MAY 0.6 2024

## TOWN OF WOODSTOCK INLAND WETLANDS AND WATERCOURSES AGENCY

TOWN OF WOODSTOCK LAND USE DEPT.

APPLICATION FOR PERMISSION TO CONDUCT A REGULATED ACTIVITY WITHIN AN INLAND WETLAND OR WATER COURSE AREA IN THE TOWN OF WOODSTOCK, CONNECTICUT.

(In accordance with the Woodstock Inland Wetlands and Watercourses Regulations, and the regulations of the Connecticut Department of Environmental Protection)

INSTRUCTIONS: All applicants must complete Section 1 of this application form for preliminary review. The Agency will then notify the applicant of any additional information that may be required and will schedule a public hearing, if necessary. In addition in its evaluation of this proposal.

NO PERMIT SHALL BE TRANSFERRED WITHOUT PERMISSION OF AGENCY. SECTION 1 (if not applicant) 1. Name of Applicant Lake Bunggee Tax District Name of Property Owner \_\_ P.O. Box 231 Address Woodstock, CT 06281 Telephone # (860) 634-3998 Telephone # Robert Billings (Roads Chair) 2. Attach a written consent to the proposed activity by the owner, if applicant is not the property owner. See attached 3. Street Location of the Property: \_ 72 Lake View Drive Specific directions: 220 ft. south of Bungay Hill Road on Lake View Drive Utility Pole Number if present: CL&P 1759 (Use an additional sheet, if necessary, to draw a sketch showing the property in relation to surrounding roads.) 4. Purpose and Description of Activity for which Authorization is Requested a. Proposed activity will involve the following: (Check appropriate activity): Alteration \_\_\_\_\_ Construction \_\_\_\_ Deposition or \_\_\_\_\_ Removal of material \_\_\_\_ \_ Waste Disposal b. Attach a general description of the proposal and indentification of each regulated activity for which permit is sought. Include nature, area and a volume of material to be placed, removed or transferred. Lineal measurements of affected watercourses or wetlands must also be given. See attached information. c. A detailed site plan of the proposal must be included. Full site plan and details attached. d. Purpose of the proposed activity (i.e., a new dwelling, addition to existing dwelling, new business, driveway, etc.): Drainage improvements. Attach a copy of soils map section and copy of U.S. Geological survey map section which contains the proposed activity if any watercourses are altered in any way.
 A USGS Location Map is shown on the plans and soils information is attached
 A USGS Location Map is shown on the plans and soils information is attached
 6. Names and Addresses of Adjacent Property Owners (attach separate sheet). See attached sheet. The undersigned applicant hereby consents to necessary and proper inspections of the above-mentioned property by Agents of the Inland Wetlands and Watercourses Agency, at reasonable times, both before and after the permit in question has been granted by the Agency. In evaluating this application, the Agency has relied on information provided by the applicant and, if such information subsequently proves to be false, deceptive, incomplete and/or inaccurate, this permit may be modified, suspended or revoked. The undersigned swears that the information supplied in the complete application is accurate to the best of his/her knowledge and belief. Signature of Applicant (Robert Billings, Roads Chair, LBTD) SECTION II TO BE FILLED IN BY AGENCY Date Filed \_ Application # \_\_ Fee: \_\_ Approved with the following conditions: All erosion controls required are to be inspected and approved by the Enforcement Officer prior to the start of the approved activity. Failure to arrange for the inspection and secure approval may VOID the permit. This approval covers only specific activities described in this application. Date Approved Chairperson Erosion controls inspected on \_ Date Bonding (if required) posted on \_ release date Date

Attachments to the Application Drainage Improvements Lake Bunggee Tax District 72 Lake View Drive Woodstock, CT

2. Written Consent of Adjacent Property Owners – Attached under separate cover for the following properties:

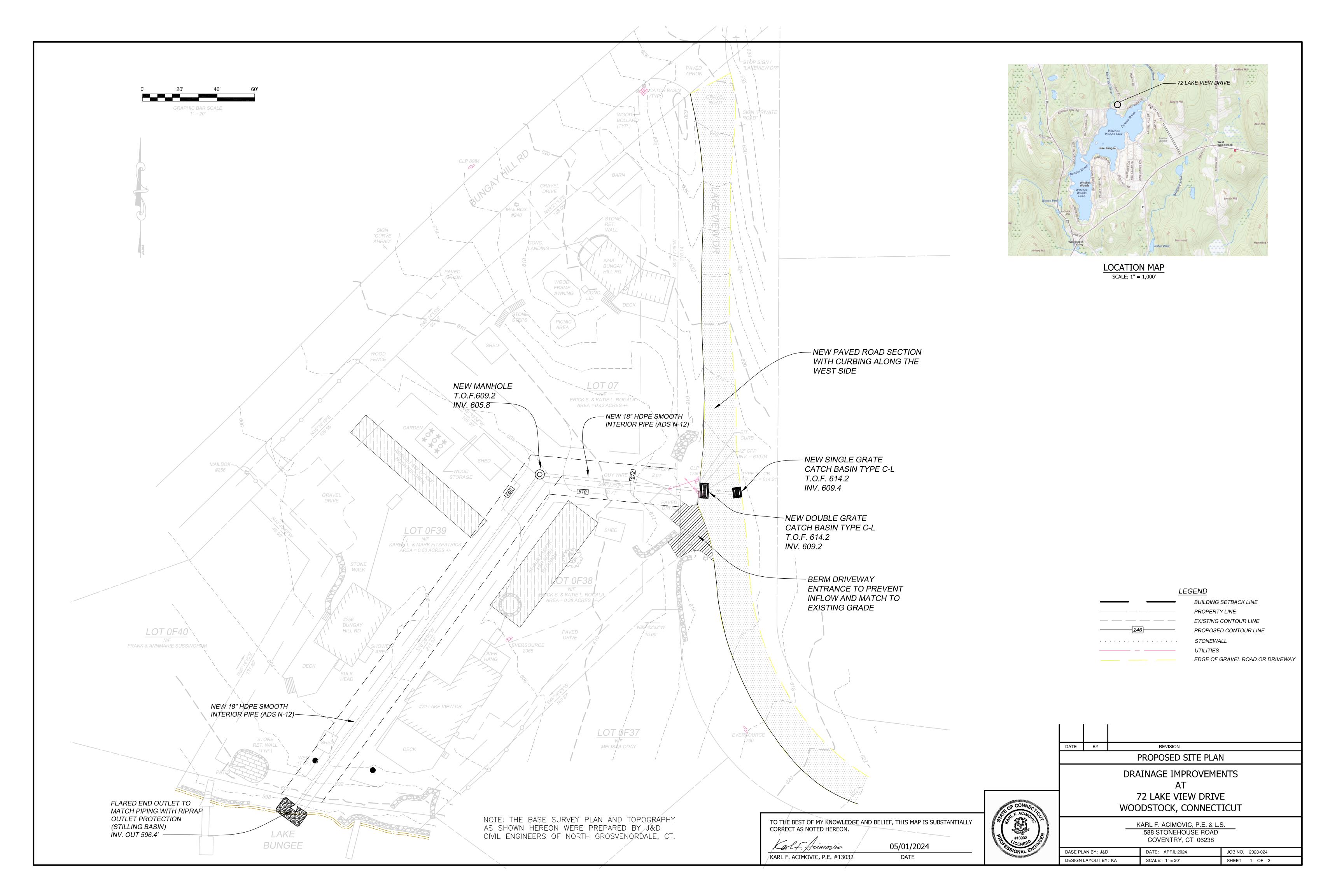
248 Bungay Hill Road Eric & Karie Rogala

