



TECHNICAL MEMORANDUM

DATE April 3, 2025

Project No. CA-EI-CW238404

TO Darryl Drohomerski
Town of Drumheller
224 Centre Street
Drumheller, AB, T0J 0Y4

FROM Alannah Gallo

EMAIL alannah.gallo@wsp.com

PRE-CONSTRUCTION WILDLIFE SWEEP RESULTS FOR THE NACMINE BERM WITHIN THE TOWN OF DRUMHELLER

1 INTRODUCTION

The Town of Drumheller (Drumheller) retained WSP Canada Inc. (WSP) to conduct a wildlife sweep prior to construction activities for the Nacmine flood prevention berm between the Red Deer River and the Nacmine residences within the town of Drumheller, approximately 5 km southwest of the Drumheller downtown. This memo contains the wildlife sweep results for the Nacmine berm with a focus on the areas where drilling was to occur along the berm.

Wildlife sweeps are required to meet the Alberta Master Schedule of Standards and Conditions (MSSC; Government of Alberta [GOA] 2024). A wildlife sweep is conducted by a qualified professional as close to the first day of construction as possible to assess the proposed project area and surrounding site to identify important wildlife features (e.g., nests, dens) that must be avoided during associated activities (GOA 2020).

The 2022 update to the Migratory Birds Regulations (MBR) under the *Migratory Birds Convention Act, 1994* (MBCA) protect the active and inactive nests of 18 species, including pileated woodpecker (*Dryocopus pileatus*). Pileated woodpecker roosting and feeding cavities are not protected under the updated MBR. Pileated woodpecker nests require registration through Environment and Climate Change Canada's (ECCC) Abandoned Nest Registry (GOC 2022a) and confirmation of non-occupancy by any migratory bird over 36 months prior to removal of the tree containing the nest cavity (GOC 2022b).

2 METHODS

As per the Wildlife Sweep Protocols: Sensitive Species Inventory Guidelines (the Wildlife Sweep Protocols; GOA 2020), wildlife sweeps should be conducted within 10 days of the start of activities by a qualified professional, unless alternative timing has been justified, to assess the proposed project and surrounding area for important wildlife features (e.g., raptor stick nests, pileated woodpecker nest cavities, dens). Disturbance to important wildlife features must be avoided during construction activities (GOA 2020).

Following the Wildlife Sweep Protocols (GOA 2020), wildlife sweeps were conducted within 10 days of the start of activities, with one sweep on February 25, 2025, and a second sweep on March 10, 2025. The Nacmine berm plus a 100 m buffer was swept to search for evidence of wildlife (e.g., tracks, scat), sensitive habitat features (e.g., mineral licks, dens, burrows, nests), and wildlife observations (i.e., visual, and auditory observations). The 100 m buffer was limited due to the Red Deer River to the north and private property to the south (Project area). The wildlife sweeps were conducted during daylight hours and during suitable weather conditions for observing wildlife and detecting important wildlife features. A global positioning system (GPS) was used to record a tracklog of the sweep and locations of important wildlife features with photographs taken if features were present.

3 PRE-CONSTRUCTION WILDLIFE SWEEP SURVEY RESULTS

On February 25, 2025, two biologists walked the Project area and 100-m buffer where access allowed. The wildlife sweep took place between 10:00 to 13:00. Weather conditions on site were favourable with clear skies, no wind, and temperatures ranging between -5°C and -3°C.

The Project area consisted of trembling aspen (*Populus tremuloides*), balsam poplar (*Populus balsamifera*), and willow species (*Salix* species) (Appendix A). Small patches of white spruce (*Picea glauca*) trees were also found in the Project area.

A pileated woodpecker roosting cavity was observed at UTM location 12U 376300 E; 5703674 N (Appendix A). Pileated woodpecker were not observed during the survey, other wildlife sign observed include deer species (*Odocoileus* species) pellets and woodpecker species (*Picidae* species) feeding cavities (Appendix A).

