ROBERT LAGA Chairman

# TOWN OF CARMEL ENVIRONMENTAL CONSERVATION BOARD

ANTHONY DUSOVIC Vice-Chair

ROSE TROMBETTA Secretary

DAVID KLOTZLE Wetland Inspector

CARMET AL

60 McAlpin Avenue Mahopac, New York 10541 Tel. (845) 628-1500 - Ext. 190 www.ci.carmel.ny.us

#### **BOARD MEMBERS**

Edward Barnett Marc Pekowsky Vincent Turano Nicholas Fannin John Starace

# **ENVIRONMENTAL CONSERVATION BOARD AGENDA**

# DECEMBER 3, 2015 - 7:30 P.M.

# ELIGIBLE FOR A PERMIT

APPLICANT	ADDRESS	TAX MAP #	COMMENTS
Richard Dudyshyn     Construction	31 Tamarack Road	75.8-2-14	Remove and Construct New Deck & Redo Sidewalk
2. Frenkel, Robert	43 Tamarack Road	75.8-2-20	Replace & Expand Existing Boathouse
3. Basli, Joseph	859 South Lake Blvd	75.44-1-21	Construct Retaining Wall and Deck

# SUBMISSION OF AN APPLICATION OR LETTER OR PERMISSION

4. Mahopac Point Owners Assoc. 41 & 43	Tamarack Rd 75.8-2-19 & 20	Drainage System Repair
--	----------------------------	------------------------

# **ESCROW RETURN**

5. Morales, Ignacio	32 Sycamore Road	76.5-1-34	Construct Addition	

# PUBLIC HEARING

<ol><li>Wagner Millwork LLC - Corbelli</li></ol>	150 Barrett Hill Rd	53.18-1-28	Tree Cutting Permit
Corbelli			

# **MISCELLANEOUS**

7. Minutes - 09/03/15, 09/17/15, 10/01/15 & 10/15/15



Carmel, New York 10512

Fax: (845) 225-9717

# LETTER OF TRANSMITTAL

TO:	Rose Tr	ombetta, Se	ecretar	У		Date:	11-23-20	15	Job No.	14186.100	
-		Carmel				Attn:	Rose Tro			14100.100	
-	Environi	mental Cons	servati	on Board		Re:				Association	-
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-		c NY, 1054				-	- rumkin d	× Frei	nkei Drair	nage Repair	_
-	· ·										
WE AR	E SENDI	NG YOU	⊠ Enc	losed	Under separ	ate cover via	_		t	the following items	
	Shop Di Copy of	•		Prints Change Or		Plans	☐ Sai	mples		Specifications	
COPIES	S	DATE		NO.			DESCRI	PTION	V		$\neg$
4		11-17-15			Application Fo	r Letter of Per	mission				
4		11-23-15			Short EAF						
1		11-18-15		8427	\$100.00 Applic	cation Fee					
	approval	NSMITTED	□ A		s submitted	☐ Resubmit				oies for approval	
☐ As re	equested		□R	eturned fo	or corrections	Return				rected prints	
Forr	eview and	I comment								pilito	
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СОРҮ Т	O: MC	DPA, c/o And	reas Kı	uhbier		SIGNED	Joh	nr/M. V	Watson P.E.	W.t.	

IF ENCLOSURES ARE NOT AS NOTED, KINDLY NOTIFY US AT ONCE



October 22, 2015

Town of Carmel Environmental Conservation Board Carmel Town Hall 60 McAlpin Avenue Mahopac, New York 10541

RE: Mahopac Point Owner's Association Frumkin / Frenkel Drainage Repair Town of Carmel, New York Tax Map #'s. 75.8-2-19 & 20

Dear Chairman Laga and Members of the Board:

As a follow up to our initial letter regarding the drainage system repair at #41 and #43 Tamarack Road in the Mahopac Point Owners Association (MPOA), a meeting with the Town Engineer took place onsite on Tuesday October 13, 2015. It was agreed that the subject project, as depicted on the previously submitted plans, is a repair of the terminal portion of the existing drainage system. The repair of this portion of the existing drainage system falls under Section 89–4,C,(5) of the Town Code, "Ordinary Maintenance and repair of existing structures or improved areas" and therefore does not require a permit or letter of permission.

For clarification, and as discussed with the Town Engineer, this project contains less than the 5,000 square foot disturbance threshold necessary for coverage under the General Permit for Construction Activities GP-0-15-002. A submission to the NYSDEC was made in September for a General Wetland Permit for the proposed drainage repair. The NYSDEC responded with a determination that a permit from their department is not required, as the work is considered a repair / maintenance. Attached herewith please find the recent Notice of No Jurisdiction issued by the NYSDEC for the subject project.

The enclosed project plans have been revised to provide additional clarity of the overall scope of the subject project based on the site meeting. It should be noted that there is no change in ground cover proposed with this repair. The installation of the proposed planter boxes to cover the pipe are located in existing areas of minimal vegetation and will provide an overall stormwater benefit to the Lake. Appropriate erosion and sediment control measures will be installed per the details as shown on the plans to protect Lake Mahopac over the duration of the work. As previously stated the repair is expected to take place later this fall over an approximate two (2) week duration.