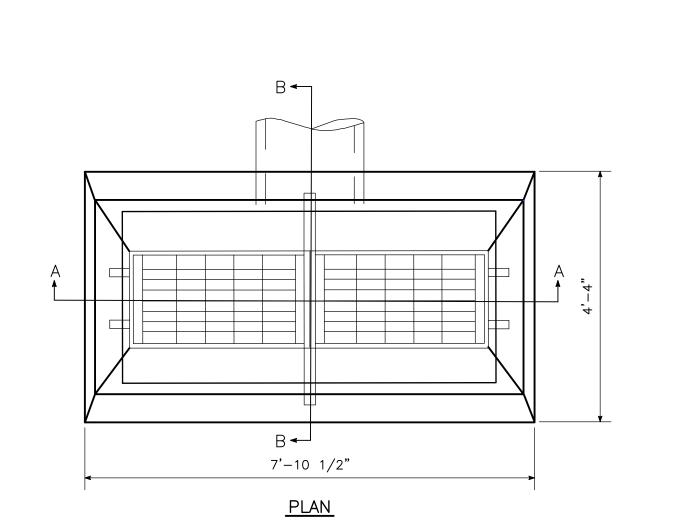
256 Bungay Hill Road Karen & Mark Fitzpatrick

72 Lake View Drive Eric & Karie Rogala

4.b The activity proposed includes the installation of new drainage facilities where none now exist. Flow from Lake View Drive is overland flow between houses with no formal drainage path and no wetlands along its route to the final discharge in Lake Bunggee. As such, new installations will include two catch basins, a manhole at a turning point and a flared end outlet at the shoreline of the Lake. Flow will be through a new HDPE (high density polyethylene) lined pipe (with smooth interior) for its entire distance. An existing non-functional catch basin at the low point of Lake View Drive will be removed prior to installation of new facilities. An engineering report accompanies the application with further explanations.

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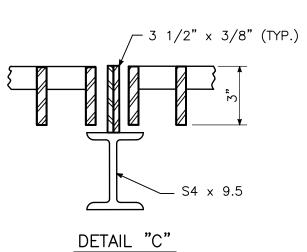
NOTES

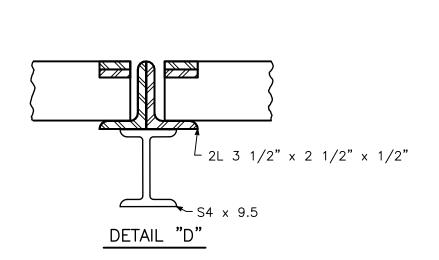
FOR DETAILS OF STEEL FRAME & GRATE SEE STANDARD SHEET NO. 507-K
TWO FRAMES & GRATES REQUIRED FOR EACH CATCH BASIN.

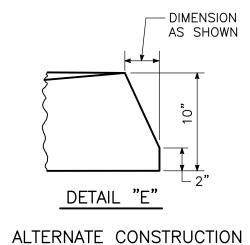
WALLS OF ALL CATCH BASINS OVER 10 FT. DEEP TO BE INCREASED TO 12"
THICKNESS, INSIDE DIMENSIONS TO REMAIN THE SAME.

ALL STEEL, EXCEPT REINFORCING BARS, SHALL BE GALVINIZED

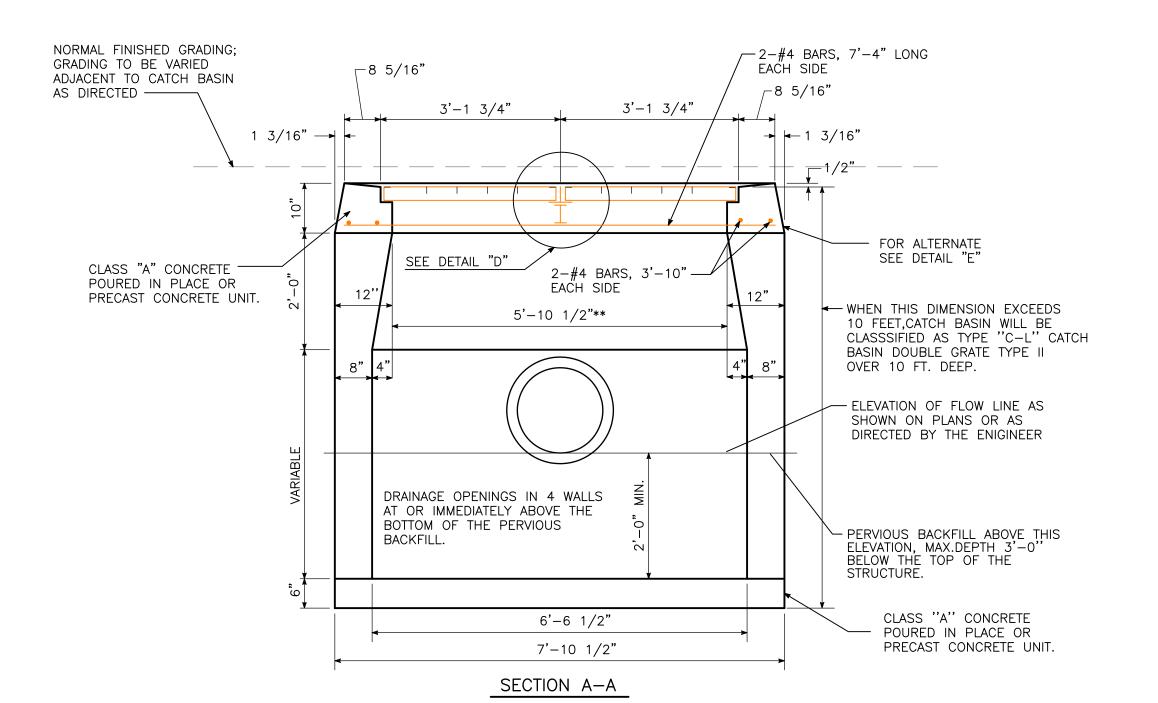
IN ACCORDANCE WITH M.06.03.
ALL BARS SHALL HAVE 2" COVER.

