

July 2, 2009

Marcia Spencer-Famous
LURC
State House Station #22
Augusta, ME 04333

Re: Additional information and amendment to DP 4830

Dear Marcia;

TransCanada is providing the following additional information in support of DP 4830: A modification of the application to reduce the number of met towers from 4 to 1, with an attendant reduction in necessary access trails along the ridge; wetland delineation data mapping and a realignment of the primary access trail to minimize wetland impact; and a Phase 1A archaeological survey report. The trail width has also been reduced to 12 feet and a revised Exhibit A to the Special Use Agreement with Plum Creek, reflecting the current proposal and realignment, is also included.

As a result of the soil and wetland delineation work, wetland impact has been kept to a minimum, and the trail has been realigned to avoid wetland impact to the extent possible. Two different scrub shrub (P-WL2) wetland areas found in a regenerating clear cut on the lower slopes of the mountain will be crossed with equipment mats. The impact areas total approximately 276 square feet, or 0.006 acre of temporary wetland impact. See the attached detailed maps depicting the trail and wetland impact areas. Also attached is a revised Supplement S-3. As described in the original application, there will be a temporary bridge placed for a trail stream crossing. The crossing is along the existing winter road and is at the former site of a culvert/bridge crossing used for timber harvesting in the area. This has not changed from the original application. Trail area within the P-SL2 subdistrict associated with this stream is 2,006 square feet or 0.05 acre.

Research performed for prehistoric archaeological assessment of the site has determined there is minimal likelihood that any such resources are found on the site. This research was performed at the MHPC offices, and Art Speiss of the MHPC concurs with this conclusion. See the attached memo from Rick Will.

TransCanada would also like to amend the current application to include only one met tower and associated trail. The trail and met tower site will also be used for geotechnical investigations. The total cleared area will be reduced by 3.92 acres from 6.25 acres to 2.33 acres of clearing. Total linear distance of trail along the ridge line will be reduced by 1.6 miles. If it becomes necessary to install one or more of the remaining three towers, TransCanada will provide additional wetland delineation data as necessary and seek the necessary approvals to do so at that time. Of this total cleared area, approximately 1.77 acres of clearing is in Chain of Ponds Twp and 0.56 acres is in Kibby Twp. The length of the newly proposed trail is 1.56 miles, made up of existing gravel road (0.24 mile), winter

Ms. Marcia Spencer-Famous

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road (0.46 mile), skidder trail (0.02 mile), new trail in recently cut regeneration area (0.35 mile), and new trail in forested area (0.5 mile). The vicinity of the site has been cut recently up to 2,700 feet in elevation, so the new trail in forested area is almost entirely above 2,700 feet. Total area that will require clearing above 2,700 feet is 1.79 acres, which includes trail area and the met tower clearing. See the attached location and foot print maps, which include tables with trail lengths and areas.

If you have questions or comments, please let me know. Thank you for your timely review of this material.

