

CONFIDENTIAL

Project Number: 2024ABE0015

May 8, 2024

Roger Autio,
Municipal District of Greenview
4806 – 36 Avenue, PO Box 1079,
Valleyview, AB T0H 3N0

Dear Mr. Roger Autio,

RE: PRE-DISTURBANCE WILDLIFE SWEEP FOR GREENVIEW INDUSTRIAL GATEWAY PROJECT

BASE Land and Environmental Ltd. (BASE) was retained by Municipal District of Greenview (MDGreen) to complete a pre-disturbance wildlife sweep for the construction of the proposed Greenview Industrial Gateway (GIG) which is an initiative to provide infrastructures needed for companies, such as power, rail, processed water, and an integrated transportation network. encompassing a total area of approximately 200 acres. The sweep area comprises the following sections: 14-67-5-W6M, 23-67-5-W6M, 15-67-5-W6M, 22-67-5-W6M, 16-67-5-W6M, and 21-67-5-W6M. Situated approximately 41.73 km south of Grande Prairie, Alberta, the project site is shown in Figure 1.

Under the Government of Alberta (2021) 'Master Schedule of Standards and Conditions', a wildlife sweep using the 'Wildlife Sweep Protocols, updated 2020' is required when important wildlife features may be destroyed or disturbed. The sweep area includes the proposed impacted area as well as a 100 metres (m) buffer zone, with safety restrictions preventing entry into wetland areas, as shown in the Appendices.

The wildlife sweep was completed in accordance with the Wildlife Act administered by Alberta Environment and Protected Areas. This provides regulatory provisions to protect and manage wildlife and their nests, dens, hibernacula, houses, etc. when active.

If any active den, residence, or feature of any wildlife are encountered, a 100 m buffer will be implemented around it. In addition, the den/residence will be determined to be active through the visual presence of the resident animal, fresh tracks or digging, and/or fresh feces.

This report provides the results of the wildlife sweep conducted by Marie Prill (P. Biol), Yostina Geleta (B.Sc.), Jamie Smith (B.Sc.), and Victor Henry (B.Sc.) of BASE spanning from April 11 to April 25, 2024. The sweep was conducted for GIG construction.

Site Description

The project area is located in the Boreal Forested Natural Region within the Central Mixedwood Natural Subregion (NRC 2006). The Central Mixedwood subregion is characterized by a mix of aspen, mixedwood, and white spruce forests that covers the uplands areas. Nearly half of the region is covered by wet, poorly drained fens and bogs distributed throughout central areas, whereas jack pine stands are found on coarser terrain to the east.

Additionally, timber harvesting, petroleum exploration and development are the primary land uses in this area. Agricultural activities are limited to hay crops and livestock grazing. Hunting, fishing, and trapping provide income for some residents, with commercial ventures operating in the area.

Wildlife and Nest Search

A preliminary desktop review by BASE included a search of the Fisheries and Wildlife Management Information System (FWMIS) and the Alberta Conservation Information Management System (ACIMS) databases to determine the presence or absence of sensitive species within the project area. The result from the ACIMS database search showed no sensitive species and non-sensitive plant species around the subjected area. The FWMIS search revealed the presence of five sensitive species: the Broad-winged Hawk (*Buteo platypterus*), Common Yellowthroat (*Geothlypis trichas*) the Great Gray Owl (*Strix nebulosa*), the Pileated Woodpecker (*Dryocopus pileatus*), Trumpeter Swan (*Cygnus buccinator*) along with one species at risk, and one species at risk, the Grizzly Bear (*Ursus arctos*), and two species that are potentially at risk; the Canada Warbler (*Wilsonia canadensis*) and Western Wood-pewee (*Contopus sordidulus*) within a 2 km radius of the project area. During the wildlife sweep, Trumpeter Swan calls were identified, and a Pileated Woodpecker was sighted flying overhead, accompanied by alarm calls and potential signs of an active nest. Pre-disturbance assessment measures included the installation of a 25m radius buffer around the potential active nest in Area 1 within the project site. (Refer to Appendix C).