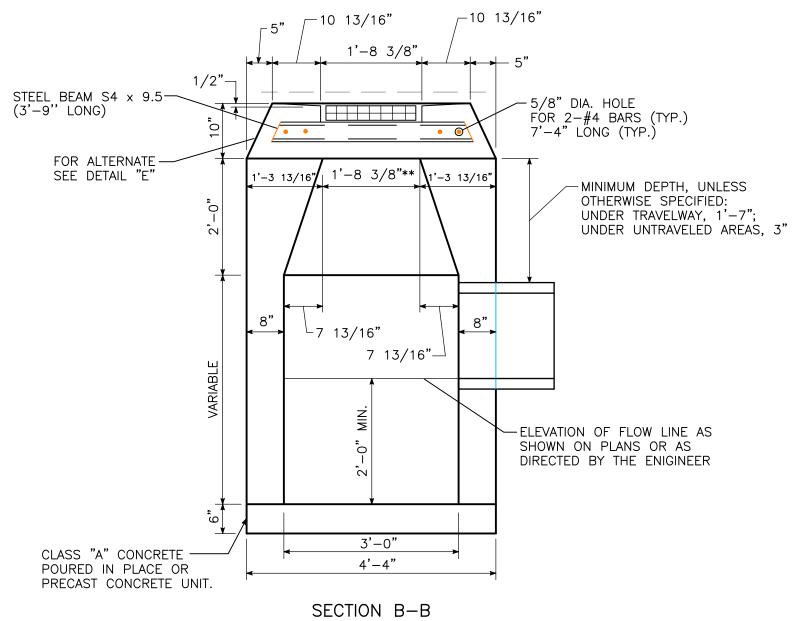




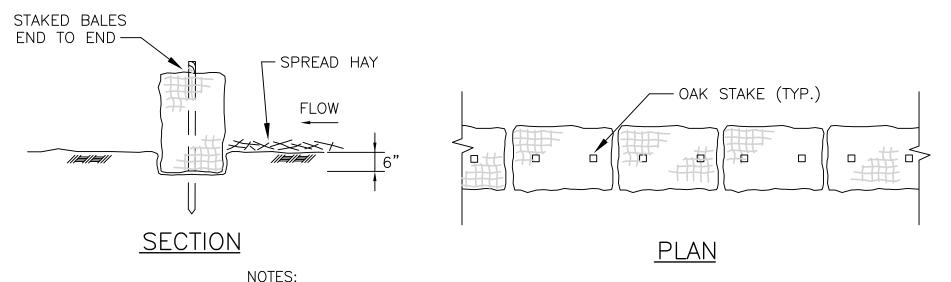


ALTERNATE CONSTRUCT
OF TYPE II TOP





TYPE "C-L" CATCH BASIN DOUBLE GRATE - TYPE II



1. HAYBALES TO BE PLACED PRIOR TO START OF WORK.

2. HAY BALES TO BE SECURED WITH MINIMUM TWO (2) 2" X 2" X 4' OAK STAKES PER BALE, DRIVEN 18" MINIMUM INTO GRADE.

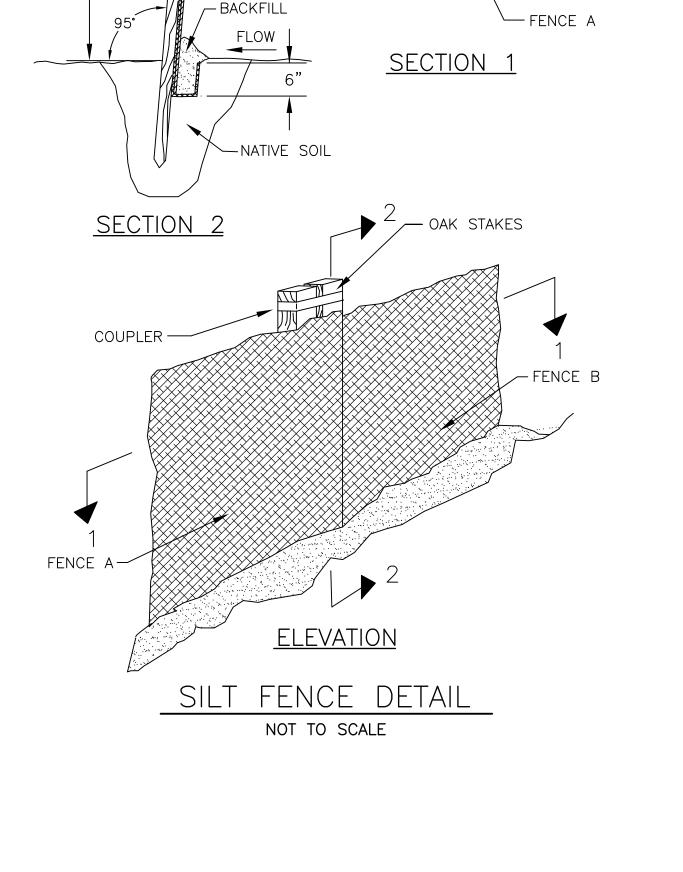
HAYBALE DETAIL

NOT TO SCALE

TO THE BEST OF MY KNOWLEDGE AND BELIEF, THIS MAP IS SUBSTANTIALLY CORRECT AS NOTED HEREON.

KARL F. ACIMOVIC, P.E. #13032

05/01/2024 2 DATE



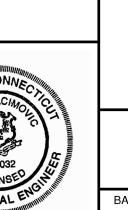
FENCE B-

ÒÁK STAKES

-FILTER FABRIC

(TYP.)