Sincerely,

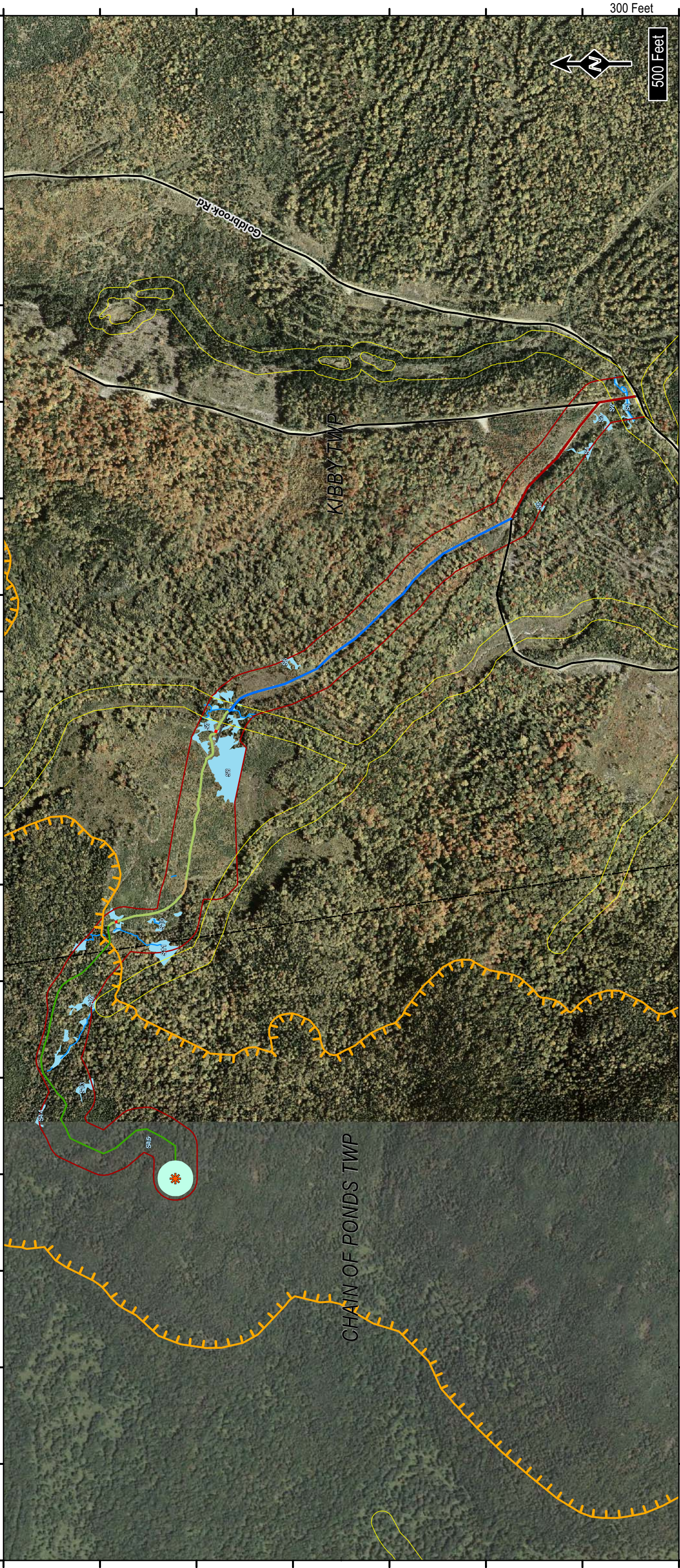


for Christine Cinnamon

cc: Nick DiDomenico, TransCanada
Tom Patterson, TransCanada
Vivane Miraghi, TransCanada
Juliet Browne, Verrill Dana, LLP
Dana Valleau, TRC

File: 165796-2, TransCanada

Attachments 3



Sisk Mountain

Proposed Meteorological Tower Site and Access Wetlands and Streams

249 Western Ave
 Augusta, ME 04330
 Created: 7/11/2009

ACCESS BY TOWNSHIP			
TOWN	LINEAR FEET	SQUARE FEET	ACRES
Chain of Ponds Twp	2462	29536	0.678
Kibby Twp	8264	117506	1.598
total	10726	147042	2.276

CLEARING BY TOWNSHIP		
TOWN	SQUARE FEET	ACRES
Chain of Ponds Twp	77414	1.777
Kibby Twp	24223	0.556
total	101637	2.333

ACCESS			
ROAD TYPE	LINEAR FEET	SQUARE FEET	ACRES
Gravel	1261	15135	0.348
Winter	2470	28922	0.664
Skid trail	112	1348	0.031
New trail in cut	1824	21879	0.502
New trail in forested	2657	31879	0.732
total	8264	99164	2.276

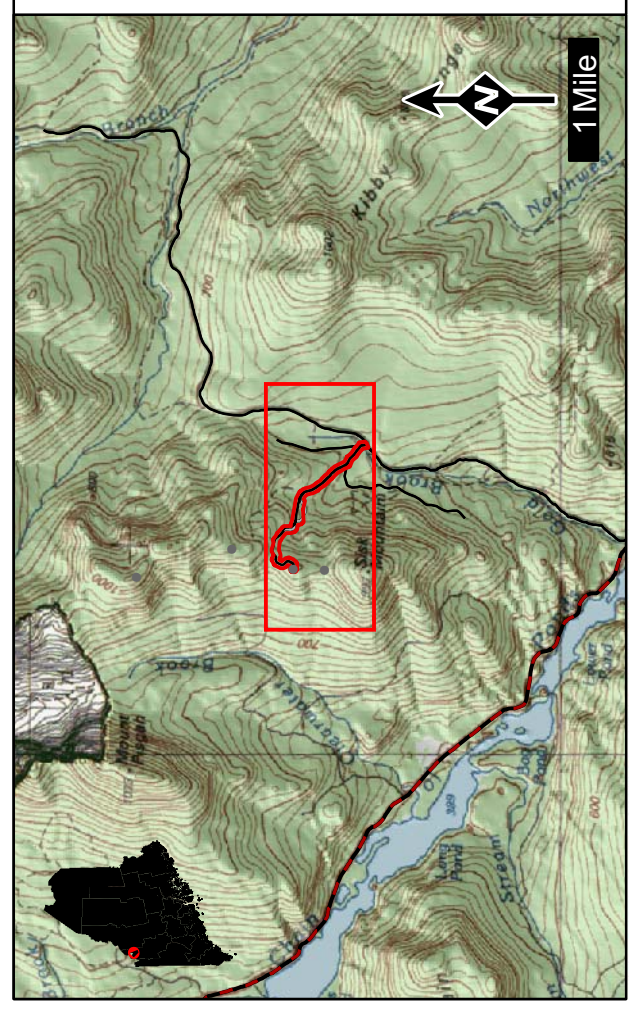
CLEARING		
TYPE	SQUARE FEET	ACRES
Trail in forested	31879	0.732
Trail in cut	21879	0.502
Met site	47878	1.099
total	101637	2.333