It should be noted that the MPOA will be undertaking a number of similar repairs around the point in the coming years. An initial assessment of proposed repairs around the point was recently completed by our office. Prior to the completion of the master plan, additional onsite investigation of both the existing collection systems and roadways is scheduled for later this fall. The additional investigation work is needed to prioritize the drainage and roadway repairs for the MPOA for planning purposes moving forward. Upon completion the master plan, our office will schedule a meeting with the Town Engineer to review all of the forthcoming projects around the point, including and assessment of the necessary Federal and Local permits for all projects, including the preparation of a SWPPP to encompass all of the proposed repairs.

If you have any questions or comments regarding this information, please do not hesitate to contact our office.

Very truly yours,

INSITE ENGINEERING, SURVEYING & LANDSCAPE ARCHITECTURE, P.C.

By:

John M. Watson, P.E. Principal Engineer

JMW/zmp

CC:

Andreas Kuhbier, Mahopac Point Owners Association Richard J. Franzetti, P.E. Town of Carmel Engineer

Insite File No. 14186.100

# NEW YORK STATE DEPAR .... ENT OF ENVIRONMENTAL CONSL. JATION

Division of Environmental Permits, Region 3 21 South Putt Corners Road, New Paltz, NY 12561-1620 P: (845) 256-3054 | F: (845) 255-4659 www.dec.ny.gov

October 15, 2015

Andreas Kuhbier Mahopac Point Owners Association P.O. Box 411 Mahopac, New York 10541

RE: Frumkin/Frenkel Drainage Repair Project
DEC ID #: 3-3720-00441/00001
Town of Carmel, Putnam County
Notice of No Jurisdiction

Dear Mr. Kuhbier:

The New York State Department of Environmental Conservation (DEC) has reviewed the information submitted with your Request for Authorization for GP-0-13-001, Freshwater Wetland Adjacent Area General Permit for the above referenced project. This information was received by the Department on October 5, 2015. According to the submitted information, the project consists of the replacement of an existing drainage system with a stabilized discharge at the edge of Lake Mahopac. The project site is not located near any NYS protected Freshwater Wetlands and the drainage pipe outlet will be installed within an existing concrete wall, above the mean high water level of Lake Mahopac (NYS Water Index #: H-31-P 44-14-P 53, Class A).

Based upon the information submitted, the Department has determined that the proposed work will not disturb the regulated area of any NYS protected wetland and authorization under GP-0-13-001 is **not required**. Additionally, an Article 15, Protection of Waters – Excavation and Fill, Permit is **not required** as no work associated with the project (as proposed) will occur below the mean high water level of Lake Mahopac. Please be aware that although a permit is not required, you are still responsible for ensuring that work shall not pollute any stream or waterbody. Care shall be taken to stabilize any disturbed areas promptly after construction, and all necessary precautions shall be taken to prevent contamination of the stream or waterbody by silt, sediment, fuels, solvents, lubricants, paint sludge or any other pollutant associated with the project. This typically includes the installation and maintenance of appropriate erosion and sediment controls until the project is completed.



RE:

Frumkin/Frenkel Drainage Repair Project DEC ID #: 3-3720-00441/00001

Town of Carmel, Putnam County

Notice of No Jurisdiction

If significant modifications are proposed to the above referenced project, please contact the Department for additional review. This determination will remain valid for one year. If you have any comments or questions, please feel free to contact me at (845) 256-3096.

Sincerely,

Jonathan Stercho

Environmental Analyst 1

Division of Environmental Permits, Region 3

Date: 10/15/2015

(845) 256-3096

CC: John Watson, Insite Engineering, Surveying & Landscape Architecture Doug Gaugler, R3 DEC



September 28, 2015

Town of Carmel Environmental Conservation Board Carmel Town Hall 60 McAlpin Avenue Mahopac, New York 10541

RE: Mahopac Point Owner's Association Frumkin / Frenkel Drainage Repair Town of Carmel, New York Tax Map #'s. 75.8-2-19 & 20

Dear Chairman Laga and Members of the Board:

The subject properties are located on the western side of Tamarack Road (#41 Frumkin and #43 Frenkel) in the Mahopac Point Community in the Town of Carmel. There is an existing drainage system bisecting the two properties that is currently in a state of disrepair. The ultimate discharge location of the existing drainage system is beneath an existing wall near the lakes edge on the Frenkel property. The Mahopac Point Owners Association (MPOA) is in the process of expediting the repair of this drainage system as portions of both properties and additional upstream properties are affected by the marginal drainage system. The repair is expected to take place later this fall over an approximate two (2) week duration.

Based on review of Chapter 89 "Freshwater Wetlands" of the Town of Carmel Code, Section 89–4,C,(5), "Ordinary Maintenance and repair of existing structures or improved areas" do not require a permit or letter of permission". This letter is to notify your Board that the MPOA will be proceeding with a repair of the existing drainage system currently bisecting the two properties. The existing drainage discharge in this location is very old and located beneath the existing masonry wall on the Frenkel property. The repair includes the replacement of the existing drainage pipe with a discharge to the edge of the lake as shown on the enclosed project plans. The sum of the repairs include a replacement of the existing drainage system with a stabilized discharge at the edge of the lake. There are no changes in ground cover associated with the proposed repair, as all disturbed areas shall be restored to the existing condition. Appropriate erosion and sediment control measures will be installed per the details as shown on the plans to protect Lake Mahopac over the duration of the work.