OAK STAKE —

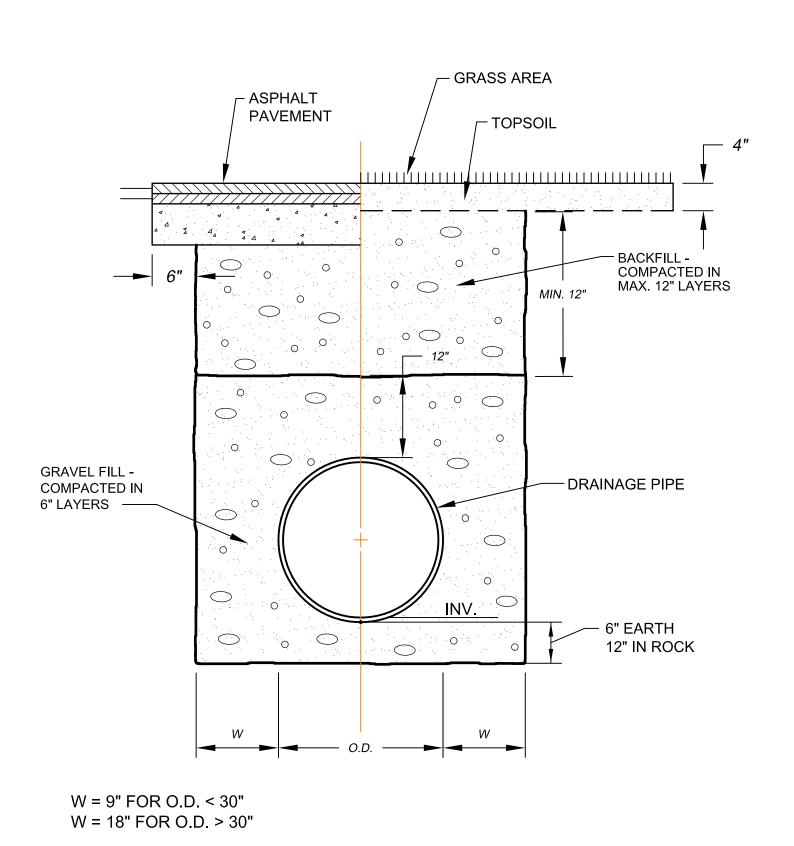




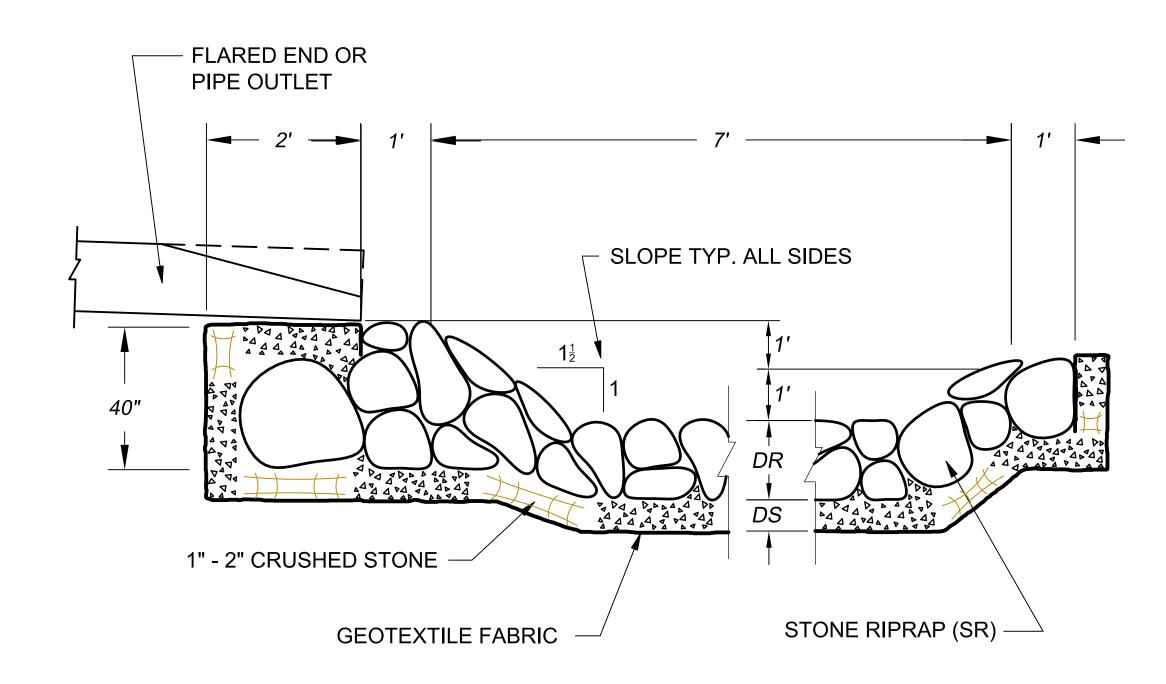
 COVENTRY, CT 06238

 BASE PLAN BY: AA
 DATE: APRIL 2024
 JOB NO. 2023-024

 DESIGN LAYOUT BY: KA
 SCALE: 1" = 20'
 SHEET 2 OF 3



## DRAINAGE PIPE TRENCH NOT TO SCALE

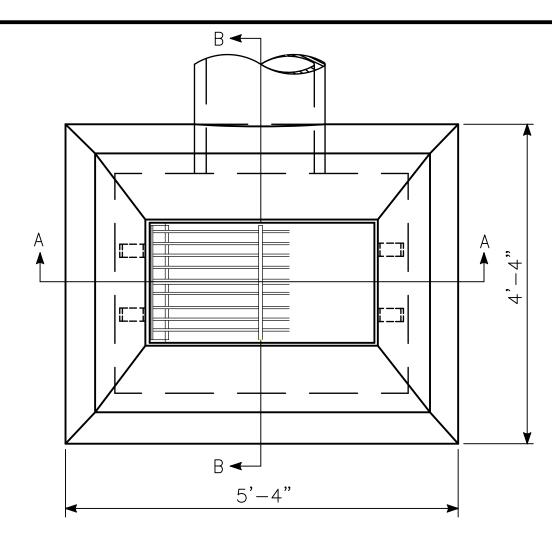


DEPTH OF RIPRAP = DR = 12"
DEPTH OF CRUSHED STONE = DS = 6"
STONE RIPRAP SIZE = SR = 8"-10"

FOR BASIN WIDTH SEE PLAN (MIN. WIDTH = PIPE O.D. + 5')

