



Development Application
Town of Stowe Zoning Department
PO Box 730
Stowe VT 05672
Voice (802) 253-6141

Project #
 (To be assigned) 6192

Date Received: 2/7/2020

This form serves as an application for all requested zoning and subdivision reviews.

Owner Information

Property Owner: Delart Investments, Inc.
 Westmount, QC Canada H3Z1P4

Mailing Street Address: 4120 St. Catherine Street
 City, State and Zip: Westmount, QC Canada H3Z1P4

Phone Number: Day: _____ Other phone or email: _____

Applicant/Contact Information (Relationship to Owner)

- Owner (If so, skip to site information) Lessee Contractor
- Architect/Designer Agent for Owner Under purchase contract

All information and correspondence is sent to applicant/contact.

Contact Name: John D. Grenier, PE

Company (if any): Grenier Engineering, PC

Mailing Street Address: Post Office Box 445
 City, State and Zip: Waterbury, VT 05676

Phone Number: 802-244-6413 Other/Email: john@grenierengineering.com

Site Information

Physical Address: 464 Sugarbush Lane

Business (if any): None

Tax Map ID: 05-057.000

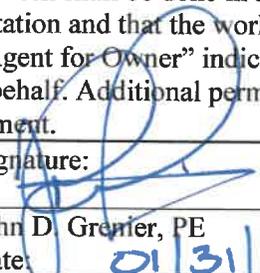
Please briefly describe the project or request below:

To create a PUD subdivision of the existing 24+/- acre lot located at 464 Sugarbush Lane. The proposed PUD subdivision includes a driveway access off Sugarbush Lane, a town road. The driveway access will serve proposed Lot 1 of 3.18+/- acres, Lot 2 of 2.43+/- acres and Lot 3 of 3.56+/- acres. Lot 4 of 14.85+/- acres will continue to be served by its existing private driveway off Sugarbush Lane. The proposed PUD offers 15+/- acres of designated open space. Please see the cover letter and site plan for further details.

For All Approvals:

The below signed hereby agrees that the proposed work shall be done in accordance with the application, plan, specifications, and other associated documentation and that the work shall conform to all applicable town ordinances and regulations. Signing as an "Agent for Owner" indicates that the person signing has the permission of the owner to act on the owner's behalf. Additional permits may be needed from the State of Vermont and/or the Town of Stowe for development.

Indicate if:
 Property Owner OR
 Agent for Owner

Signature: 
 John D. Grenier, PE
 Date: 01/31/2020

Additional application information is required on reverse side: ➔

Note: Local Zoning approval does not cover any required state approvals. Wastewater System and Potable Water Supply permits may be required for construction or modifications that change the wastewater flow. Other State permits may be required for certain uses. The applicant is advised to contact a DEC Permit Specialist to discuss the State permit requirements at 802-505-5367.

Construction Information

A site plan showing the proposed development is required if construction is involved. **The applicant is responsible for determining property lines and setbacks.**

Please answer the questions below for all construction projects:

Will there be a new curb cut (driveway opening)?	Yes <input type="checkbox"/> No <input type="checkbox"/>
Will over 1/2 acre of land be graded or disturbed?	Yes <input type="checkbox"/> No <input type="checkbox"/>
Will the development create an additional 1/2 acre of impervious surface?	Yes <input type="checkbox"/> No <input type="checkbox"/>
Will there be other changes resulting in increased sewer or water flows?	Yes <input type="checkbox"/> No <input type="checkbox"/>
Will there be a new connection to the Stowe sewage system?	Yes <input type="checkbox"/> No <input type="checkbox"/>
Will there be a new connection to the Stowe water system?	Yes <input type="checkbox"/> No <input type="checkbox"/>
Is any portion of the building rented out?	Yes <input type="checkbox"/> No <input type="checkbox"/>
Is an Act 250 permit or amendment required?	Yes <input type="checkbox"/> No <input type="checkbox"/>

Maximum Bldg. Height: _____ * Building Height is defined as the vertical distance measured from the average elevation of the proposed finished grade at the front or rear of the building to the highest point of the roof for flat and mansard roofs, and to the average height between eaves and ridge for other types of roofs. On sloping sites the height will be measured on the uphill side.

Please answer the questions below for all projects involving residential dwellings:

Existing Rooms:	# Bathrooms:	# Bedrooms:	# Kitchens:
New Rooms:	# Bathrooms:	# Bedrooms:	# Kitchens:

Please complete the fee calculation below for all construction projects:

Indicate new/additional gross floor area	Cost/Sq. Ft.	Fee Required
Heated Enclosed Space: _____ sq ft	\$.20/sq. ft.	\$
Unheated Enclosed Space: _____ sq ft	\$.13/sq. ft.	\$
Unheated Unenclosed Space: _____ sq ft (such as decks and open porches)	\$.07/sq. ft.	\$
Structures other than buildings (such as ponds and tennis courts) (administrative approval)	\$50/structure	\$
Structures other than buildings (such as ponds and tennis courts) (Conditional use approval required)	\$100/structure	\$
Additional Recording Fee:	\$15 for permitted uses \$30 for conditional uses	\$
	Total Fee**:	\$ 690.00

** Minimum application fee for all construction (includes recording fee):
Permitted Uses: \$60.00 Conditional Uses: \$250.00

**Fee Schedule for Projects Not Involving Construction
(all fees below include recording fee)**

For permitted uses not involving construction: \$60
 For conditional uses not involving construction, appeals and variances: \$250
 Administrative amendment of conditional uses: \$70
 New signs: \$70
 Certificate of Occupancy: \$55 (additional inspections if need after first: \$40)
 Subdivisions:
 Preliminary Layout Application (Base Fee): \$250
 Preliminary Layout (Fee per lot if equal to and/or more than 5 lots): \$250/lot or unit
 Final Plat Application (Base Fee): \$250
 Final Plat Application (additional fee per lot if preliminary layout was not required): \$100/lot or unit
 Minor Subdivision - Lot Line Adjustment: \$105 (includes recording fee for one map page)
 Final Plat Recording Fee (per map page): \$25

Payments should be made to the Town of Stowe. Payment can be made by cash, check, or with a credit card (Mastercard, Visa or Discover) or online. Go to www.townofstowevt.org/townclerk/ and click the link for online payments. Please note there is a 3% convenience fee for credit card payments.