BASE biologists used both meandering and intersect transect lines sweep methodologies across the project area and 100m buffer, with limitations of entering some wetland areas within the project area. Survey tracks within the proposed project area and the 100m buffer zone are shown on Appendix B through Appendix F. A total of 32



birds and five mammal's species were observed during the sweeps completed from April 11 through April 25, 2024 (see Table 1).

Table 1. Species Found Within the Project Area During the Wildlife Sweep between April 11 - April 25, 2024.

Common Name	Scientific Name	Number Present	Observation Type*
Birds			
American Crow	<i>Corvus brachyrhynchos</i>	>9	S, V - In
American Pipit	<i>Anthus rubescens</i>	1	S - In
American Robin	<i>Turdus migratorius</i>	36	S, V – In and Out
Barred Owl ^a	<i>Strix varia</i>	1	S - In
Black-capped Chickadee	<i>Poecile atricapillus</i>	24	S, V - In and Out
Blue-winged Teal	<i>Spatual discors</i>	1	S, V - In
Boreal Chickadee	<i>Poecile hudsonicus</i>	3	S - In
Bufflehead	<i>Bucephala albeola</i>	7	S, V - In
Canada Goose	<i>Branta canadensis</i>	13	S, V - In
Canada Jay	<i>Perisoreus canadensis</i>	4	S, V -In
Common Raven	<i>Corvus corax</i>	20	S, V - in
Dark-eyed Junco	<i>Junco hyemalis</i>	16	S, V - in
Downy Woodpecker	<i>Dryobates pubescens</i>	3	S - In
House Finch	<i>Carpodacus mexicanus</i>	1	S - In
Killdeer	<i>Charadrius vociferus</i>	5	S, V - In
Mallard	<i>Anas platyrhynchos</i>	7	S, V - In
Northern Flicker	<i>Colaptes auratus</i>	7	S, V - In
Northern Pintail	<i>Anas acuta</i>	2	S - In
Ovenbird	<i>Seiurus aurocapilla</i>	1	V - In
Pileated Woodpecker ^a	<i>Dryocopus pileatus</i>	4	S, V - In
Pine Grosbreak	<i>Pinicola enucleator</i>	1	S - In
Purple Finch	<i>Carpodacus purpureus</i>	6	S, V - In
Red-breasted Nuthatch	<i>Sitta canadensis</i>	3	S - in
Red-winged Blackbird	<i>Agelaius phoeniceus</i>	1	S - In
Ruby-crowned Kinglet	<i>Regulus calendula</i>	4	S, V - In
Ruffed Grouse	<i>Bonasa umbellus</i>	27	S, V - in
Sandhill Crane	<i>Grus canadensis</i>	18	S, V – In and Out
Song Sparrow	<i>Melospiza melodia</i>	1	S – In and Out
Tree Swallow	<i>Tachycineta bicolor</i>	6	S - In
Trumpeter Swan ^a	<i>Cygnus buccinator</i>	1	S - In
Wilson's Snipe	<i>Gallinago delicata</i>	5	S, V - In
Yellow-rumped Warbler	<i>Dendroica coronata</i>	2	S - In
Mammals			
Coyote	<i>Canis latrans</i>	>15 tracks	O - In
Deer	<i>Odocoileus hemionus/virginianus</i>	>45 tracks	O - In and Out
Moose	<i>Alces alces</i>	>40 tracks	O - In and Out
Nuttall's Cottontail	<i>Sylvilagus nuttallii</i>	>15 tracks	O, S, V – In
Red Squirrel	<i>Tamiasciurus hudsonicus</i>	15	S, V - In and Out

*Note: C = Call, S = Sound, V = Visual, and O = Other, In = within the project buffer, and Out = Outside of the project buffer, ^a = Sensitive species.





Figure 1. Map of project area for the wildlife sweep.

Findings, Recommendations and Closure

During the wildlife survey, we observed a Pileated Woodpecker (*Dryocopus pileatus*), a sensitive species, along with a potentially active nest, prompting the establishment of a 25 m buffer zone. Additionally, we identified multiple unoccupied stick and grass nests throughout the project area. To ensure an accurate assessment of sensitive species' presence, we recommend continued wildlife surveys. Given the presence of an active nest during the sweep, implementation of the Bird Nest Protocol for nests and dens was triggered to ensure the occupants of the nests are protected. Based on these findings, we advise that, following the Wildlife Sweep Protocols set forth by the Government of Alberta (2020), any construction projects should start within a 10-day period from the date of the wildlife sweep.