WETLAND IMPACTS		
ID	SQUARE FEET	ACRES
S7	164	0.004
S11	111	0.003
total	276	0.006

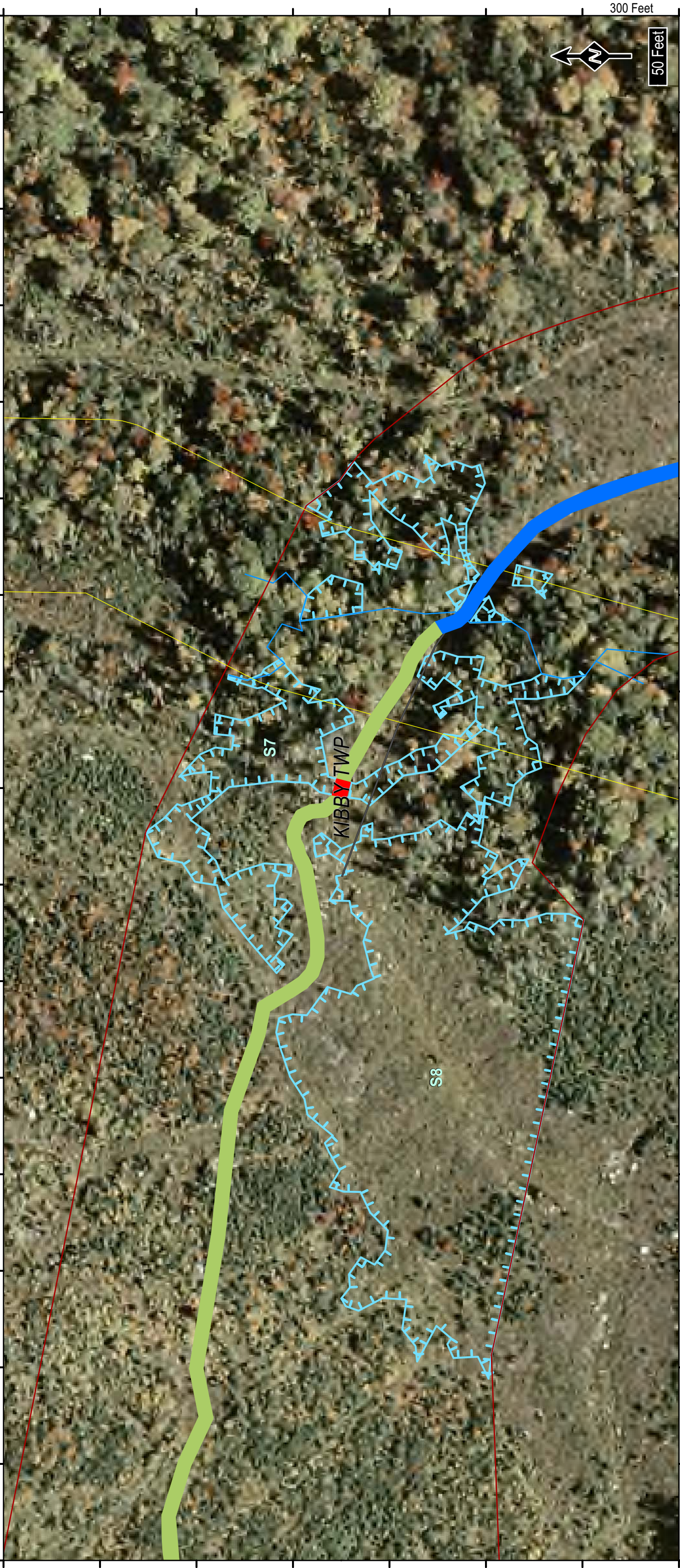
ACCESS BY TOWNSHIP			
TOWN	LINEAR FEET	SQUARE FEET	ACRES
Chain of Ponds Twp	2462	29536	0.678
Kibby Twp	8264	117506	1.598
total	10726	147042	2.276