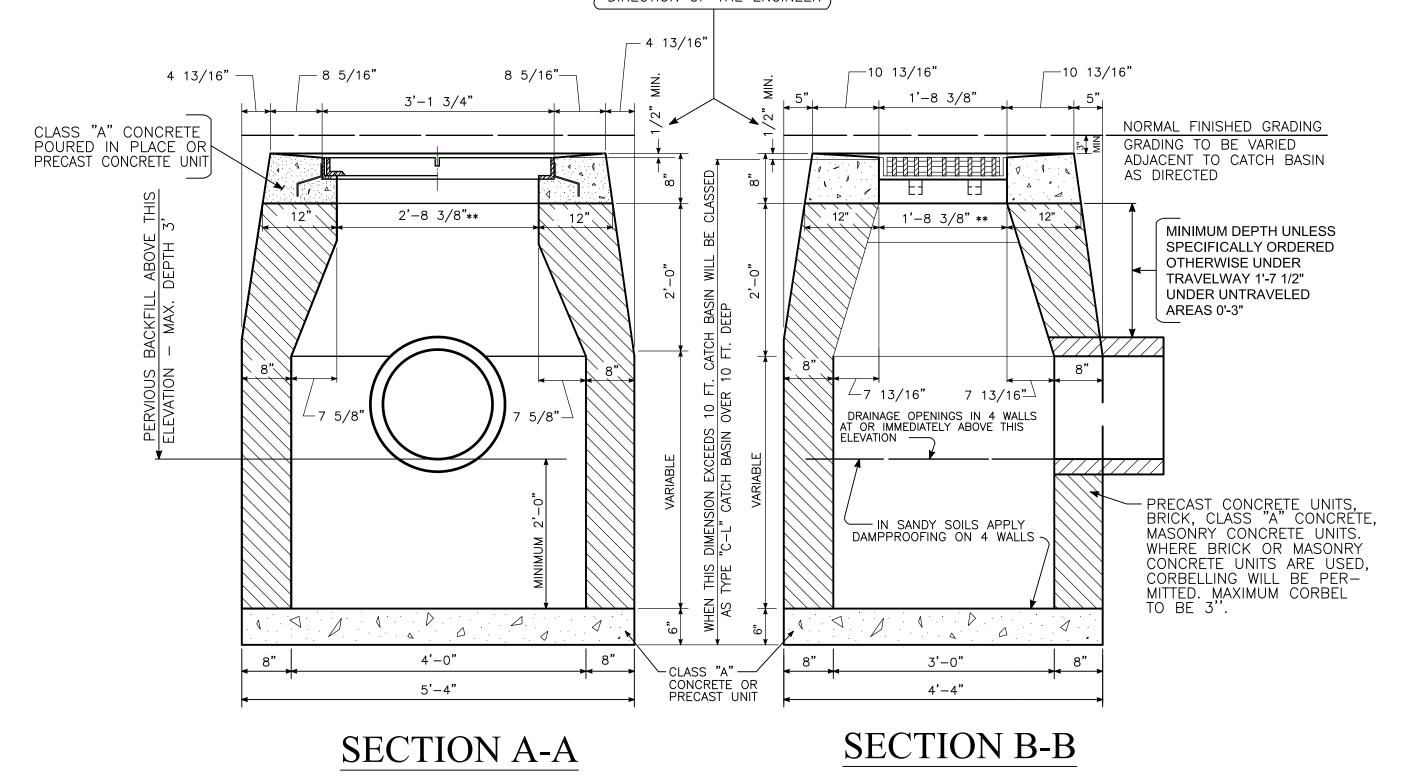
## RIPRAP STILLING BASIN

NOT TO SCALE



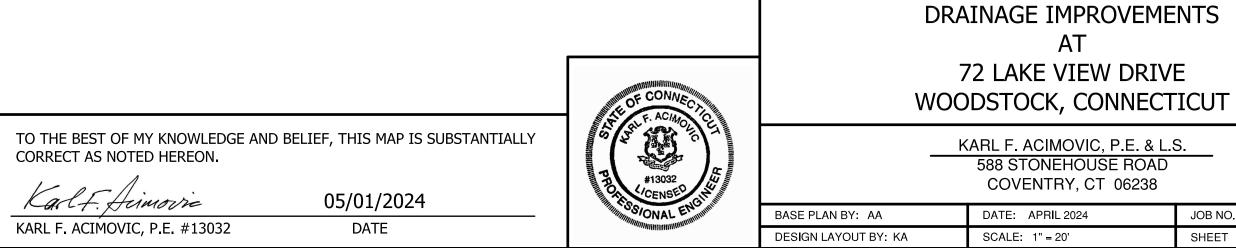
## **PLAN**

THIS DIMENSION MAY BE INCREASED TO 1 1/2" AT THE DIRECTION OF THE ENGINEER



## TYPE "C-L" CATCH BASIN

NOT TO SCALE



DATE

REVISION

SITE DETAILS

JOB NO. 2023-024

SHEET 3 OF 3

When Recorded Please Return to: Robert M. DeCrescenzo, Esq. Updike, Kelly & Spellacy, P.C. 225 Asylum Street, 20<sup>th</sup> Floor Hartford, CT 06103

### **TEMPORARY WORK EASEMENT**

This TEMPORARY EASEMENT ("Easement") dated as of the day of day o

WHEREAS, Grantor is the owner of the properties known as 256 Bungay Hill Road, 248 Bungay Hill Road and 72 Lakeview Drive in the Town of Woodstock, County of Windham, and State of Connecticut (collectively, the "Premises"), as more particularly described in Exhibit A attached hereto and made a part hereof.

WHEREAS, Grantee desires to enter upon and use a portion of the Premises for the purposes of installation, construction, and repair of a drainage structure on the Premises.

WHEREAS, Grantee has requested that Grantor enter into this Easement, and Grantor has agreed to enter into this Easement upon the terms and conditions hereinafter set forth.

NOW THEREFORE, in consideration of the sum of One Dollar (\$1.00) paid by Grantee, receipt and sufficiency of which is hereby acknowledged by Grantor, and in consideration of the mutual promises hereinafter made, the parties hereto hereby agree as follows:

- Easement. Grantor hereby gives, grants, bargains, sells and confirms unto Grantee, its agents, contractors, or representatives, a non-exclusive easement to enter upon and use the Premises for the sole purpose of installation, construction, and repair of a drainage structure on the Premises (collectively, the "Work"). Grantee shall use commercially reasonable efforts to minimize disturbances to the Grantor on the Premises. No ownership, leasehold, possessory, or other rights to the Premises shall vest in Grantee by virtue of this Easement, and Grantor hereby reserves all other rights not granted in this Easement.
- 2. <u>Term.</u> This Easement shall commence upon the date hereof and shall terminate automatically without any action by either party upon the later of (i) the date of the completion of the Work on the Premises in accordance with <u>Section 7</u> hereof, (ii) the date Grantor ceases to be the fee owner of the Premises or (iii) June 30, 2023.

- 3. <u>Prohibited Uses</u>. Grantee shall not perform any acts upon or within the Premises except as specifically authorized by this Easement.
- 4. Additional Requirements. Grantee shall perform and complete the Work in a good, workmanlike, expeditious and lien-free manner, and in accordance with all applicable laws and codes and the requirements of Grantor. Notwithstanding the foregoing, in the event that any lien shall be filed against the Premises, Grantee shall procure the full release or discharge of the lien within thirty (30) days either by payment or in such other manner as may be prescribed by law or bond over to the reasonable satisfaction of Grantor, and shall hold Grantor harmless from and indemnified against any loss or damage related to the lien. In the event Grantee fails to procure such release or discharge of any such lien within such thirty (30) day period, Grantor may procure such release or discharge of such lien, and Grantee shall reimburse Grantor the costs and expenses of such release or discharge within ten (10) days of Grantor's written request therefor. This provision shall survive the expiration or earlier termination of this Easement.
- 5. Insurance. Grantee and Grantee's agents, representatives and contractors performing the Work shall at all times maintain, at their sole cost and expense, (i) on an occurrence basis, commercial general liability insurance, with a combined limit of not less than \$5,000,000.00 for general liability, personal injury and property damage, (ii) worker's compensation insurance as required by all applicable laws, including employers' liability insurance, and (iii) business automobile liability insurance covering all owned, hired, and non-owned vehicles with a limit of not less than \$500,000 per occurrence, each insuring Grantee, Grantor, and any person or entity with access to the Premises pursuant to this Easement on behalf of Grantee, against any injuries or damages to persons or property that may result from or are related to such parties' respective entry upon the Premises pursuant to this Easement. All such policies shall name Grantor as additional insured, on a primary and non-contributory basis, and shall be issued by companies authorized to issue such policies in the State of Connecticut and shall be issued by an insurance company with an A.M. Best rating of no less than A-VIII. Prior to entering the Premises and beginning performance of the Work, Grantee shall provide evidence of such insurance which states that such policies of insurance cannot be cancelled or terminated without thirty (30) days advance written notice to Grantor.
- 6. <u>Indemnification</u>. Grantee covenants and agrees that it shall defend, indemnify, and hold harmless Grantor, its agents, representatives, and employees from and against any and all claims for loss or damages arising from Grantee's entrance onto the Premises, the performance of the Work and/or activities performed on the Premises by or on behalf of Grantee pursuant to this Easement. Anything in the foregoing to the contrary notwithstanding, nothing in this Easement shall be construed to relieve

Grantor from responsibility to Grantee for any loss or damage caused to Grantee wholly or in part by the grossly negligent acts of Grantor.

- 7. Restoration of Premises. Upon completion of the Work, Grantee shall promptly remove all equipment and materials from the Premises and Grantee shall restore the Premises, as nearly as reasonably possible, to the condition it was in prior to Grantee's entry and in all events in accordance with the requirements of Grantor set forth in Exhibit C and Exhibit D attached hereto and made a part hereof.
- 8. <u>Default</u>. In the event that Grantee breaches any provision of this Easement, and such breach continues for thirty (30) days after written notice thereof from Grantor, Grantor may, in addition to any other rights and remedies available at law or equity, terminate this Easement by written notice to Grantee.
- Notices. Any notice required to be given hereunder shall be given in writing and either (i) sent by United States registered or certified mail, with postage prepaid, return receipt requested in which case it shall be deemed to have been given forty-eight (48) hours following deposit with the United States Postal Service, (ii) sent by nationally recognized overnight courier in which case it will be deemed to have been given upon delivery, (iii) hand delivered in which case it will be deemed to have been given upon delivery, (iv) sent by e-mail in which case it will be deemed to have been given on the day the message was sent if sent prior to 6:00 PM eastern time on a business day and on the next business day if sent after 6:00 PM eastern time or not on a business day. All notices shall be addressed to the following address or at such other address as may hereafter be substituted by notice in writing thereof:

To Grantor: Karen L. Fitzpatrick and Mark Fitzpatrick 256 Bungay Hill Road, Woodstock Connecticut 06281

Eric S. Rogala and Katie L. Rogala 248 Bungay Hill Road, Woodstock, Connecticut 06281

To Grantee:
President
Lake Bunggee Tax District
P.O. Box 231
Woodstock, CT 06281

11. No Assignment. This Easement is granted solely to Grantee and shall not be assignable, in whole or in part, by Grantee for any reason whatsoever.