Sarah McShane, Zoning Administrator
Town of Stowe
Post Office Box 730
Stowe, VT 05672

February 20, 2020

RE: Delart Investments, Inc. 464 Sugarbush Lane. Proposed 4-Lot PUD Subdivision.

Dear Sarah,

Please find enclosed, 9 copies each of the revised overall site plan, septic system site plan, & erosion control plan for the proposed 4-lot PUD subdivision by Delart Investments, Inc. at 464 Sugarbush Lane. The zoning application and fee have been previously submitted for this project.

Delart Investments, Inc. is applying to create a PUD subdivision of the existing 24+/- acre lot located at 464 Sugarbush Lane. The proposed PUD subdivision includes a driveway access off Sugarbush Lane, a town road. The subject property consists of land within the RR-5 zoning district, RR-2 zoning district, and Ridgeline Hillside Overlay District (RHOD). All development will occur within the RR-5 zone, and no development is proposed near the RHOD portion of the property. Basing density off the RR-5 zone, the project can contain 4 units on 24+/- acres of land. No transfer of RR-2 density is being requested. Zoning modifications, open space, and density calculations are provided on the enclosed site plan.

The proposed access will serve proposed Lot 1 of 3.18+/- acres, Lot 2 of 2.43+/- acres and Lot 3 of 3.56+/- acres. Lot 2 and lot 3 will be served by a proposed Right of Way (R.O.W.) along the proposed driveway. Therefore, the proposed access is a driveway by definition and is not required to meet town road standards. Lot 4 of 14.85+/- acres will continue to be served by its existing private driveway off Sugarbush Lane. No changes to the existing residence or access are proposed with this application.

The proposed driveway access consists of slopes averaging 7% with a maximum slope of 10%, with an average width of 16'. The length of driveway is 460' +/- . Each lot is proposed with a flat parking area for access. Cut and fill slopes, drainage implements, and retaining walls are shown where necessary for construction of the proposed driveway access. As shown on the erosion control plan, all areas proposed for disturbance will be controlled by use of erosional netting, seeding and mulching etc. Please see the enclosed erosion control plan for further details regarding construction and prevention of sediment and erosion on the site.

Preliminary review of the proposed driveway access by Stowe Fire Department and Stowe Public Works has commenced. Public Works has determined that the driveway is in a location that can obtain a curb cut permit from the Town of Stowe. Stowe Fire Department comments requested clarity of width and slope details for the proposed driveway. The enclosed revised plan includes a wider driveway and more gentle curves to the individual house sites. Given that driveways are under the general guidance of the Fire Dept. , we anticipate the revisions made will better align with their guidelines and provide adequate access for emergency services.

The proposed lots will be served by private drilled wells for water supply and private mound septic systems for sewage disposal. Easements for access and construction of the proposed systems will be



provided where needed and depicted on State of Vermont water/wastewater plans as well as on the final survey plat for the project.

Through PUD design the clustering of house sites on the 3 proposed lots allow for compact development and avoidance of sprawling disturbance on the sloping site. It also allows for the proper required setbacks from top of bank of the perennial stream existing on the property. No development is proposed in the area of the perennial stream on the property and 50' setback from top of bank is provided as required by Section 3.10, Setback from Watercourses. The significant amount of proposed open space of 15.7+/- acres represents 65% of the overall property area that will remain open space, which well aligns with the goals of the PUD zoning section 13.

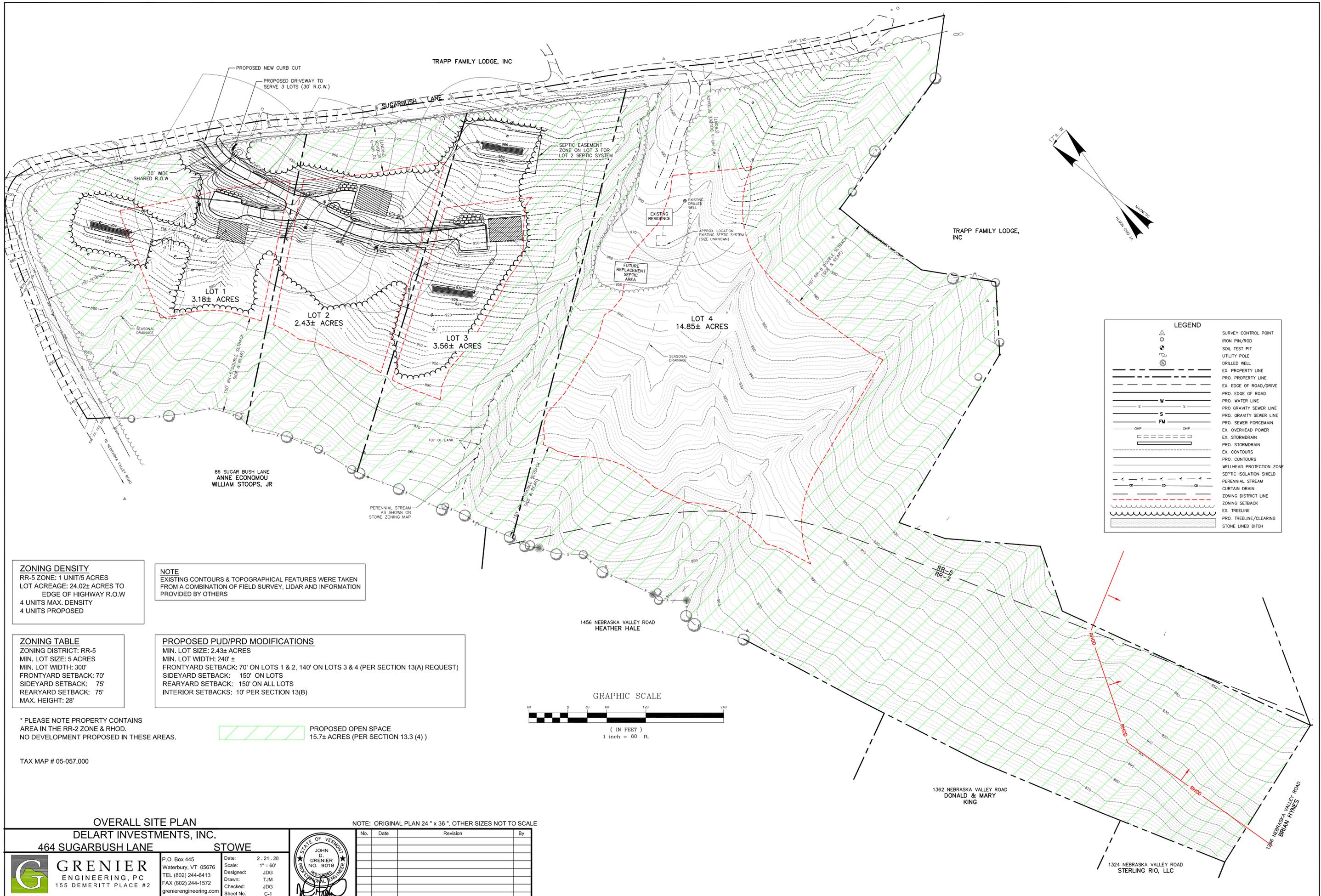
The project is proposed with the required double property line setback to the outer property boundaries on all sides of all lots with the exception of the road frontage side of proposed lot 1 and lot 2. Lots 1 and 2 are proposed with the normal RR-5 front yard setback of 70'. This reduction is proposed in part due to the fact that application of a double setback in this area would result in further impact to the property, as the optimal clustered building sites for these lots have been chosen for practicality and for preservation of steeper slopes and natural wooded areas lower on the site. The proposed building locations as shown allows for gently sloped proposed driveway access. It is also the applicant's position that the proposed reduction of the double setback is in accordance with PUD Section 13.3 Development Standards, item A, sub-items i, ii, & iii:

- i. Lots 1 and 2 will remain private due to existing topography along with significant forested area to remain between the proposed building zones and Sugarbush lane. The house sites are 20'-30' in elevation below Sugarbush Lane Rd., which will provide privacy and screening.
- ii. The natural beauty of the area will be preserved by the significant amount of open space proposed with the project in combination with the clustered compact project design. No known irreplaceable natural areas or historic sites are known to exist in the development areas.
- iii. The character of the area for the RR-5 zone will remain intact due to the factors listed above, as a majority of the property remains undeveloped and conserved as open space, while existing vegetation will remain in the front yard setback areas to provide the privacy and rural character of the area.

Thank you for your time in considering this matter. Our office will handle all public notice Requirements for the planned Development Review Board (DRB) hearing, scheduled for March 17, 2020. Please send all referral and notice information to our office.

Respectfully,

Chris Austin
Permit Coordinator
Grenier Engineering, PC



ZONING DENSITY
 RR-5 ZONE: 1 UNIT/5 ACRES
 LOT ACREAGE: 24.02± ACRES TO
 EDGE OF HIGHWAY R.O.W
 4 UNITS MAX. DENSITY
 4 UNITS PROPOSED

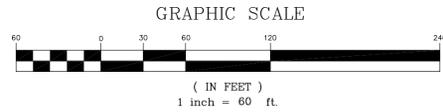
NOTE
 EXISTING CONTOURS & TOPOGRAPHICAL FEATURES WERE TAKEN
 FROM A COMBINATION OF FIELD SURVEY, LIDAR AND INFORMATION
 PROVIDED BY OTHERS

ZONING TABLE
 ZONING DISTRICT: RR-5
 MIN. LOT SIZE: 5 ACRES
 MIN. LOT WIDTH: 300'
 FRONTYARD SETBACK: 70'
 SIDEYARD SETBACK: 75'
 REARYARD SETBACK: 75'
 MAX. HEIGHT: 28'

PROPOSED PUD/PRD MODIFICATIONS
 MIN. LOT SIZE: 2.43± ACRES
 MIN. LOT WIDTH: 240' ±
 FRONTYARD SETBACK: 70' ON LOTS 1 & 2, 140' ON LOTS 3 & 4 (PER SECTION 13(A) REQUEST)
 SIDEYARD SETBACK: 150' ON LOTS
 REARYARD SETBACK: 150' ON ALL LOTS
 INTERIOR SETBACKS: 10' PER SECTION 13(B)

* PLEASE NOTE PROPERTY CONTAINS
 AREA IN THE RR-2 ZONE & RHOD.
 NO DEVELOPMENT PROPOSED IN THESE AREAS.

PROPOSED OPEN SPACE
 15.7± ACRES (PER SECTION 13.3 (4))



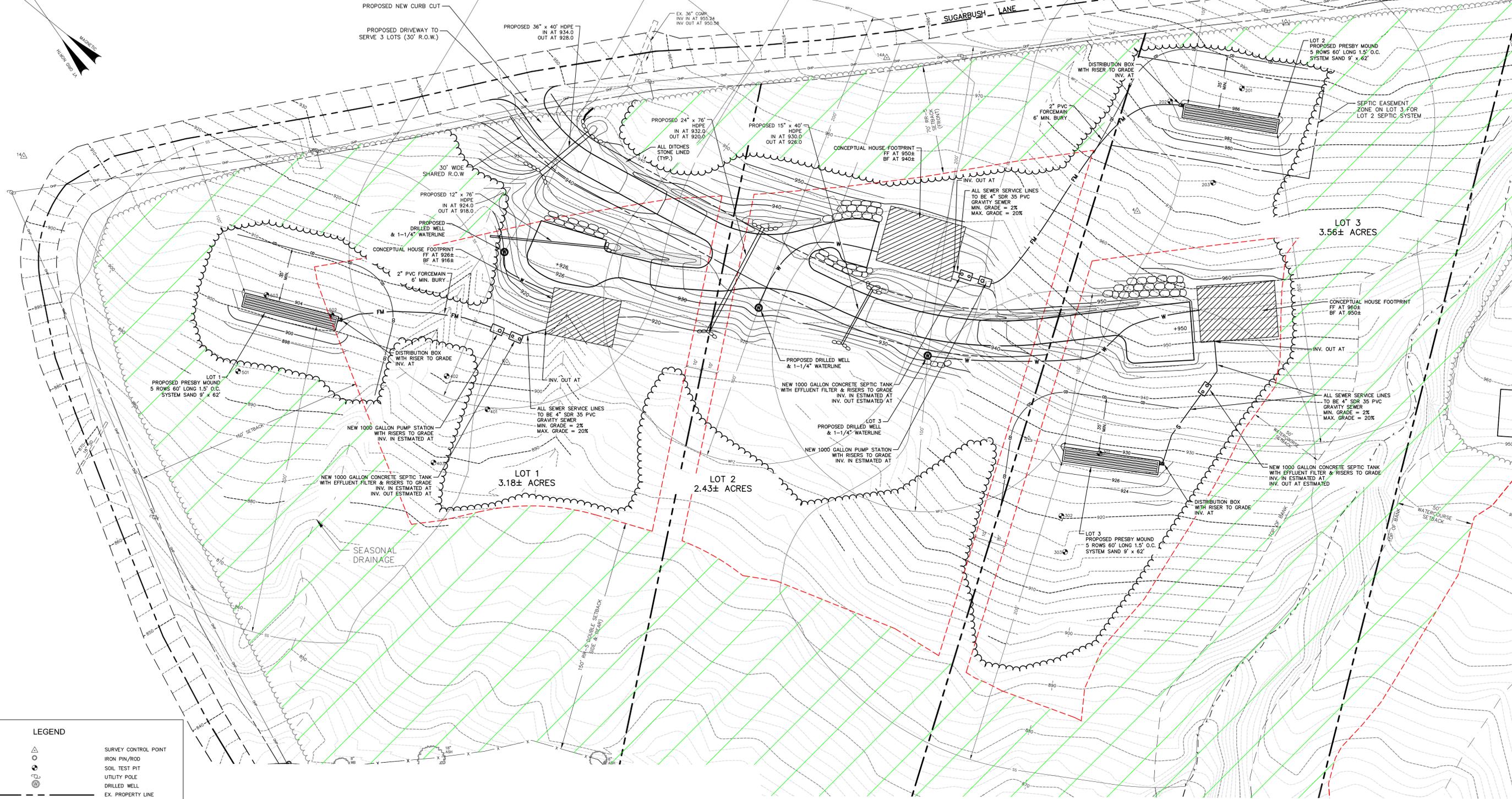
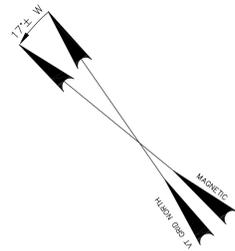
TAX MAP # 05-057.000