Given that an active nest was found within the project area at the time of the pre-disturbance assessment, buffers were installed.

Yours truly,

BASE Land & Environment Ltd.

Prepared by:



Yostina Geleta, B.SC.

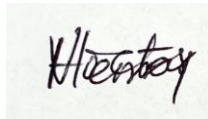
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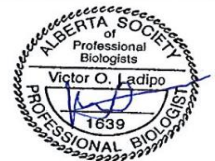
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References

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<https://albertaparks.ca/acims-data/>. (Accessed on May 7, 2024).

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(Accessed on May 7, 2024).

Government of Alberta. Master schedule of standards and conditions (April 2021) Available online at

<https://open.alberta.ca/dataset/133e9297-430a-4f29-b5d9-4fea3e0a30c2/resource/37d91717-08ab-4998-a13f-ce5c103c0735/download/aep-master-schedule-of-standards-and-conditions-2021-04.pdf>
(Accessed May 7, 2024).

Government of Alberta. Sensitive Species Inventory Guidelines. Wildlife seep protocols (December 2020):

<https://open.alberta.ca/dataset/d15221f2-f6d8-4671-8b49-d8fff6eab2b6/resource/6968392a-9e05-4bd8-bd76-ea107ba86c1c/download/aep-wildlife-sweep-protocols-sensitive-species-inventory-guidelines-2020.pdf>. (Accessed on May 7, 2024).



Appendix A: Site Photography

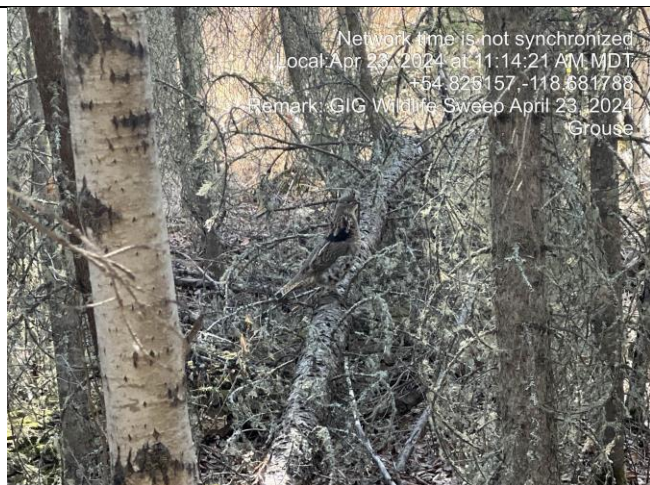
Area 4 transmission line GIG 22 Apr 2024, 11:12:51 a.m.	Area 4 habitat Municipal District of Greenview 22 Apr 2024, 09:44:01
Network time is not synchronized Local Apr 24, 2024 at 9:12:32 AM MDT +54.815775 -118.698451 Remark: GIG Wildlife Sweep April 24, 2024 Bird nest Area 4 Canada Goose Municipal District of Greenview 22 Apr 2024, 11:41:54	Area 4 Canada Goose Municipal District of Greenview 22 Apr 2024, 11:41:54



Photograph 5: View of deer scats identified in the project area.



Photograph 6: View of beaver activity identified adjacent to a wetland in the project area.



Photograph 7: View of a ruffed grouse identified in Area 4 of the project area.



Photograph 8: View of grouse scats identified in the project area.



Photograph 9: View of wetland adjacent to the northeast buffer in Area 1 of the project area.



Photograph 10: View of moose scats spotted in the project area.



Photograph 11: View of cutblock and vegetation in Area 4 of the project site.



