# Appendix D

## Record of Consultation

# Appendix D.1

## Notice of Virtual PIC

TIMMINSTODAY.com

# Learn more about Canada Nickel at this virtual open house

TimminsToday Staff
Jan 31, 2024 12:30 PM


| *Canada Nickel Company photo*

Listen to this article
00:00:36

As Canada Nickel goes through the provincial and federal impact assessment for its Timmins project, it's hosting a virtual open house.

The Crawford Nickel project is a proposed open-pit mine 40 kilometres north of the city.

An online open house is a chance for people to learn about the project, the federal impact assessment and class environmental assessment process, and provide feedback. It runs from Jan. 31 to Feb. 22. You can check it out here.

In-person consultations are also expected to be held this spring.

**From:** Community <community@canadanickel.com>
**Sent:** Wednesday, January 31, 2024 11:11 AM
**To:** [redacted]
**Cc:** [redacted] Mathieu Boucher
**Subject:** CNC Environmental Committee: Crawford Project Virtual Open House

Dear Environmental Committee Members,

As valued members of Canada Nickel's committees for the implementation of the Crawford Nickel Project, the team at Canada Nickel would like to inform you that the Company will be hosting a Virtual Open House from January 31st to February 22nd, 2024.

The aim of this open-to-all, online consultation opportunity is to inform all interested parties about the Crawford Nickel Project and its various components, and to gather feedback that will help inform the Project's federal Impact Statement and associated provincial permits.

Specifically, the Virtual Open House will cover the following topics:

- Project Overview
- Federal Impact Assessment and Class EA Processes
- Project components and Activities
- Purpose of and Need for the Project
- Baseline Conditions

You may find the link to the Virtual Open House here: https://canadanickel.com/sustainability/

Canada Nickel will also be hosting an open-to-all, in-person consultation meeting, targeted for spring 2024. This meeting will cover alternative means of carrying out the Project, the details of the Impact Statement, and the results of the various technical studies being completed to assess potential project effects. Details about this upcoming future consultation opportunity will be shared in the coming months.

As a member of Canada Nickel's Environmental Committee, we value your time in participating in the Virtual Open House. Rest assured that all feedback will be considered by our team and will help improve the Project's local and regional integration.

Additionally, Canada Nickel will be reaching out to the members shortly with details regarding the next planned committee meeting in February to continue discussions on Canada Nickel's Water management plan.

Please feel free to reach out to our team at community@canadanickel.com if you have questions or comments about any of the above, or any other topic you would like to discuss.

Kind regards,

**Community Relations Team**
Canada Nickel Company Inc.
TSXv: CNC | OTCQB: CNIKF

**Web** www.canadanickel.com
**Email** community@canadanickel.com

**Newsletter**
http://eepurl.com/hJ-5jP

**From:** Community <community@canadanickel.com>
**Sent:** Wednesday, January 31, 2024 11:13 AM
**To:** [redacted]
**Cc:** [redacted] Mathieu Boucher; [redacted]
**Subject:** CNC Socio-economic committee: Crawford Project Virtual Open House

Dear Socio-economic Committee Members,

As valued members of Canada Nickel's committees for the implementation of the Crawford Nickel Project, the team at Canada Nickel would like to inform you that the Company will be hosting a Virtual Open House from January 31st to February 22nd, 2024.

The aim of this open-to-all, online consultation opportunity is to inform all interested parties about the Crawford Nickel Project and its various components, and to gather feedback that will help inform the Project's federal Impact Statement and associated provincial permits. Specifically, the Virtual Open House will cover the following topics:

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As a member of Canada Nickel's Socio-Economic Committee, we value your time in participating in the Virtual Open House. Rest assured that all feedback will be considered by our team and will help improve the Project's local and regional integration.

Additionally, Canada Nickel will be reaching out to the members shortly regarding the next planned committee meeting, on Wednesday, February 7.

Please feel free to reach out to our team at community@canadanickel.com if you have questions or comments about any of the above, or any other topic you would like to discuss.

Kind regards,

**Community Relations Team**
Canada Nickel Company Inc.
TSXv: CNC | OTCQB: CNIKF

**Email** community@canadanickel.com
**Web** www.canadanickel.com

**Newsletter**
http://eepurl.com/hJ-5jP

**From:** [redacted]
**Sent:** Wednesday, January 31, 2024 2:01 PM
**To:** [redacted]
**Cc:** [redacted] Mathieu Boucher; [redacted]
**Subject:** CNC Training and Employment Committee - Crawford Project Virtual Open House

Dear Training and Employment Committee Members,

As valued members of Canada Nickel's committees for the implementation of the Crawford Nickel Project, the team at Canada Nickel would like to inform you that the Company will be hosting a Virtual Open House from January 31st to February 22nd, 2024.

The aim of this open-to-all, online consultation opportunity is to inform all interested parties about the Crawford Nickel Project and its various components, and to gather feedback that will help inform the Project's federal Impact Statement and associated provincial permits.

Specifically, the Virtual Open House will cover the following topics:

- Project Overview
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Canada Nickel will also be hosting an open-to-all, in-person consultation meeting, targeted for spring 2024. This meeting will cover alternative means of carrying out the Project, the details of the Impact Statement, and the results of the various technical studies being completed to assess potential project effects. Details about this upcoming future consultation opportunity will be shared in the coming months.

As a member of Canada Nickel's Training and Employment Committee, we value your time in participating in the Virtual Open House. Rest assured that all feedback will be considered by our team and will help improve the Project's local and regional integration.

Additionally, Canada Nickel will be reaching out to the members in the coming weeks with new information and an update on the schedule for the next Training and Employment committee meetings.

Please feel free to reach out to our team at community@canadanickel.com if you have questions or comments about any of the above, or any other topic you would like to discuss.

Kind regards,

**Community Relations Team**
Canada Nickel Company Inc.
TSXv: CNC | OTCQB: CNIKF

**Web** www.canadanickel.com
**Email** community@canadanickel.com

**Newsletter**
http://eepurl.com/hJ-5jP

# Appendix D.2

## Notice of In-Person PIC

CANADA NICKEL COMPANY

## CRAWFORD NICKEL PROJECT

# OPEN HOUSE & COMMUNITY BBQ

**Meet our team, get firsthand information, ask questions, and share your thoughts, ideas and feedback!**

Canada Nickel Company, a Canadian junior exploration company with properties located in the Northeastern Ontario, is undergoing a federal Impact Assessment and several provincial Class Environmental Assessments for the Crawford Nickel Project.

The Project aims to **develop, construct, operate, and progressively reclaim a new open pit nickel mine** located 42 km north of Timmins.

To allow interested parties to share feedback on the Crawford Nickel Project, Canada Nickel Company will be hosting **two in-person Open House events** in the Cochrane District.

## Open House Details

### Timmins

**Wednesday, June 19th, 2024**

**4pm – 7pm**

**Canada Nickel Core Shack**
**170 Jaguar Drive N., Timmins, ON, P4R 0H1**

### Cochrane

**Thursday, June 20th, 2024**

**4pm – 7pm**

**Cochrane Pavilion**
**226 5th Street, Cochrane, ON, P0L 1C0**

## Event Highlights

- Meet-and-greet with the project team and experts
- Enjoy a complimentary BBQ and refreshments
- Family friendly: Colouring station, building blocks, and soccer balls
- Information about the Crawford Nickel Project and preliminary Impact Assessment details
- Opportunity to share your questions and/or feedback

## ALL ARE WELCOME!

For questions or comments regarding the Open House or any of Canada Nickel's activities, please reach out to our team at **community@canadanickel.com** or visit our website for more information:

**canadanickel.com**

CANADA NICKEL COMPANY

## CRAWFORD NICKEL PROJECT

# OPEN HOUSE & COMMUNITY BBQ

**Mark your calendars!** As part of the ongoing federal Impact Assessment and provincial Class Environmental Assessments for Canada Nickel Company's Crawford project and to allow interested parties to share feedback on the Crawford Project's components, Canada Nickel will be hosting two in-person Open House events in the Cochrane District

### Timmins

**Wednesday, June 19th, 2024**

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**canadanickel.com**

CANADA NICKEL COMPANY

## CRAWFORD NICKEL PROJECT

# OPEN HOUSE & COMMUNITY BBQ

**Mark your calendars!** As part of the ongoing federal Impact Assessment and provincial Class Environmental Assessments for Canada Nickel Company's Crawford project and to allow interested parties to share feedback on the Crawford Project's components, Canada Nickel will be hosting an in-person Open House event in Smooth Rock Falls.

### Smooth Rock Falls

**Friday, July 26th, 2024**

**11 am - 1 pm**

**Smooth Rock Falls Golf Course**
**195 5th St, Smooth Rock Falls, ON P0L 2B0**

## Event Highlights

- Meet-and-greet with the project team and experts
- Enjoy a complimentary BBQ and refreshments
- Family friendly: Colouring station, face painting, and toys
- Information about the Crawford Nickel Project and preliminary Impact Assessment details
- Opportunity to share your questions and/or feedback

**ALL ARE WELCOME!**

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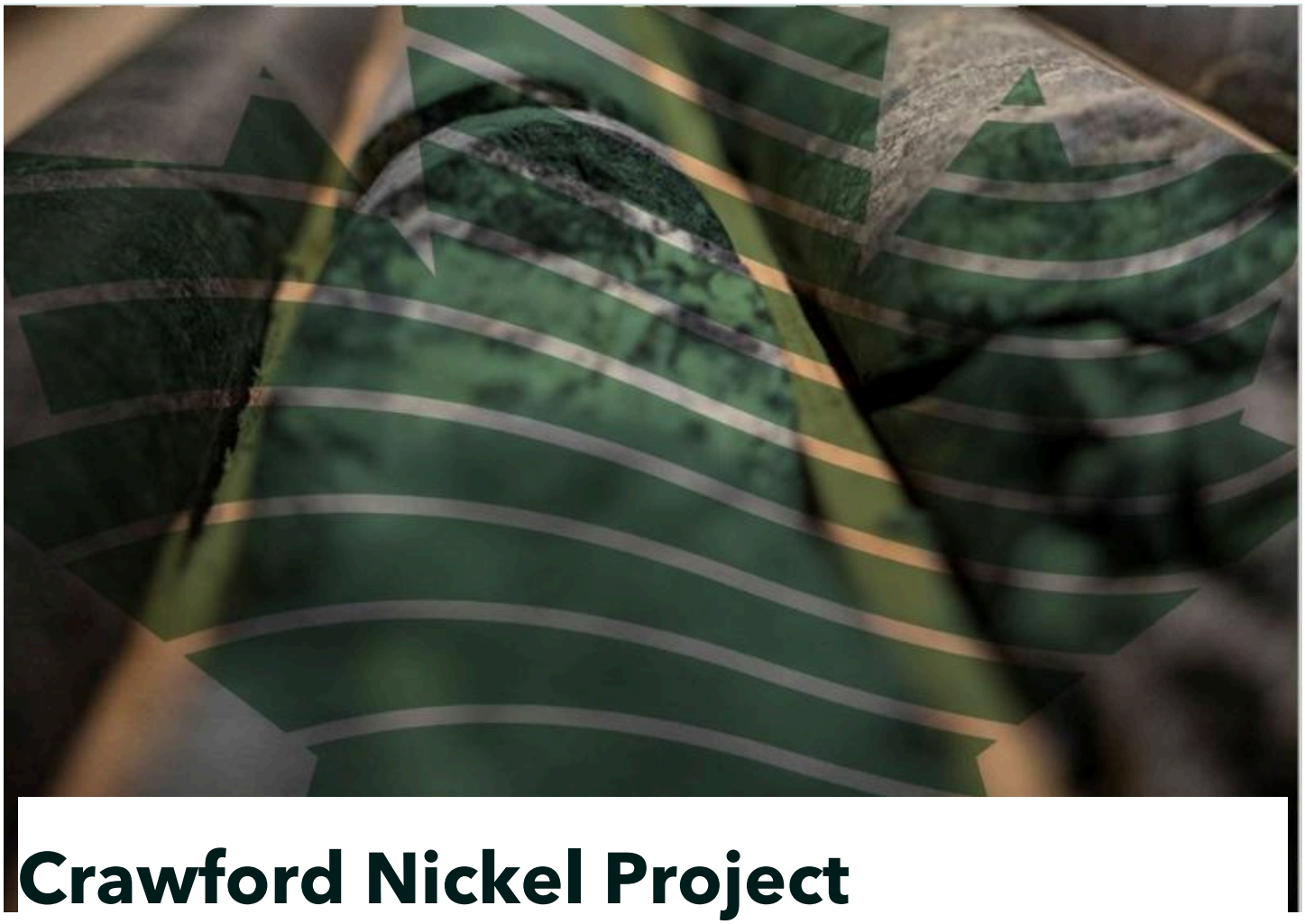
**canadanickel.com**