OVERALL SITE PLAN
DELART INVESTMENTS, INC.
 464 SUGARBUSH LANE
STOWE

	GRENIER ENGINEERING, PC 155 DEMERITT PLACE #2	P.O. Box 445 Waterbury, VT 05676 TEL (802) 244-6413 FAX (802) 244-1572 grenierengineering.com	Date: 2.21.20 Scale: 1" = 60' Designed: JDG Drawn: TJM Checked: JDG Sheet No: C-1
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NOTE: ORIGINAL PLAN 24" x 36". OTHER SIZES NOT TO SCALE

No.	Date	Revision	By



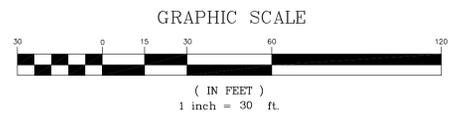
LEGEND

	SURVEY CONTROL POINT
	IRON PIN/ROD
	SOIL TEST PIT
	UTILITY POLE
	DRILLED WELL
	EX. PROPERTY LINE
	PRO. PROPERTY LINE
	EX. EDGE OF ROAD/DRIVE
	PRO. EDGE OF ROAD/DRIVE
	PRO. EDGE OF ROAD
	PRO. WATER LINE
	PRO. GRAVITY SEWER LINE
	PRO. GRAVITY SEWER LINE
	PRO. SEWER FORCE MAIN
	EX. OVERHEAD POWER
	EX. STORMDRAIN
	PRO. STORMDRAIN
	EX. CONTOURS
	PRO. CONTOURS
	WELLHEAD PROTECTION ZONE
	SEPTIC ISOLATION SHIELD
	PERENNIAL STREAM
	CURTAIN DRAIN
	ZONING DISTRICT LINE
	ZONING SETBACK
	EX. TREELINE
	PRO. TREELINE/CLEARING
	STONE LINED DITCH

NOTES
 ALL INVERT GRADES LISTED AND TANK LOCATIONS ARE SUBJECT TO FINAL BUILDING DESIGN AND LOCATION.
 EXACT SIZE AND LOCATION OF FUTURE RESIDENCES ARE UNKNOWN. FOOTPRINTS ARE SHOWN FOR THE PURPOSE OF GAINING STATE OF VERMONT WW PERMIT APPROVAL ONLY. BUILDING LOCATIONS MUST COMPLY WITH CHAPTER 1 EPR AND LOCAL ZONING REGULATIONS.

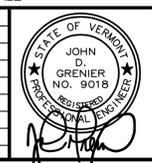
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 15.7± ACRES (PER SECTION 13.3 (4))

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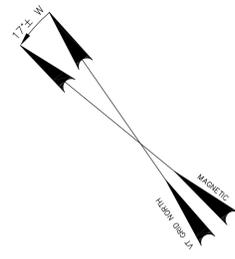
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SEPTIC SYSTEM SITE PLAN
DELART INVESTMENTS, INC.

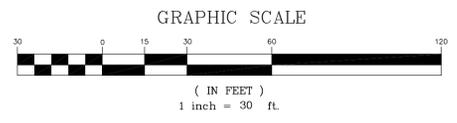
464 SUGARBUSH LANE STOWE

<p>GRENIER ENGINEERING, PC 155 DEMERITT PLACE #2</p>	P.O. Box 445 Waterbury, VT 05676 TEL (802) 244-6413 FAX (802) 244-1572 grenierengineering.com	Date: 2.21.20 Scale: 1" = 30' Designed: JDG Drawn: TJM Checked: JDG Sheet No: C-2
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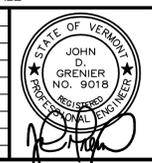
LEGEND	
	DRILLED WELL
	EX. PROPERTY LINE
	PRO. PROPERTY LINE
	EX. EDGE OF ROAD/DRIVE
	PRO. EDGE OF ROAD
	PRO. WATER LINE
	PRO. GRAVITY SEWER LINE
	PRO. SEWER FORCE MAIN
	EX. OVERHEAD POWER
	EX. CONTOURS
	PRO. CONTOURS
	PERENNIAL STREAM
	CURTAIN DRAIN
	ZONING SETBACK
	EX. STORM DRAIN
	PRO. STORM DRAIN
	EX. TREELINE
	PRO. TREELINE/CLEARING
	STONE LINED DITCH
	LIMITS OF DISTURBANCE
	SILT FENCE
	EROSION MATTING

NOTE
 EXISTING CONTOURS & TOPOGRAPHICAL FEATURES WERE TAKEN FROM A COMBINATION OF FIELD SURVEY, LIDAR AND INFORMATION PROVIDED BY OTHERS



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EPSC PLAN

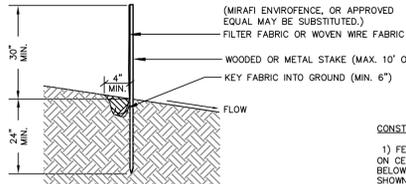
DELART INVESTMENTS, INC.

