCEPT DURING THE ACTUAL CONSTRUCTION. THERE SHALL BE NO UNNECESSARY MOVEMENT OF CONSTRUCTION EQUIPMENT IN THE ABSORPTION FIELD AREA BEFORE, DURING, OR AFTER CONSTRUCTION. EXTREME CARE MUST BE TAKEN DURING THE ACTUAL CONSTRUCTION SO AS TO AVOID ANY UNDUE COMPACTION THAT COULD RESULT IN A CHANGE OF THE ABSORPTION CAPACITY OF THE SOIL ON WHICH THE DESIGN LOAD WAS BASED.

18.) THIS SYSTEM WAS NOT DESIGNED TO ACCOMODATE GARBAGE GRINDERS, JACUZZI TYPE SPA TUBS OVER 100 GALLONS, OR WATER CONDITIONERS. AS SUCH, THESE ITEMS SHALL NOT BE INSTALLED UNLESS THE SYSTEM IS REDESIGNED TO ACCOUNT FOR THEM.

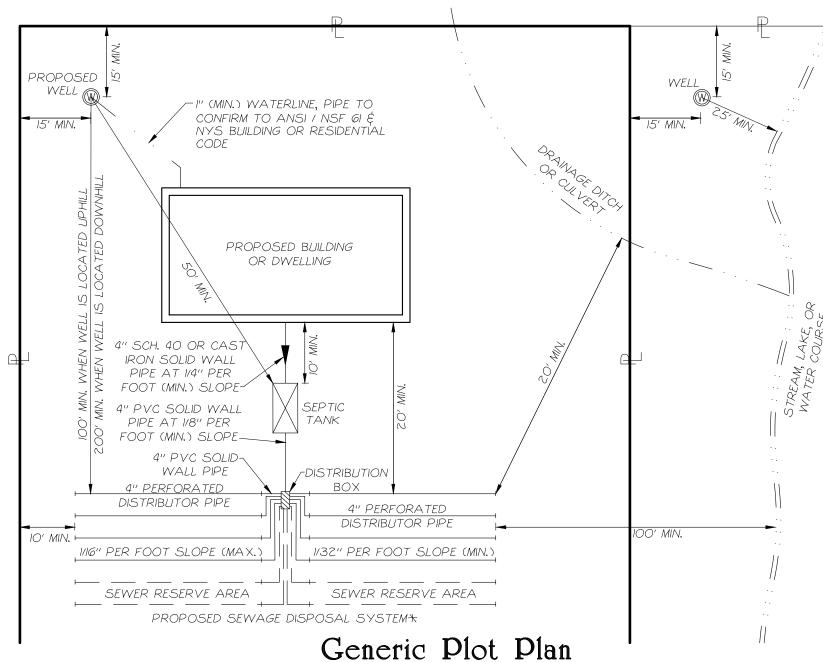
19.) THE PURCHASER OF EACH LOT SHALL BE PROVIDED WITH A COPY OF THE APPROVED PLANS AND AN ACCURATE AS-BUILT DRAWING OF ANY EXISTING SANITARY FACILITIES, INCLUDING A COPY OF THE NYSDEC WELL COMPLETION REPORT.

20.) SEPTIC TANKS SHOULD BE INSPECTED PERIODICALLY AND PUMPED EVERY 2-3 YEARS.

21.) DISTRIBUTION BOXES SHOULD BE INSPECTED PERIODICALLY TO ASSURE THAT THEY ARE LEVEL AND OPERATING PROPERLY.

Percolation Testing Results

TEST I	HOLE #	1	2	3	3
TESTIN	NG DATE:	4-15-20	4-15-20	4-15-20	4-15-20
DEPTH	I / TESTER:	24" - RTS	24" - RTS	24" - RTS	24" - RTS
PERCOLATION TEST RESULTS ESTING COMPLETED WITH A STOPWATCH *ELAPSED TIMES ARE IN MINUTES	RUN I ELAPSED TIME:	1:04	23:03	1:52	2:19
	RUN Z ELAPSED TIME:	1:31	27:27	2:09	2:52
	RUN 3 ELAPSED TIME:	1:37	28:42	2:20	2:59
	RUN 4 ELAPSED TIME:		29:02		
	RUN 5 ELAPSED TIME:				
	RUN 6 ELAPSED TIME:				
	RUN 7 ELAPSED TIME:				
*	STABILIZED RATE:	1:37	29:02	2:20	2:59



* THE 'GENERIC PLOT PLAN' IS INTENDED FOR ILLUSTRATION PURPOSES ONLY. FOR SPECIFIC DESIGN INFORMATION ON THE PROPOSED SEWAGE DISPOSAL SYSTEM REQUIREMENTS TABLE, DETAILS, AND NOTES ON THIS SHEET.