# Appendix D.3

## Virtual PIC Content

Crawford Nickel Project



# Crawford Nickel Project

Virtual Open House

**January 31st 2024 - February 22nd, 2024 | Project email: community@canadanickel.com**

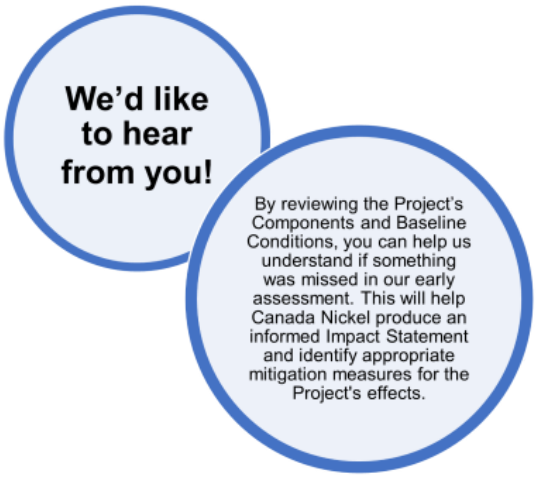
## Welcome

**Welcome to the Virtual Open House for the Crawford Nickel Project!**

Note: The virtual open house materials will perform best on a computer or tablet due to the large amount of visual and interactive material that we want to share with you.

The Virtual Open House presents the following information:

- Project overview
- Federal Impact Assessment (IA) and Class Environmental Assessment (EA) Process
- Project components and activities
- Purpose of and Need for the Project
- Baseline Conditions




Please provide your feedback and comments using these tools:

- Add a comment or identify a location of interest on the Interactive Map below
- Fill in an online questionnaire
- Submit comments and questions to community@canadanickel.com

## Future Consultation Opportunity

Canada Nickel will be holding an open-to-all, in-person consultation meeting (called a Public Information Centre or PIC) targeted for spring 2024, to present the alternative means of carrying out the Project and the results of the Impact Statement, including the results of the various technical studies being completed to assess potential effects. Canada Nickel will also include a summary of comments and concerns provided throughout the Project and how they have been addressed and/or incorporated into the design of the Project.

Participants of the Virtual Open House are invited to join Canada Nickel's team for the upcoming Public Information Centre. Details about this upcoming future consultation opportunity will be shared with the public and all interested parties in the coming months.

## Interactive Map

**Crawford Nickel Project Map**

Click here to launch the interactive map

https://stantec.maps.arcgis.com/apps/webappviewer/index.html?id=c151f277304e4b698be046b68b629977

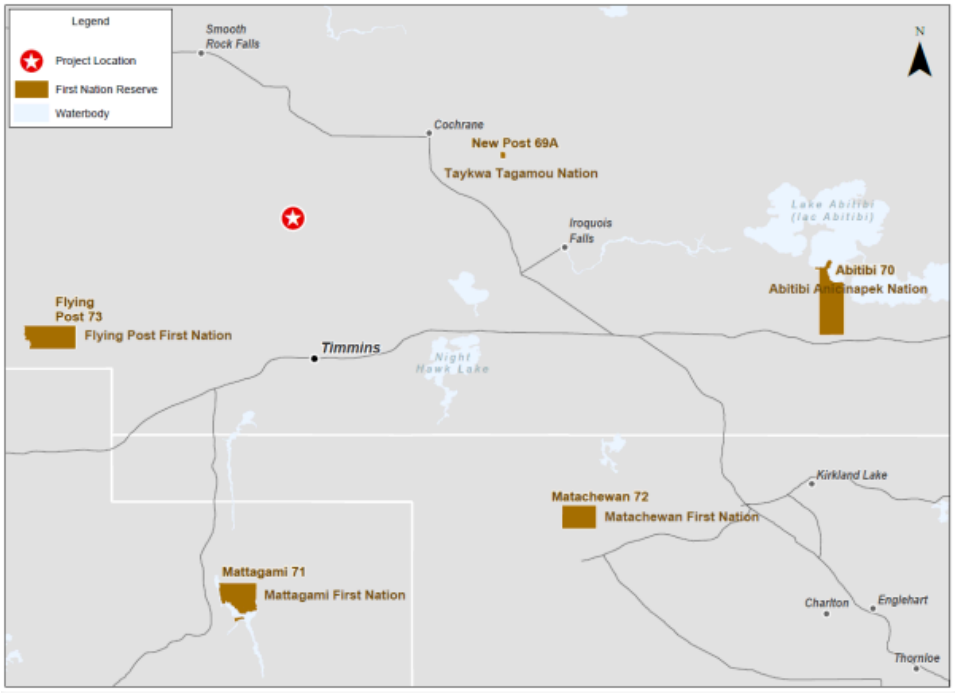
## General Overview of the Crawford Nickel Project

Canada Nickel is a Canadian junior exploration company headquartered in Toronto, Ontario, Canada with exploration properties located in Northeastern Ontario.

Canada Nickel is proposing to develop, construct, operate, and progressively reclaim a new open pit nickel mine and processing facility, collectively known as the Crawford Nickel Project (the Project). The Project is located 42 km north of Timmins, Ontario (refer to Figure below); one of the largest cities in Northern Ontario and one strongly linked to the mining industry.

This new mine is proposed to extract and process critical minerals necessary to meet Canada and Ontario's ambitious critical minerals strategies.

*This domestic source of nickel and other critical minerals will supplement the global need for stainless steel and lithium-ion batteries. The Project is positioned to be the largest base metal mine in Canada and one of the largest suppliers of nickel in the world.*




Location of Crawford Nickel Project

## Federal Impact Assessment and Provincial Environmental Assessment Process

The Project is currently undertaking a Federal Impact Assessment (IA), which will be administered by the Impact Assessment Agency of Canada (IAAC) under the Impact Assessment Act. Certain components of the Project are also subject to Class Environmental Assessments (Class EA) through various Provincial agencies. Environmental permits and approvals will also be required in the future.


***The Federal IA process involves 5 Phases:***

Canada Nickel initiated Phase 1 in July 2022, to engage with Indigenous communities, government agencies, interested stakeholders, and the public. This Phase concluded with the issuance of the TIS Guidelines by IAAC in March 2023. The TIS Guidelines outline the factors to be considered in the IA.

The Project is currently in Phase 2. Canada Nickel is preparing an Impact Statement that will identify and describe the Project and existing environmental conditions. This will lead to the assessment of the Project's potential effects and identification of mitigation measures and associated monitoring programs. Additional information on project alternatives, effects of potential accidents and malfunctions, effects of the environment on the Project, effects on Canada's ability to meet its environmental obligations and climate change commitments, and the extent to which the Project will

contribute to sustainability will also be included. To learn more about the approach to undertaking the Alternatives Assessment and Cumulative Effects Assessment, please click here. As mentioned above, public consultations on the Project's potential effects and associated mitigation measures will be held during the **open-to-all Public Information Centre (PIC), planned for spring 2024.**

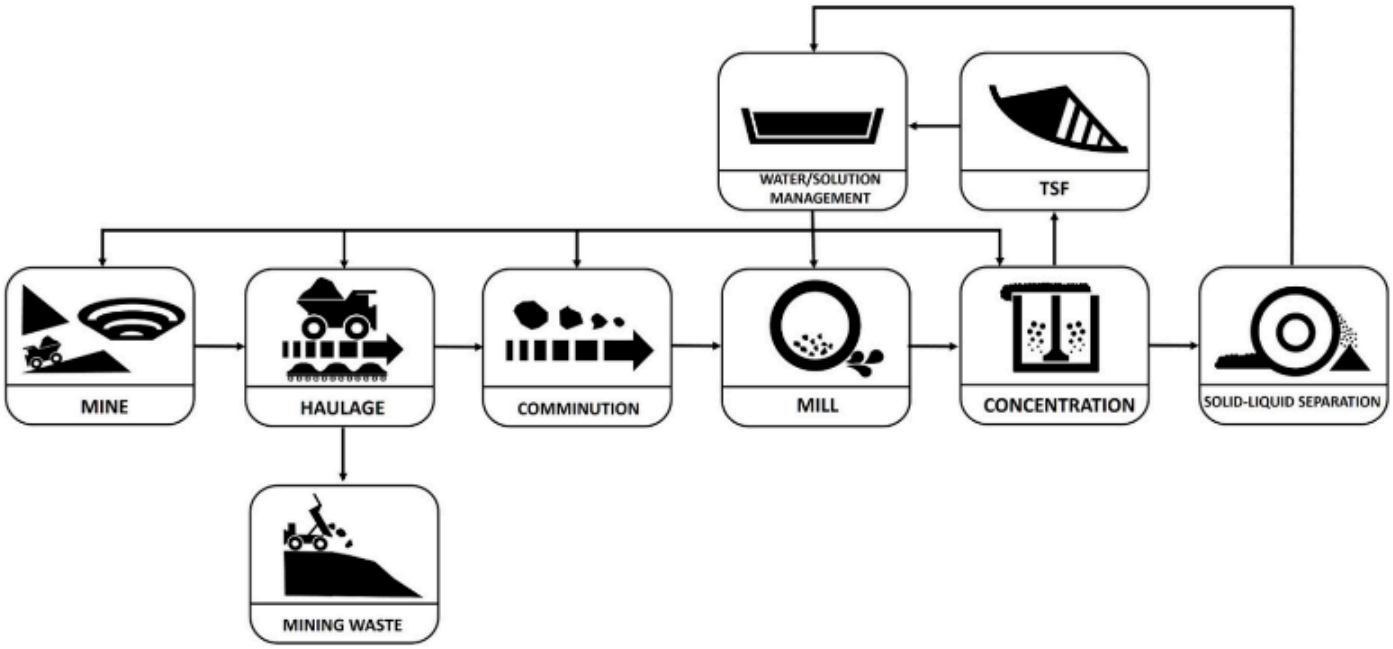
Once prepared and submitted to IAAC, the IAAC will review the submitted Impact Statement and will engage with federal authorities, jurisdictions, Indigenous communities, and other participants (including the public) to identify any deficiencies in the information provided, which Canada Nickel will address, before proceeding to Phase 3 for recommendations by IAAC and an ultimate decision by the Minister.