CLEARING BY TOWNSHIP		
TOWN	SQUARE FEET	ACRES
Chain of Ponds Twp	77414	1.777
Kibby Twp	24223	0.556
total	101637	2.333

Meteorological Tower Location
 Meteorological Tower Access
 Wetland Impact
 Surveyed Area
 Stream
 Wetland
 LURC P-MA Zone
 LURC P-SL Zone
 Meteorological Tower Site

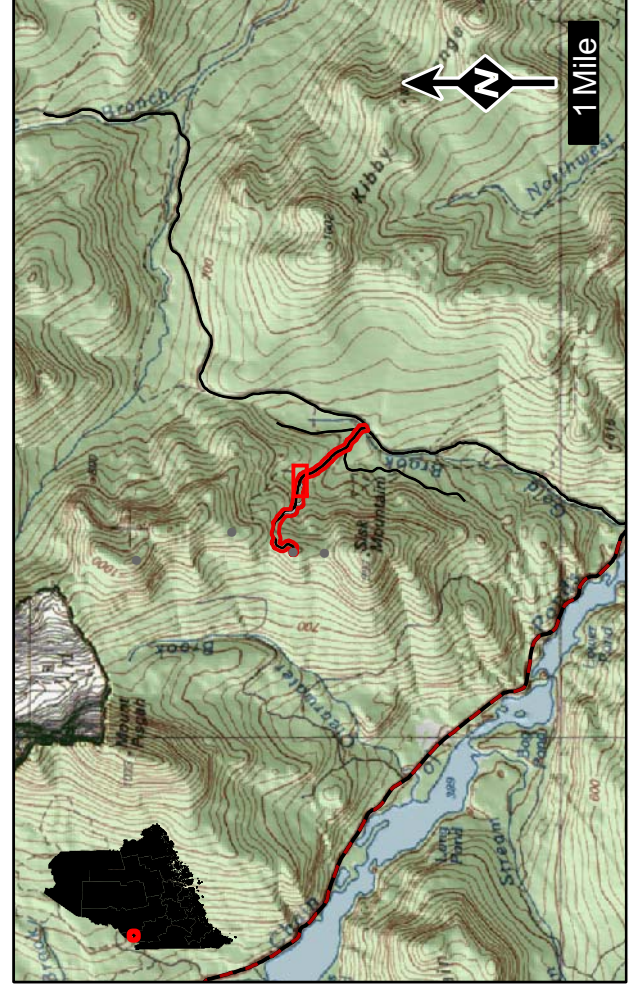


Sources: Maine OGIS, Color Orthophotography: 2003



300 Feet

50 Feet



1 Mile

Sisk Mountain

Proposed Meteorological Tower Site and Access Wetlands and Streams

Inset 1, wetland S7



249 Western Ave
Augusta, ME 04330

Created: 7/11/2009

ACCESS BY TOWNSHIP			
TOWN	LINEAR FEET	SQUARE FEET	ACRES
Chain of Ponds Twp	2462	29536	0.678
Kibby Twp	8264	117506	1.598
total	10726	147042	2.276

CLEARING BY TOWNSHIP		
TOWN	SQUARE FEET	ACRES
Chain of Ponds Twp	77414	1.777
Kibby Twp	24223	0.556
total	101637	2.333

ACCESS			
ROAD TYPE	LINEAR FEET	SQUARE FEET	ACRES
Gravel	1261	15135	0.348
Winter	2470	28922	0.664
Skid trail	112	1348	0.031
New trail in cut	1824	21879	0.502
New trail in forested	2657	31879	0.732
total	8264	99164	2.276

CLEARING		
TYPE	SQUARE FEET	ACRES
Trail in forested	31879	0.732
Trail in cut	21879	0.502
Met site	47878	1.099
total	101637	2.333