MINIMUM SEPARATION DISTANCES FROM EXISTING OR PROPOSED FEATURES

SYSTEM COMPONENTS	WELL OR SUCTION LINE	STREAM, LAKE, OR WATERCOURSE (B)	DWELLING	PROPERTY LINE	DRAINAGE DITCH (B) (G)
HOUSE SEWER (WATERTIGHT JOINTS)	50′ (E)	25′	3′	10'	
SEPTIC TANK	50′	50'	10'	10'	10'
EFFLUENT LINE TO DISTRIBUTION BOX	50'	50'	10'	10'	10'
DISTRIBUTION BOX	100'	100'	20'	10'	20'
ABSORPTION FIELD	100' (A)	100'	20′	10'	50'
SEEPAGE PIT	150' (A)	100'	20′	10'	50'
DRY WELL (ROOF & FOOTING)	50′	25'	20′	10'	10'
RAISED OR MOUND SYSTEM (C)	100' (A)	100'	20′	10'	50'

(A) WHEN SEWAGE TREATMENT SYSTEMS ARE LOCATED IN COARSE GRAVEL OR UPGRADE AND IN THE GENERAL PATH OF DRAINAGE TO A WELL, THE CLOSEST PART OF THE TREATMENT SYSTEM SHALL BE AT LEAST 200' AWAY FROM THE WELL.

(B) MEAN HIGH WATER MARK.

(C) FOR ALL SYSTEMS INVOLVING THE PLACEMENT OF FILL MATERIAL, SEPARATION DISTANCES ARE MEASURED FROM THE TOE OF THE SLOPE OF THE FILL.

(D) RECOMMENDED SEPARATION DISTANCES.

(E) UNLESS CAST IRON OR PVC WITH O-RING JOINTS IS UTILIZED, THEN 25'.

PE #087107

SYSTEM COMPONENT	SWALE, STI	REAM, OR WATERCOURS!	CEMETERY P	ROPERTY	LINE SUBDIVI	SUBDIVISION BOUNDARY		
ABSORPTION FIELD		25′		100'		50'		
(F) ALL DRAINAGE PIPE	S WITHIN 25 FL	EET OF ANY WELL SHALL	. BE WATERTIGHT	-				
SYSTEM COMPONENT	HIGH WATER LINE OF A WET POND	INTERMITTENT STREAM, DRY WELL, CULVERT OR STORM SEWER (NON-GASKETED PIPE), OR CATCH BASIN	CULVERT OR STORM SEWER (GASKETED, TIGHT PIPE)	CURTAIN DRAIN	TOP OF EMBANKMENT OR STEEP (I ON 3) SLOPE	SOLID CURTAIN DRAIN, ROOF OR FOOTING PIPES, SNOW STORAGE EASEMENT		
ABSORPTION FIELD	100'	50'	35′	15'	25'	10'		

Minimum Separation Distances From Existing Or Proposed Features

- FOR ORANGE COUNTY -AS PER NEW YORK STATE DEPARTMENT OF HEALTH "RESIDENTIAL ONSITE WASTEWATER TREATMENT SYSTEMS DESIGN HANDBOOK", 2012 EDITION & ORANGE COUNTY POLICY & STANDARDS LAST REVISED SEPTEMBER 2014

"UNAUTHORIZED ALTERATION OR ADDITION TO A SURVEY MAP
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WAS PREPARED. CERTIFICATIONS ARE NOT TRANSFERABLE TO
ADDITIONAL INDIVIDUALS, INSTITUTIONS, THEIR SUCCESSORS - -

AND/OR ASSIGNS, OR SUBSEQUENT OWNERS."

NO. DATE REVISION BY LAWRENCE MARSHALL

Well & Sewage Disposal System
Detail Sheet I for
Robert P. & Deborah C. Madan



AND INVALID WITHOUT ALL SHEETS IN THE PLAN SET.

