



September 4, 2018

Amanda Lessard, Town Planner  
Town of Windham  
8 School Road  
Windham, ME 04062

**Re: Response to Review Comments  
Gray Road Retirement Community  
Weld, LLC - Applicant**

Dear Amanda:

On behalf of Weld, LLC we have prepared the enclosed plans and supporting material in response to review comments received for the Gray Road Retirement Community project. We have revised the plans in response to the email comments received from the Planning Department dated 7/30/18 and from the Town Engineer dated 8/17/18.

We have also included preliminary building elevation plans and septic system HHE-200 designs for the proposed wastewater disposal fields. A Nitrate Study is currently underway, and we are coordinating final approval of the water main infrastructure design with the Portland Water District. A ground survey of the proposed stormwater basins will be performed prior to final approval of the project.

It is our opinion that the requirement for a High Intensity Soil Survey can reasonably be waived. The three soil types mapped on the property by the Medium Intensity maps are all classified as silty loam or sandy loam, which have similar characteristics. The soils on the property are mostly classified as Hydrologic Soil Group "C" soils, with some small areas of HSG "B" soils. The project will be served by public water, and septic systems will be consolidated into two specific areas, which will include HHE-200 designs and a nitrate analysis that considers the specific soil types encountered and analyzed at the septic system locations.

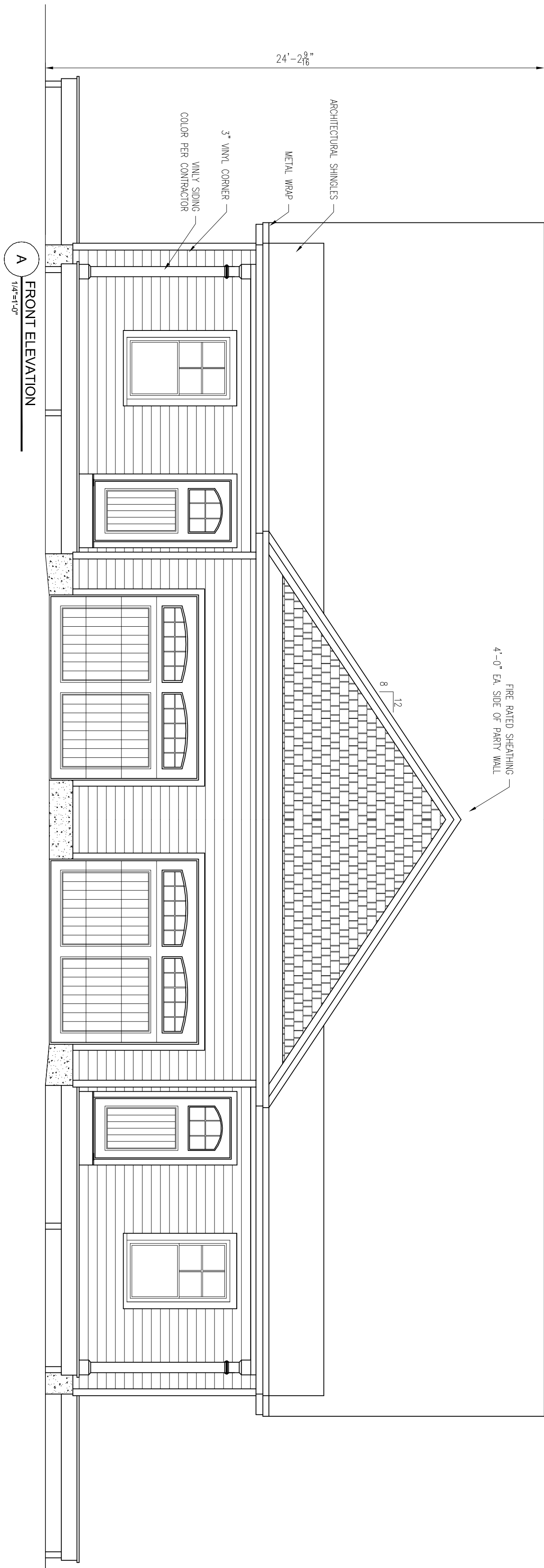
Upon your review of this information, please let us know if you have any questions or require any additional information.