## Class EA Requirements

In addition to the Impact Assessment, four Class EAs have been identified for the Project pursuant to the Ontario Environmental Assessment Act. Requirements of each Class EA will be confirmed as the Project continues to advance. Class EAs will be initiated through the issuance of a notice of commencement and will be focused on specific Project components, not the Project as a whole. Opportunities for consultation and engagement as part of each Class EA process will be available and coordinated by Canada Nickel in conjunction with preparation of the Impact Statement, as appropriate.

| Name of Class EA | Ministry | Purpose / Project Component |
|---|---|---|
| **Class EA for Provincial Transportation Facilities – Group B** | Ministry of Transportation | • Realignment of the existing Highway 655<br>• Intersection and/or underpass beneath Highway 655 |
| **Class EA for Minor Transmission Facilities – Screening** | Ministry of Energy | • Transformer station(s)<br>• New transmission line internal to the site if between 2 - 4 km & under 500 kV |
| **Class EA for MNR Resource Stewardship and Facility Development Projects – Category B*** | Ministry of Natural Resources and Forestry | • Infrastructure located on Crown land<br>• Development of on-line tailing management facility (if required)<br>• Water crossings / culverts / tree removals<br>• Beaver dam / furbearing mammal |

| Name of Class EA | Ministry<br>**About the Project** | Purpose / Project Component |
|---|---|---|



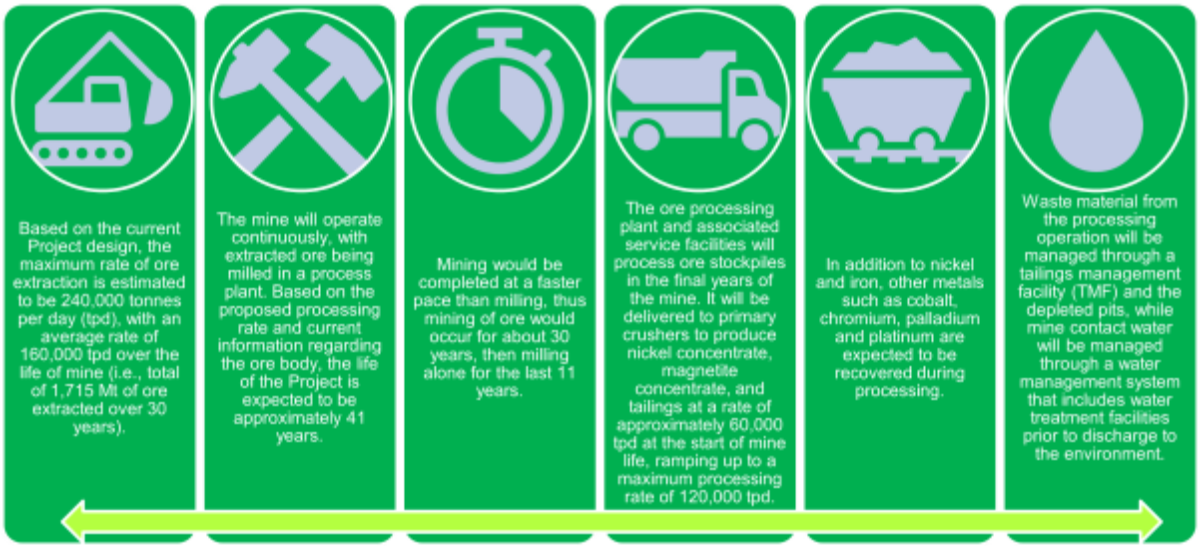

## How do Mines Work?

The Project is a proposed open pit mine that generally follows the following mine process:

- **Mine:** Develop the open pit using drills and shovels
- **Haulage:** Collect the overburden (soil on top of bedrock), ore (rock that contains the minerals) and waste rock (does not contain minerals) and transport it out of the pit with trucks
- **Mining Waste:** Transport overburden and waste rock to be reused for mine construction and reclamation, or to stockpiles

- **Comminution:** Use conveyors to screen and crush ore, stockpile
- **Mill:** Grind ore in mills to reduce the rock particle size further
- **Concentration:** Coarse flotation and magnetic separation to concentrate material
- **Solid-Liquid Separation:** Nickel concentrate thickening and filtration and magnetite dewatering and filtration. Concentrates are shipped off-site to a downstream processing facility
- **TSF:** Tailings, consisting of grinded rock now exempt from the targeted minerals, are sent to a final storage area
- **Water/Solution Management:** Process water is recycled and reused in the milling and concentration process

## Project Activities




Project Activities

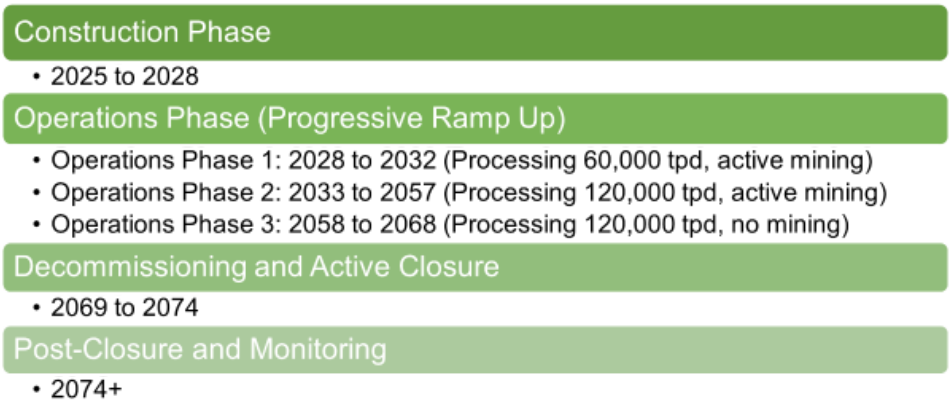
## Project Components

The interactive map provides a general layout of the various Project components.


Project Components

## Project Phases and Schedule

The Project can be split into four Phases. A preliminary timeline for each of the Phases is provided but note that the commencement of Project activities is dependent on several factors, including timelines for Impact Assessment approval, Class EA approvals, and receipt of all applicable permits and approvals:




Project Phases and Schedule

The three sub-phases of the Operations Phase are further described below:

**Operations Phase 1** – Mining operations during this phase will produce more ore than the process plant can process, with surplus lower value material to be stockpiled in the East Stockpile location for future processing. The process plant will operate at a capacity of approximately 60,000 tons per day (tpd) (or 21.9 million tonnes per annum (Mt/a)). Construction will continue during this phase to expand the process plant (second phase of the process plant's operation) and other supporting mine infrastructure, including the finalization of Highway 655 realignment.

**Operations Phase 2** – Mining operations during this phase will produce approximately 240,000 tpd, which is double of what the process plant can process. The process plant will operate at a capacity of approximately 120,000 tpd (or 43.8 Mt/a). Lower value ore will continue to be stockpiled in the East and/or the West Ore Stockpiles.

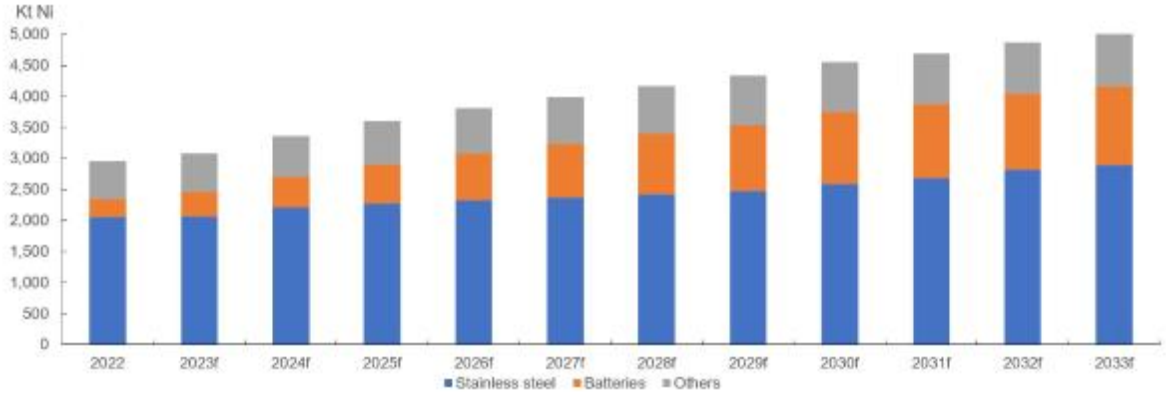
**Operations Phase 3** – Mining operations will cease (e.g., no further extraction of ore from the pits). The process plant will continue to operate at approximately 120,000 tpd (or 43.8 Mt/a) and will process ore stockpiled during Operations Phase 1 and 2. As mine operations cease, there will be an opportunity for progressive reclamation of the pits, haul routes, and other areas of the Project site, such as the Impoundment Facility.

## Purpose and Need for the Project

The primary purpose of the Project is to responsibly and sustainably extract and process critical minerals, including nickel, iron, chromium, cobalt, palladium and platinum, contributing to the global supply of critical metals used in the production of various essential industrial and consumer goods.

A Feasibility Study has been prepared that confirms the technical feasibility and economic viability to develop the Project for the purpose of extraction, processing, and sale. No issues have been identified to date that are expected to materially affect the ability of Canada Nickel to extract minerals from the Project.

## Forecasted Demand for Critical Minerals




Forecasted Demand for Critical Minerals[1] - Note: "f" denotes forecast and Kt Ni refers to kilotonnes (10 000) of nickel

- Nickel is a critical metal with diverse applications in various industries, including automotive, aerospace, and renewable energy sectors. As demand for nickel and other critical minerals continues to grow, it is essential to locate a reliable and sustainable source of this resource.
- The World Bank states that the production of minerals such as nickel, iron and cobalt could increase by as much as 500% by 2050 to meet the growing demand for clean energy technologies (World Bank Group 2020[2]).
- Primary nickel demand is expected to rise at a compound annual growth rate (CAGR) of 4.9% between 2022 and 2033, driven by growth in the stainless steel and battery sectors. Demand for primary nickel in batteries will grow at a CAGR of 14.2% between 2022 and 2033, consolidating its position as a strong second largest consumer of primary nickel after the stainless-steel industry. (Fastmarkets, 2023)

- It is predicted that while supply will meet demand in the short-term, a lack of new projects will result in deficits beginning in 2030 and widening to in excess of 300,000 tonnes annually by 2033 (Fastmarkets, 2023).
- Substantial part of the world's nickel supply for stainless steel and batteries is sourced from China or China-owned operations in Indonesia, with numerous suppliers operating in opaque, unsustainable, and carbon-intensive ways.
- Carbon footprint of nickel production in the Philippines and Indonesia is much larger than Canadian operations and there is a need to expand current and future mined production of nickel, iron, and cobalt in a manner that does not come at the cost of the climate, environment, or society, particularly those communities directly affected by mining activities.
- Maintaining a diverse and secure supply of critical minerals is crucial for the stability of the global economy. The Project represents a domestic source of nickel and other critical minerals intended to meet the increasing global demand from the stainless steel and lithium-ion battery markets in the move toward decarbonization of the global transportation economy.