A local resident contacted Project representatives regarding a great horned owl (*Bubo virginianus*) pair sighted in their neighbour's trees. The resident had photo evidence of the owls nesting in the tree the previous year. The crew visited the residence and observed the trees for approximately 15 minutes, left the area to continue the survey, and returned to monitor the trees for another 45 minutes. No owls were observed during the times the trees were observed. The nest from the previous year was visible (12U 376616 E; 5703360 N), however there was no evidence it was currently active (Appendix A).

On March 10, 2025, a second sweep was conducted between 11:15 to 15:15. Two biologists walked the Project area and 100-m buffer, where access allowed. Weather conditions on site were favourable with cloudy skies, no wind, and temperatures ranging between -2°C and 2°C. Wildlife sign observed include deer species tracks and pellets, old beaver (*Castor canadensis*) chewed trees, woodpecker species (*Picidae* species) feeding cavities and inactive small nesting cavities, inactive corvid species (*Corvidae* species) nests, and two small mammal burrows. Dried small mammal scat, possibly striped skunk (*Mephitis mephitis*), was found outside one of the burrows, however no recent tracks or other recent evidence (e.g., digging, breathing holes) was found. Wildlife observed included an adults pair of downy woodpecker (*Picoides pubescens*) foraging, red crossbills (*Loxia curvirostra*), black-capped chickadee (*Poecile atricapillus*), white-breasted nuthatch (*Sitta carolinensis*), black-billed magpie (*Pica hudsonia*), and one red squirrel (*Tamiasciurus hudsonicus*) displaying freeze behaviour in a tree.

The crew reassessed the inactive great horned owl nest identified during the February wildlife sweep and observed the trees for approximately 20 minutes; no owls were observed. The crew visited the site once more on March 11 at 10:30 to check the white spruce trees to the west of where the owls were observed. The crew observed the trees for approximately 30 minutes, with no observations of owl activity.

4 RECOMMENDATIONS

No important wildlife features requiring setbacks or other mitigation were observed during the wildlife sweep. Any work activities that the Town of Drumheller chooses to undertake should occur within 10 days after the sweep, which was completed on March 11, 2025.

5 CLOSURE

This report was prepared by WSP for the Town of Drumheller. The material in this report reflects WSP's best judgment considering information available to it at the time of preparation. If the Town of Drumheller edits, revises, alters, or adds to the material in this report in any way, all reference to WSP and WSP's employees must be removed unless the Town of Drumheller changes are agreed to by WSP. Any use which a third party makes of this report or any reliance on or decisions to be made based on it, are the responsibility of such third party. WSP accepts no responsibility for damages, if any, suffered by any third party as a result of decision made or action based on this report.

We trust the information contained in this report is sufficient for your present needs. Should you have any questions regarding the project, please do not hesitate to contact the signatories below at (780) 918-7816.

Yours truly,

WSP Canada Inc.



Alannah Gallo, MSc, PBIol
Intermediate Wildlife Biologist



Christina Snider, Dip EVT
Senior Wildlife Biologist

AG/CS

Attachments: Appendix A – Wildlife Features and General Habitat Identified During Wildlife Sweep

6 REFERENCES

- GOA. (Government of Alberta). 2020. Wildlife Sweep Protocols: Sensitive species inventory guidelines. Available at: <https://open.alberta.ca/publications/wildlife-sweep-protocols-sensitive-species-inventory-guidelines>
Accessed: 24 January 2025.
- GOA. 2024. Master Schedule of Standards and Conditions. Available at:
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- GOC (Government of Canada). 1994. *Migratory Birds Convention Act, 1994*. SC 1994, c. 22. Current to 1 April 2024; last amended 12 December 2017. Ottawa ON: Minister of Justice. <https://laws-lois.justice.gc.ca/eng/acts/m-7.01/>.
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- GOC. 2022b. Fact sheet: nest protection under the Migratory Birds Regulations, 2022. [updated 30 May 2023; accessed October 2024]. <https://www.canada.ca/en/environment-climate-change/services/avoiding-harm-migratory-birds/fact-sheet-nest-protection-under-mbr-2022.html>.