464 SUGARBUSH LANE STOWE

GRENIER
ENGINEERING, PC
155 DEMERITT PLACE #2

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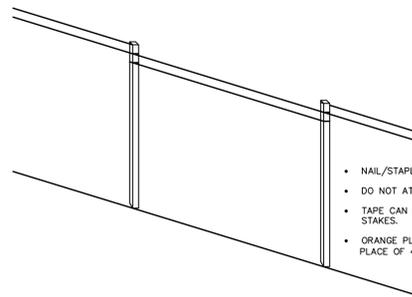
CONSTRUCTION SPECIFICATIONS FOR SILT FENCE

- 1) SILT FENCE SHALL BE EITHER PRE-FABRICATED EROSION CONTROL FENCE (MIRAFI ENVIROFENCE, OR EQUAL), OR CONSTRUCTED-IN-PLACE, AS SPECIFIED HEREIN.
- 2) MAXIMUM DRAINAGE AREA IS 1/4 ACRE FOR 100 FEET OF SILT FENCE.
- PRE-FABRICATED SILT FENCE
 - 1) FENCE SHALL BE INSTALLED PARALLEL TO GROUND CONTOURS, AND FILTER FABRIC SIDE SHALL FACE UPSLOPE; MESH AND STAKES SHALL FACE DOWNSLOPE.
 - 2) TRENCH SHALL BE EXCAVATED MINIMUM 6 INCHES DEEP ON UPSLOPE SIDE OF FENCE LINE. EXCESS FLAP OF FILTER FABRIC (MINIMUM 8 INCHES) SHALL BE PLACED IN TRENCH. TRENCH SHALL BE BACKFILLED AND COMPACTED. CONSTRUCTION IN THIS MANNER PREVENTS SEDIMENT-LADEN RUNOFF FROM FLOWING UNDER SILT FENCE.
 - 3) SILT FENCE SHALL BE INSPECTED WEEKLY, AND AFTER EACH SIGNIFICANT PRECIPITATION EVENT. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND SEDIMENT SHALL BE REMOVED WHEN IT IS HALFWAY UP THE FENCE.
 - 4) BROKEN STAKES SHALL BE REPLACED PROMPTLY.

SILT FENCE
N7S

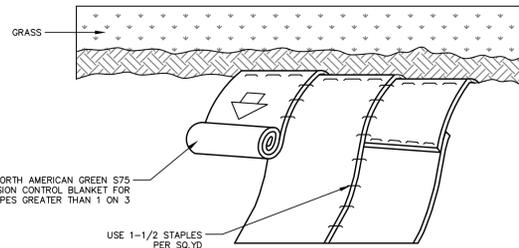
CONSTRUCTED-IN-PLACE SILT FENCE

- 1) FENCE POST SHALL BE DRIVEN, 10 FEET MAXIMUM ON CENTER; POSTS SHALL BE DRIVEN MINIMUM 24" BELOW GRADE. FENCE SHALL BE POSITIONED AS SHOWN, PARALLEL TO THE GROUND CONTOURS.
- 2) TRENCH SHALL BE EXCAVATED MINIMUM 6 INCHES DEEP AND 4 INCHES WIDE ON UPSLOPE SIDE OF FENCE LINE.
- 3) WOVEN WIRE FABRIC (14 GA., 6 INCH MAX. MESH OPENING) SHALL BE STAPLED OR FASTENED SECURELY WITH WIRE TIES TO UPSLOPE SIDE OF FENCE POSTS. WOVEN WIRE FABRIC SHALL EXTEND MINIMUM 36 INCHES ABOVE GRADE.
- 4) FILTER FABRIC SHALL BE FASTENED SECURELY ON UPSLOPE SIDE OF WOVEN WIRE FABRIC WITH WIRE TIES, SPACED EVERY 24 INCHES, AT TOP AND MID-SECTION OF FENCE. MINIMUM 8 INCH FLAP OF FILTER FABRIC SHALL BE PLACED IN TRENCH ON UPSLOPE SIDE OF FENCE, AND BACKFILLED.
- 5) WHEN TWO SECTIONS OF FABRIC ADJOIN EACH OTHER, THEY SHALL BE OVERLAPPED BY 6 INCHES, FOLDED AND STAPLED.
- 6) SILT FENCE SHALL BE INSPECTED WEEKLY, AND AFTER EACH SIGNIFICANT PRECIPITATION EVENT. MAINTENANCE SHALL BE PERFORMED AS NEEDED, AND SEDIMENT REMOVED WHEN IT IS HALFWAY UP THE FENCE.



**LIMITS OF DISTURBANCE
4" ORANGE BARRIER TAPE DETAIL**
N7S

- NAIL/STAPLE TAPE TO STAKES.
- DO NOT ATTACH TAPE TO SILT FENCE STAKES.
- TAPE CAN BE ATTACHED TO TREES INSTEAD OF STAKES.
- ORANGE PLASTIC SNOW FENCE CAN BE USED IN PLACE OF 4" TAPE.