## Strategic Need for Critical Minerals

Both the federal and provincial governments have highlighted the growing demand and importance of critical minerals:

- Natural Resources Canada's Critical Minerals List, released in 2021[3]
- Canada's 2022 and 2023 Federal Budgets[4]
- Ontario's Critical Minerals Strategy, released in 2022[5]
- Ontario's 2023 Fall Economic Statement[6]

The Project will supply critical minerals, including nickel, cobalt, chromium, palladium and platinum. The chromium contained in this concentrate would make Canada Nickel the

sole miner of chromium in North America. By developing domestic sources of nickel, the Project could reduce Canada's dependency on foreign suppliers, enhance supply chain resilience, and contribute to national and regional economic stability.

## Plausible Destinations for Mine Products

The nickel concentrate that would be produced by the Project is expected to be sold into the North American battery production chain and the magnetite concentrate is expected to be sold to a steel melt shop as a primary feed for steel production in North America.

## Growth Plan for Northern Ontario

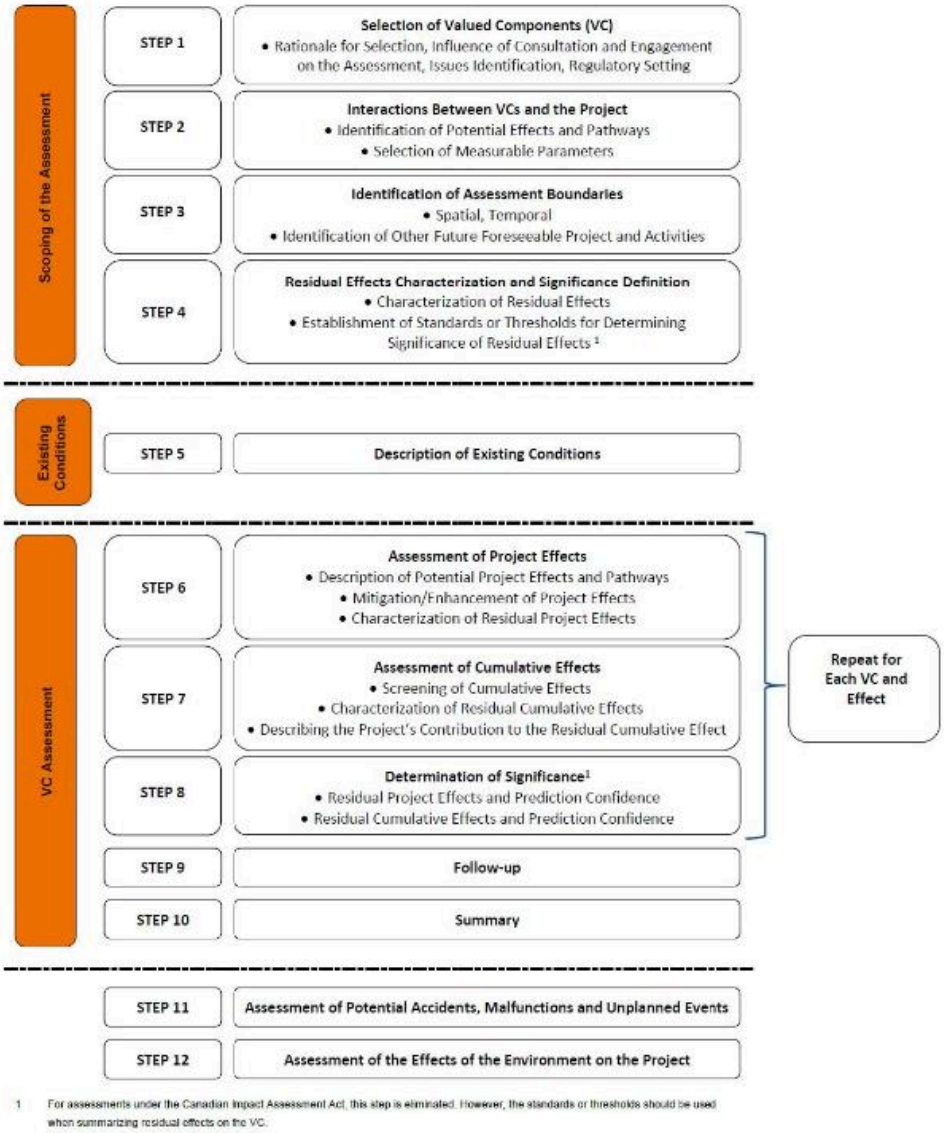
Growth Plan for Northern Ontario, 2011 identifies the minerals sector and mining supply and services as an existing and emerging priority economic sector for which Northern Ontario has a distinct competitive advantage. Specifically, the Project contributes to the following Growth Plan objectives:

- Provides a new mining opportunity within the Cochrane District mining camp area, along with the additional mining supply, partnerships, and employment it will generate, while relying on existing infrastructure, workforce, and services.
- The Project is expected to generate hundreds of direct employment opportunities and would support many indirect employment opportunities in northern Ontario. The Project will have a peak workforce of 1,400 full-time equivalents and an average of 700 full-time equivalents over the life of the mine.
- It is estimated that approximately 60% of capital expenditures will be within Ontario, while approximately 25% will be within Canada and the remaining 14% of capital expenditures will be international.

- During operations, expenditures will occur primarily in Ontario (approximately 65%). Within Canada, an estimated 8% of expenditures are expected and the remaining expenditures (27%) will be international.
- The Project will be subject to a mining tax of 10% of the annual operator's profit exceeding $500,000 (Ministry of Finance 2022[7]). Over the life of mine, the Project could generate over $5 billion in federal and provincial income taxes, as well as close to $2 billion in provincial mining tax.


## Impact Statement Methodology

Assessing the environmental impacts of a project follows a standard methodology; however, the scope of the assessment is influenced by existing environmental conditions, potential project effects, and information received from participating agencies, Indigenous peoples, stakeholders, and the public. The figure below outlines the general methodology to be followed for the Impact Statement.




Impact Statement Methodology

The following section outlines the methodology and selection of VCs. Additional information on alternatives assessment, cumulative effects, and spatial and temporal boundaries can be found in the Additional Resources section

## Selection of Valued Components

Valued Components (VCs) are elements of the natural and human environment identified as having scientific, social, cultural, economic, historical, archaeological or aesthetic importance. VCs are also tools used to measure the potential effects of a project on the environment. The 'environment'

includes not only ecological systems, but also human, or social, cultural and economic conditions.

For each VC, the assessment methodology is structured to:

Vegetated and aquatic area at Crawford Nickel

- Identify potential effects, measurable parameters, and potential interactions between Project components and activities and the environment
- Predict and assess potential changes to the environment and the likely effects on identified VCs (pathways of effects)
- Identify technically and economically feasible measures to mitigate adverse effects (i.e., avoid, reduce, restore, enhance) and enhance positive effects
- Determine and characterize any residual effects (i.e., effects following the implementation of mitigation measures) and, for potential adverse effects in areas of federal jurisdiction, determine the extent to which residual effects may be significant
- Develop follow-up and monitoring programs to verify the accuracy of the effects assessment and the effectiveness of mitigation and enhancement measures

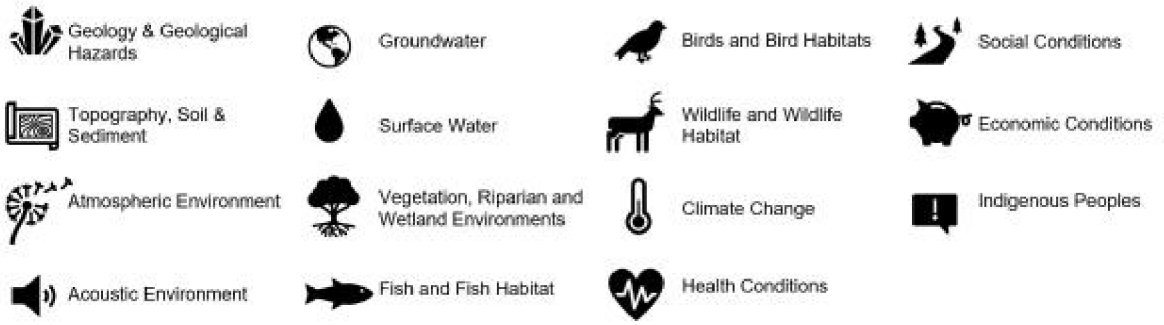
Any key issues raised by Indigenous Peoples, agencies, stakeholders, or the public will be considered during the assessment to inform the determination of potential effects, identification of mitigation measures, determination of significance, and follow-up programs.

Based on initial Indigenous, agency, stakeholder, and public feedback provided during Phase 1 of the IAA process, and based on the requirements of the TIS Guidelines, the following VCs will be assessed as part of the Impact Statement:

- **Geology and Geologic Hazards**
- **Topography, Soil and Sediment**
- **Atmospheric Environment**, including air quality and light
- **Acoustic Environment**, including noise and vibration
- **Groundwater**
- **Surface Water**, including geochemistry, surface water quantity and quality
- **Vegetation, Riparian and Wetland Environment**, including plant species at risk (SAR)
  - Black ash
- **Fish and Fish Habitat**, including aquatic SAR:
  - Lake sturgeon
- **Birds and Bird Habitats**, including groups of birds and SAR:
  - SAR include bank swallow, eastern whip-poor-will, eastern meadowlark, Canada warbler, common nighthawk, olive-sided flycatcher, bobolink, barn swallow, short-eared owl, lesser yellowlegs, yellow rail, rusty blackbird and evening grosbeak
- **Wildlife and Wildlife Habitat**, including wildlife SAR:
  - Boreal caribou
  - Bats including the little brown myotic, northern myotis and tri-coloured bat
- **Climate Change**, including greenhouse gas emissions and carbon sinks
- **Health Condition**, including biophysical and social determinants of health
- **Social Conditions**, including community well-being and services and infrastructure as they relate to the social conditions of Indigenous Peoples and recreation (Big Water Campground and Snowmobile Trail)
- **Economic Conditions**, including employment, business environment and local economy
- **Indigenous Interests**, including Indigenous physical and cultural heritage, the current use of land and resources for traditional purposes, health, social and economic conditions, and the rights of Indigenous Peoples.

## Baseline Conditions

Canada Nickel began baseline environmental studies in 2021 to support the Impact Assessment, Provincial Class EAs, and future environmental approvals / applications. Efforts have included a review of available background information, completing various seasonal site investigations, and consulting with Indigenous communities, agencies, stakeholders, and the public. Additional investigations and background research continue. The goal is to describe, measure, and document existing conditions for each VC where Project components and activities are proposed and where potential direct and/or indirect impacts may be predicted.