Sincerely,

DM ROMA CONSULTING ENGINEERS

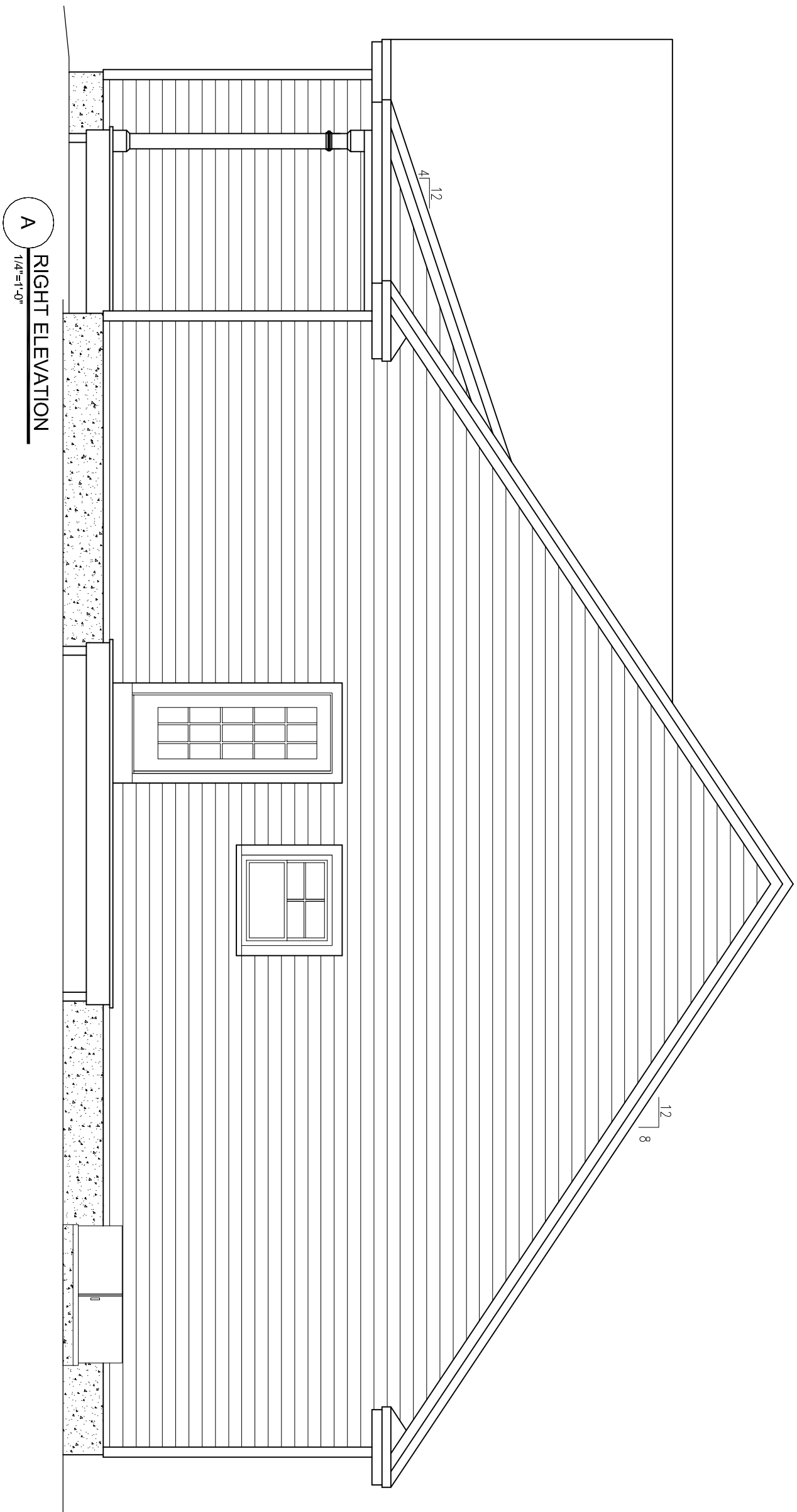
*Dustin Roma*

Dustin M. Roma, P.E.  
President



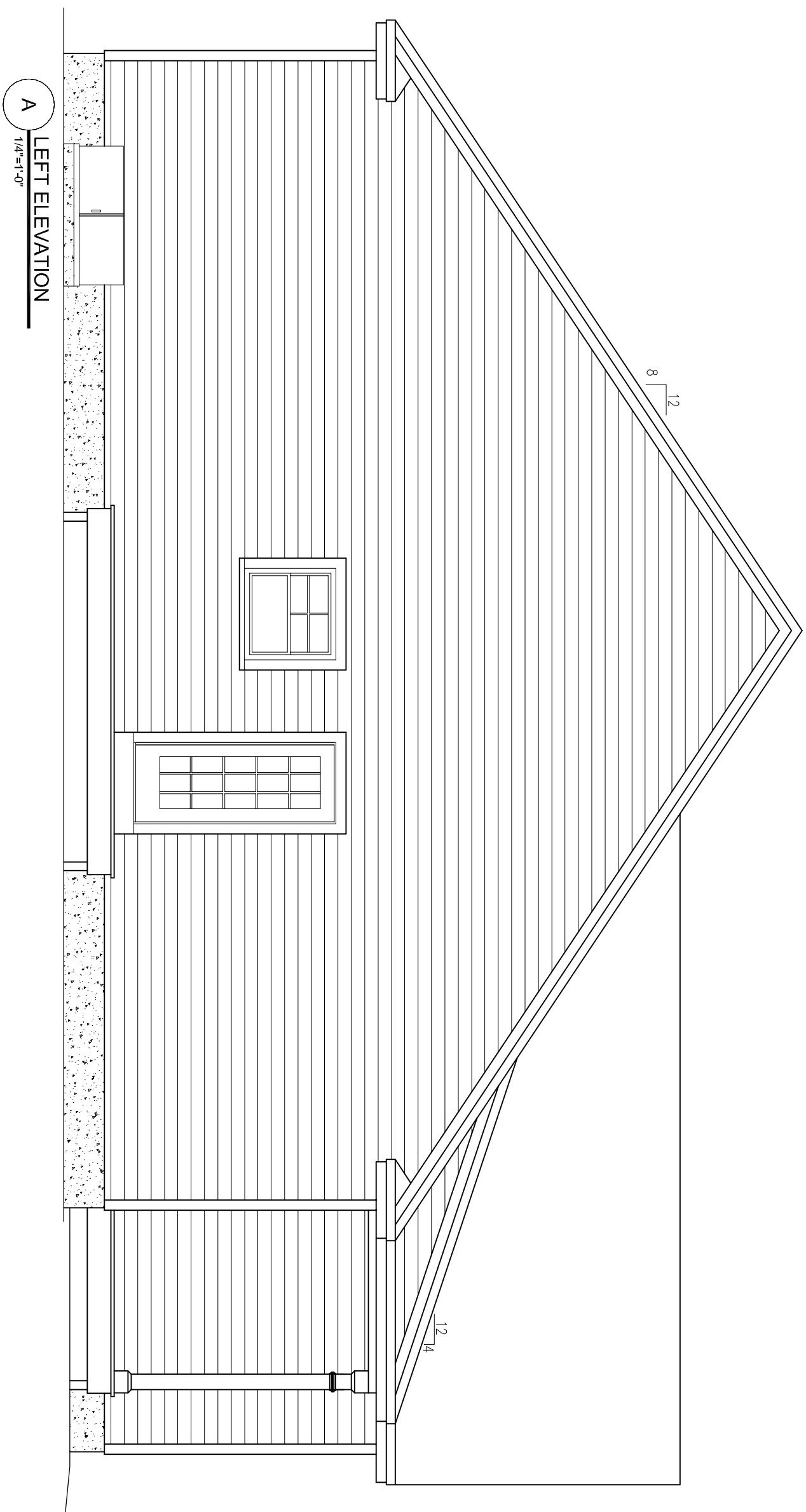
A  
1/4"=1'-0"