**FOR SLOPES GREATER THAN 1 ON 3
EROSION CONTROL NETTING**
N7S

EROSION CONTROL NOTES

1. PROPERTY LINES SHOWN ON THESE PLANS ARE BASED UPON SURVEYS PROVIDED BY OUR OFFICE. THE PROJECT VERTICAL DATUM IS USGS. TOPOGRAPHY AND EXISTING CONTOURS OF THE AREA SHOWN ON THE SITE PLANS WERE DEVELOPED BY FIELD SURVEYS BY OUR OFFICE.
2. LIMIT OF DISTURBANCE TO BE DELINEATED IN THE FIELD WITH 4" ORANGE WARNING TAPE PRIOR TO CONSTRUCTION.
3. ADD SILT FENCE AS REQUIRED TO MAINTAIN COMPLIANCE AS THE SITE IS DEVELOPED. SILT FENCE SHALL BE PLACED AS SHOWN ON THE PLANS TO RETAIN SEDIMENT. THE SILT FENCE CAN BE REMOVED WHEN THE EXCAVATION IS COMPLETE, THE SLOPES MULCHED AND GOOD GRASS COVER STARTED.
4. ALL EROSION AND SEDIMENT CONTROL FEATURES SHOWN ON THIS SHEET SHALL BE INSTALLED ACCORDING TO PLANS/DETAILS PRIOR TO ANY EARTH DISTURBANCE. IT IS ANTICIPATED THAT ADDITIONAL EROSION CONTROL MEASURES WILL BE REQUIRED IN THE FIELD. THE ENGINEER SHALL AUTHORIZE ADDITIONAL NETTING, MULCH, STONE, CULVERTS, ETC., AS THE BECOME NECESSARY.
5. USE EROSION CONTROL NETTING/BLANKET, ON ALL STEEP SLOPES (GREATER THAN 1 VERTICAL ON 3 HORIZONTAL) SHOWN ON THE PLAN. BLANKETS OR NETTING SHALL BE STAPLED INTO THE GROUND. ONLY WOVEN OR INTERLINKED PRODUCTS ARE APPROVED FOR USE IN RECP. APPLICATIONS.
6. THE "VERMONT LOW RISK HANDBOOK FOR EPSC" SHALL BE FOLLOWED DURING ALL SITE CONSTRUCTION.
7. A PRECONSTRUCTION MEETING WILL BE HELD WITH THE OWNER, ENGINEER AND CONTRACTOR TO REVIEW EROSION CONTROL REQUIREMENTS PRIOR TO COMMENCEMENT OF CONSTRUCTION.
8. TOTAL DISTURBED AREAS NOT TO EXCEED 4 ACRES AT ANY TIME. ALLS AREAS OF DISTURBANCE MUST HAVE TEMPORARY OR FINAL STABILIZATION WITHIN 14 DAYS OF INITIAL DISTURBANCE. AFTER THIS TIME ANY DISTURBANCE IN THE AREA MUST BE STABILIZED AT THE END OF EACH WORK DAY. THE FOLLOWING EXCEPTIONS APPLY:
 - 1) STABILIZATION IS NOT REQUIRED IF WORK IS TO CONTINUE IN THE AREA WITHIN THE NEXT 24 HOURS AND THERE IS NO PRECIPITATION FORECAST FOR THE NEXT 24 HOURS.
 - 2) STABILIZATION IS NOT REQUIRED IF THE WORK IS OCCURRING IN A SELF-CONTAINED EXCAVATION (IE. NO OUTLET) WITH A DEPTH OF 2 FEET OR GREATER (E.G. HOUSE FOUNDATION EXCAVATION, UTILITY TRENCHES).
9. NO MORE THAN 100' OF TRENCH SHALL BE OPEN AT ONE TIME. THE TRENCH SHALL BE BACK FILLED DAILY. EXTRA MATERIAL SHALL BE PLACED ON THE EXCAVATED AREA TO OVERFILL THE TRENCH AND ALLOW FOR SETTLING. THE FILL MATERIAL SHALL BE GRADED TO FORM A CROWN OR AS NEEDED IN ORDER TO FACILITATE PROPER DRAINAGE. THE KEY IS TO PREVENT WATER FROM FOLLOWING AND CONCENTRATING ALONG THE EXCAVATED AREA OF THE TRENCH LINE. BUILT UP WATER BARS MAY ALSO BE USED TO PROMOTE SHEDDING OF WATER AWAY FROM THE EXCAVATED AREA. THE COMPLETED AREAS OF EXCAVATION SHALL BE SEEDED AND MULCHED DAILY.
10. MAINTENANCE AND INSPECTIONS: INSPECTIONS TO BE PERFORMED A MINIMUM OF ONCE PER WEEK BY THE ONSITE COORDINATOR AND PRIOR TO AND IMMEDIATELY FOLLOWING STORM EVENTS. MAINTENANCE TO BE PERFORMED AS NEEDED BASED ON INSPECTIONS. IN ADVANCE OF A PREDICTED RAINFALL OR SNOW MELT EVENT, ALL MANAGEMENT PRACTICES APPROPRIATE TO CURRENT AREAS OF DISTURBANCE MUST BE CHECKED AND REPAIRED AS NECESSARY TO ENSURE PROPER OPERATING CONDITION TO PREVENT SEDIMENT DISCHARGE FROM THE CONSTRUCTION SITE TO WATERS OF THE STATE. THIS MAY INCLUDE THE TEMPORARY STABILIZATION OF ALL DISTURBED SOILS OF THE SITE IN ADVANCE OF ANTICIPATED RUNOFF PERIOD.
11. ALL SEDIMENT REMOVED FROM SEDIMENT CONTROL PRACTICES AS A PART OF MAINTENANCE SHALL BE DISPOSED OF IN AN AREA THAT IS:
 - a. LESS THAN 5% IN SLOPE.
 - b. AT LEAST 100 FT FROM ANY DOWNSLOPE WATER BODY OR CONVEYANCE TO A WATER BODY (INCLUDING STORM DRAIN INLET OR DITCH).
 - c. PERMANENT STABILIZATION OF SEDIMENT SHALL BE IMMEDIATELY IMPLEMENTED FOLLOWING DISPOSAL.
12. SILT FENCE TRAPS SHALL BE PLACED AT THE INLET END OF ALL CULVERTS TO RETAIN SEDIMENT.
13. AT APPROXIMATE LOCATIONS ALONG STEEPER SECTIONS OF THE ROADWAY, STONE IN DITCHES IS SPECIFIED. STONE LINED DITCHES ARE TO BE CONSTRUCTED AT THE SHADED AREAS SHOWN ON THE SITE PLANS. STONE LINED DITCHES MAY BE REQUIRED AT OTHER LOCATIONS AS DIRECTED BY THE ENGINEER.
14. CHECK DAMS ARE REQUIRED IN DITCHES ON THE "CUT SIDE" OF THE ROADWAY AT THE SPACING SPECIFIED IN THE DETAIL ON THIS SHEET.
15. ALL SEED SHALL BE APPLIED PRIOR TO SEPTEMBER 15TH, TO FACILITATE GERMINATION.