The Project comprises approximately 11,425 hectares (ha) (28,230 acres) of forested areas, wetlands, and recently logged areas along Highway 655 approximately 42 km north of the City of Timmins, Ontario. The nearest larger communities include the Town of Cochrane (35 km to northeast), City of Timmins (42 km to south), Town of Smooth Rock Falls (50 km to north), and Town of Iroquois Falls (50 km to east).

The Project is located in an area well-connected by local infrastructure. The Project is bisected by Highway 655 and an existing rail spur line connects Glencore's existing Kidd Mine west of Highway 655 to the Kidd Metallurgical Site to the southeast of the Project site. Other local infrastructure includes a regional transmission line (500 kV), which parallels Highway 655 and extends from the Hydro One Porcupine

Transformer Station located east of Timmins. In addition, a 115 kV transmission line runs north south along the east side of the Project. A hydro-electric generating station, Lower Sturgeon, is located along Mattagami River to the west of the Project site, within the boundaries of Mahaffy Township.

The following provides a snapshot of the information collected to date describing the existing conditions for each VC. A summary of baseline conditions is available in the additional resources section or by clicking here.

## Geology & Geological Hazards

- The Project site is part of the Blake River Assemblage, consisting mainly of mafic to felsic calc-alkaline volcanic rocks.
- Serpentinization of the ultramafic rocks has resulted in the formation of chrysotile within the deposit.
- The area has relatively low seismic activity and no earthquakes of magnitude > 3 having occurred in the past 40 years.
- Some soil surface erosion and gullying occurs along some slopes; however, no major ground or rock instability (i.e., landslides) were identified.
- Baseline geochemical characteristics anticipated rock to have low acid generation potential and low metal leaching potential.

## Topography, Soil & Sediment

- The Project is located in an area of gently rolling topography typical of the glaciated Canadian Shield.
- Site elevations range from about 265 and 290 metres above sea level (masl).
- Terrain mapping indicates that the dominant surficial material type consists of till deposits (i.e.,

sand, clay, loose gravel, and boulders) and glaciolacustrine sediments (predominantly silt and clay), then followed by glaciofluvial deposits (sand and gravel).

## Atmospheric (Air Quality and Light)

- Air quality monitoring data is generally consistent with what would be expected for a remote location.
- Baseline concentrations for particulate matter, nitrogen dioxide, sulphur dioxide, volatile organic compounds, silica, diesel particulate matter, asbestos, and metals were measured at low concentrations or below detectable levels.
- There are no anthropogenic light sources in the area, with the exception of vehicle traffic along Highway 655.

## Acoustic Environment (Noise and Vibration)

- The acoustic environment is relatively quiet and is comprised mainly of natural sound from wind, wildlife, insects, etc., with exception of some mineral exploration, recreational, and forestry activities as well as road traffic along Highway 655 and rail traffic to the south.

## Groundwater

- Locally, groundwater is present at or near the surface in wetland areas, with regional groundwater flowing generally in a south to north direction.
- An esker located along the western edge of the Preliminary Project Area is likely a regional groundwater recharge zone.

## Surface Water

- The Preliminary Project Area drains into the subwatersheds of the North Driftwood River, West Buskegau River, and

Jocko Creek. Jocko Creek drains into the Mattagami River, while the North Driftwood and West Beskagau Rivers drain into the Abitibi River; all of which flow northward into Hudson Bay.

- The Mattagami River is approximately 3.75 km west of the Preliminary Project Area.
- Watercourses generally consist of slow flowing and low-gradient channels, with banks dominated by brush and grasses. Multiple beaver dams are present.
- Sampled water quality generally indicates circumneutral pH, low to moderate hardness, and have low concentrations of nutrients (i.e., nitrate, nitrite, ammonia) and anions (e.g., chloride, sulphate). Levels of total suspended solids and total dissolved solids are low.

## Vegetation, Riparian and Wetland

- Mixed forest (29.5%), coniferous forest (28.1%), sparse forest (10.8%), and deciduous forest (7.2%), with 7.8% classified as cutover and 6.7% covered by water.
- 310 species of vascular and nonvascular plants were identified (including provincially rare plants).
- 89% of the identified plants are native to Ontario, and 11% are non-native species.
- Black Ash is the only vegetation Species at Risk identified during surveys, which is listed as a provincially “endangered” species under the Endangered Species Act.
- 28 distinct plant communities (upland and wetland) were recorded, including fens, bogs, swamps, marshes, and coniferous forests. Coniferous forest and swamp communities dominate the area.

## Fish and Fish Habitat

- Local fish communities encountered during the three years of sampling are typical of northeastern Ontario and are generally characterized as cool water thermal regimes.
- 24 species of fish were confirmed through sampling efforts.

- Lake sturgeon (special concern under the Species at Risk Act) is confirmed present in the Mattagami River by eDNA testing; however, no other aquatic Species at Risk were encountered during sampling.
- Upper trophic level panfish (i.e., Yellow Perch) and sportfish (i.e., Northern Pike) species are found in the lakes near the Project.

## Birds and Bird Habitats

- 89 bird species of breeding birds were observed, including various raptors, waterfowl, waterbirds, marsh birds, shorebirds, forest birds, and other land birds. An additional 24 bird species were identified incidentally during other surveys (e.g., migrating individuals).
- Seven bird Species at Risk have been confirmed in the area, including Chimney Swift, Common Nighthawk, Olive-sided Flycatcher, Canada Warbler, Rusty Blackbird, Lesser Yellowlegs, and Bald Eagle.

## Wildlife and Wildlife Habitat

- 16 mammal species were observed during targeted surveys including furbearers (e.g., Beaver, River Otter, Lynx, American Marten, Snowshoe Hare, Red Fox), large mammals (Moose, Northern Grey Wolf, Black Bear) small rodents (Meadow Vole, Woodland Jumping Mouse, Red Squirrel) and bats (Little Brown Myotis, Silver-haired Bat, Hoary Bat, Big Brown Bat).
- Two wildlife Species at Risk have been confirmed in the area, including Little Brown Myotis and Blanding's Turtle.
- While the Project is located in the Kesagami Caribou range, Caribou are considered absent from the Preliminary Project Area.

## Climate Change

- Wettest month of the year occurs in July; driest month is February.
- Coldest month of the year occurs in January; warmest month is July.
- Downward trend in annual total precipitation of -15.6 mm per decade, with increased precipitation events in October.
- Annual temperatures are trending upwards by 0.2°C per decade, increasing in both summer and winter months.

## Health Conditions

- Collection of environmental media including soil, vegetation (some medicinal plants), water and fish and the characterization of chemicals of concern (e.g., metals) in these media has begun.
- Collection of social determinants of health data and characterization for each community where information is available has begun. These data include rates of sexually transmitted infections, injuries and chronic disease, rates of gender-based violence, mental health status, and other community-relevant health information, which are disaggregated where possible for various population groups (e.g., Indigenous, women, youth, and Elders).

## Social Conditions

- The local population in the area decreased 1.4% between 2016 and 2021; however, all First Nations communities have increased over this time (16%).
- 276 people were identified as homeless in the Cochrane District in 2023. Homelessness is experienced in the region more often by members of vulnerable groups, such as youth, seniors, Indigenous people, visible minorities, person with disabilities, and low-income families.

- Local communities are served through water and sewage systems, although water and sewer systems in some Indigenous communities are operating beyond their capacity.
- Recreation and tourism are an important industry in the region focused on the natural environment, including hunting, fishing and trapping, outdoor trails (e.g., hiking, snowmobile, ATV), and camping (including Provincial Parks and private campgrounds (Big Water Campground)).

## Economic Conditions

- Total labour force participation rate (60.1%), with variations in labour force participation rates between men+ (63.7%) and women+ (56.5%).
- Participation among the Indigenous population was higher compared to the total population, as was the unemployment rate.
- Top industries for employment include health care and social assistance, mining quarrying and oil and gas production, and retail trade.
- Sales and service occupations make up the highest number of total and Indigenous labour force workers, predominantly women+ (61.0% of total population and 62.9% of Indigenous population, respectively), followed by trades, transport, and equipment operators, predominantly worked by men+ (90.9% respectively) and Indigenous (86.4% respectively) populations.

## Indigenous Peoples

- Project is located within the boundaries of Treaty 9 and Métis Nation of Ontario Region 3.
- As per IAAC's understanding, interests and rights of the following Indigenous groups may be affected by the Project and for which an assessment of effects will be conducted:

    - Apitipi Anicinapek Nation
    - Flying Post First Nation
    - Matachewan First Nation
    - Mattagami First Nation
    - Taykwa Tagamou Nation
    - Métis Nation of Ontario Region 3
- Canada Nickel continues to engage with potentially affected Indigenous groups to understand the culture and history of Indigenous interests and rights in the local and regional area of the Project.
- Based on the Stage 1 Archaeological Assessment (AA) completed for this Project and based on feedback received from a 3rd party review of the Stage 1 AA, limited areas of the site have archeological potential, which will be targeted for the completion of a Stage 2 archeological assessment, where required.

## Additional Resources

For additional details on the following topics, click on the links provided below:

Understanding the Approach to Conducting an Alternatives Assessment

Understanding the Approach to Cumulative Effects Assessment

Understanding Temporal and Spatial Boundaries

Details of Baseline Conditions

## Share Your Thoughts

Canada Nickel is committed to early, ongoing, and accessible engagement that is specifically tailored to the interests and

expectations of all project stakeholders, communities, and Indigenous Peoples. Canada Nickel intends to manage the Project's potential social, economic, environmental, cultural, and human rights impacts by responding to community concerns, honestly and transparently, while working to directly optimize its benefits.

Ongoing dialogue is a key to Crawford Nickel developing and constructing the Project in a way that positively contributes to the future successes of its neighboring communities. Our team will maintain, and seek to continuously improve, ongoing information and participation tools and activities aimed at supporting meaningful collaboration throughout the life of the Crawford Project.

Since 2021, we have been engaging with local communities and stakeholders to hear your thoughts on the project. Here is a link to what we have heard so far (please refer to available meeting reports): https://canadanickel.com/sustainability/

Thank you for participating in Canada Nickels Virtual Open House. We look forward to receiving your feedback and comments so that we can consider and incorporate it into Project documentation, as appropriate.

**We'd like to hear from you!**

- Submit comments and questions to community@canadanickel.com
- Fill in an online questionnaire below
- Add a comment or identify a location of interest on the Interactive Map

## Questionnaire

Questionnaire

**Upcoming consultation opportunities:**

- Open-to-all, in-person **Open House, in spring 2024**
- Click here to sign up to Canada Nickel's mailing list
- Participate in the Federal Impact Assessment process (Canadian Impact Assessment Registry) and review of Class EA documentation through their respective processes

Created/Maintained by the Digital Practice Team at Stantec Consulting Ltd.