If you have any questions or comments regarding this information, please do not hesitate to contact our office.

Very truly yours,

INSITE ENGINEERING, SURVEYING & LANDSCAPE ARCHITECTURE, P.C.

By:

John M. Watson, P.E Principal Engineer

JMW/zmp

cc: Andreas Kuhbier, Mahopac Point Owners Association

Insite File No. 14186.100

CARL STONE Chairman

ROBERT LAGA Vice Chair

ROSE TROMBETTA Secretary

DAVID KLOTZLE Wetland Inspector

Telephone#\_ ► A

# TOWN OF CARMEL ENVIRONMENTAL CONSERVATION BOARD



60 McAlpin Avenue Mahopac, New York 10541 Tel. (845) 628-1500 - Ext. 190 www.carmelny.org

# BOARD MEMBERS

Email: akuhbier @ comcast. Let

Name and Address of Owner if different from Applicant:

Edward Barnett Anthony Dusovic Marc Pekowsky Vincent Turano Nicholas Fannin

# APPLICATION FOR WETLAND PERMIT OR LETTER OF PERMISSION

Name of Applicant: MAKOPAC POINT OWNERS ASSOCIATION

Address of Applicant: P.O. BOX 411 MAHODAC 10541

Property Address: #41 + # 43 TAMA PACK POAD Tax Map # 75 8-2-19 +20
Agency Submitting Application If Applicables N A
Location of Welland: LAKE MAHOPAE
Size of Work Section & Specific Location: LES THAN SOO ST DISTURBED ON #41 +11 43 TAMAPACK Will Project Utilize State Owned Lands? If Yes, Specify: NO
Type and extent of work (feet of new channel, yards of material to be removed, draining, dredging, filling, etc). A brief description of the regulated activity (attach supporting details).  MAHORAC POINT OWNERS ASSOCIATION OWNED DRAINAGE SYSTEM REPAIR
AS SHOWN ON PREVIOUSLY SUBMITTED PLANS
Proposed Start Date: 1 4 2016 Anticipated Completion Date: 1/15/2016 Fee Paid \$ 100.00
CERTIFICATION
I hereby affirm under penalty of perjury that information provided on this form is true to the best of my knowledge and belief, false statements made herein are punishable as a class A misdemeanor pursuant to Section 210.45 of the Penal Law. As a condition to the issuance of a permit, the applicant accepts full legal responsibility for all damage, direct or indirect, or whatever nature, and by whomever suffered, arising out of the project described here-in and agrees to indemnify and save harmless the Town of Carmel from suits, actions, damages and costs of every name and description resulting from the said project.
× SIGNATURE DATE

# Short Environmental Assessment Form Part 1 - Project Information

# **Instructions for Completing**

Part 1 - Project Information. The applicant or project sponsor is responsible for the completion of Part 1. Responses become part of the application for approval or funding, are subject to public review, and may be subject to further verification. Complete Part 1 based on information currently available. If additional research or investigation would be needed to fully respond to any item, please answer as thoroughly as possible based on current information.

Complete all items in Part 1. You may also provide any additional information which you believe will be needed by or useful to the lead agency; attach additional pages as necessary to supplement any item.

Part 1 - Project and Sponsor Information			
Name of Action or Project:			
Frumkin / Frenkel Drainage Improvement Project			
Project Location (describe, and attach a location map):			
41 and 43 Tamarack Road, Mahopac, NY			
Brief Description of Proposed Action:			70 00
The project proposes to replace and relocate the existing drainage structures, pipe, and outfal is to be relocated such that it shall prevent erosion and sediment disposition into Lake Mahop	II associated with an existing ac.	dwelling. Th	e outfall
	ephone: N/A		
Mahopac Point Homeowner Association E-N	Mail: akuhbier@comcast.ne	t	
Address:			
P.O. Box 411			
City/PO:	State:	Zip Code:	
Mahopac	New York	10541	
1. Does the proposed action only involve the legislative adoption of a plan, local administrative rule, or regulation?	law, ordinance,	NO	YES
If Yes, attach a narrative description of the intent of the proposed action and the e may be affected in the municipality and proceed to Part 2. If no, continue to ques	nvironmental resources th	nat 🔲	V
2. Does the proposed action require a permit, approval or funding from any other		NO	YES
If Yes, list agency(s) name and permit or approval:	<i>g</i> , .		
3.a. Total acreage of the site of the proposed action?  b. Total acreage to be physically disturbed?  c. Total acreage (project site and any contiguous properties) owned or controlled by the applicant or project sponsor?	0.5 acres .007 acres .5 acres	I	
4. Check all land uses that occur on, adjoining and near the proposed action.	*		
☐ Urban ☐ Rural (non-agriculture) ☐ Industrial ☐ Commercia	Residential (suburb	an)	
Forest Agriculture Aquatic Other (speci	fy):	17709	
Parkland			