WETLAND IMPACTS		
ID	SQUARE FEET	ACRES
S7	164	0.004
S11	111	0.003
total	276	0.006

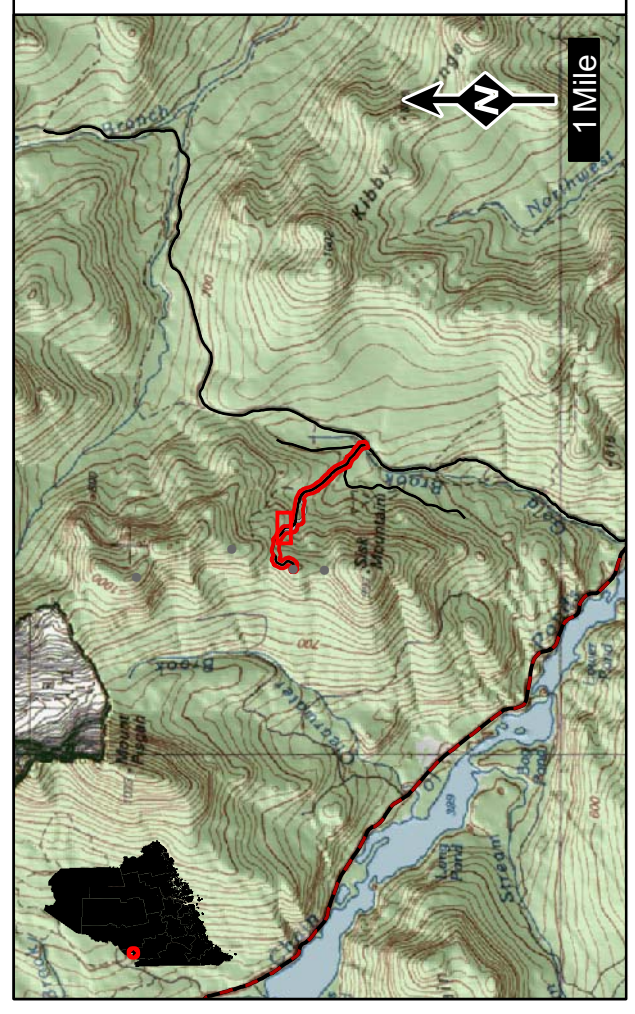
ACCESS BY TOWNSHIP			
TOWN	LINEAR FEET	SQUARE FEET	ACRES
Chain of Ponds Twp	2462	29536	0.678
Kibby Twp	8264	117506	1.598
total	10726	147042	2.276

CLEARING BY TOWNSHIP		
TOWN	SQUARE FEET	ACRES
Chain of Ponds Twp	77414	1.777
Kibby Twp	24223	0.556
total	101637	2.333

Meteorological Tower Location	
Symbol	Description
	Meteorological Tower Location
	Meteorological Impact
	Surveyed Area
	Stream
	Wetland
	LURC P-MA Zone
	LURC P-SL Zone

Meteorological Tower Access	
Color	Description
	Gravel Road
	Winter Road
	Skid Trail
	New Trail in Cut
	New Trail in Forested
	Meteorological Tower Site


Sources: Maine OGIS, Color Orthophotography: 2003



Sisk Mountain

Proposed Meteorological Tower Site and Access Wetlands and Streams

Inset 2, wetland S11



249 Western Ave
Augusta, ME 04330

Created: 7/1/2009

ACCESS		ACCESS BY TOWNSHIP	
ROAD TYPE	LINEAR FEET	SQUARE FEET	ACRES
Gravel	1261	15135	0.348
Winter	2470	28922	0.664
Skid trail	112	1348	0.031
New trail in cut	1824	21879	0.502
New trail in forested	2657	31879	0.732
total	8264	99164	2.276

CLEARING		CLEARING BY TOWNSHIP	
TYPE	SQUARE FEET	ACRES	
Trail in forested	31879	0.732	
Trail in cut	21879	0.502	
Met site	47878	1.096	
total	101637	2.333	

ACCESS BY TOWNSHIP		CLEARING BY TOWNSHIP	
TOWN	LINEAR FEET	SQUARE FEET	ACRES
Chain of Ponds Twp	2462	29536	0.678
Kibby Twp	8264	117506	1.598
total	10726	147042	2.276

CLEARING BY TOWNSHIP		CLEARING BY TOWNSHIP	
TOWN	SQUARE FEET	ACRES	
Chain of Ponds Twp	77414	1.777	
Kibby Twp	24223	0.556	
total	101637	2.333	

ACCESS

- * Meteorological Tower Location
- Meteorological Tower Access
- Wetland Impact
- Surveyed Area
- Stream
- Wetland
- LURC P-MA Zone
- LURC P-SL Zone

Meteorological Tower Location

- Gravel Road
- Winter Road
- Skid Trail
- New Trail in Cut
- New Trail in Forested
- Meteorological Tower Site

WETLAND IMPACTS	
ID	SQUARE FEET ACRES
S7	164 0.004
S11	111 0.003
total	276 0.006



Supplement S-3

Requirements for Wetland Alterations

Applicant Name(s): Christine Cinnamon, TransCanada Maine Wind Development	Project Location (Township and County): Kibby Twp and Chain of Ponds Twp, Franklin County
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NATURE OF WETLAND ALTERATION