1 Fastmarkets. 2023. Select Commodity Price Long-Term Outlook. Prepared for Canada Nickel by Fastmarkets, October 2023.

2 World Bank Group. 2020. Minerals for Climate Action: The Mineral Intensity of the Clean Energy Transition. May 2020.

3 Natural Resources Canada (NRCan). 2021. Canada Announces Critical Minerals List. Retrieved December 10, 2023, from https://natural-resources.canada.ca/sites/nrcan/files/mineralsmetals/pdf/Critical_Minerals_List_2021-EN.pdf

4 Department of Finance Canada. 2023. 2023 Fall Economic Statement. Retrieved December 21, 2023 from https://www.budget.canada.ca/fes-eea/2023/report-rapport/FES-EEA-2023-en.pdf

5 Ministry of Energy, Northern Development and Mines. 2021. Ontario's Critical Minerals Strategy 2022–2027: Unlocking potential to drive economic recovery and prosperity. Retrieved December 10, 2023, from https://www.ontario.ca/page/ontarios-critical-minerals-strategy-2022-2027-unlocking-potential-drive-economic-recovery-prosperity#section-2

6 Ministry of Finance. 2023. 2023 Ontario Economic Outlook and Fiscal Review: Building a Strong Ontario Together. Retrieved December 10, 2023, from https://budget.ontario.ca/2023/fallstatement/contents.html

7 Ministry of Finance. 2022. Ontario mining tax. Retrieved June 30, 2022, https://www.ontario.ca/page/ontario-mining-tax

# Appendix D.4

## In-Person PIC Content

CANADA NICKEL COMPANY

# WELCOME TO THE CRAWFORD NICKEL PROJECT OPEN HOUSE!

Canada Nickel is advancing the next generation of high quality, high potential nickel projects to deliver the metals needed to power the electric vehicle revolution and feed the high growth stainless steel market.

Canada Nickel is currently anchored by its 100% owned flagship Crawford Nickel Project in the heart of the emerging Timmins Nickel District.

## Our Commitment

With the aim of sustainably producing the critical minerals needed for a low carbon future, Canada Nickel is committed to operating in ways that support resilient local communities and reduce environmental impacts.


## The purpose of this Open House is to meet the community, share key information, and obtain feedback on:

1. The Project and Applicable Environmental Assessments
2. Engagement & Consultation to Date
3. Project Alternatives
4. Preliminary Anticipated Residual Impacts & Proposed Mitigation Measures
5. Conceptual Closure Plan
6. Next Steps

CANADA NICKEL COMPANY

# CRAWFORD NICKEL PROJECT – WHAT IS BEING PROPOSED?

The Crawford Nickel Project aims to sustainably extract and process critical metals, including nickel, iron, chromium, cobalt, palladium, and platinum. This will contribute to the global supply of critical minerals used to produce various essential industrial and consumer goods in the automotive, battery, aerospace, and renewable energy sectors, among others.

## Key Project Facts

**Open pit size**
Surface area: 9.92 $km^2$
Depth: up to 690 m

**Estimated Project Life – 41 years**
Mining for the first 30, milling alone for the last 11

**Mineral reserve**
1,715 million tons

Project named as a **major component of Canada's electric vehicle supply chain**

## The Project Includes:

- An open pit
- Stockpiles
- Two ore processing plants
- A tailings management facility
- Mine related infrastructure
- A new rail spur line
- Relocation of Highway 655 and prior interim works

## Project Phases and Schedule

The Project has been split into four phases. Each phase can only begin once all required permits and approvals have been obtained.

**Construction Phase**
2025 to 2028

**Operations Phase (Progressive ramp up)**

**Step 1 : 2028 to 2032**
(Processing 60,000 tpd, active mining)

**Step 2 : 2033 to 2057**
(Processing 120,000 tpd, active mining)

**Step 3 : 2058 to 2068**
(Processing 120,000 tpd, no mining)

**Decommissioning and Active Closure**
2069 to 2074

**Post-Closure and Monitoring**
2074+

**For more information, please visit**

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# IMPACT ASSESSMENT & ENVIRONMENTAL ASSESSMENT PROCESSES

The Crawford Project is currently undergoing a Federal Impact Assessment (IA) administered by the Impact Assessment Agency of Canada (IAAC) under the *Impact Assessment Act*.

Certain components of the Project are also subject to Class Environmental Assessments (Class EA) through various Provincial agencies. Environmental permits and approvals will also be required in the future.

## Federal Impact Assesment Process

### Planning

Projects go through a planning phase where the public and Indigenous peoples are invited to provide information and contribute to planning the assessment.

### Impact Statement

The project proponent is given clear guidelines regarding the information and studies required for the Impact Statement. The Impact Statement is informed by sound science and Indigenous knowledge.

★ **We are here** ★

### Impact Assessment

The assessment considers potential environmental, health, social, and economic impacts of the proposed project, including its benefits. Potential impacts on Aboriginal and Treaty rights are also assessed and consulted on. The Agency uses the information to develop an impact assessment report.

### Decision-making

Public interest is at the centre of decisions. The Impact Assessment report and Crown consultation outcomes inform the Minister or Governor in Council's decision on whether a project's adverse impacts are in the public interest. If it is decided that they are, the Minister must establish conditions for the project proponent. Decision Statements set out the rationale for the decision, providing transparency and accountability.

### Post Decision

The Agency will be active in checking compliance with Decision Statements and correcting non-compliance. There will be greater transparency around follow-up programs, with increased access to key documentation, as well as increased opportunities for Indigenous and community participation in follow-up and monitoring programs.

## List of Applicable Provincial Class Environmental Assessments (Class EA)

| Class EA Process / Category | Project Component or Activity |
|---|---|
| **Class EA for Provincial Transportation Facilities and Municipal Expressways** | • Realignment of the existing Highway 655<br>• Temporary overpass and bypass affecting Highway 655 |
| **Class EA for Ministry of Natural Resources and Forestry Resource Stewardship and Facility Development Projects (tentative)** | • Infrastructure located on Crown land<br>• Disposition of Crown land and resources<br>• Water crossings / culverts<br>• Removal of trees to allow for construction<br>• Beaver dam / furbearing mammal den, and raptor nest removal |
| **Class EA for Activities of the Ministry of Northern Development and Mines under the Mining Act (tentative)** | • Surface rights within Crown land reservations from waterbodies, as applicable |
| **Class EA for Transmission Facilities (screening)** | • Two transformer stations<br>• New transmission line internal to the site<br>• Subject to a separate Class EA process from the Transmission Infrastructure Partnerships' (TIP-1) proposed transmission line project |

**Use this code to find out more about the assessment processes!**

# ENGAGEMENT APPROACH & CONSULTATION

From the outset, Canada Nickel has been committed to accessible and ongoing engagement that is tailored to the interests and expectations of project stakeholders, communities, and Indigenous Nations.

Canada Nickel intends to manage the Project's social, economic, environmental, cultural, and human rights impacts by responding to concerns raised through engagement and consultation, while working to directly optimize its benefits.

## Engagement & Consultation Activities to Date

**June – September 2021**
Preliminary Engagement Meetings

**January 2022 – Ongoing**
Socio-Economic, Environment & Workforce Committees meetings

**May – September 2022**
Initial Project Description (IPD) consultations

**February – March 2023**
Draft Tailored Impact Statement (TIS) Guidelines consultations

**March 2023**
Notice of Commencement of an Impact Assessment, Consultation on the Indigenous Engagement and Participation Plan, Permitting Plan, Public Participation Plan and Cooperation Plan, issuance of final TIS Guidelines

**February 2024**
Virtual Open House on Baseline Conditions & Methods

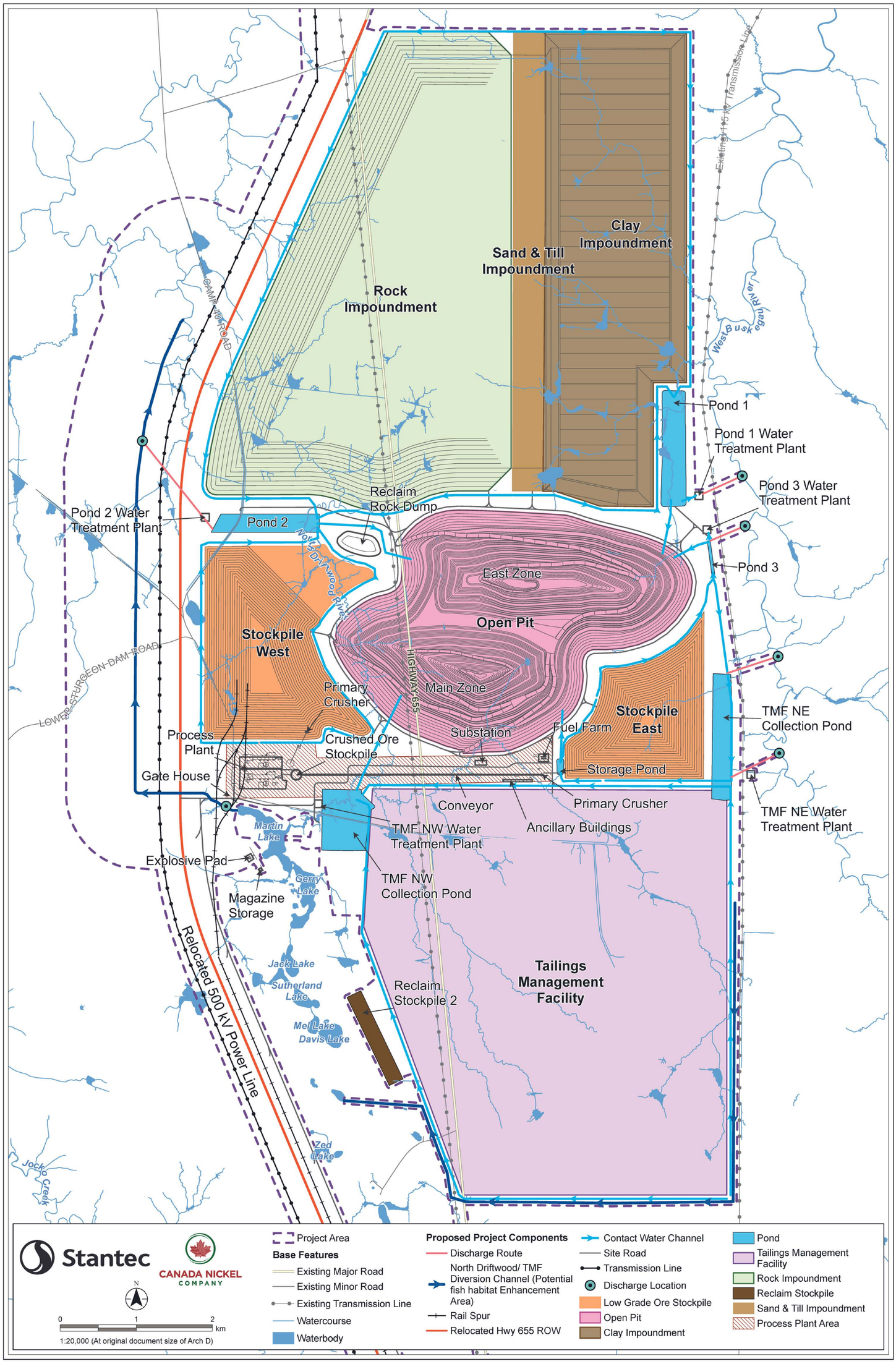
## High-level Overview of Feedback to Date

- Water management plan & discharge location
- Potential impacts on land use, including hunting and fishing
- Surface and groundwater quality and flow
- Potential impacts to air quality, greenhouse gas emissions (GHGs), and climate change
- Noise and vibrations from the project and from rail lines
- Distribution of Project's economic and social benefits
- Project footprint and potential impacts on wildlife
- Workforce requirements and early planning
- Potential impacts to socio-economic conditions, including housing availability and health