5. Is the proposed action, a. A permitted use under the zoning regulations?	NO	YES	N/A
b. Consistent with the adopted comprehensive plan?	H	<b>V</b>	V
		<u> </u>	
6. Is the proposed action consistent with the predominant character of the existing built or natural landscape?		NO	YES
			~
7. Is the site of the proposed action located in, or does it adjoin, a state listed Critical Environmental A	rea?	NO	YES
If Yes, identify:		V	
8. a. Will the proposed action result in a substantial increase in traffic above present levels?		NO	YES
		V	П
b. Are public transportation service(s) available at or near the site of the proposed action?		H	V
c. Are any pedestrian accommodations or bicycle routes available on or near site of the proposed ac	tion?	V	H
9. Does the proposed action meet or exceed the state energy code requirements?			VEC
If the proposed action will exceed requirements, describe design features and technologies:		NO	YES
		V	
		ب	
10. Will the proposed action connect to an existing public/private water supply?		NO	YES
If No, describe method for providing potable water:			
		~	Ш
11. Will the proposed action connect to existing wastewater utilities?		NO	YES
YC Y			
If No, describe method for providing wastewater treatment:		~	
12. a. Does the site contain a structure that is listed on either the State or National Register of Historic Places?		NO	YES
b. Is the proposed action located in an archeological sensitive area?		6	
o. 13 the proposed action rocated in an archeological sensitive area?		П	V
13. a. Does any portion of the site of the proposed action, or lands adjoining the proposed action, contain	n	NO	YES
wetlands or other waterbodies regulated by a federal, state or local agency?		П	V
b. Would the proposed action physically alter, or encroach into, any existing wetland or waterbody?	Ì	V	一
If Yes, identify the wetland or waterbody and extent of alterations in square feet or acres:			
14 T1 (C.1 + 1111)			
14. Identify the typical habitat types that occur on, or are likely to be found on the project site. Check a	ll that a	pply:	
Shoreline	onal		
☐ Wetland ☐ Urban ☑ Suburban			-
15. Does the site of the proposed action contain any species of animal, or associated habitats, listed		NO	YES
by the State or Federal government as threatened or endangered?	ł		
			V
16. Is the project site located in the 100 year flood plain?		NO	YES
17 Will the proposed action greate stems and disclared in the control of the cont			V
17. Will the proposed action create storm water discharge, either from point or non-point sources? If Yes,	}	NO	YES
a. Will storm water discharges flow to adjacent properties?			V
	}		
b. Will storm water discharges be directed to established conveyance systems (runoff and storm drain If Yes, briefly describe:	s)?		
Repair of existing collection system with discharge to Lake.			

18. Does the proposed action include construction or other activities that result in the impoundment of water or other liquids (e.g. retention pond, waste lagoon, dam)?	NO	YES
If Yes, explain purpose and size:	~	
19. Has the site of the proposed action or an adjoining property been the location of an active or closed	NO	YES
solid waste management facility?  If Yes, describe:	V	
20. Has the site of the proposed action or an adjoining property been the subject of remediation (ongoing or	NO	YES
completed) for hazardous waste?  If Yes, describe: As per NYSDEC, groundwater remediation completed for observed contamination in neighboring business district wells.		V
I AFFIRM THAT THE INFORMATION PROVIDED ABOVE IS TRUE AND ACCURATE TO THE I KNOWLEDGE  John M. Watson, P.E.  Applicant/sponsor name: Insite Engineering. Surveying. & Landscape Architecture. P.C.  Date:  Date:		F MY