TOWN OF NEWBURGH

COUNTY OF ORANGE

STATE OF NEW YORK

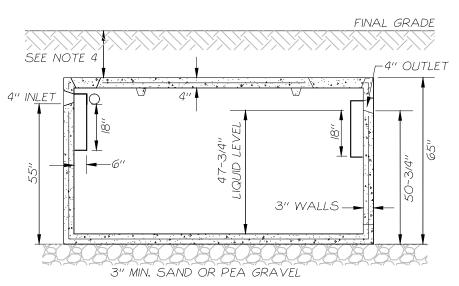
DRAFTED BY: ZAP

DATE: FEBRUARY 24, 2020

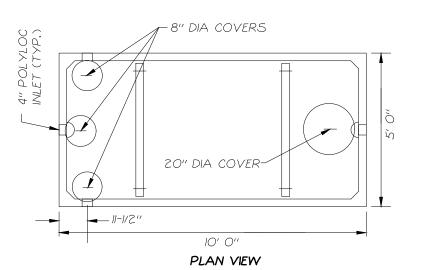
PROJECT: 2822-110B

SHEET:

THIS MAP IS INCOMPLETE



CROSS SECTION VIEW



NOTES:
I.) SEPTIC TANK SHALL BE MODEL ST-1250, OR APPROVED EQUAL,
AS MANUFACTURED BY:
WOODARDS CONCRETE PRODUCTS, INC
629 LYBOLT ROAD
BULLVILLE, NY 10915
(845) 361-3471

2.) ALL PIPE JOINTS (INLET ¢ OUTLET PIPES) SHALL BE SEALED WITH ASPHALTIC MATERIAL OR EQUIVALENT.

3.) INLET BAFFLE CAN BE RELOCATED TO THE SIDE.

4.) IF COVER EXCEEDS 12" A RISER MUST BE USED TO ALLOW ACCESS.

CONCRETE MINIMUM STRENGTH: 4,000 P.S.I. AT 28 DAYS
STEEL REINFORCEMENT: 6" X 6" XIO GA. STEEL WIRE MESH
#4 REBAR AROUND PERIMETER
CONSTRUCTION JOINT: SEALED WITH BUTYL RUBBER CEMENT
WEIGHT: 9,500 LBS
LOAD RATING: 300 PSF

Typical Precast 1,250-Gallon Concrete Septic Tank

18" MIN. ABOVE GRADE, OR 24" $\overline{\downarrow}$

SOLID ROCK

ABOVE 100-YEAR FLOOD PLAIN 🖠

END OF CASING (50' MIN.) -

6" DIA. DRILL HOLE

6" DIAMETER STEEL CASING IN COMPLIANCE WITH AWWA

PITLESS ADAPTER OR PITLESS UNIT (AMERICAN GRANBY, INC. PT

SERIES OR APPROVED EQUAL) -

STANDARD A-100, LATEST REVISION -

PUMP TO BE SELECTED TO FIT VOLUME

AND HEAD CONDITIONS (5GPM MINIMUM)-

NOT TO SCALE

-WATER TIGHT WELL CAP (AMERICAN GRANBY WELL CAP, WC SERIES OR

COVER

-FINAL GRADE SHALL BE GRADED TO KEEP

SURFACE WATER RUNOFF FROM ENTERING WELL

I"(MIN.) WATERLINE (PIPE TO

DRILL HOLE APPROXIMATELY 10" DIA.

TO ALLOW PLACEMENT OF GROUT

CONFORM TO ANSI / NSF 61 \$ NYS BUILDING OR RESIDENTIAL CODE)

APPROVED EQUAL)

CEMENT GROUT SHALL BE

 Γ BOTTOM OF PUMP AT LEAST 5'

ABOVE BOTTOM OF WELL

I.) WELL SHALL BE CONSTRUCTED IN ACCORDANCE WITH TABLE 2 OF THE NEW YORK STATE

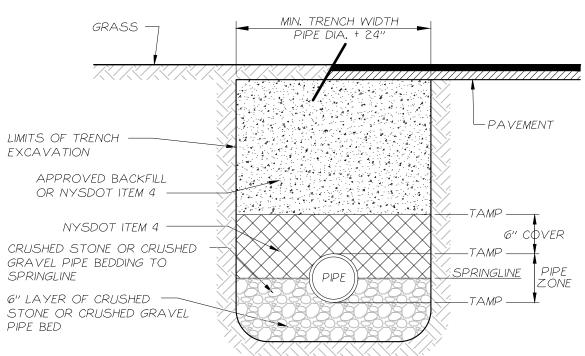
2.) THE WELL CAP MUST BE A MINIMUM OF TWO (2) FEET ABOVE THE 100 YEAR FLOOD ELEVATION.

DEPARTMENT OF HEALTH (NYSDOH) APPENDIX 5-B "STANDARDS FOR WATER WELLS."

Typical Well Detail

3.) THE END OF WELL CASING SHALL EXTEND TO A MINIMUM DEPTH OF 50 FEET.