**Use this code for a detailed summary of key feedback to date!**

CANADA NICKEL COMPANY

# PROPOSED SITE LAYOUT & PROJECT COMPONENTS



# FORWARD LOOKING STATEMENT

This Presentation contains certain information that may constitute "forward-looking information" under applicable Canadian securities legislation about Canada Nickel Company Inc. (“CNC” or the "Company"). All statements, other than statements of historical fact, are forward-looking statements and based upon expectations, estimates and projections as at the date of this Presentation. Often, but not always, forward-looking statements can be identified by the use of words such as "may", "will", "expect", "believe", "anticipate", "illustrative", "potential" or the negative of these terms or variations of them or similar terminology. In this Presentation, forward looking information includes, but is not limited to, statements regarding the potential of the Company's Crawford project, including future zero carbon production; potential size of carbon storage facilities and ability to be have a net negative carbon footprint; , timing and results of economic studies, including the bankable feasibility study ("BFS"); mineral resource estimates and mineral reserve estimates; ability to realize on projected economic estimates, including EBITDA, NPV, IRR, all-in sustaining costs, free cash flow and C1 cash costs; scale, capital costs, operating costs and life of mine projections; potential to commercialize the IPT Carbonation process; timing of receipt of permits and commencement of construction and initial production; eligibility for Canadian federal refundable tax credits; the ability to sell marketable materials; strategic plans, including future exploration and development results; and corporate and technical objectives; statements regarding the future of the nickel market, including supple and political risks; and exploration activities at the Company's regional properties. Forward-looking information is necessarily based upon several assumptions that, while considered reasonable, are subject to known and unknown risks, uncertainties, and other factors which may cause the actual results and future events to differ materially from those expressed or implied by such forward-looking information. Factors that could affect the outcome include, among others: future prices and the supply of metals, the future demand for metals, the results of drilling, the ability to accurately predict mineralization, inability to raise the money necessary to incur the expenditures required to retain and advance the property, environmental liabilities (known and unknown), general business, economic, competitive, political and social uncertainties, results of exploration programs, risks of the mining industry, delays in obtaining governmental approvals, changes in international, national and local government, legislation, controls, regulations and political or economic developments, failure to obtain regulatory or shareholder approvals, relationships with local stakeholders, and the impact public health related disruptions in relation to the Company's business operations including upon its employees, suppliers, facilities and other stakeholders. There can be no assurance that such information will prove to be accurate, as actual results and future events could differ materially from those anticipated in such information. Accordingly, readers should not place undue reliance on forward-looking information. All forward-looking information contained in this Presentation is given as of the date hereof and is based upon the opinions and estimates of management and information available to management as at the date hereof.

This Presentation has been completed by CNC. Certain corporate projects referred to herein are subject to agreements with third parties who have not prepared, reviewed or approved this Presentation. The Presentation is not intended to reflect the actual plans or exploration and development programs contemplated for such projects. Any forward-looking statement speaks only as of the date on which it is made and, except as may be required by applicable securities laws, CNC disclaims any intent or obligation to update any forward-looking statement, whether as a result of new information, future events or results or otherwise. Although CNC believes that the assumptions inherent in the forward-looking statements are reasonable, forward-looking statements are not guarantees of future performance and accordingly undue reliance should not be put on such statements due to the inherent uncertainty therein. For additional information with respect to these and other factors and assumptions underlying the forward-looking information contained herein concerning the Company, please refer to the public disclosure record of the Company, including the Company's annual information form for the year ended October 31, 2022 and the most recent annual and interim financial statements and related management’s discussion and analysis of the Company, which are available on SEDAR+ (www.sedarplus.ca) under the Company’s issuer profile. The scientific and technical information contained in this Presentation has been reviewed by Steve Balch, P. Geo, (VP Exploration) who is a Qualified Person within the meaning of National Instrument 43-101
Foreign Exchange Assumptions

All amounts discussed herein are denominated in CAD dollars unless otherwise specified.

# INDIGENOUS ENGAGEMENT & CONSULTATION

From the Project's onset, Canada Nickel has been engaging with Indigenous Nations to identify and understand **potential impacts to Aboriginal and Treaty rights**. We are committed to forging a **respectful and mutually beneficial relationship** with all participating Indigenous Nations that aligns with their preferred methods for engagement, collaboration and information sharing.

**Through engagement and in consideration of federal guidelines and requirements, a preliminary list of residual effects were identified as Indigenous interests, namely :**

- **Change to Aboriginal and Treaty rights** (including Indigenous lands and resource use)
- **Change in physical and cultural heritage**
- **Change to governance, health, social and economic conditions of Indigenous Nations**

Canada Nickel is pursuing engagement with participating Indigenous Nations to understand how the Project may affect Aboriginal or Treaty rights exercised or practiced in the Project's area. These include, but are not limited to: **hunting, trapping, fishing, and undertaking cultural pursuits**. Canada Nickel recognizes that these activities are closely connected to and informed by Indigenous physical and cultural heritage, as well as the **environmental, health, social, and economic conditions** required for Indigenous land and resource use.

## Canada Nickel is engaging the following Indigenous Nations, as per federal guidelines

- Apitipi Anicinapek Nation
- Flying Post First Nation
- Matachewan First Nation
- Mattagami First Nation
- Taykwa Tagamou Nation
- Métis Nation of Ontario - Region 3

# PRELIMINARY ANTICIPATED RESIDUAL IMPACTS & PROPOSED MITIGATION MEASURES

## Topography, Soil, Sediment, Geology and Geological Hazards

Topography, soil, and sediment impacts refer to changes to general topography, potential, and likelihood of problematic erosion from movement or redistribution of soil and potential and likelihood of changes to soil quality.

Geological hazards refer to potential changes on areas of geological instability, including the potential for increased landslides, slope erosion and potential for ground and rock instability.

### Summary of Anticipated Residual Impacts

- Expected losses, disturbances, or changes to soils during the construction and operations phases
- No expected stability, erosion or slumping impacts

### Key Mitigation Measures & Monitoring Recommendations

1. Design Project components in accordance with applicable engineering standards
2. Develop and implement the following plans:
   - Erosion and Sediment Control Plan
   - Soil and Excavated Materials Management Plan
   - Spill Response Plan
   - Mine Production Closure Plan
   - Water Management Plan
3. Apply best management practices for excavation, slope gradients, and stockpiling
4. Monitor the effectiveness of mitigation measures and progressive reclamation efforts, and use results to adapt mitigations and other measures

CANADA NICKEL COMPANY

# ALTERNATIVE MEANS – WHAT WAS CONSIDERED FOR THE PROJECT

Alternative means are the various technically and economically feasible ways to carry out the Project and its activities, including using best available technologies.

## Alternatives were examined for each of the following components

- Project Layout, Component Size, and Locations
- Route or Corridor Options for Project Infrastructure and Transportation of Materials to and from the Site
- Energy and Power Sources
- Potable Water and Process Water Supply Sources
- Aggregate Supply Sources
- Water Diversion Routes and Water Crossing Structures
- Mining Operations / Methods
- Process Plant Location and Design
- Mine Waste Management for Tailings and Waste Rock
- Water and Wastewater Management, Treatment Technology, and Effluent Discharge Points
- Waste Management for Domestic, Industrial, and Hazardous Waste
- Project Closure Concepts and Timing
- Workforce Hiring, Scheduling, and Accommodation Strategies

**Each alternative was assessed through a comprehensive list of evaluation criteria, before a prefered option was identified.**

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# PRELIMINARY ANTICIPATED RESIDUAL IMPACTS & KEY FINDINGS

## Atmospheric and Acoustic Environments

Atmospheric environment refers to the Project's impacts on air quality and light. Acoustic environment refers to the Project's impacts on noise and vibration levels.

### Summary of Anticipated Residual Impacts

An air quality assessment is ongoing to understand the distribution and concentration of contaminants of potential concern. Canada Nickel will also continue to assess potential air quality impacts and is exploring measures to reduce such impacts.

The current anticipated impacts are:

- Limited light impacts to neighbouring areas (light trespass and glare)
- Expected vibration impacts within the regulatory vibration limits for all Project phases
- Noise levels within accepted regulatory guidelines once mitigation measures are applied

### Key Mitigation Measures & Monitoring Recommendations

1. Develop and implement the following mitigation plans:
   - Air Quality Management Plan
   - Noise and Vibration Management and Monitoring Plan
   - Construction Environmental Management Plan
2. Implement preventive maintenance programs for equipment and machinery
3. Follow best management practices for dust control
4. Limit access to and around the Project site, including restrictions on overnight stays
5. Obtain an Environmental Compliance Approval for Air and Noise from the Ministry of the Environment, Conservation and Parks

CANADA NICKEL COMPANY

# PRELIMINARY ANTICIPATED RESIDUAL IMPACTS & KEY FINDINGS

## Surface Water

Surface water impacts are measured by changes to water flow and water quality in the environment.

### Summary of Anticipated Residual Impacts

- The Project will source all water from within its own footprint by reusing runoff
- **No discharge into the Mattagami River**
- **Four (4) potential effluent discharge locations: two (2) in the North Driftwood River and two (2) in the West Buskegau River**
- Effluent will meet regulatory standards within a mixing zone
- Required diversion of the North Driftwood River to facilitate pit development
- Preliminary modelling predictions suggest:
  - 93% of the time, the West Buskegau River remains within ±10% of baseline flows
  - 73% of the time, the North Driftwood River remains within ±10% of baseline flows
  - The period of time when flows exceed ±10% of baseline flows typically during peak or low flows

**Further studies are ongoing to confirm anticipated impacts to water quality and quantity, and associated mitigation measures**

### Key Mitigation Measures & Monitoring Recommendations

1. Design the water management system to provide flood control and water treatment, including reducing sedimentation
2. Avoid effluent discharge into the Mattagami River
3. Develop and implement the following mitigation plans :
   - Erosion and Sediment Control Plan
   - Spill Prevention and Contingency Plan
   - Mine Production Closure Plan
   - Water Management Plan
   - Environmental Effects Management Plan
   - Acid Rock Drainage / Metal Leaching Management Plan
   - Construction Environmental Management Plan
4. Manage onsite water (with ditches and ponds) to limit contact with Project activities and associated components
5. Mimic natural flow conditions when diverting water (when feasible)
6. Monitor surface water quantity and quality at key Project locations to confirm the anticipated impacts and to meet regulatory requirements

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# PRELIMINARY ANTICIPATED RESIDUAL IMPACTS & KEY FINDINGS

## Groundwater

Groundwater has the potential to be a source of potable water, and is important in maintaining ecological habitats by supporting stream flow, vegetation, and wetlands. Impacts on groundwater include changes in quality and quantity.

### Summary of Anticipated Residual Impacts

- Predicted lowering of the water table (due to the pit dewatering - ie. water removal from the open pit) during construction and operations, and, to a lesser extent, during closure once the open pit refills
- Predicted increase of concentration of select parameters in groundwater from Project components
- No known groundwater uses within the extent of predicted effects for groundwater.