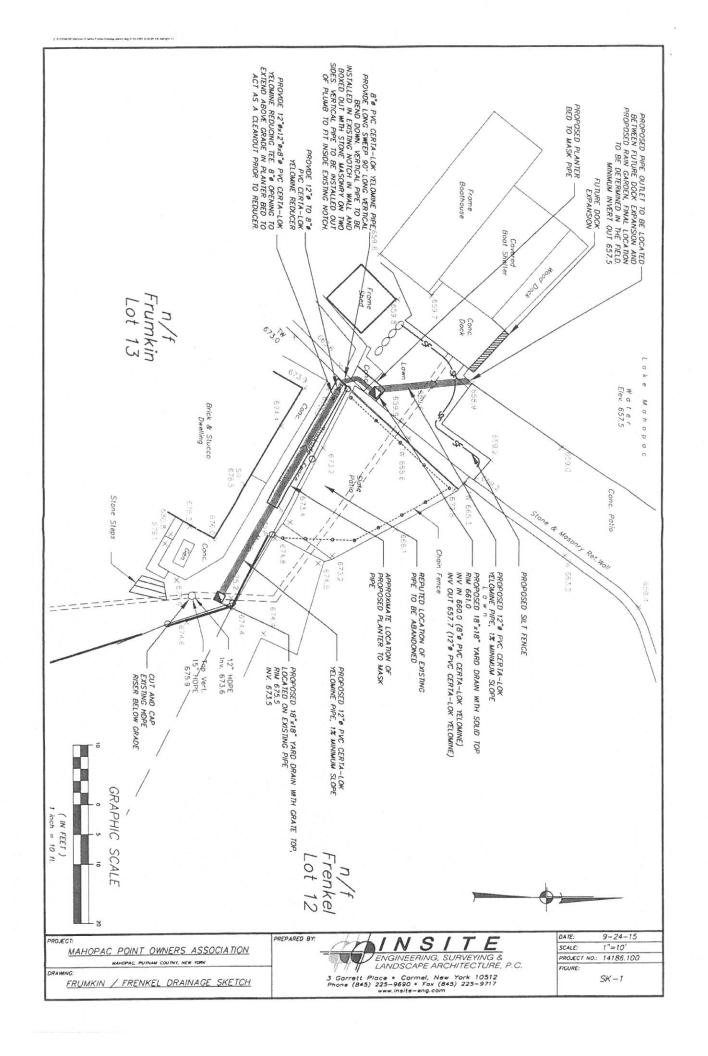
MANOPAC, PUTNAM COUTNY, NEW YORK

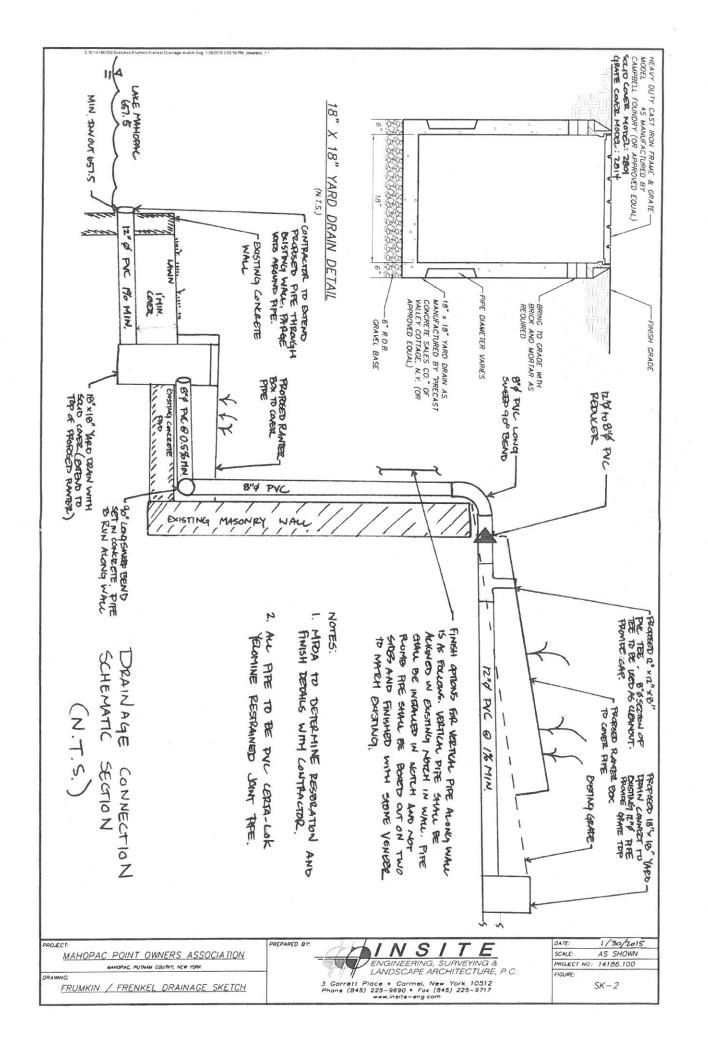
FRUMKIN / FRENKEL OVERALL PLAN



3 Garrett Place • Carmel, New York 10512 Phone (845) 225–9690 • Fax (845) 225–9717 www.insite-eng.com

"=150"
4186.100





#### Introduction

Albert and Elaine Corbelli own parcel 53.18-1-28 of 22.8 acres located at 150 Barrett Hill Road. There is a timber resource located on this parcel which Albert and Elaine Corbelli would like to harvest.

Wagner Millwork LLC has marked the property boundaries with orange flagging and painted the property boundaries with blue three stripe. Wagner Millwork LLC has marked and cruised the timber within the parcel. The timber is marked with a horizontal blue line at breast height and on the stump per the requirements of the Carmel town code 142-8 C.(3). Access to the woodlot will be from Barrett Hill Rd.

Wagner Millwork LLCs contractor TW Logging LLC will harvest the timber from this woodlot. TW Logging utilizes chainsaws, a Timberjack 450C cable skidder, and a Franklin 670 forwarder for harvesting timber. Figures 1-4 show what the cable skidder and forwarder look like. In general, the cable skidder is used to bunch logs and the forwarder is used to pick up the bunched logs and forward them out to the landing. The purpose of the forwarder is to minimize ground disturbance and maintain a neat and organized landing area. TW Logging LLC is fully insured under General Liability insurance, and Workmen's Compensation. These certificates will be submitted to the Town of Carmel if they request them after this permit is acquired. Wagner Millwork LLC will have a copy of TW Logging LLC insurance present at the meeting for the ECB to review.



Figure 1. Timberjack 450C Cable Skidder



Figure 2. Timberjack 450C Cable Skidder



Figure 3. Franklin 670 Forwarder



Figure 4. Franklin 670 Forwarder

Wagner Millwork LLC and TW Logging LLC implement Best Management Practices to ensure soil stabilization and maintain the natural processes of a woodlot during and post-harvest. Best Management Practices will be described under the "Best Management Practices (BMP's and Waterbars" section of this document.

#### Plan of Action

Timber harvesting will begin as soon as the following requirements are met:

- 1. Logging permit for the Town of Carmel is acquired.
- 2. Driveway permit from the Town of Carmel Highway Department is acquired.
- 3. the Central Hudson gas line is flagged according to Central Hudson's requirements.
- 4. the silt fence is installed at the beginning of the wetland located in the southeastern portion of the woodlot and in the eastern portion of the woodlot.
- 5. Logging will occur when the ground is dry or frozen.