APPENDIX A

**Wildlife Features and General Habitat
Identified During Wildlife Sweep**



Photo 1: Pileated woodpecker roosting cavity tree within the 100 m buffer (February 25, 2025)



Photo 2: View looking west along the berm (February 25, 2025)



Photo 3: View looking east from the berm (February 25, 2025)



Photo 4: Inactive great horned owl nest observed within the 100 m buffer (February 25, 2025)



Photo 5: Deer pellets observed within 100 m buffer (February 25, 2025)



Photo 6: Inactive burrow, dry striped skunk (possible) scat at entrance (March 10, 2025)



Photo 7: Dry striped skunk (possible) scat found at entrance of inactive burrow (March 10, 2025).



Photo 8: squirrel tracks (March 10, 2025)

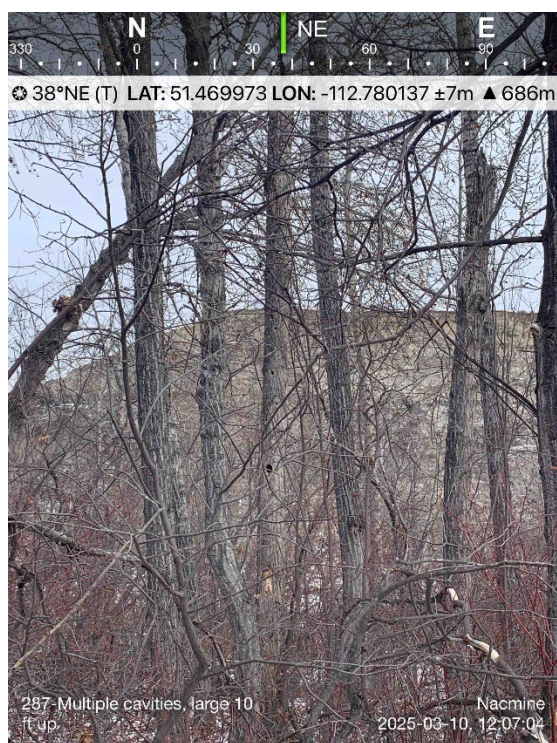


Photo 9: Inactive cavities (March 10, 2025)



Photo 10: Site photo looking NW (March 10, 2025)



Photo 11: Squirrel on tree displaying freeze behaviour (March 10, 2025)

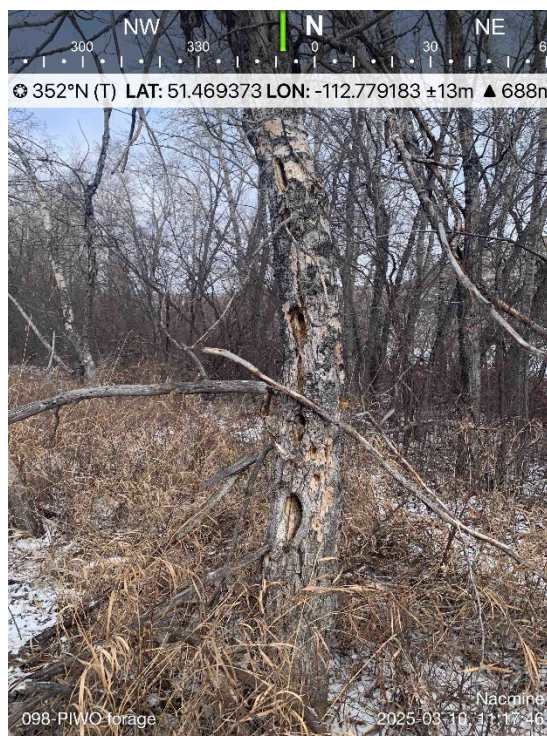


Photo 12: Older pileated woodpecker forage evidence at base of tree (March 10, 2025)



Photo 13: Old beaver activity (March 10, 2025)