FRONT ELEVATION



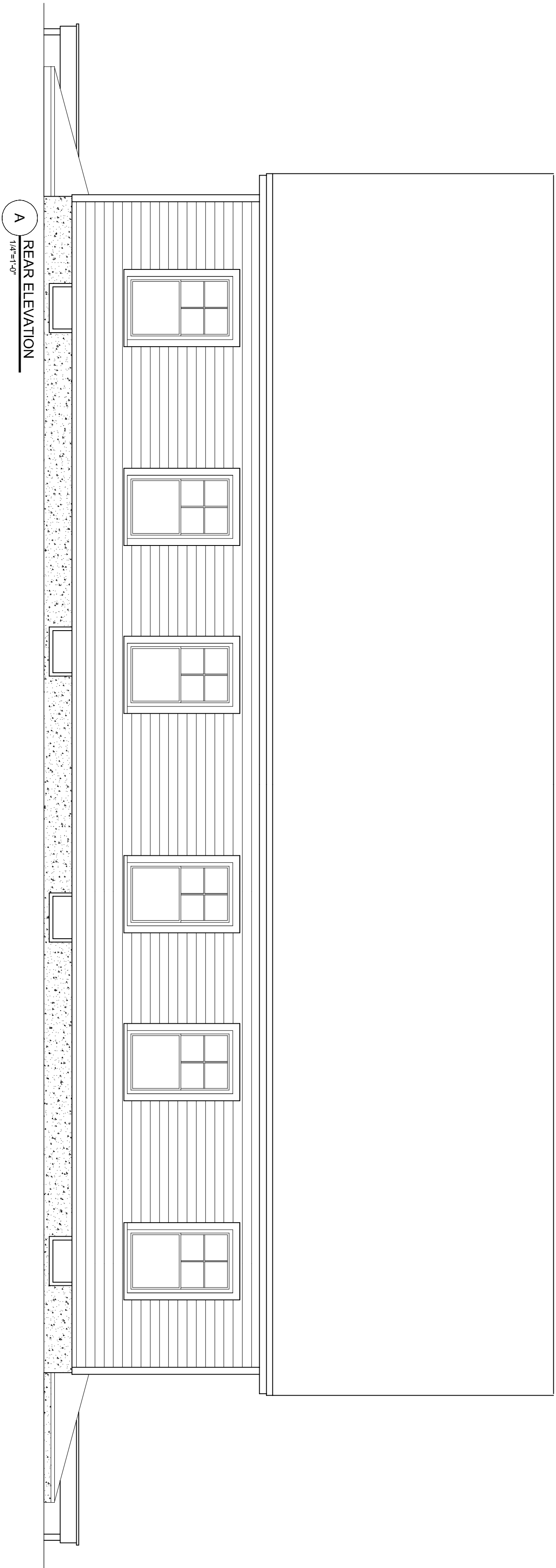
A  
1/4"=1'-0"

RIGHT ELEVATION



A  
1/4"=1'-0"

LEFT ELEVATION



A  
1/4"=1'-0"

REAR ELEVATION

## EXTERIOR ELEVATIONS

## FARM BROOK

THE DESIGNERS OF ROY ARCHITECTURAL DESIGN ARE NOT ARCHITECTS, AND OR ENGINEERS. THE DRAWINGS ARE PROVIDED FOR GENERAL INFORMATION PURPOSES ONLY AND HAVE NOT BEEN REVIEWED OR APPROVED BY A LICENSED ARCHITECT OR PROFESSIONAL ENGINEER. UNLESS OTHERWISE INSTRUCTED, ROY ARCHITECTURAL DESIGN WILL BUILD THE PROJECT IN ACCORDANCE WITH THESE CONCEPTUAL DRAWINGS. ALL CONTRACTORS AND SUBCONTRACTORS ARE TO FOLLOW LOCAL CODES AND BUILDING PRACTICES. TOP OF WALL HEIGHT MAY VARY PER SITE CONDITIONS. ALL SITE CONDITIONS ARE TO BE FIELD VERIFIED PER ON SITE CONDITIONS. NO WARRANTIES ARE MADE WITH REGARD TO THESE CONCEPTUAL DRAWINGS.

Builders Name and Address

WELD LLC  
P.O. BOX 1362  
WINDHAM MAINE 04062

Project Designer	
ROY ARCHITECTURAL DESIGN	
69 FAULCON ROAD	
CONSUMERS FALLS, ME 04920	
PHONE: 207.718.7178	
No.	DATE
Revision/Issue	DATE

Project	18-032	Sheet
Date	7/3/16	
Scale	1/4"=1'-0"	A1

# SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Dept. Health & Human Services  
Div. Environmental Health, 11SHS  
(207) 287-2070 Fax: (207) 287-4172

4984

## PROPERTY LOCATION

## >> CAUTION: LPI APPROVAL REQUIRED <<

City, Town, or Plantation Windham  
Street or Road Gray Road  
Subdivision, Lot #

Town/City \_\_\_\_\_ Permit # \_\_\_\_\_  
Date Permit Issued: 1/1/1 Fee: \$ \_\_\_\_\_ Double Fee Charged [ ]

## OWNER/APPLICANT INFORMATION

Name (last, first, MI) WELD LLC Owner  
Mailing Address of P.O. Box 1361  
Owner/Applicant Windham 04062  
Daytime Tel. # 831-5930

Local Plumbing Inspector Signature \_\_\_\_\_ L.P.I. # \_\_\_\_\_  
Fee: \$ \_\_\_\_\_ state min fee \$ \_\_\_\_\_ Locally adopted fee  
Copy: [ ] Owner [ ] Town [ ] State

The Subsurface Wastewater Disposal System shall not be installed until a Permit is issued by the Local Plumbing Inspector. The Permit shall authorize the owner or installer to install the disposal system in accordance with this application and the Maine Subsurface Wastewater Disposal Rules.

Municipal Tax Map # \_\_\_\_\_ Lot # \_\_\_\_\_

## OWNER OR APPLICANT STATEMENT

I state and acknowledge that the information submitted is correct to the best of my knowledge and understand that any falsification is reason for the Department and/or Local Plumbing Inspector to deny a Permit.

## CAUTION: INSPECTION REQUIRED

I have inspected the installation authorized above and found it to be in compliance with the Subsurface Wastewater Disposal Rules Application.  
(1st) date approved \_\_\_\_\_

Signature of Owner or Applicant \_\_\_\_\_ Date \_\_\_\_\_

Local Plumbing Inspector Signature \_\_\_\_\_ (2nd) date approved \_\_\_\_\_

## PERMIT INFORMATION

### TYPE OF APPLICATION

1. First Time System
2. Replacement System  
Type replaced: \_\_\_\_\_  
Year installed: \_\_\_\_\_
3. Expanded System  
a. <25% Expansion  
b. ≥25% Expansion
4. Experimental System
5. Seasonal Conversion

### THIS APPLICATION REQUIRES

1. No Rule Variance
2. First Time System Variance  
a. Local Plumbing Inspector Approval  
b. State & Local Plumbing Inspector Approval
3. Replacement System Variance  
a. Local Plumbing Inspector Approval  
b. State & Local Plumbing Inspector Approval
4. Minimum Lot Size Variance
5. Seasonal Conversion Permit

### DISPOSAL SYSTEM COMPONENTS

1. Complete Non-engineered System
2. Primitive System (graywater & alt. toilet)
3. Alternative Toilet, specify: \_\_\_\_\_
4. Non-engineered Treatment Tank (only)
5. Holding Tank, \_\_\_\_\_ gallons
6. Non-engineered Disposal Field (only)
7. Separated Laundry System
8. Complete Engineered System (2000 gpd or more)
9. Engineered Treatment Tank (only)
10. Engineered Disposal Field (only)
11. Pre-treatment, specify: \_\_\_\_\_
12. Miscellaneous Components