# Harvesting on Steep Slope

Timber in the areas where the slope exceeds 30% will be winched from the bottom or top of the slope or from the primary skid trail. Skid trails in these sections will have waterbars created to divert water from the skid trail. Skidding will be kept to the skid trail in these sections. Figure 5, on the following page, displays the layout of the skid trail, where waterbars will be created and the grades for each section of the skid trail. The skid trail shown in Figure 5 is where all skidding will take place. There will not be skid trails all over the woods. The skid trail is determined before the harvest so that ground disturbance is minimized.

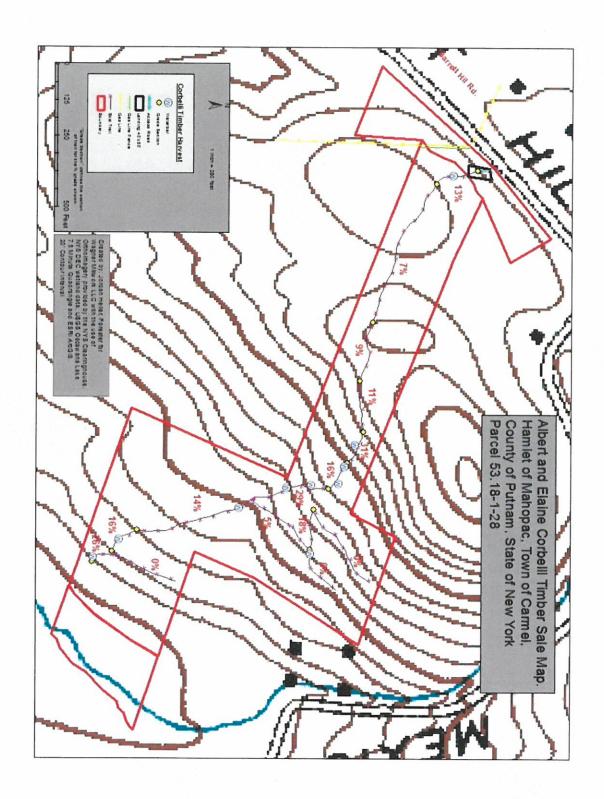


Figure 5. Skid Trail and Waterbar

# Landing Area

The landing area will not be clearcut, it will be seeded after the harvest and all debris and logs will be cleared. The landing will roughly be 40'x80' in size. Wagner Millwork LLC understands the Carmel town code 142-8 D.(6) addressing landing area, and the Environmental Conservation Boards concern about the landing area being less than 200' from Barrett Hill Road. After further inspection of the landing area Wagner Millwork LLC has determined the landing cannot be setback 200' from Barrett Hill Rd due to slope that begins roughly 60' from Barret Hill road. The log truck will have to back into the landing, because there will not be enough room for the log truck to turn around in the landing area. It is very difficult for a log truck to back into a landing that increases in slope. This particular landing area does not have a steep slope heading up from Barrett Hill Rd., but it is steep enough to require a log truck to be pulled into the landing by the skidder. It is company policy that Wagner Millwork LLC log trucks are not to be pulled into landings by the contractor's skidder because the risk for damage to a Wagner Millwork LLC log truck increases. Also, there would be an increase in ground disturbance due to a longer section of trail created for the log truck. A Wagner Millwork LLC log truck is about 52' in length, 9' wide and 13' tall. This log truck trail would have to be a minimum of 12' in width to provide sufficient overhead clearance, the grade of the slope would have be reduced leading up to the landing, and the trail would have to be free of large rocks. Creating a log truck trail so that the landing can be 200' from Barrett Hill Rd. will create a much larger "hole" in the woods than the proposed landing. Geotextile fabric and stone will be put down for the area where the log truck will be loaded.

# Best Management Practices (BMP's and Waterbars)



Figure 6

Best Management Practices (BMPs) are guidelines that were developed by the New York State Department of Environmental Conservation (NYSDEC), the New York City Watershed Agricultural Council (WAC), and the New York City Department of Environmental Conservation (DEP). Figure 6, above, is the BMP Field Guide provided by the NYSDEC. A complete list of contributors can be found in Appendix 1. BMP's are easy to follow guidelines for diverting water from skid trails, crossing streams, closing out logging jobs, setting up landings, and laying out an access system for large and small woodlots. The most common BMP's implemented on any timber harvest:

- 1. Harvest when the ground is dry, frozen, or avoid harvesting when excessive rutting would occur.
- 2. Creation of waterbars on slopes to divert water off the skid trail in order to minimize soil erosion and sedimentation of streams and wetlands.
- 3. Minimize ground disturbance by laying out skid trails prior to harvest.
- 4. Minimize size of landing.
- Post-harvest clean-up such as smoothing ruts from skid trails, creating permanent waterbars where necessary, lopping tops, and removing all wood from the landing.

Many of the requirements under the Carmel town code 142-8 refer to the BMP Field Guide provided by the NYSDEC.