TEMPORARY & PERMANENT PLANTINGS, SOIL AMENDMENTS

- ALL DISTURBED AREAS SHALL BE SEEDED AND MULCHED IN THE FOLLOWING PROPORTIONS:
- A. SEED @ 20 LB/ACRE (CONSERVATION MIX)
 - B. FERTILIZER (300 LB/ACRE OF 10-20-20)
 - C. LIME @ 2 TONS/ACRE
 - D. MULCH @ 2 TONS/ACRE
 - E. TOPSOIL (4" MINIMUM USING ON SITE STOCKPILES SAVED DURING CONSTRUCTION)
 - F. EROSION NETTING (AS NEEDED.)

BACKFILL MATERIAL SPECIFICATIONS

GRAVEL FOR SUBBASE: GRAVEL FOR SUBBASE SHALL BE OBTAINED FROM APPROVED SOURCES. IT SHALL CONSIST OF SATISFACTORILY GRADED, FREE DRAINING GRANULAR MATERIAL REASONABLY FREE FROM LOAM, SILT, CLAY AND ORGANIC MATERIAL. MAXIMUM STONE SIZE IS 8".

GRADING: THE GRAVEL SHALL MEET THE REQUIREMENTS OF THE FOLLOWING TABLE:

TABLE 704.04A - GRAVEL FOR SUBBASE	
SIEVE DESIGNATION	PERCENTAGE BY MASS (WEIGHT) PASSING SQUARE MESH SIEVES
NO. 4	20 TO 60
NO. 100	0 TO 12
NO. 200	0 TO 6

CRUSHED GRAVEL FOR SUBBASE: CRUSHED GRAVEL FOR SUBBASE SHALL BE PRODUCED FROM NATURAL GRAVELS OR CRUSHED QUARRIED ROCK AND SHALL BE A MATERIAL REASONABLY FREE FROM SILT, LOAM, CLAY OR ORGANIC MATTER. IT SHALL BE OBTAINED FROM APPROVED SOURCES AND SHALL MEET THE FOLLOWING REQUIREMENTS:

GRADING: THE CRUSHED GRAVEL SHALL BE UNIFORMLY GRADED FROM COARSE TO FINE AND SHALL MEET THE REQUIREMENTS OF THE FOLLOWING TABLE:

TABLE 704.05A - CRUSHED GRAVEL FOR SUBBASE		
GRADING	SIEVE DESIGNATION	PERCENTAGE BY MASS (WEIGHT) PASSING SQUARE MESH SIEVES
FINE	2 INCH	100
	1-1/2 INCH	90 TO 100
	NO. 4	30 TO 60
	NO. 100	0 TO 12
	NO. 200	0 TO 6

SAND BORROW AND CUSHION: SAND BORROW AND SAND CUSHION SHALL CONSIST OF MATERIAL REASONABLY FREE FROM SILT, LOAM, CLAY OR ORGANIC MATTER. IT SHALL BE OBTAINED FROM APPROVED SOURCES AND SHALL MEET THE REQUIREMENTS OF THE FOLLOWING TABLE:

TABLE 703.03A - SAND BORROW AND CUSHION	
SIEVE DESIGNATION	PERCENTAGE BY MASS (WEIGHT) PASSING SQUARE MESH SIEVES
NO. 100	100
37.5 MM (1-1/2 INCH)	90 TO 100
12.5 MM (1/2 INCH)	70 TO 100
4.75 MM (NO. 4)	60 TO 100
150 UM (NO. 100)	0 TO 20
75 UM (NO. 200)	0 TO 8

GRANULAR BORROW: GRANULAR BORROW SHALL BE OBTAINED FROM APPROVED SOURCES, CONSISTING OF STONE AND SAND REASONABLY FREE FROM LOAM, SILT, CLAY AND ORGANIC MATERIAL AND SHALL MEET THE REQUIREMENTS OF THE FOLLOWING TABLE:

TABLE 703.04A - GRANULAR BORROW	
SIEVE DESIGNATION	PERCENTAGE BY MASS (WEIGHT) PASSING SQUARE MESH SIEVES
4.75 MM (NO. 4)	20 TO 100
75 UM (NO. 200)	0 TO 12

THE MAXIMUM SIZE OF STONE PARTICLES IN THE GRANULAR BORROW SHALL NOT EXCEED 67 PERCENT OF THE THICKNESS OF THE LAYER BEING SPREAD.

GRANULAR BACKFILL FOR STRUCTURES: GRANULAR BACKFILL FOR STRUCTURES SHALL BE OBTAINED FROM APPROVED SOURCES. IT SHALL CONSIST OF SATISFACTORILY GRADED, FREE DRAINING GRANULAR MATERIAL REASONABLY FREE FROM LOAM, SILT, CLAY AND ORGANIC MATERIAL. THE GRANULAR BACKFILL SHALL MEET THE REQUIREMENTS SPECIFIED IN THE FOLLOWING TABLE:

TABLE 704.08A - GRANULAR BACKFILL FOR STRUCTURES	
SIEVE DESIGNATION	PERCENTAGE BY MASS (WEIGHT) PASSING SQUARE MESH SIEVES
75 MM (3 INCH)	100
4.75 MM (NO. 4)	45 TO 75
150 UM (NO. 100)	0 TO 12
75 UM (NO. 200)	0 TO 6

DENSE GRADED CRUSHED STONE FOR SUBBASE: DENSE GRADED CRUSHED STONE FOR SUBBASE SHALL CONSIST OF CLEAN, HARD, UNIFORMLY GRADED, CRUSHED STONE. IT SHALL BE SUFFICIENTLY FREE FROM DIRT, DELETERIOUS MATERIAL AND PIECES THAT ARE STRUCTURALLY WEAK AND SHALL MEET THE FOLLOWING REQUIREMENTS:

SOURCE: THIS MATERIAL SHALL BE OBTAINED FROM APPROVED SOURCES AND THE AREA FROM WHICH THIS MATERIAL IS OBTAINED SHALL BE STRIPPED AND CLEANED BEFORE BLASTING.