### SIZE OF PROPERTY

11.4 SQ. FT. ACRES

### SHORELAND ZONING

Yes ☐ No ☒

### DISPOSAL SYSTEM TO SERVE

1. Single Family Dwelling Unit, No. of Bedrooms: \_\_\_\_\_
2. Multiple Family Dwelling, No. of Units: 2-2A/m
3. Other: \_\_\_\_\_ (specify)  
Current Use Seasonal Year Round Undeveloped

### TYPE OF WATER SUPPLY

1. Drilled Well
2. Dug Well
3. Private
4. Public
5. Other

## DESIGN DETAILS (SYSTEM LAYOUT SHOWN ON PAGE 3)

### TREATMENT TANK

1. Concrete  
a. Regular  
b. Low Profile
  2. Plastic
  3. Other: \_\_\_\_\_
- CAPACITY: 1000 GAL.

### DISPOSAL FIELD TYPE & SIZE

1. Stone Bed
  2. Stone Trench
  3. Proprietary Device  
a. cluster array c. Linear  
b. regular load d. H-20 load
  4. Other: \_\_\_\_\_
- SIZE: 240 sq. ft. lin. ft.

### GARBAGE DISPOSAL UNIT

1. No
  2. Yes
  3. Maybe
- If Yes or Maybe, specify one below:  
a. multi-compartment tank  
b. \_\_\_\_\_ tanks in series  
c. increase in tank capacity  
d. Filter on Tank Outlet

### DESIGN FLOW

360 gallons per day  
BASED ON:  
1. Table 4A (dwelling unit(s))  
2. Table 4C (other facilities)  
SHOW CALCULATIONS for other facilities

### SOIL DATA & DESIGN CLASS

PROFILE 3/C  
CONDITION 701  
at Observation Hole # 701  
Depth 16"  
of Most Limiting Soil Factor

### DISPOSAL FIELD SIZING

1. Medium---2.6 sq. ft. / gpd
2. Medium---Large 3.3 sq. ft. / gpd
3. Large---4.1 sq. ft. / gpd
4. Extra Large---5.0 sq. ft. / gpd

### EFFLUENT/EJECTOR PUMP

1. Not Required
  2. May Be Required
  3. Required
- Specify only for engineered systems:  
DOSE: \_\_\_\_\_ gallons

3. Section 4G (meter readings)  
ATTACH WATER METER DATA

### LATITUDE AND LONGITUDE

at center of disposal area  
Lat. 43 d 46 m 40 s  
Lon. 70 d 25 m 00 s  
if g.p.s., state margin of error: 15

## SITE EVALUATOR STATEMENT

I certify that on 8/17/18 (date) I completed a site evaluation on this property and state that the data reported are accurate and that the proposed system is in compliance with the State of Maine Subsurface Wastewater Disposal Rules (10-144A CMR 241).

Mary Hampton  
Site Evaluator Signature

263  
SE #

8/18/18  
Date

MARY J. HAMPTON  
Site Evaluator Name Printed

756-2900  
Telephone Number

\_\_\_\_\_  
E-mail Address

Note: Changes to or deviations from the design should be confirmed with the Site Evaluator.

# SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Department of Health & Human Services  
Division of Environmental Health  
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation

Street, Road, Subdivision

Owner's Name

Wincham

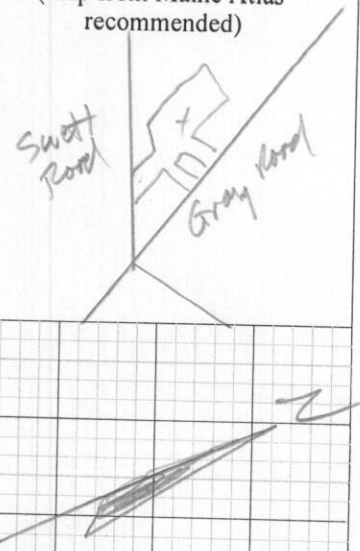
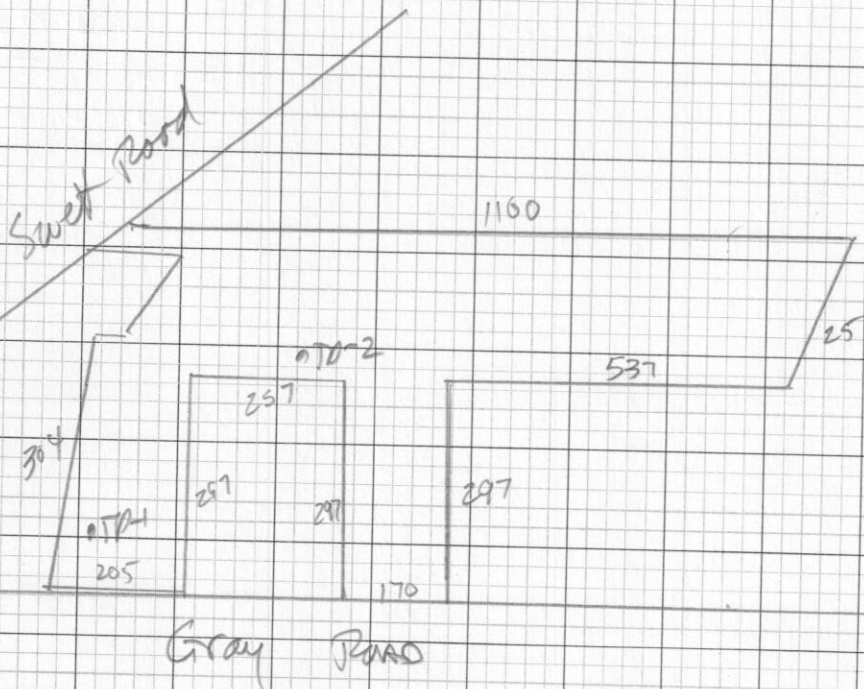
Gray Road

WELD, LLC

## SITE PLAN

Scale 1" = 300 ft. or as shown

SITE LOCATION PLAN  
(map from Maine Atlas  
recommended)



## SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown Above)

Observation Hole OH-1 ☒ Test Pit ☐ Boring  
" Depth of Organic Horizon Above Mineral Soil

Depth Below Mineral Soil Surface (inches)	Texture	Consistency	Color	Mottling
0	Sandy loam	Friable	Dark Brown	
10	Sandy loam	Friable	Brown	
20	Sandy loam	Fine	olive	Common distinct
30				
40				
50				