A waterbar is described as "mounds of soil excavated across the width of a skid trail at a 30-degree downward angle. Effective water bars extend the entire width of the skid trail and possess a clear outlet which facilitates the drainage of water from the compacted surface of a skid trail into undisturbed forest soil. The number of water bars installed on a skid trail is contingent upon the trail slope. The steeper the slope, the greater the number of water bars necessary to control runoff on the skid trail. Water bars control the volume and velocity of water that flows down skid trails, intercepting runoff and returning it to its natural place within the landscape where it can be absorbed by undisturbed forest soils. Water bars are a necessary tool for controlling the forces of erosion associated with storm water runoff on skid trails." (2011 BMP Field Guide). On the following page Figure 7 shows the function and layout of a waterbar and Figure 8 is a picture of a water bar in a skid trail. The general rule for determining where a waterbar should be created is to stand in the middle of the skid trail and look down the center of the trail; wherever your eyes intersect the slope is where a waterbar belongs.

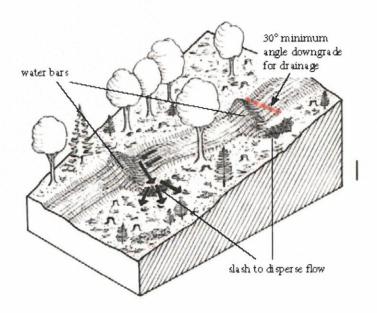


Figure 7. Diagram of waterbar layout and function



Figure 8. Waterbar in skid trail

# Skid Trail Mitigation

The equipment described above will create a 9' wide skid trail. The layout of the primary skid trail and waterbars for this harvest is displayed in figure 9. The skid trails will be smoothed of any ruts created during the harvest, waterbars will be created to stabilize the skid trails, skidding will be avoided if the ground conditions become too wet, and the skid trails will be seeded to help stabilize the soil after the harvest. The seed used on the skid trails is described in Appendix 2.

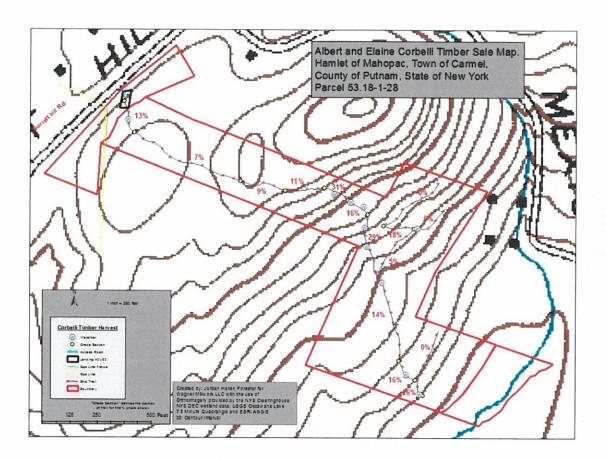


Figure 9. Skid Trail and Waterbar Layout

Tree Data

Table 1 provides the data related to the trees to be harvested.

Table 1	Tree	Species	Information
I dole 1	. 1100	Species	minument

Table 1. Tree Species Information				
Species	Number of Trees	Volume (Thousand board feet)	Range of Diameters (DBH- Inches)	
Tulip Poplar				
(Liriodendron	86	38.554	18-34	
tulipifera)				
Red Oak				
(Quercus	82	21.004	16-32	
rubra)				
Hard Maple				
(Acer	29	6.196	18-26	
saccharum)				
Black Oak				
(Quercus	10	1.6	16-22	
velutina)				
Chestnut Oak				
(Quercus	13	1.649	16-22	
prinus)				
Soft Maple				
(Acer	5	0.825	16-24	
rubrum)				
Ash				
(Fraxinus	2	0.372	18-20	
Americana)				

# Traffic Safety Plan

When a Wagner Millwork LLC truck arrives to pick up a load the contractor will stand out in the road with caution flag to stop traffic as the log truck backs into the landing. When the log truck departs from the landing the contractor will, again, stand out in the road with a caution flag to stop any traffic as the log truck departs. Signs stating "trucks entering highway" will be placed on the north and south ends of the landing on Barrett Hill Rd. to notify motorists that trucks may be entering or exiting Barrett Hill Rd.

A Wagner Millwork LLC log truck will be coming to the landing via the route below:

Washington/Crane/Long Pond Rd > Bullet Hill Rd > Barrett Hill Rd > back into the landing.

A Wagner Millwork LLC log truck will leave the landing via the route below:

Barrett Hill Rd. > Hitchcock Hill Rd. > Long Pond/Crane/Washington Rd.

#### **Skid Trail Pictures**

Figures 10-15 are of a timber harvest Wagner Millwork LLC and TW Logging LLC are in the process of completing. Notice in figures 10 and 11 that ruts in the primary skid trail are minimal. This is due to harvesting when the ground is unsaturated. Figures 12 and 13 show that a section of skid trail on a short steep slope leading down to a stream crossing has not been washed out by the rain we have received in the past two months. This is due to the proper use of waterbars during the harvest. Please note that the waterbars have been run down due to skidding, but will be replaced before the harvest is closed out. Figures 14 and 15 display what the tops of trees look like after they are lopped to a height of 4' or less.

The stick with blue paint that is used in these images is 2'7" long.



Figure 10. Few to no ruts in skid trail due to harvesting when the ground is not saturated with moisture.