1. Describe in detail the purpose and need for the proposed wetland alteration and the type of activity involved (use additional paper if needed).
Meteorological tower and geotechnical investigation access trail. Trail crosses two wetlands, which will be traversed with temporary equipment mats. A stream will also be crossed with equipment mats at the former site of a forest management road bridge.
The mats will span the stream and there will be no alteration to the stream bottom.
2. Will your proposal alter any amount of land that is a mapped P-WL subdistrict or any ground below the normal high water mark of a lake, pond, river, stream, or intertidal area? X Yes No
3. Will your proposal alter an acre or more of any land area, either upland or wetland? X Yes No
 - 3a. If yes, are there wetlands present within the boundaries of your project area (as determined by a qualified wetland professional)? X Yes No

WETLAND TYPE AND AMOUNT OF ALTERATION

4. What type of wetland(s) will be altered? (check all that apply) Provide the amount of wetland area (in square feet) that is proposed to be altered within each category that is checked off, then calculate the total area of wetland alteration.

<input type="checkbox"/> P-WL1: Wetland of special significance _____ sq. ft.	}	TOTAL AREA OF WETLAND ALTERATION:
<input type="checkbox"/> P-WL2: Scrub shrub wetland <u>276</u> sq. ft.		
<input type="checkbox"/> P-WL3: Forested wetland _____ sq. ft.		
		<input style="width: 80px;" type="text" value="276"/> sq. ft.
5. Provide the amount of wetland area (in square feet) that is proposed to be altered within each of the following categories:

<input type="checkbox"/> Coastal wetland _____ sq. ft.	<input type="checkbox"/> River, stream or brook bottom _____ sq. ft.
<input type="checkbox"/> Freshwater wetland <u>276</u> sq. ft.	<input type="checkbox"/> Lake or pond bottom _____ sq. ft.
6. Do the wetlands to be altered contain any critically imperiled (S1) or imperiled (S2) natural communities? Yes X No

PREVIOUS ALTERATION, AVOIDANCE, EROSION/SEDIMENTATION CONTROL

7. Has any wetland area been previously altered on the property? X Yes No
 - 7a. If yes, provide the date, purpose, and amount of previous alteration, and whether permits were obtained.
Forest management activities in the area have cleared forested wetland and altered hydrology.
8. Is there a reasonable way for you to conduct your project that avoids alteration of wetland areas? Yes X No
 - 8a. If no, explain why not and describe how do you propose to minimize the amount of wetland to be altered.
The trail alignment has been revised and sited to avoid wetlands to the extent possible.
9. How will you keep disturbed soils from eroding into nearby lakes, ponds, rivers, streams, intertidal areas, or other wetlands?
Soil disturbance will be minimized to the extent possible and an erosion control plan, submitted as Exhibit H, will be followed.

LEVEL OF WETLAND REVIEW, REQUIRED EXHIBITS

10. Determine the level of wetland review required for your project (check only one option!) and submit all necessary exhibits with this supplement (see instructions for details).	Level of Review	Required Exhibits
<input type="checkbox"/> Altering a P-WL1 of any size.		
<input type="checkbox"/> Altering 15,000 – 43,559 sq. ft. of a P-WL2 or P-WL3 containing S1 or S2 communities.	Tier 3	S-3A, S-3B, S-3C, S-3D
<input type="checkbox"/> Altering 43,560 sq. ft. or more or a P-WL2 or P-WL3.		
<input type="checkbox"/> Altering 20,000 – 43,560 sq. ft. of a P-WL2 or P-WL3 not containing S1 or S2 communities.	Tier 2	S-3A, S-3B, S-3C, S-3D
<input type="checkbox"/> Altering 15,000 – 19,999 sq. ft. of a P-WL2 or P-WL3 not containing S1 or S2 communities.	Tier 2	S-3A, S-3B
<input type="checkbox"/> Altering 4,300 – 14,999 sq. ft. of a P-WL2 or P-WL3.	Tier 1	S-3A
<input checked="" type="checkbox"/> Altering less than 4,300 sq. ft. of a P-WL2 or P-WL3.	None	S-3A

TRC
249 Western Avenue
Augusta, ME 04330

Main 207.621.7000
Fax 207.621.7001

Memorandum

To: Dana Valleau
TRC - Augusta

From: Richard Will
TRC - Ellsworth

Subject: Proposed Meteorological Towers on Sisk Mountain

Date: June 23, 2009

Project No.: 165796 Phase 10

TransCanada Maine Wind Development (TransCanada) is assessing the development of a wind power generating facility in the Boundary Mountains of Western Maine known as the Sisk Wind Power Project. Sisk Mountain is located in the unorganized townships of Kibby and Chain of Ponds, in Franklin County, Maine (Figure A-1).