Soil Classification	Slope	Limiting Factor	<input checked="" type="checkbox"/> Ground Water <input checked="" type="checkbox"/> Restrictive Layer <input type="checkbox"/> Bedrock <input type="checkbox"/> Pit Depth
3 C Profile Condition	2 %	16 "	

Observation Hole OH-2 ☒ Test Pit ☐ Boring  
" Depth of Organic Horizon Above Mineral Soil

Depth Below Mineral Soil Surface (inches)	Texture	Consistency	Color	Mottling
0	Sandy loam	Friable	Dark Brown	
10	Sandy loam	Friable	Brown	
20	Sandy loam	Fine	olive	Common distinct
30				
40				
50				

Soil Classification	Slope	Limiting Factor	<input checked="" type="checkbox"/> Ground Water <input checked="" type="checkbox"/> Restrictive Layer <input type="checkbox"/> Bedrock <input type="checkbox"/> Pit Depth
3 C Profile Condition	2 %	20 "	

Mary Huph  
Site Evaluator Signature

2013  
SE #

8/18/18  
Date



4984

# SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Department of Health & Human Services  
Division of Environmental Health  
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation

Street, Road, Subdivision

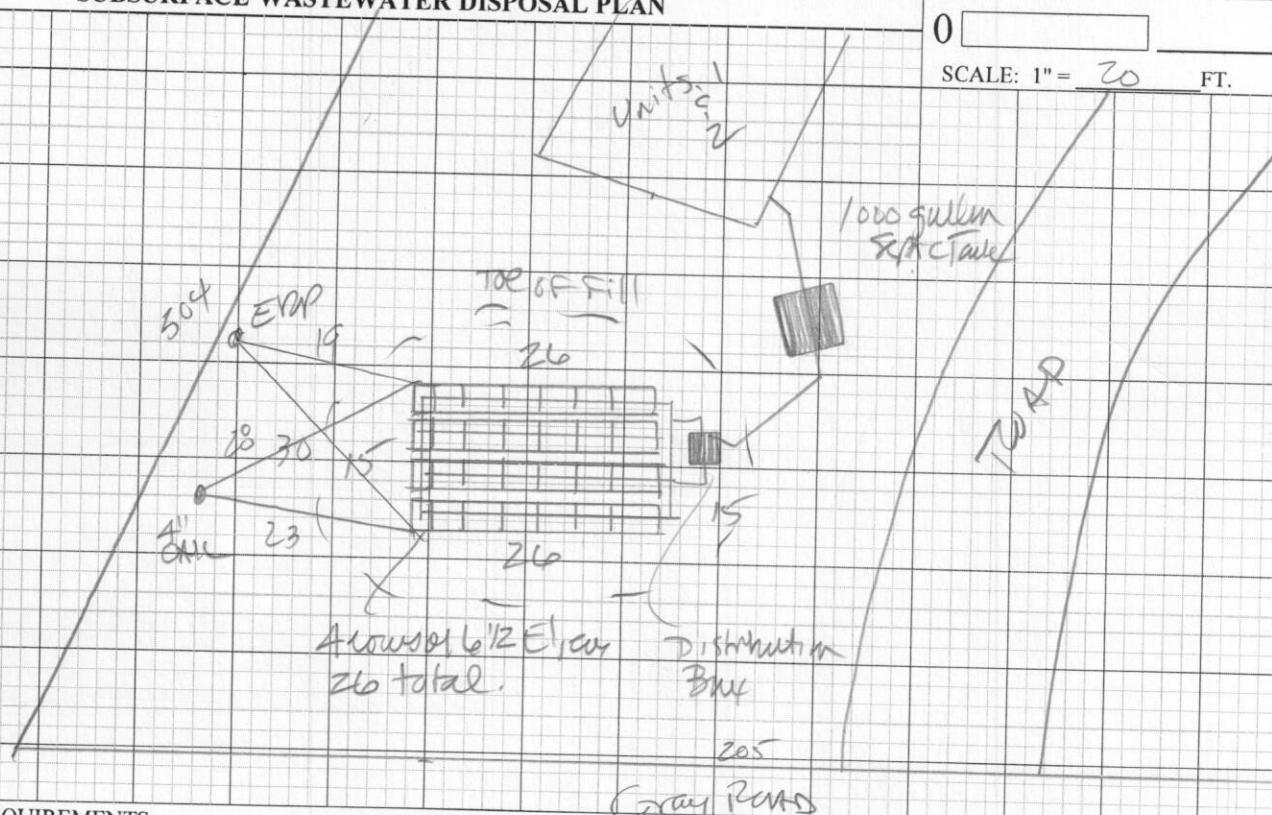
Owner's Name

Wintham Gray Road

WEID, LLC

## SUBSURFACE WASTEWATER DISPOSAL PLAN

0   
SCALE: 1" = 20 FT.



### FILL REQUIREMENTS

### CONSTRUCTION ELEVATIONS

Depth of Fill (Upslope)	21"	Finished Grade Elevation	-27
Depth of Fill (Downslope)	26"	Top of Distribution Pipe or Proprietary Device	-37
		Bottom of Disposal Area	-48

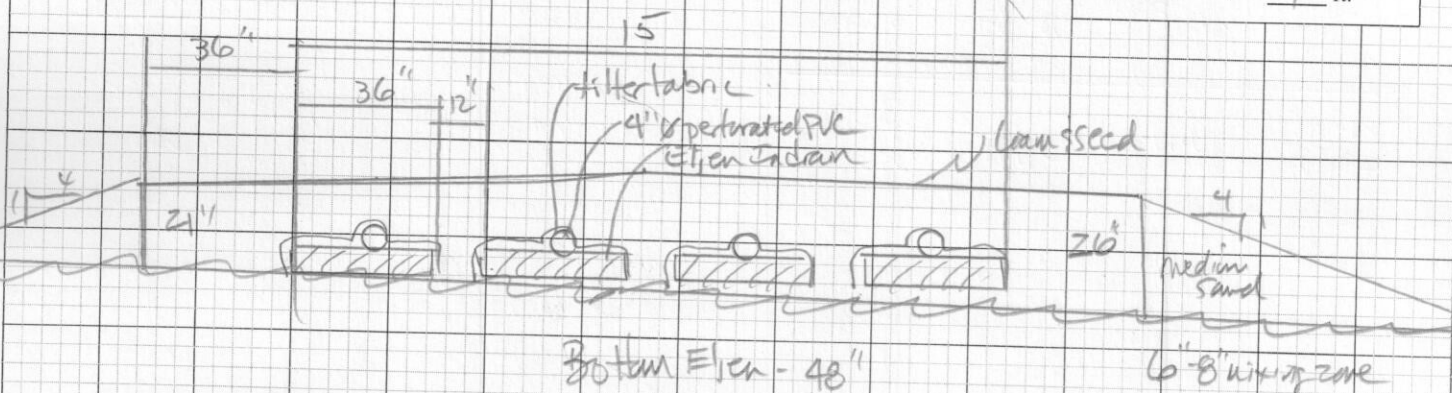
ELEVATION REFERENCE POINT  
Location & Description: Nail 51' up  
8" Beech  
Reference Elevation: 0"

Note: Materials and installation shall be in accordance with Maine Subsurface Wastewater Disposal Rules dated 08/15 as amended.