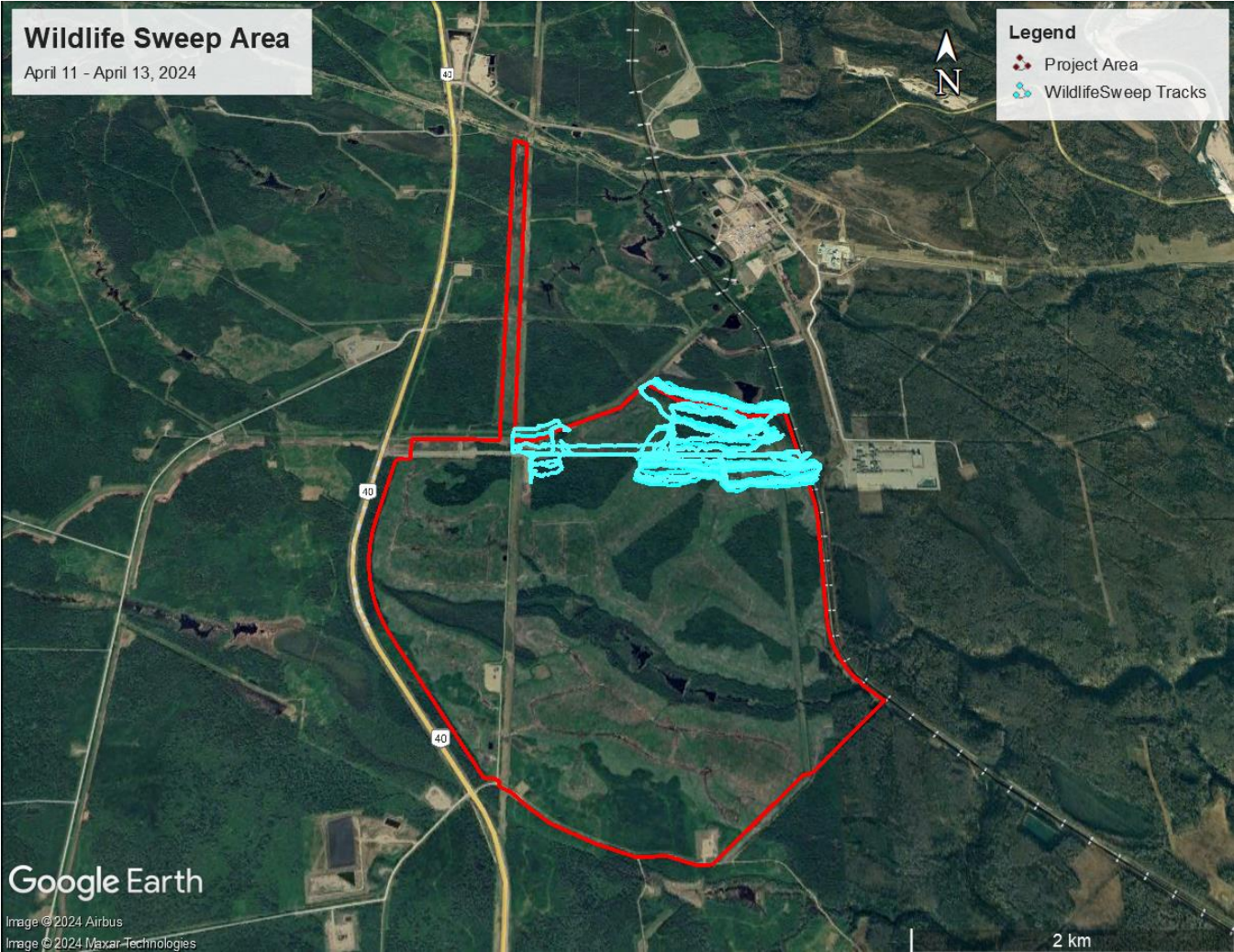
Photograph 12: View of coyote tracks identified in the project area.