PLACED IN ANNULAR SPACE ON OUTSIDE OF WELL CASING



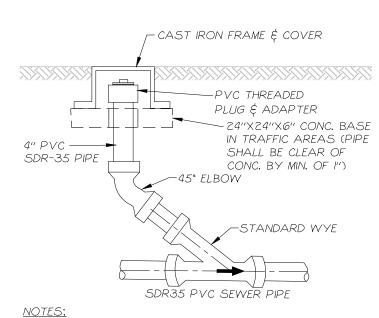
NOTES:

1) NYSDOT ITEM 4 BACKFILL SHALL BE INSTALLED IN 6" LIFTS.

2) IN LAWN AREAS, A MINIMUM OF 6 INCHES OF TOPSOIL SHALL BE PLACED ON TOP OF THE NYSDOT ITEM 4 BACKFILL AND SHALL BE SEEDED AND MULCHED WITH SEED IN ACCORDANCE WITH THE PERMANENT SEEDING SPECIFICATIONS.

3) IN PAVED AREAS, THE EXISTING PAVEMENT SHALL BE SAW CUT PRIOR TO REMOVAL.
REPLACEMENT OF THE PAVEMENT SHALL BE COMPLETED WITH A MINIMUM OF 4" NYSDOT ITEM 4
LEVELING COURSE, 3" ASPHALT BINDER COURSE, AND 1-1/2" ASPHALT TOP COURSE.

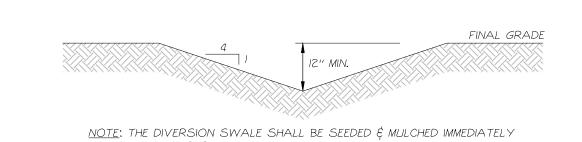
Typical Trench Detail



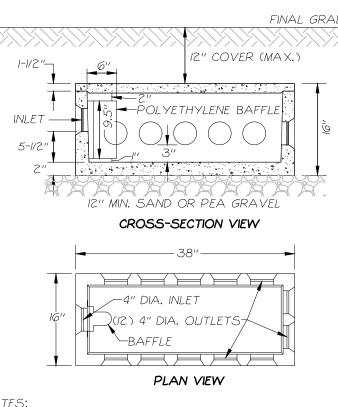
I. CAST IRON FRAME & COVER AND CONCRETE BASE SHALL ONLY BE INSTALLED IF CLEANOUT IS IN VEHICULAR TRAFFIC AREAS.

2. IN LAWN AREAS, CLEANOUT SHALL BE INSTALLED A MINIMUM OF 4" ABOVE FINAL GRADE.

In-Line Sewer Cleanout



Diversion Swale Detail



NOTES:

I.) DISTRIBUTION BOX SHALL BE MODEL DB-IZ, OR APPROVED EQUAL, AS MANUFACTURED BY:

WOODARDS CONCRETE PRODUCTS, INC.

629 LYBOLT ROAD

BULLVILLE, NY 10915

(835) 361-3471

2.) FLOW EQUALIZERS SHALL BE USED TO ENSURE EQUAL FLOW TO EACH OUTLET PIPE. YEARLY CHECKING AND ADJUSTMENT IS RECOMMENDED.

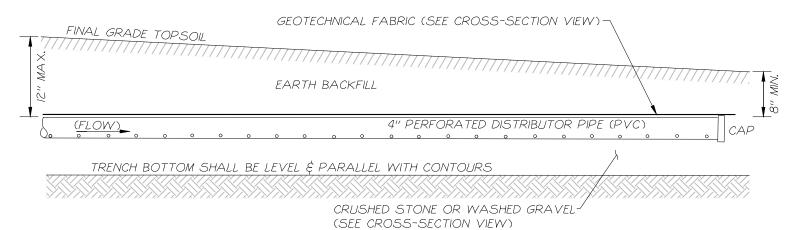
3.) ALL PIPE JOINTS (INLET & OUTLET) SHALL BE SEALED WITH ASPHALTIC MATERIAL OR EQUIVALENT.

4.) A SANITARY TEE, 90° ELBOW, OR OTHER APPROVED BAFFLE SHALL BE INSTALLED AT THE INLET.

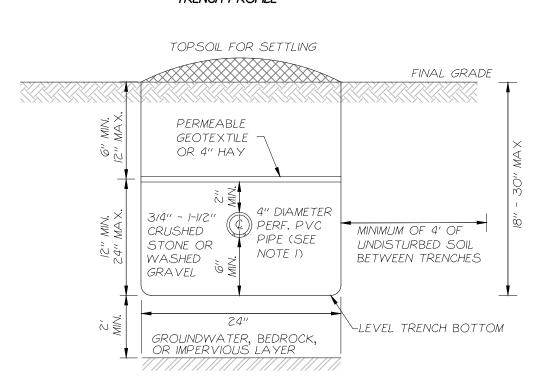
5.) OUTLET INVERTS SHALL BE SET AT THE SAME ELEVATION.
6.) OUTLETS MUST BE USED IN A MANNER TO ALLOW ACCESS TO THE NECESSARY NUMBER OF OUTLETS FOR THE EXPANSION AREA WITHOUT DISTURBING THE INITIAL SYSTEM.