- 12. <u>Amendment</u>. This Easement may not be amended, altered, modified, or extended except by a written instrument signed by Grantee and Grantor.
- Governing Law. This Easement shall be governed by and construed in accordance with the laws of the State of Connecticut.
- 14. <u>Severability</u>. If any provision of this Easement shall to any extent be held invalid or unenforceable, the remaining provisions of this Easement shall not be affected thereby.
- 15. <u>Counterparts</u>. This Easement may be executed in counterparts, all of which together shall constitute one agreement binding Grantor and Grantee, notwithstanding that Grantor and Grantee are not signatories to the original or the same counterpart.

[Signature page follows]

## **EXHIBIT A**

[NTD: INSERT LEGAL DESCRIPTION]

#### SCHEDULE A

A certain piece or parcel of land with the buildings thereon situated in the Town of Woodstock, County of Windham and State of Connecticut, known and designated as Lot NO. 39F on a map or plan of lots entitled "Lake Bungee Development Section "F" Owned by Campert Enterprises, Inc. Revisions of Lots 1F & 2F Woodstock, Conn. Scale – 1" = 40', February 1967 Certified Substantially Correct Geo. M. Sheaffer Jr. Conn. Reg. No. 5183", which map or plan of lots is on file in the Town Clerk's Office of said Town of Woodstock, reference to which may be had. Said Lot No. 39F is more particularly bounded and described as follows:

NORTHERLY: by land now or formerly of Herman A. Keach, 105 feet;

EASTERLY: by Lot No. 38F, as shown on said map, 215.97 feet, more or less;

SOUTHERLY: by the high water mark of Lake Bunggee, 64 feet, more or less;

WESTERLY: by Lot No. 40F, as shown on said map, 133.40 feet, more or less;

SOUTHERLY: by Lot No. 40F, as shown on said map, 45 feet; and

WESTERLY: by Bunggee Hill Road, 109.96 feet.

Together with a right of way over all roads as shown on said map.

Being the same premises as conveyed by a Warranty Deed dated 6/10/04 and recorded 6/14/04 in Volume 405, Page 471 of the Woodstock Land Records.

### SCHEDULE A

A certain tract or parcel of land with all buildings thereon standing located on the westerly side of Lakeview Drive in the Lake Bunggee section of the Town of Woodstock, County of Windham and State of Connecticut, known as 72 Lakeview Drive, known and designated as Lot No. 38F on a map or plan of lots entitled, "Lake Bunggee Development Section 'F' Owned by Campert Enterprises, Inc. Revisions of Lots 1F & 2F Woodstock, Conn. Scale – 1" = 40', February, 1967 Certified Substantially Correct Geo. M. Sheaffer Jr. Conn. Reg. No. 5183", which map or plan of lots is on file in the Town Clerk's Office of said Town of Woodstock, reference to which may be had. Said Lot No. 38F is more particularly bounded and described as follows:

NORTHERLY by land now or formerly of Herman A. Keech and by land of

Campert Enterprises, Inc. partly on each, in all 72.72 feet:

EASTERLY

by Lake View Drive, 61.10 feet;

SOUTHERLY

by Lot No. 37F, as shown on said map, 15 feet;

SOUTHEASTERLY by Lot No. 37F, as shown on said map, 163.87 feet, more or less;

SOUTHWESTERLY by the high water mark of Lake Bunggee, 70 feet, more or less; and

NORTHWESTERLY by Lot No. 39F, as shown on said map, 215.97 feet, more or less.

Together with a right of way over all roads as shown on said map.

Said premises are subject to any and all provisions of any ordinance, municipal regulation, or public or private law. Said premises are further subject to restrictions as of record appear, and the following additional restrictions:

No structure shall be erected until Campert Enterprises, Inc., shall have approved the design of said structure, materials to be used in constructing the same and plot plan showing the set-back line, side lines and rear line.

Said premises are also subject to a permanent easement in favor of the Connecticut Light & Power Company dated April 10, 1959, and recorded in Woodstock Land Records, Vol. 56, Page 243.

Being the same premises conveyed to Corner Properties, Inc. by Committee Deed of Mark R. Brouillard dated October 9, 1997, and recorded in Woodstock Land Records, Vol. 281, Page 254.

Also being the same premises conveyed to Eric S. Rogala by Warranty Deed of Corner Properties, Inc. dated August 27, 1998, and recorded in Woodstock Land Records, Vol. 290, Page 280.

After recording, return to:

Eric S. Rogala & Katie L. Rogala

72 Lakeview Drive Woodstock, CT 06281

StateTax \$393.75

WCODSTOCK VOL 602 PG 20 11/16/2015 10:46:38 AM 2 Pages FIDUCIARY DEED Judy E. Walberg, Town Clerk

Statutory Form

#### FIDUCIARY'S DEED

GALE G. NESTOR, of the Town of West Hartford, County of Hartford and State of Connecticut, herein, the Grantor, acting herein by LINDA FELDMAN, ESQ., CONSERVATRIX FOR GALE G. NESTOR, Conservator of the Person and the Estate, for consideration paid in the amount of Fifty Two Thousand, Five Hundred Dollars (\$52,500.00) grants to ERIC S. ROGALA and KATIE L. ROGALA of the Town of Woodstock, County of Windham, and State of Connecticut, (herein, the Grantees) WITH WARRANTY COVENANTS, the following piece of property; /AS JOINT TENANTS WITH RIGHTS OF SURVIVORSHIP.

A certain tract or parcel of land with all buildings thereon standing, situated in the Town of Woodstock, County of Windham and State of Connecticut, known as 248 Bungay Hill Road, being the same premises conveyed by Campert Enterprises, Inc. to Herman A. Keech and Myrtle L. Keech by Warranty Deed dated October 19, 1966, and recorded in Woodstock Land Records, Vol. 61, Page 635, therein bounded and described as follows:

Beginning at an iron pin on the easterly line of Bunggee Hill Road, which iron pin is at Northerly corner of the premises herein described, being the Northernmost corner of the premises acquired by Elizabeth A. Rice from Walter Mylimas and which point is at the Northwesterly corner of the premises acquired by said Elizabeth A. Rice from one Laura Monahan.

Thence from said point of beginning S. 29° 01' 05" W., 148.00 feet along the Easterly line of Bunggee Hill Road to an iron pin; thence continuing S. 24° 54' 07" W. 55.18 feet along the Easterly line of Bunggee Hill Road to an iron pin; thence S. 70° 00' 00" E. 105.00 feet along other land of the Elizabeth A. Rice to an iron pin; thence N. 75° 16' 30" E. 70.71 feet along other land of the Elizabeth A. Rice to an iron pin; thence N. 20° 02' 40" W. 210.14 feet along other land of Elizabeth A. Rice, formerly land of Laura Monahan, to the point and place of beginning.