GRADING: THE MATERIAL SHALL MEET THE REQUIREMENTS SPECIFIED IN THE FOLLOWING TABLE:

TABLE 704.06A - DENSE GRADED CRUSHED STONE FOR SUBBASE (3" MINUS PLANT MIX)	
SIEVE DESIGNATION	PERCENTAGE BY MASS (WEIGHT) PASSING SQUARE MESH SIEVES
90 MM (3-1/2 INCH)	100
75 MM (3 INCH)	90 TO 100
50 MM (2 INCH)	75 TO 100
25 MM (1 INCH)	50 TO 80
12.5 MM (1/2 INCH)	30 TO 60
4.75 MM (NO.4)	15 TO 40
75 UM (NO.200)	0 TO 6

FILLER: THE APPROVED FILLER SHALL BE OBTAINED FROM APPROVED SOURCES AND SHALL CONSIST OF CLEAN, HARD, UNIFORM GRADED, CRUSHED STONE AND/OR STONE SCREENINGS PRODUCED BY THE CRUSHING PROCESS. THE MATERIAL SHALL CONSIST OF HARD DURABLE PARTICLES, SUFFICIENTLY FREE FROM DIRT, ORGANIC MATERIAL, STRUCTURALLY WEAK PIECES, AND OTHER DELETERIOUS MATERIALS.

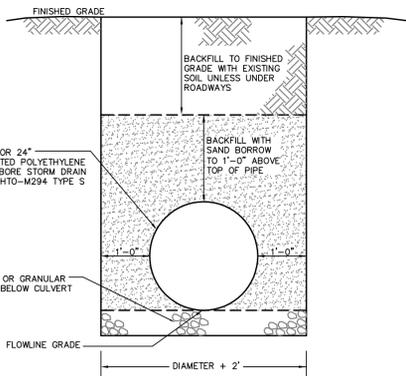
APPROVED FILLER MATERIAL SHALL MEET THE REQUIREMENTS SPECIFIED IN THE FOLLOWING TABLE:

TABLE 704.06B - APPROVED FILLER (1-1/2" MINUS PLANT MIX)	
SIEVE DESIGNATION	PERCENTAGE BY MASS (WEIGHT) PASSING SQUARE MESH SIEVES
19 MM (3/4 INCH)	100
12.5 MM (1/2 INCH)	70 TO 100
4.75 MM (NO.4)	50 TO 90
150 UM (NO.100)	0 TO 12
75 UM (NO.200)	0 TO 6

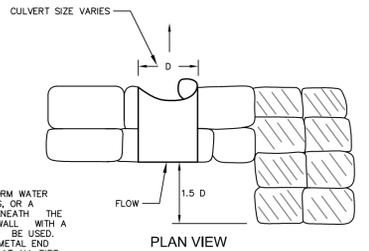
IMPORTANT NOTES:

1. IF BECAUSE OF CLOSE PROXIMITY TO THE SITE A SAND OR GRAVEL SOURCE IS AVAILABLE, BUT THE MATERIAL DOES NOT MEET THE ABOVE VTRANS SPECIFICATIONS, THE CONTRACTOR MAY APPLY TO THE OWNER AND THE ENGINEER FOR PRE-APPROVAL. A SITE VISIT AND SIEVE ANALYSIS (AT THE CONTRACTORS EXPENSE) IS REQUIRED FOR APPROVAL.

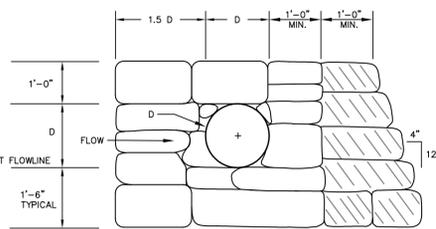
ANY OF THESE MATERIAL SPECIFICATIONS, INCLUDING A MIXTURE, MAY BE USED FOR THE COMMON FILL REQUIRED ON THIS PROJECT, EXCEPT UNDER THE ROADWAYS AND PARKING LOTS. ALSO WITHIN 3' OF ANY BUILDING FOUNDATION, GRANULAR BACKFILL FOR STRUCTURES OR 1-1/2" CRUSHED STONE HAS BEEN SPECIFIED.



TYPICAL STORM DRAIN SECTION
N7S

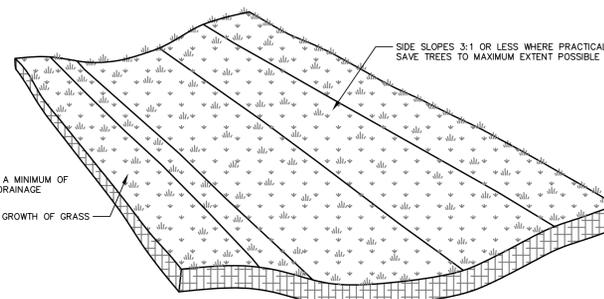


PLAN VIEW



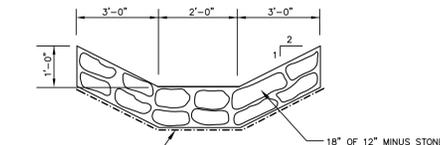
ELEVATION VIEW

*** FIELD STONE L-SHAPED INLET HEADWALL**
N7S

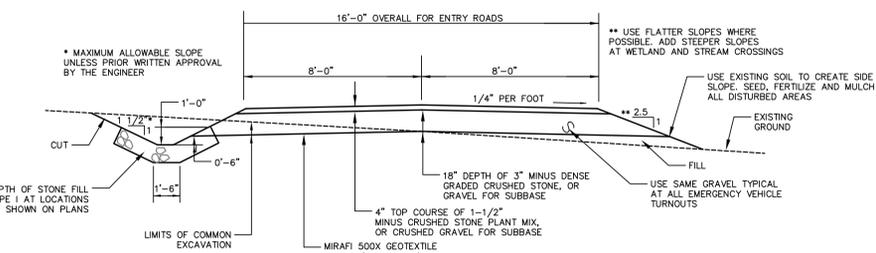


GRASSED TREATMENT SWALE
N7S

SWALE SLOPES AT A MINIMUM OF 1% TO ALLOW AS DRAINAGE



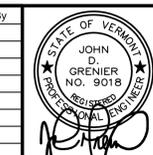
STONE LINED DITCH CROSS SECTION
N7S



TYPICAL ENTRY ROADWAY SECTION
N7S

NOTE: ORIGINAL PLAN 24" x 36". OTHER SIZES NOT TO SCALE

No.	Date	Revision	By



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Designed: JDG
Drawn: TJM
Checked: JDG
Sheet No: E-2