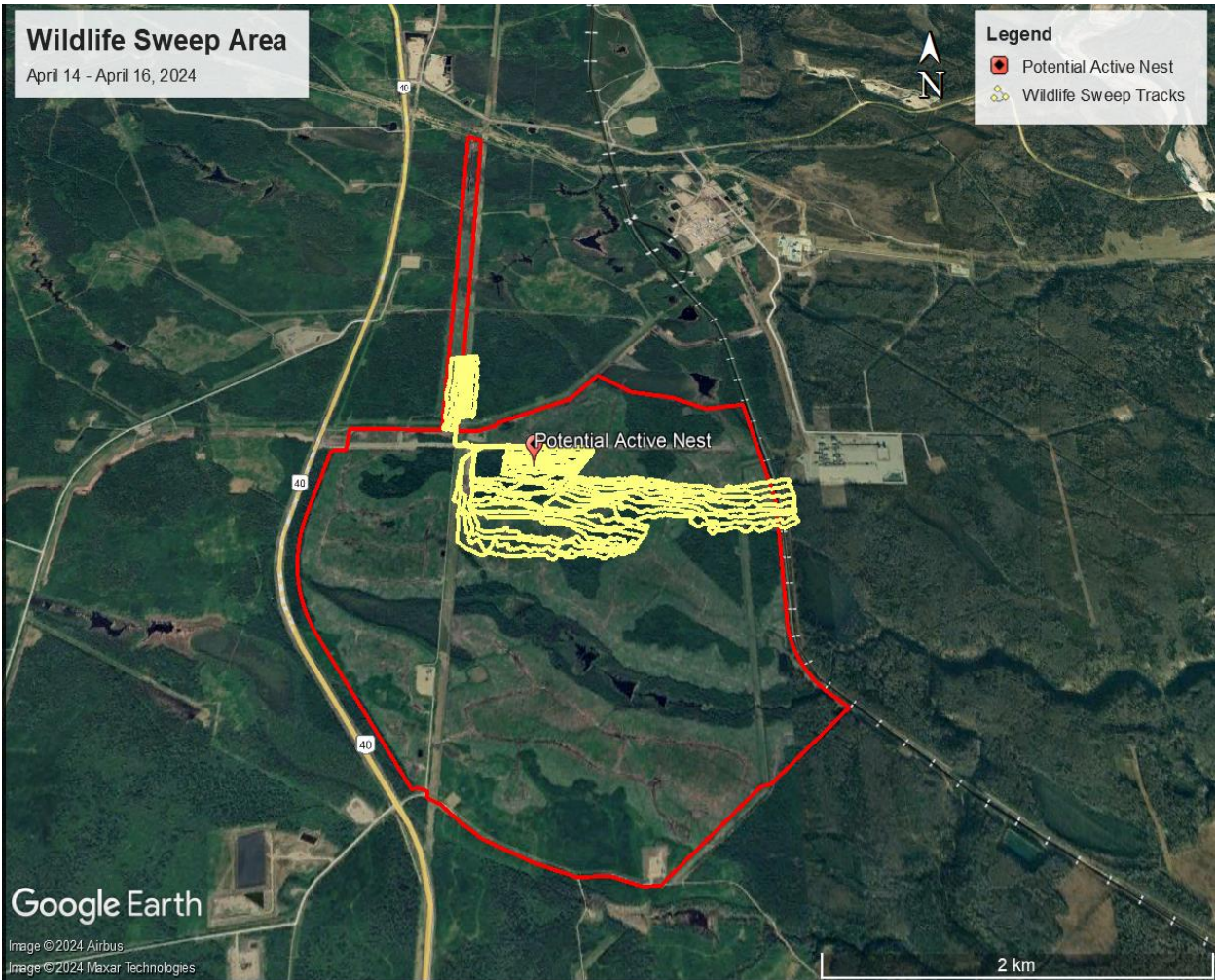
Photograph 13: View of woodpecker feeding cavities found in the project area.