Said premises are conveyed subject to a Declaration of Restrictions and Covenants dated March 25, 1966, and recorded in Vol. 61, Page 312, of the Woodstock Land Records.

Said premises are also subject to any and all provisions of any ordinance, municipal regulation, or public or private law.

Reference is made to a Tax Certificate for Lane Records from Myrtle L. Keech to Herman A. Keech dated February 6, 1979, and recorded in Woodstock Land Records, Vol. 98, Page 96.

Being the same premises conveyed to the grantor herein by Warranty Deed of Martin L. and Virginia D. Boucher, dated December 31, 1984 and recorded in Vol. 136, at Page 110 of the Woodstock Land Records.

Also being the same premises conveyed to Gale G. Biller by Warranty Deed of William P. Sacramone dated December 30, 1986, and recorded in Woodstock Land Records, Vol. 161, Pages 147-148

To Have and to Hold the same to the said Grantees, forever to them and their proper use and behoof. And the said Granter, for herself, her heirs, executors, and administrators, covenant and agree with the said Grantees to warrant and defend the said property to the said Grantees, against all claims and demands, except as hereinbefore mentioned.

Said premises are conveyed subject to Taxes on the List of October 1, 2014 to the Town of Woodstock, which Taxes the Grantees herein assume and agree to pay as part consideration for this deed.

Signed this 12th day of November, 2015.

Witnessed by

Kristin M. Made

GALE G. NESTOR, BY LINDA FELDMAN,

Conservator of the Estate of Gale Nestor

STATE OF CONNECTICUT)

) ss: Woodstock

November 12, 2015

COUNTY OF WINDHAM

On this the 12<sup>th</sup> day of November, 2015 before me Francine Davis Early the undersigned officer, personally appeared LINDA FELDMAN, acting as Conservator of the Estate and Person of GALE G. NESTOR, known to be (or satisfactorily proven) to be the person whose name is subscribed to the within instrument and acknowledged that she executed the same for the purposes therein contained.

In witness whereof I hereunto set my hand.

Commissioner of the Superior Court

## [Signature Page 1 of 5 to Temporary Work Easement]

IN WITNESS WHEREOF, Grantor and Grantee have executed this Easement as of the day and year first above written.

Signed, Sealed and Delivered in the presence of:

**GRANTOR:** 

ARÊN L. FITZPATRICI

STATE OF CONNECTICUT

ss: Cooxdstock

country of Windham

On this Aday of June, 2023, before me, the undersigned officer, personally appeared Karen L. Fitzpatrick, known to me to be the person whose name is subscribed to the within instrument and acknowledged that he executed the same for the purpose therein contained.

IN WITNESS WHEREOF, I hereunto set my hand and official seal.

Name

Commissioner of the Superior Court/

Notary Public

My Commission Expires 10/31

CHRISTINE G. FRENCH

MY COMMISSION EXPIRES 10/31/202

## [Signature Page 2 of 5 to Temporary Work Easement]

Signed, Sealed and Delivered in the presence of:

GRANTOR:

county of Windham) ss: (coolstock

On this 26 day of June, 2023, before me, the undersigned officer, personally appeared Mark Fitzpatrick, known to me to be the person whose name is subscribed to the within instrument and acknowledged that he executed the same for the purpose therein contained.

IN WITNESS WHEREOF, I hereunto set my hand and official seal.

Commissioner of the Superior Court/

Notary Public

My Commission Expires

3989045

## [Signature Page 4 of 5 to Temporary Work Easement]

Signed, Sealed and Delivered in the presence of:

GRANTOR:

Luch Alla

Witness/

Plourde

STATE OF CONNECTICUT

COUNTY OF

Ss: Woodstock

On this day of July 2023, before me, the undersigned officer, personally appeared Katie L. Rogala, known to me to be the person whose name is subscribed to the within instrument and acknowledged that he executed the same for the purpose therein contained.

IN WITNESS WHEREOF, I hereunto set my hand and official seal.

Commissioner of the Superior Court/

Notary Public

My Commission Expires

KAREN L. FITZPATRICK
Notary Public, State of Connecticut
My Commission Expires June 30, 2024

## [Signature Page 3 of 5 to Temporary Work Easement]

Signed, Sealed and Delivered in the presence of:

GRANTOR: STATE OF CONNECTICUT ) ss: Woodstock COUNTY OF On this day of July, 2023, before me, the undersigned officer, personally appeared Eric S. Rogala, known to me to be the person whose name is subscribed to the within instrument and acknowledged that he executed the same for the purpose therein contained.

IN WITNESS WHEREOF, I hereunto set my hand and official seal.

Commissioner of the Superior Court/

Notary Public

KAREN L. FITZPATRICK My Commission Expires Notary Public, State of Connecticut

My Commission Expires June 30, 2024

## [Signature Page 5 of 5 to Temporary Work Easement]

Signed and Delivered In the Presence of:	GRANTEE:				
Witness:	LAKE BUNGGEE FLOOD CONTROL AND EROSION AND TAX DISTRICT, a Connecticut Tax District				
Witness:	By: Title: Duly Authorized				
STATE OF CONNECTICUT ) COUNTY OF ) ss.					
FLOOD CONTROL AND EROSION All that they, as such	refore me, the undersigned officer, personally appeared redged themselves to be the LAKE BUNGGEE ND TAX DISTRICT, a Connecticut Tax District, and being authorized so to do, executed the foregoing d, by signing the name of the tax district by themselves				
IN WITNESS WHEREOF, I hereunto set n	ny hand and official seal.				
Name: Commissioner of the Superior Court/ Notary Public My Commission Expires					

## ENGINEERING REPORT DRAINAGE IMPROVEMENTS 72 LAKE VIEW DRIVE / WOODSTOCK, CONNECTICUT

The area analyzed for this project includes drainage issues of runoff from a gravel road and through three lot areas in the vicinity of 72 Lake View Drive at the north end of Lake Bunggee. Due to the lack of directed drainage to the lake, sediment laden runoff has entered the lake and caused excess water flow through these lots, erosion and deposition of sediment into the lake and along its overland route to the water's edge. The improvements shown on the plans are intended to alleviate these problems with the installation of catch basins, a manhole and a directed discharge to a settling basin just prior to shoreline of Lake Bunggee. Associated work includes the installation of pavement from the edge of Bungay Hill Road to a high point on Lake View Drive approximately 400 feet south of the intersection of the two roads.

The watershed contributing flow to the drainage improvement area encompasses 2.03 acres of undeveloped land, including portions of Lake View Drive and land to its east which includes both wooded and open field areas. Drainage from Bungay Hill Road does not enter onto Lake View Drive, but passes by the intersection and enters Lake Bunggee farther to the west. Slopes in the vicinity of the new drainage improvements (i.e., along the east side) range generally from 8% to 15%, and soils are primarily in the NRCS Hydrologic Soil Group "C" with slow infiltration rates (see attached soil reports).