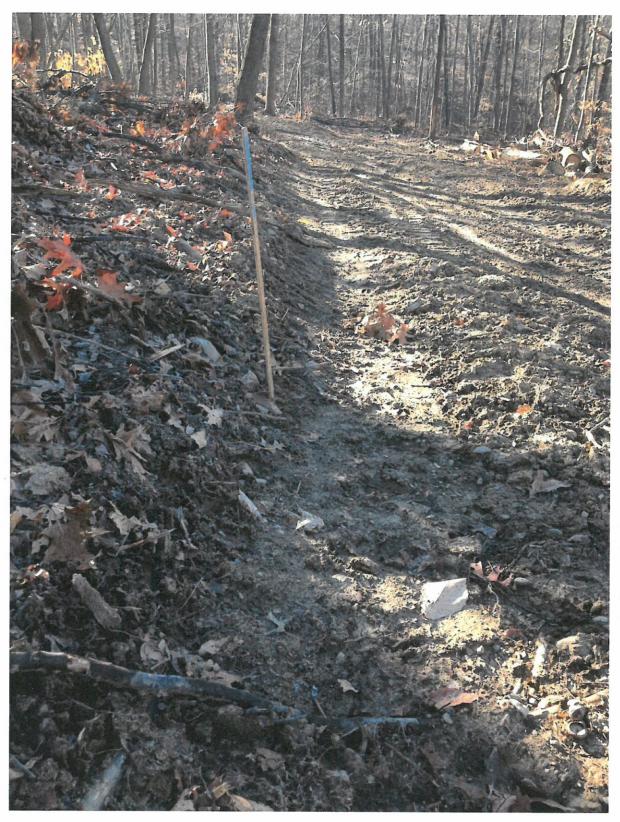


Figure 11. Minimal ruts.



Figure 12. Looking up at the short steep slope from the stream crossing. No channeling of the soil from runoff due the proper use of waterbars during the harvest.

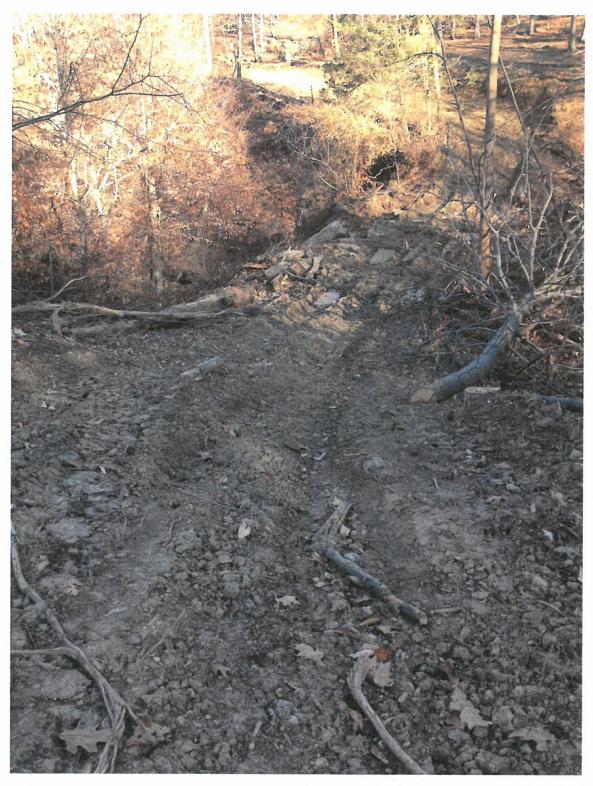


Figure 13. Looking down at the short steep slope from the top. No channeling of the soil from runoff due the proper use of waterbars during the harvest



Figure 14. Tops lopped at or below 4' in height.



Figure 15. Tops lopped at or below 4' in height.



# SOURCES FOR INFORMATION

# Appendix 1. NYS DEC BMP Field Guide Contributers

#### SOURCES FOR INFORMATION

Professional forestry assistance should always be obtained before undertaking any timber harvest. Information and assistance in using Best Management Practices for forest management activities can be found at many federal, state and local organizations. Some of these organizations include:

Adirondack Park Agency (518) 891-4050 www.apa.state.ny.us

Catskill Forest Association (CFA) (845) 586-3054 www.catskillforest.org

Cornell Cooperative Extension (CCE) (See telephone book for local number) www.cce.cornell.edu

County Soil and Water Conservation Districts (See telephone book for local number) Empire State Forest Products Association (ESFPA) (518) 463-1297 www.esfpa.org

New York City Department of Environmental Protection (NYC DEP) (718) 337-4357 www.nyc.gov/dep

New York Forest Owners Association (NYFOA) (800) 836-3566 www.nyfoa.org

New York State Department of Environmental Conservation (NYS DEC) (518) 402-9424 www.dec.ny.gov

New York Tree Farm (800) 836-3566 www.nytreefarm.org

Society of American Foresters (SAF) (301) 897-8720 www.safnet.org

State University of New York College of Environmental Science and Forestry (SUNY-ESF) (315) 470-6500 www.esf.edu USDA Forest Service (603) 868-7616 www.fs.fed.us

USDA Natural Resource Conservation Service (315) 423-5076 www.nrcs.usda.gov

Watershed Agricultural Council (WAC) Forestry Program (607) 865-7790 www.nycwatershed.org

Appendix 2. Seed Information