### DISPOSAL AREA CROSS SECTION

#### Scale

Horizontal 1" = 4 ft.  
Vertical 1" = 4 ft.



NOTE: All ground to be filled must be scarified.

*Mary Hampton*

Site Evaluator Signature

2003

SE #

8/18/18

Date

# SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Dept. Health & Human Services  
Div. Environmental Health, 11SHS  
(207) 287-2070 Fax: (207) 287-4172

4984

PROPERTY LOCATION		>> CAUTION: LPI APPROVAL REQUIRED <<	
City, Town, or Plantation <u>Wintham</u>		Town/City _____ Permit # _____	
Street or Road <u>Gray Pond</u>		Date Permit Issued: ___/___/___ Fee: \$ _____ Double Fee Charged <input type="checkbox"/>	
Subdivision, Lot # _____		Local Plumbing Inspector Signature _____ L.P.I. # _____	
OWNER/APPLICANT INFORMATION		The Subsurface Wastewater Disposal System shall not be installed until a Permit is issued by the Local Plumbing Inspector. The Permit shall authorize the owner or installer to install the disposal system in accordance with this application and the Maine Subsurface Wastewater Disposal Rules.	
Name (last, first, MI) <u>WEID LLC</u> <span style="float: right;">Owner <input checked="" type="checkbox"/> Applicant <input type="checkbox"/></span>			
Mailing Address of <u>P.O. Box 1361</u>			
Owner/Applicant <u>Wintham 04062</u>			
Daytime Tel. # <u>831-5950</u>		Municipal Tax Map # _____ Lot # _____	
<b>OWNER OR APPLICANT STATEMENT</b> I state and acknowledge that the information submitted is correct to the best of my knowledge and understand that any falsification is reason for the Department and/or Local Plumbing Inspector to deny a Permit.		<b>CAUTION: INSPECTION REQUIRED</b> I have inspected the installation authorized above and found it to be in compliance with the Subsurface Wastewater Disposal Rules Application.	
Signature of Owner or Applicant _____ Date _____		(1st) date approved _____ Local Plumbing Inspector Signature _____ (2nd) date approved _____	

PERMIT INFORMATION			
<b>TYPE OF APPLICATION</b> 1. First Time System 2. Replacement System Type replaced: _____ Year installed: _____ 3. Expanded System a. <25% Expansion b. >25% Expansion 4. Experimental System 5. Seasonal Conversion	<b>THIS APPLICATION REQUIRES</b> 1. No Rule Variance 2. First Time System Variance a. Local Plumbing Inspector Approval b. State & Local Plumbing Inspector Approval 3. Replacement System Variance a. Local Plumbing Inspector Approval b. State & Local Plumbing Inspector Approval 4. Minimum Lot Size Variance 5. Seasonal Conversion Permit	<b>DISPOSAL SYSTEM COMPONENTS</b> 1. Complete Non-engineered System 2. Primitive System (graywater & alt. toilet) 3. Alternative Toilet, specify: _____ 4. Non-engineered Treatment Tank (only) 5. Holding Tank, _____ gallons 6. Non-engineered Disposal Field (only) 7. Separated Laundry System 8. Complete Engineered System (2000 gpd or more) 9. Engineered Treatment Tank (only) 10. Engineered Disposal Field (only) 11. Pre-treatment, specify: _____ 12. Miscellaneous Components	
<b>SIZE OF PROPERTY</b> <u>11.4 AC</u> SQ. FT. ACRES	<b>DISPOSAL SYSTEM TO SERVE</b> 1. Single Family Dwelling Unit, No. of Bedrooms: _____ 2. Multiple Family Dwelling, No. of Units: <u>10-2300</u> 3. Other: _____ (specify) _____ Current Use Seasonal Year Round <u>Undeveloped</u>	<b>TYPE OF WATER SUPPLY</b> 1. Drilled Well 2. Dug Well 3. Private 4. <u>Public</u> 5. Other _____	
<b>SHORELAND ZONING</b> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>			

DESIGN DETAILS (SYSTEM LAYOUT SHOWN ON PAGE 3)			
<b>TREATMENT TANK</b> 1. Concrete a. Regular b. Low Profile 2. Plastic 3. Other: <u>5/1000</u> CAPACITY: _____ GAL.	<b>DISPOSAL FIELD TYPE &amp; SIZE</b> 1. Stone Bed 2. Stone Trench 3. Proprietary Device a. cluster array c. Linear b. regular load d. H-20 load 4. Other: _____ SIZE: <u>6000</u> sq. ft. lin. ft.	<b>GARBAGE DISPOSAL UNIT</b> 1. No 2. Yes 3. Maybe If Yes or Maybe, specify one below: a. multi-compartment tank b. _____ tanks in series c. increase in tank capacity d. Filter on Tank Outlet	<b>DESIGN FLOW</b> <u>1800</u> gallons per day BASED ON: 1. Table 4A (dwelling unit(s)) 2. Table 4C (other facilities) SHOW CALCULATIONS for other facilities 3. Section 4G (meter readings) ATTACH WATER METER DATA
<b>SOIL DATA &amp; DESIGN CLASS</b> PROFILE CONDITION <u>3/C</u> at Observation Hole # <u>702</u> Depth <u>20</u> " of Most Limiting Soil Factor	<b>DISPOSAL FIELD SIZING</b> 1. Medium---2.6 sq. ft. / gpd 2. Medium---Large 3.3 sq. ft. / gpd 3. Large---4.1 sq. ft. / gpd 4. Extra Large---5.0 sq. ft. / gpd	<b>EFFLUENT/EJECTOR PUMP</b> 1. Not Required 2. May Be Required 3. <u>Required</u> Specify only for engineered systems: DOSE: _____ gallons	<b>LATITUDE AND LONGITUDE</b> at center of disposal area Lat. _____ d _____ m _____ s Lon. _____ d _____ m _____ s if g.p.s, state margin of error: _____

SITE EVALUATOR STATEMENT		
I certify that on <u>8/17/18</u> (date) I completed a site evaluation on this property and state that the data reported are accurate and that the proposed system is in compliance with the State of Maine Subsurface Wastewater Disposal Rules (10-144A CMR 241).		
<u>Mary J. Hampton</u> Site Evaluator Signature	<u>2663</u> SE #	<u>8/18/18</u> Date
<u>MARY J. HAMPTON</u> Site Evaluator Name Printed	<u>756-2900</u> Telephone Number	E-mail Address

Note : Changes to or deviations from the design should be confirmed with the Site Evaluator.



SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Department of Health & Human Services  
Division of Environmental Health  
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation

Street, Road, Subdivision

Owner's Name

Windham

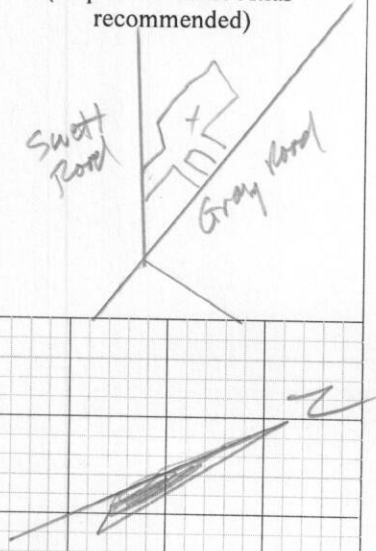
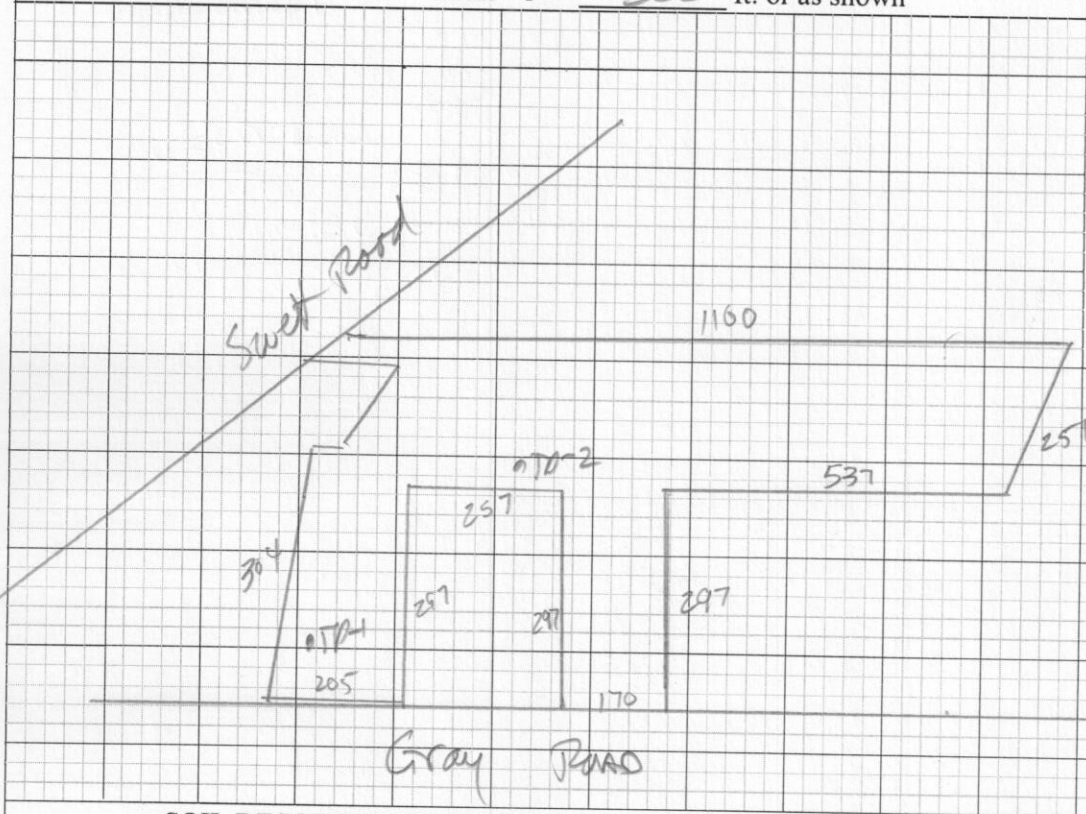
Gray Road

WELD, LLC

SITE PLAN

Scale 1" = 300 ft. or as shown

SITE LOCATION PLAN  
(map from Maine Atlas recommended)



SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown Above)

Observation Hole TP1 ☒ Test Pit ☐ Boring  
" Depth of Organic Horizon Above Mineral Soil

Texture	Consistency	Color	Mottling
Sandy loam	Friable	Dark Brown	
Sandy loam	Friable	Brown	
Sandy loam	Firm	olive	Common distinct

Soil Classification <u>3</u> <u>C</u> Profile Condition	Slope <u>2</u> %	Limiting Factor <u>16</u> "	<input checked="" type="checkbox"/> Ground Water <input checked="" type="checkbox"/> Restrictive Layer <input type="checkbox"/> Bedrock <input type="checkbox"/> Pit Depth
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Observation Hole TP2 ☒ Test Pit ☐ Boring  
" Depth of Organic Horizon Above Mineral Soil

Texture	Consistency	Color	Mottling
Sandy loam	Friable	Dark Brown	
Sandy loam	Friable	Brown	
Sandy loam	Firm	olive	Common distinct

Soil Classification <u>3</u> <u>C</u> Profile Condition	Slope <u>2</u> %	Limiting Factor <u>20</u> "	<input checked="" type="checkbox"/> Ground Water <input checked="" type="checkbox"/> Restrictive Layer <input type="checkbox"/> Bedrock <input type="checkbox"/> Pit Depth
---	---------------------	--------------------------------	---

Mary Hapth

2003

8/18/18

Site Evaluator Signature

SE #

Date

4984

# SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Department of Health & Human Services  
Division of Environmental Health  
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation

Street, Road, Subdivision

Owner's Name

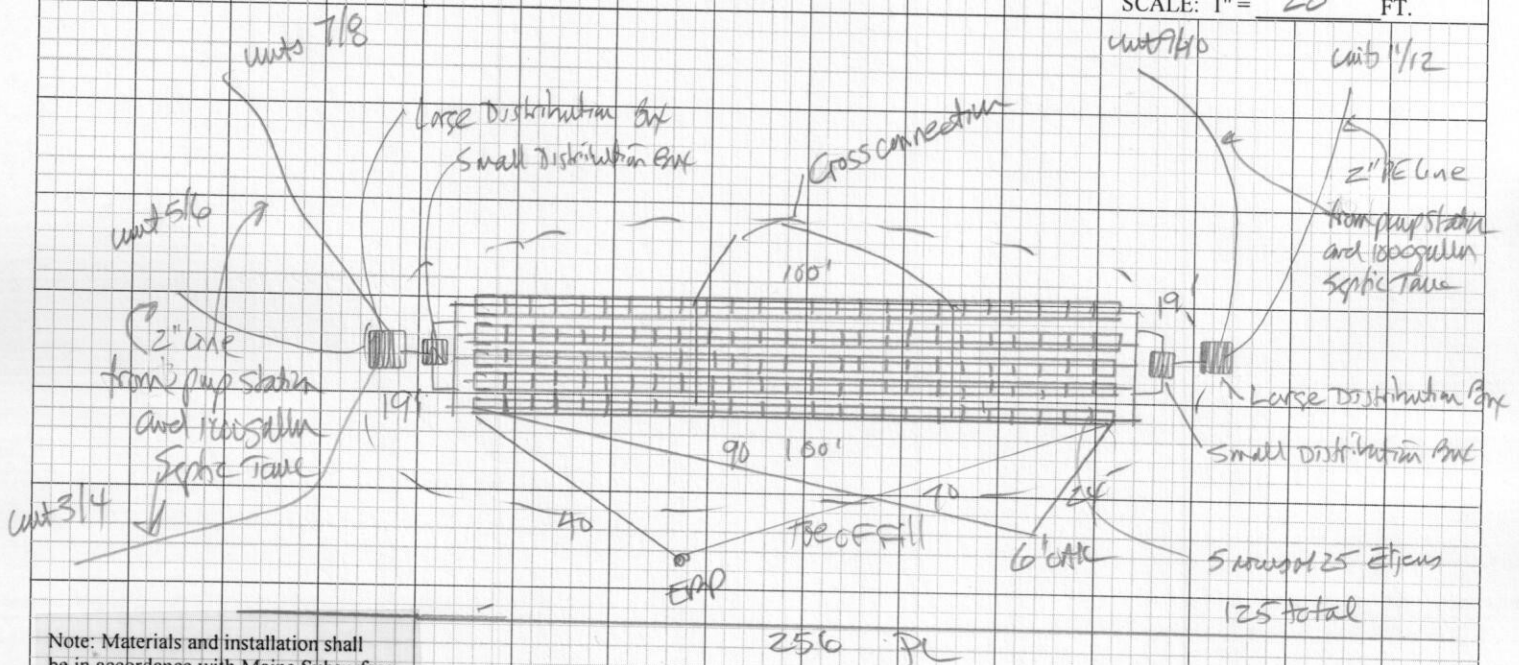
Windham

Gray Road

WELD, LLC

## SUBSURFACE WASTEWATER DISPOSAL PLAN

0    
SCALE: 1" = 20 FT.



Note: Materials and installation shall be in accordance with Maine Subsurface Wastewater Disposal Rules dated 08/15 as amended.

### FILL REQUIREMENTS

Depth of Fill (Upslope) 16  
Depth of Fill (Downslope) 24

### CONSTRUCTION ELEVATIONS

Finished Grade Elevation -33  
Top of Distribution Pipe or Proprietary Device -43  
Bottom of Disposal Area -54

### ELEVATION REFERENCE POINT

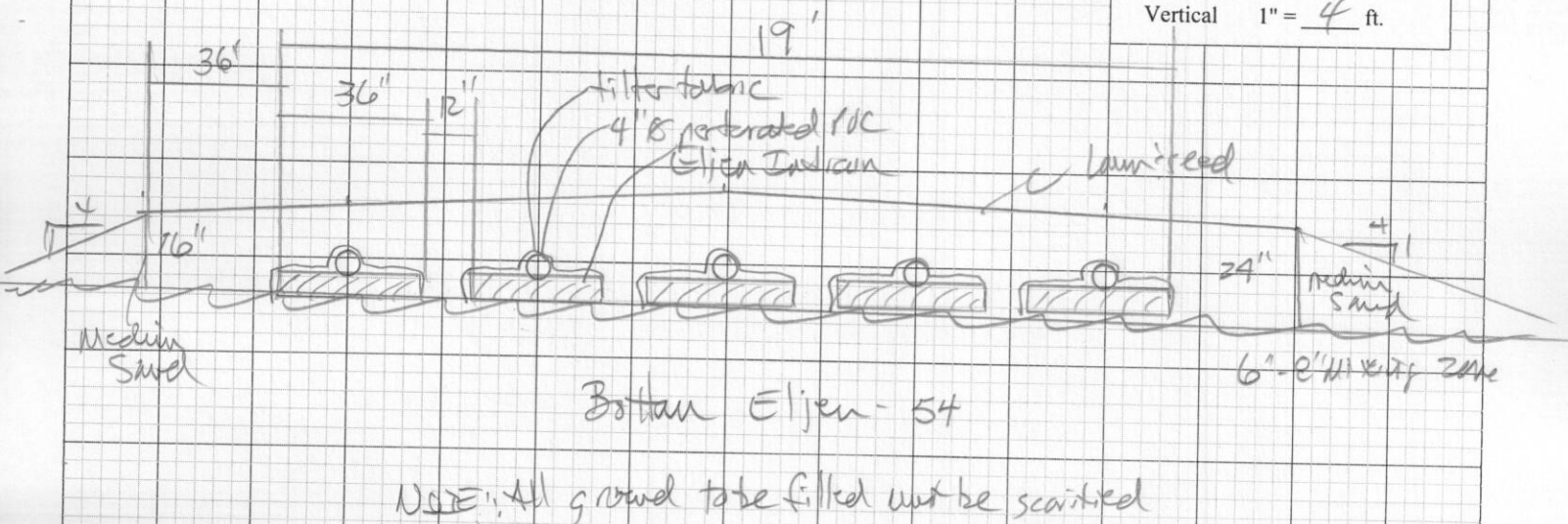
Location & Description: Nail 60" up  
10" 8" OAC  
Reference Elevation: 0'

### DISPOSAL AREA CROSS SECTION

Scale

Horizontal 1" = 4 ft.

Vertical 1" = 4 ft.



NOTE: All ground to be filled and be scarified

Mary. Thompson

243

8/18/18

Site Evaluator Signature

SE #

Date