The first step for this project is the proposed installation of four meteorological towers (met towers) on the ridge of Sisk Mountain and associated geotechnical investigations. The met towers will quantify wind resource characteristics in the project area and will assist in ecological data collection. The geotechnical investigations will include borings to determine surficial and underlying rock qualities found on the ridge. In order to install the proposed met towers, access to the ridge must be established. Proposed access trails have been located to allow transport of met towers to their proposed locations for installation via tracked equipment or all terrain vehicles (ATVs). After met towers have been installed, the access trails will be used to reach the met towers for maintenance on foot or via ATV or snowmobile. Access trails will also be used for ecological and geotechnical investigations. Proposed access trails utilize an existing logging road, winter road and skidder trail to the extent possible to minimize the need for clearing of new access trails.

Dr. Richard Will of TRC Ellsworth, Maine was hired to conduct a Precontact period cultural resources management investigation of the meteorological tower project on Sisk Mountain. Dr. Will has conducted similar study of the adjacent Kibby Wind Power Project (Will 1993, 2007). The investigation involved review of materials provided by the client; examination of topographic, surficial, and bedrock geologic maps; consultation with Dr. Arthur Spiess at the Maine Historic Preservation Commission (MHPC), and review of MHPC archaeological site files.

Survey for Precontact period archaeological site locations is based upon application of sensitivity criteria used to predict whether a cultural resource might be present. Those criteria include factors such as proximity to water, soil type (well drained), proximity of other archaeological sites, and topography (level). Given that Maine Precontact people were largely hunters and gatherers, they preferred settling near water bodies due to the abundant animal and plant resources that could be found along waterways and interior lakes and ponds. In addition, major streams and rivers provided

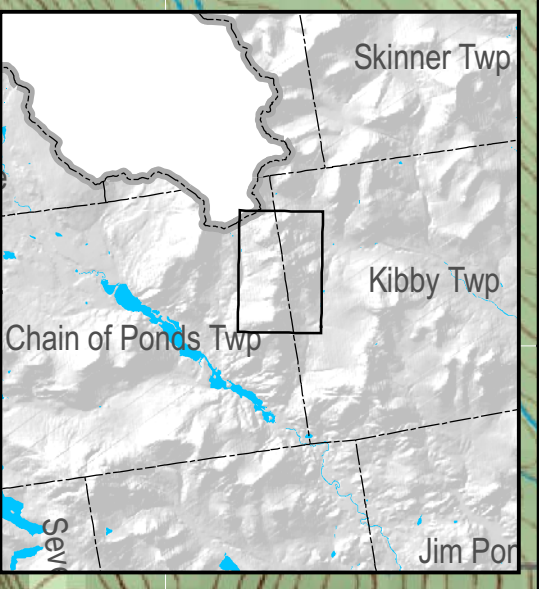
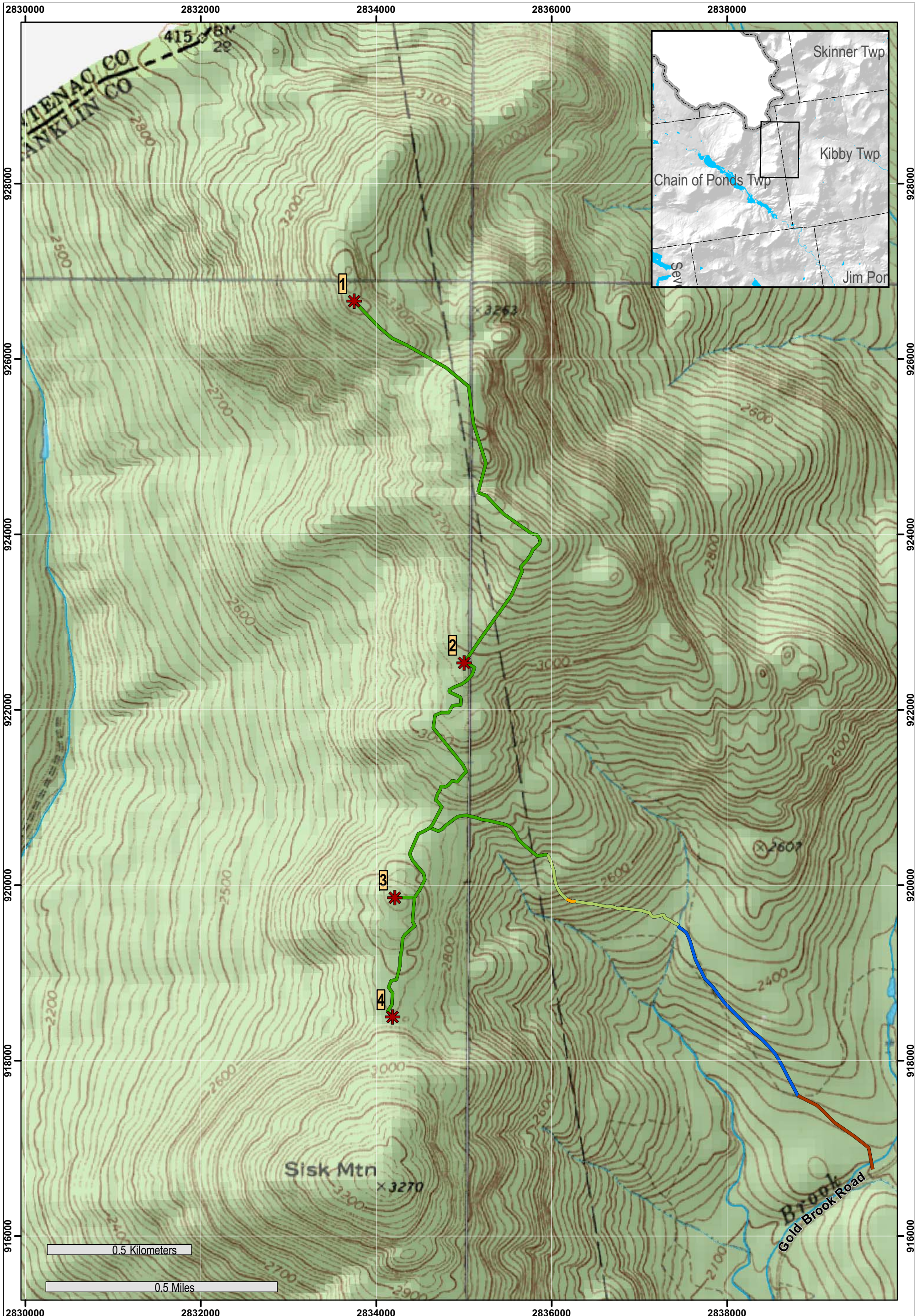
convenient travel routes to rich resource areas, as well as for commerce with neighboring regions. Thus, in assessing sensitivity of an area for prehistoric resources, the proximity to water ranks extremely high (Spiess 1992).