Typical Precast Concrete Distribution Box

NOT TO SCALE



TRENCH PROFILE



CROSS-SECTIONAL VIEW

I.) DISTRIBUTION PIPE SHALL BE INSTALLED WITH PIPE PERFORATIONS FACING DOWN.

2.) DO NOT INSTALL TRENCHES IN WET SOIL. TRENCH SIDES AND BOTTOMS SHALL BE RAKED PRIOR TO INSTALLATION OF GRAVEL.

3.) THE END OF EACH LATERAL SHALL BE CAPPED.

4.) LATERALS SHALL BE SLOPED 1/16" - 1/32" PER FOOT FOR GRAVITY SYSTEMS. LATERALS SHALL BE INSTALLED LEVEL FOR PUMPED OR DOSED SYSTEMS.

5.) LATERALS SHALL BE INSTALLED SIX (6) FEET ON CENTER, MINIMUM. MAINTAIN A MINIMUM OF FOUR (4) FEET OF UNDISTURBED SOIL BETWEEN TRENCHES.

Absorption Trench Detail

Sewage Disposal System Requirements

LOT	DESIGN FLOW RATE (GPD)	SEPTIC TANK SIZE (GALLONS)	DISTRIBUTION BOX MODEL NUMBER	TYPE OF SYSTEM	DESIGN STABILIZED PERCOLATION RATE (MIN.)	MIN. LENGTH OF ABSORPTION TRENCH (L.F.)	PROPOSED LENGTH OF ABSORPTION TRENCH (L.F.)	SEWAGE DISPOSAL SYSTEM DESIGN
2	440	1,250	DB-12	A.T.	21 - 30	367	385	7 ROWS @ 55 L.F.
3	440	1,250	DB-I2	A.T.	6 - 7	220	220	4 ROWS @ 55 L.F.

NOTES: I.) A.T. = ABSORPTION TRENCH TYPE SYSTEM

2.) THE DESIGN FLOW RATE OF 440 GALLONS PER DAY (GPD) IS BASED UPON 110 GPD PER BEDROOM * 4 BEDROOM.

3.) NO CHANGES ARE PROPOSED TO THE EXISTING SEWAGE DISPOSAL SYSTEM OR RESERVE SEWER AREA ON LOT I.

"UNAUTHORIZED ALTERATION OR ADDITION TO A SURVEY MAP BEARING A LICENSED LAND SURVEYOR'S EMBOSSED SEAL IS A VIOLATION OF SECTION 7209, SUB-DIVISION 2, OF THE NEW YORK STATE EDUCATION LAW." "ONLY COPIES FROM THE ORIGINAL TRACING OF THIS SURVEY MAP MARKED WITH THE LAND SURVEYORS EMBOSSED SEAL SHALL BE CONSIDERED VALID, TRUE COPIES.'' "CERTIFICATIONS INDICATED HEREON SIGNIFY THAT THIS SURVEY WAS PREPARED IN ACCORDANCE WITH THE EXISTING CODE OF PRACTICE FOR LAND SURVEYORS ADOPTED BY THE NEW YORK STATE ASSOCIATION OF PROFESSIONAL LAND SURVEYORS. SAID CERTIFICATIONS SHALL RUN ONLY TO THOSE NAMED INDIVIDUALS AND/OR INSTITUTIONS FOR WHOM THE SURVEY WAS PREPARED, CERTIFICATIONS ARE NOT TRANSFERABLE TO ADDITIONAL INDIVIDUALS, INSTITUTIONS, THEIR SUCCESSORS AND/OR ASSIGNS, OR SUBSEQUENT OWNERS."

NO. DATE REVISION BY LAWR

LAWRENCE MARSHALL PE #087107

Well & Sewage Disposal System
Detail Sheet II for
Robert P. & Deborah C. Madan



AND INVALID WITHOUT ALL SHEETS IN THE PLAN SET.

TOWN OF NEWBURGH
COUNTY OF ORANGE
STATE OF NEW YORK

DRAFTED BY: ZAP
DATE: FEBRUARY 24, 2020
PROJECT: 2822-110B

THIS MAP IS INCOMPLETE