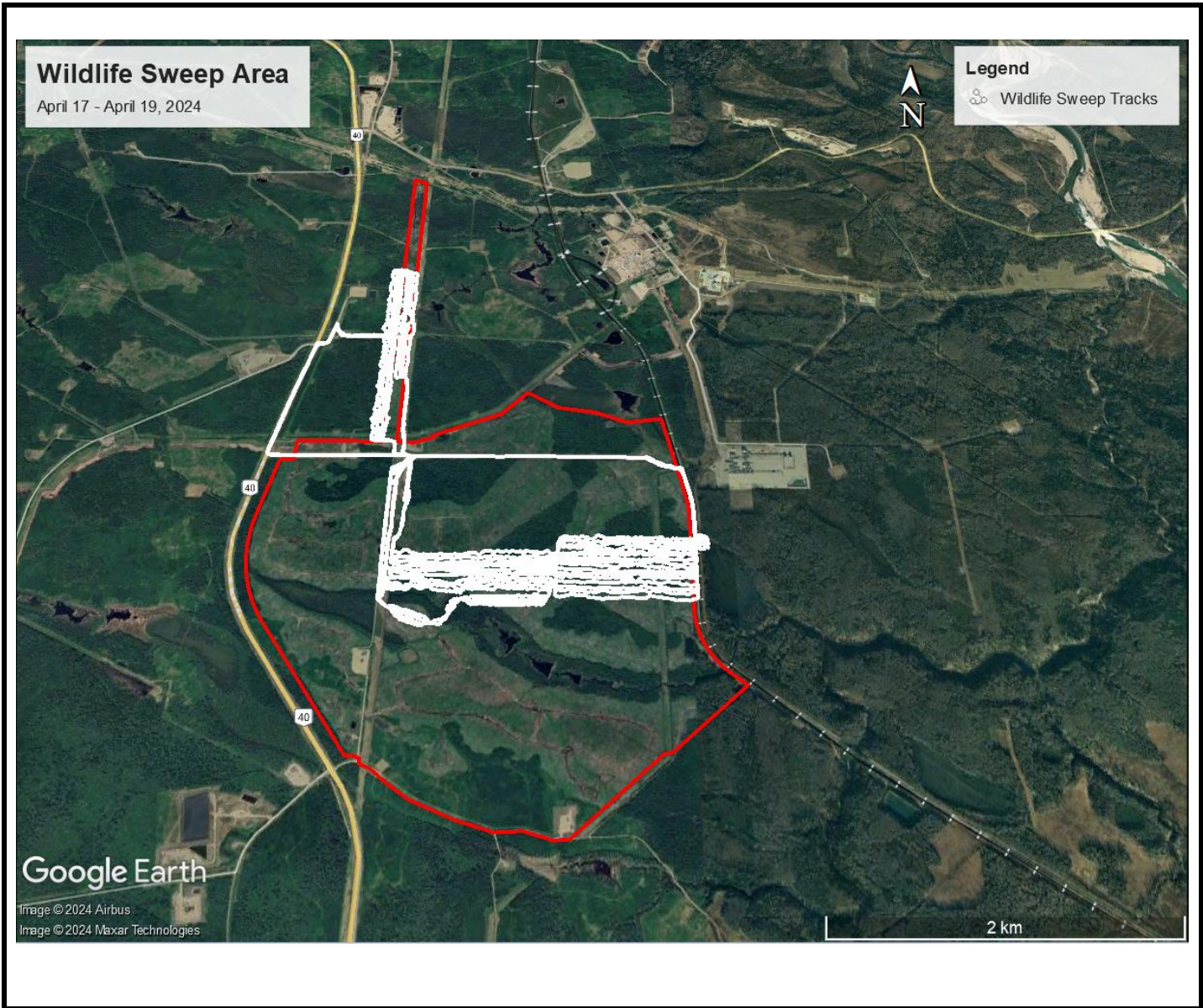
Photograph 14: View of Area 3 adjacent to an oil & gas facility and a low-grade road in the project area.



 Project Location: 21-67-5-W6M and 23-67-5-W6M	Proposed Greenview Industrial Gateway		
	Date: May 8, 2024 APP: VH	Scale: NTS DRN: YG	Job No: 2024ABE0015 Appendix B



Project Location: 21-67-5-W6M and 22-67-5-W6M	Proposed Greenview Industrial Gateway		
	Date: May 8, 2024	Scale: NTS	Job No: 2024ABE0015
	APP: VH	DRN: YG	Appendix C



	Proposed Greenview Industrial Gateway		
Project Location: 22-67-5-W6M, and 23-67-5-W6M	Date: May 8, 2024	Scale: NTS	Job No: 2024ABE0015
	APP: VH	DRN: YG	Appendix D