The following data were developed using various sources of information, including the DEEP and UConn GIS databases, precipitation data from the National Oceanic and Atmospheric Administration (NOAA) and the Northeast Regional Climate Center at Cornell University, and the Hydrology Studio software program. The watershed and drainage improvements were analyzed for various storm events, and for the 100-year event in particular. The drainage improvements include the installation of 18-inch drainage piping, two catch basins along Lake View Drive, a manhole at an angle point along its drainage pipe route and a final discharge to a riprap stilling basin at the discharge point along the shoreline of the lake.

Available data and calculations resulted in the following numbers:

Drainage Area:

2.03 Ac.

NRCS Runoff Curve No. (RCN):

70

100-Year Flow:

12 cfs

Full Pipe Flow Capacity:

23 cfs

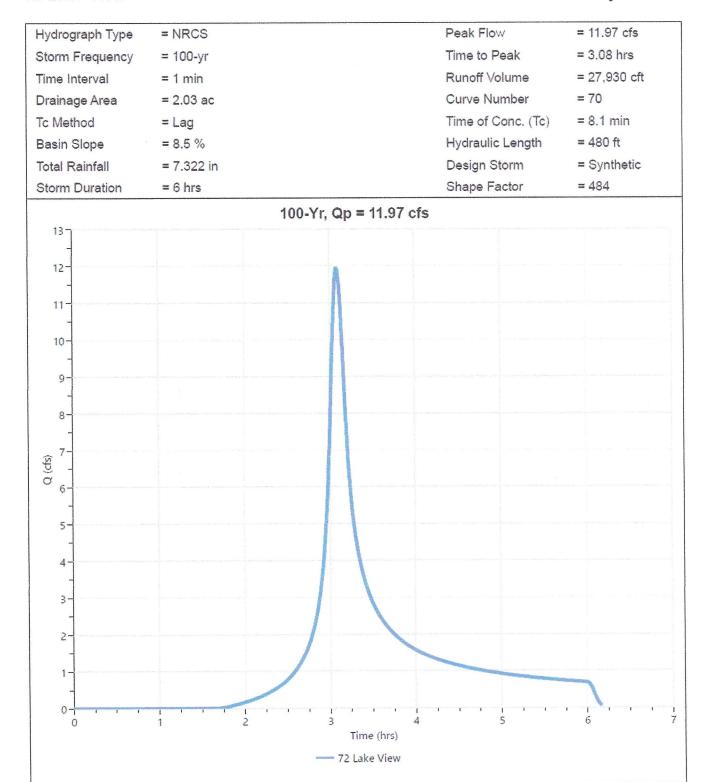
## Hydrograph Report

Studio Express by Hydrology Studio v 1.0.0.15

02-20-2024

### 72 Lake View

## Hyd. No. 1





WATERSHED MAP



## MAP LEGEND

Spoil Area	Stony Spot	Very Stony Spot	Wet Spot			Special Line Features	-
(Autor)		(3	Ť.	F 1		8	1
Area of Interest (AOI)	Area of Interest (AOI)		Soil Map Unit Polygons	Soil Map Unit Lines	Soil Map Unit Points		Special Point Features
Area of In		Soils		1			Specia

## Nater Features



Streams and Canals



Interstate Highways

Rails

+

Transportation





Major Roads Local Roads

US Routes







Aerial Photography

Background





Rock Outcrop

Saline Spot Sandy Spot Severely Eroded Spot Sinkhole

Sodic Spot

Slide or Slip

# MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:12,000.

Warning: Soil Map may not be valid at this scale.

contrasting soils that could have been shown at a more detailed misunderstanding of the detail of mapping and accuracy of soil Enlargement of maps beyond the scale of mapping can cause line placement. The maps do not show the small areas of

Please rely on the bar scale on each map sheet for map measurements. Source of Map: Natural Resources Conservation Service Web Soil Survey URL:

Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator distance and area. A projection that preserves area, such as the projection, which preserves direction and shape but distorts Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required. This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

State of Connecticut, Eastern Part Version 1, Sep 15, 2023 Survey Area Data: Soil Survey Area:

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger. Date(s) aerial images were photographed: Jun 14, 2022—Oct 6,

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

## **Map Unit Legend**

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
84B	Paxton and Montauk fine sandy loams, 3 to 8 percent slopes	1.6	68.3%
84C	Paxton and Montauk fine sandy loams, 8 to 15 percent slopes	0.7	31.7%
Totals for Area of Interest		2.3	100.0%



MAP LEGEND

O	C/D	D	Not rated or not available	afures	Streams and Canals	;	rtation	Rails	Interstate Highways	US Routes	Major Roads	Local Roads	
<b>XX</b>		34		Water Features			Transportation	**	3	3			
Area of Interest (AOI)	Area of Interest (AOI)	Soils	Soil Rating Polygons	A/D		8	approximation of the contract	B/D	0	C/D	0	Not rated or not available	

Aerial Photography Background

Soil Rating Lines

×

1

AVD

8

B/D C/D Not rated or not available

Soil Rating Points

AD A 10 B/D 

## MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:12,000

Warning: Soil Map may not be valid at this scale.

contrasting soils that could have been shown at a more detailed misunderstanding of the detail of mapping and accuracy of soil Enlargement of maps beyond the scale of mapping can cause line placement. The maps do not show the small areas of

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measurements.

Source of Map: Natural Resources Conservation Service Web Soil Survey URL:

Coordinate System: Web Mercator (EPSG:3857)

distance and area. A projection that preserves area, such as the Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required. This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

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The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

## **Hydrologic Soil Group**

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
84B	Paxton and Montauk fine sandy loams, 3 to 8 percent slopes	С	1.6	68.3%
84C	Paxton and Montauk fine sandy loams, 8 to 15 percent slopes	С	0.7	31.7%
Totals for Area of Inte			2.3	100.0

## Description

Hydrologic soil groups are based on estimates of runoff potential. Soils are assigned to one of four groups according to the rate of water infiltration when the soils are not protected by vegetation, are thoroughly wet, and receive precipitation from long-duration storms.

The soils in the United States are assigned to four groups (A, B, C, and D) and three dual classes (A/D, B/D, and C/D). The groups are defined as follows:

Group A. Soils having a high infiltration rate (low runoff potential) when thoroughly wet. These consist mainly of deep, well drained to excessively drained sands or gravelly sands. These soils have a high rate of water transmission.

Group B. Soils having a moderate infiltration rate when thoroughly wet. These consist chiefly of moderately deep or deep, moderately well drained or well drained soils that have moderately fine texture to moderately coarse texture. These soils have a moderate rate of water transmission.

Group C. Soils having a slow infiltration rate when thoroughly wet. These consist chiefly of soils having a layer that impedes the downward movement of water or soils of moderately fine texture or fine texture. These soils have a slow rate of water transmission.

Group D. Soils having a very slow infiltration rate (high runoff potential) when thoroughly wet. These consist chiefly of clays that have a high shrink-swell potential, soils that have a high water table, soils that have a claypan or clay layer at or near the surface, and soils that are shallow over nearly impervious material. These soils have a very slow rate of water transmission.

If a soil is assigned to a dual hydrologic group (A/D, B/D, or C/D), the first letter is for drained areas and the second is for undrained areas. Only the soils that in their natural condition are in group D are assigned to dual classes.

## **Rating Options**

Aggregation Method: Dominant Condition Component Percent Cutoff: None Specified

Tie-break Rule: Higher