There were also resource locations that people frequented to obtain raw materials for tool manufacture. Rock resources are the best preserved locations among these. As stone used by prehistoric inhabitants are typically found in certain geologic settings, the sensitivity for the presence of lithic procurement sites can be readily assessed by identifying the nature of the bedrock within the Project area.

Sisk Mountain is not considered an area for Precontact period archaeological sensitivity. Review of MHPC files reveals that there are no known archaeological sites in the area. Water is not immediately available. Surficial geology maps show the mountain is draped in till (Thompson and Borns 1985) that drains poorly and is not greatly suited to camping. Last, the bedrock geology of Maine documents that Sisk Mountain is not underlain by any lithic materials that would be suitable for stone tool manufacture (Osberg, Hussey, and Boone 1985). These factors suggest that no further archaeological investigation of this project is warranted.

References Cited

- Osberg, P. H., A. M. Hussey, and G. M. Boone
1985 **Bedrock Geologic Map of Maine**. Maine Geological Survey, scale 1:500,0
- Spiess, A. E.
1992 **Maine Prehistoric Archaeological Sites: Introduction and Management**. Report on file with the Maine Historic Preservation Commission, Augusta.
- Thompson, W. B., and H. W. Borns, Jr. (eds.)
1985 **Surficial Geologic Map of Maine**. **Maine Geological Survey**, Department of Conservation, Augusta.
- Will, Richard
1993 **Report on Phase) Archaeological Survey of the New England Wind Energy Station**. Report on file with the Maine Historic Preservation Commission, Augusta.
- 2007 **Archaeological Phase I Testing of the Kibby Wind Power Transmission Line**. Report on file with the Maine Historic Preservation Commission, Augusta.



0.5 Kilometers

0.5 Miles



- * Potential Met Tower Sites
- Gravel Road
- Winter Road
- Skid Trail
- New Trail in Cut
- New trail in forested

Sisk Mountain Proposed Meteorological Tower Sites and Access

Exhibit A

249 Western Ave
Augusta, ME 04330



Created:
7/2/2009

Notes: Base map: Orthophotography Sewall 2005 and ESRI World Imagery (leaf on). Coordinate Grid: NAD83 UTM Zone 19N, Meters

©Project6/TRCAugusta/165796/Sisk_Mtn/MDL/LOCATION/Ex_A_Met_Tower_Sites_Access_07109.mxd