### Key Mitigation Measures & Monitoring Recommendations

1. Develop and implement the following plans:
   - Water Management Plan
   - Mine Production Closure Plan
   - Environmental Effects Monitoring Plan
   - Construction Environmental Management Plan
2. Limit construction footprint to the extent possible
3. Use standard management practices for drainage control, excavation and open pit dewatering
4. Design stockpiles adn the Tailings Management Facility (TMF) to increase runoff and reduce infiltration
5. Install contact water ditches around stockpiles and the TMF
6. Implement progressive rehabilitation

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# PRELIMINARY ANTICIPATED RESIDUAL IMPACTS & KEY FINDINGS

## Vegetation, Riparian and Wetland Environments

Impacts are measured by changes to the presence, diversity, ecology and form of vegetation, watercourses (riparian), and wetlands. Importantly, no plant Species at Risk or Species of Conservation Concern were found in the Project Area.

### Summary of Anticipated Residual Impacts

- Changes to vegetation and wetlands and not anticipated to impact the long-term viability of terrestrial community types in the region
- No expected change in the abundance of plant species of Indigenous interest as the species identified are common and widely distributed in the area
- Removal of approximately 8,667 hectares of wetlands during construction (represents approximately 28% of wetlands within the Local Study Area)
- Potential impacts to another another 542 hectares of wetlands during operations (based on preliminary modelling of the water table drawdown)

### Key Mitigation Measures & Monitoring Recommendations

1. Develop and implement the following mitigation plans:
   - Rare Vegetation Communities Monitoring and Management Plan
   - Erosion and Sediment Control Plan
   - Mine Development Closure Plan
   - Water Management Plan
   - Environmental Effects Management Plan
   - Construction Environmental Management Plan
2. Delineate clearing boundaries prior to the site preparation
3. Complete pre-construction surveys of rare vegetation and implement protection measures, where possible
4. Incorporate best practices to prevent and control the spread of invasive plant species
5. Provide vegetated buffers around rare vegetation (as practical) to reduce edge effects
6. Maintain hydrological connectivity when doing work in wetlands (for example, with properly placed and sized culverts)
7. Incorporate Species at Risk, Species of Conservation Concern, and species of Indigenous interest into reclamation planning
8. Monitor rare vegetation and wetlands for effectiveness of mitigation measures

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# PRELIMINARY ANTICIPATED RESIDUAL IMPACTS & KEY FINDINGS

## Wildlife and Wildlife Habitat, and Birds and Bird Habitat

Impacts on wildlife and wildlife habitat are measured by changes in habitat, movement, mortality risk, abundance, and overall wildlife health. Impacts on bird and bird habitat are measured by changes in habitat, mortality risk, abundance, and distribution (biodiversity).

### Summary of Residual Anticipated Impacts

- Removal of wildlife and bird habitat within the Project Area during construction
- Loss of upland forest habitat that is suitable for caribou populations, as a portion of the Project Area is located within the historic caribou range
- Potential to modify wildlife movement through and around the site due to the presence of Project infrastructure and/or sensory disturbance
- Increased mortality risk and human interaction
- No expected impact on the abundance of wildlife and bird species as the habitat is widely distributed in the Local Study Area

### Key Mitigation Measures & Monitoring Recommendations

1. Develop and implement the following mitigation plans:
   - Wildlife Management Plan
   - Vegetation Management Plan
   - Erosion and Sediment Control Plan
   - Spill Prevention and Contingency Plan
   - Mine Production Closure Plan
   - Water Management Plan
   - Environmental Effects Management Plan
   - Construction Environmental Management Plan
2. Avoid wildlife sensitive life stages during construction (timing restrictions)
3. Implement noise, light, and dust management
4. Implement habitat restoration and enhancements through the closure planning process
5. Train staff on wildlife interactions
6. Implement measures to reduce potential wildlife interactions with vehicles and equipment
7. Meet wildlife regulatory requirements *(Migratory Birds Convention Act, Endangered Species Act and Species at Risk Act)*, including an Overall Benefit Permit

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# PRELIMINARY ANTICIPATED RESIDUAL IMPACTS & KEY FINDINGS

## Fish & Fish Habitat

Impacts are measured by a change in fish habitat, as well as fish health, growth, or survival.

### Summary of Anticipated Residual Impacts

- Removal and alteration of approximately 147 hectares of fish habitat due to overprinting (overlap of Project infrastructure) of existing watercourses.
- A diversion of the North Driftwood River is proposed to offset a portion of this loss, along with a diversion around the Tailings Management Facility. Additional measures are being identified to offset the loss and alteration of fish habitat.
- Potential effects on fish health, growth, or survival due to Project activities (due to effluent discharge, and potential impacts on water quality)
- Potential effects which will require mitigation:
  - Death of fish or fish eggs due to stranding or physical injury
  - Introduction of aquatic invasive species and/or disease
  - Changes in the abundance, composition, or distribution of aquatic invertebrates

### Key Mitigation Measures & Monitoring Recommendations

1. Develop and implement the following mitigation plans:
   - Erosion and Sediment Control Plan
   - Spill Prevention and Contingency Plan
   - Mine Production Closure Plan
   - Water Management Plan
   - Environmental Effects Management Plan
   - Acid Rock Drainage / Metal Leaching Management Plan
   - Construction Environmental Management Plan
   - Fish and Fish Habitat Follow-up Monitoring Program
2. Develop a Fisheries Offsetting Plan in accordance with regulatory requirements
3. Remove fish prior to dewatering or infilling watercourses or waterbodies (as possible)
4. Comply with provincial restricted timing windows for in-water work
5. Install fish screens on freshwater intakes
6. Follow federal regulatory requirements for explosive use and work near fish-bearing watercourses and waterbodies
7. Maintain heavy equipment in good working condition to avoid spills
8. Prohibit re-fueling of heavy machinery near fish-bearing watercourses or waterbodies
9. Store fuels and other hydrocarbons within designated areas

# WHAT IS IN-PROCESS TAILINGS CARBONATION?

**Mineral Carbonation** is a naturally occurring reaction between magnesium rich minerals in the Crawford deposit and carbon dioxide ($CO_2$) resulting in permanent sequestration of $CO_2$ in a new, stable mineral. It is an alternative to $CO_2$ storage in depleted oil and gas reservoirs or aquifers.

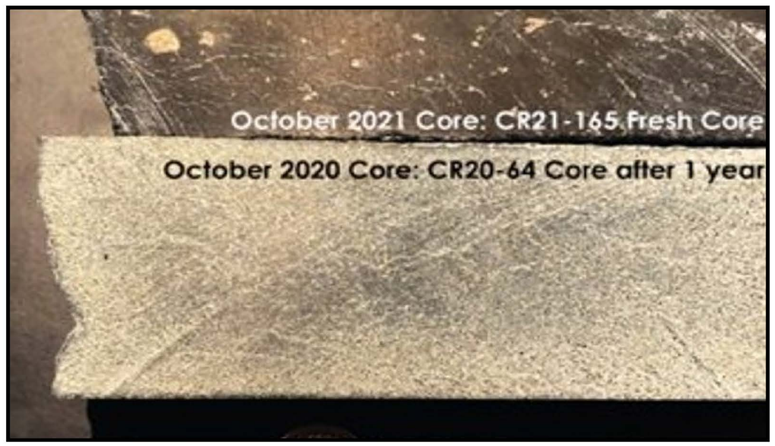
To minimize the Project's carbon footprint, Canada Nickel is planning to implement a process called **In-Process Tailings (IPT) Carbonation** which greatly speeds up the natural mineralization process to sequester $CO_2$.

**Conceptual IPT Carbonation Process**

**Open Pit mining** → **Crushing, Stockpiling** → **Milling, Flotation circuit** → **IPT Carbonation** → **Tailings Management Facility**

Over its lifetime, the Crawford Project is forecast to have the capacity to sequester up to 54 million tons of $CO_2$ (an average of 1.3Mt per year), making it a potential source of carbon sequestration for local sources of $CO_2$ and a contributor to provincial and federal GHG (Greenhouse Gas) reduction objectives.

This could position the Crawford Project as a source of carbon sequestration for the market and one of the only near-term carbon sequestration facilities in Ontario and one of the largest in Canada.



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# PRELIMINARY ANTICIPATED RESIDUAL IMPACTS & KEY FINDINGS

## Climate Change

Climate change refers to the release of Greenhouse Gas (GHG) emissions into the environment and the ability to capture and/or sequester carbon.

### Summary of Anticipated Residual Impacts

- Anticipated net GHG emissions of approximately 11,709 kilotons of $CO_2$ equivalent over the life of the mine (by implementing the best available technologies and environmental practices)
- Equal to an average GHG emissions intensity of approximately 1.95 kilotons of $CO_2$ equivalent for each ton of nickel
- By adding an In-Process Tailing mineral carbonation process to the project, early preliminary estimates indicate that the Project may be able to sequester up to 1,300 kilotons of $CO_2$ equivalent per year

### What is net-zero?

Net zero emissions means that all GHGs that are being emitted from the Project are equal to all of the GHGs that are being captured, sequestered, avoided or offset by the Project.

### Key Mitigation Measures & Monitoring Recommendations

1. Prepare a plan to achieve net-zero GHG emissions by 2050
2. Investigate the feasibility of using electric mining vehicles and autonomous equipment, as well as hybrid-electric haul trucks and trolley-assisted haulage
3. Investigate the In-Process Tailing Carbonation process to sequester carbon through the ore processing / tailings management process
4. Promote chipping and spreading of timber that can't be repurposed or sold (where feasible) to reduce methane emissions (an important GHG contributor)
5. Implement vehicle maintenance and idling policies
6. Use electrical power and decrease reliance on diesel
7. Develop and implement a Mine Production Closure Plan

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# PRELIMINARY ANTICIPATED RESIDUAL IMPACTS & KEY FINDINGS

## Social Conditions

Impacts to social conditions are measured by demand for services and infrastructure, and change in land and resource use, including recreation.

### Summary of Anticipated Residual Impacts

- Limited impacts to existing community services and infrastructure, higher anticipated impacts to pre-school and daycare facilities
- Estimated strain on accommodation availability (short-term rentals, hotels, housing) during Project construction (peak workforce estimated at 2,000 full-time employees)
- Impact to hunting, fishing, outfitting, baitfishing and trapping near the Project site (affected land base represents a small area in relation to numerous other areas where activities can occur)

### Key Mitigation Measures & Monitoring Recommendations

1. Commit to priority hires among Indigenous Nations, local communities, the region, and then outside the region. Hiring practices have been developed to encourage employment of Indigenous nations, local youth, women, and under-represented populations
2. Communicate Project needs to local accommodation providers (hotel, motel, bed-and-breakfast) to secure rooms for construction workers
3. Prepare and implement the following mitigation plans:
   - Health and Medical Services Plan
   - Traffic Management Plan
   - Project Emergency Management Plan
   - Diversity and Inclusion Policy within Employee Policies
   - Archaeology Resource Management Plan
4. Limit the Project footprint to the extent possible (including site clearing and disturbance) to reduce impacts to outdoor activities (hunting, fishing, ...)
5. Provide alternative means of access around the Project site (relocation of snowmobile trail, Highway 655, and associated local roads)
6. Conduct a Stage 2 Archaeological Assessment based on results of the previous assessment

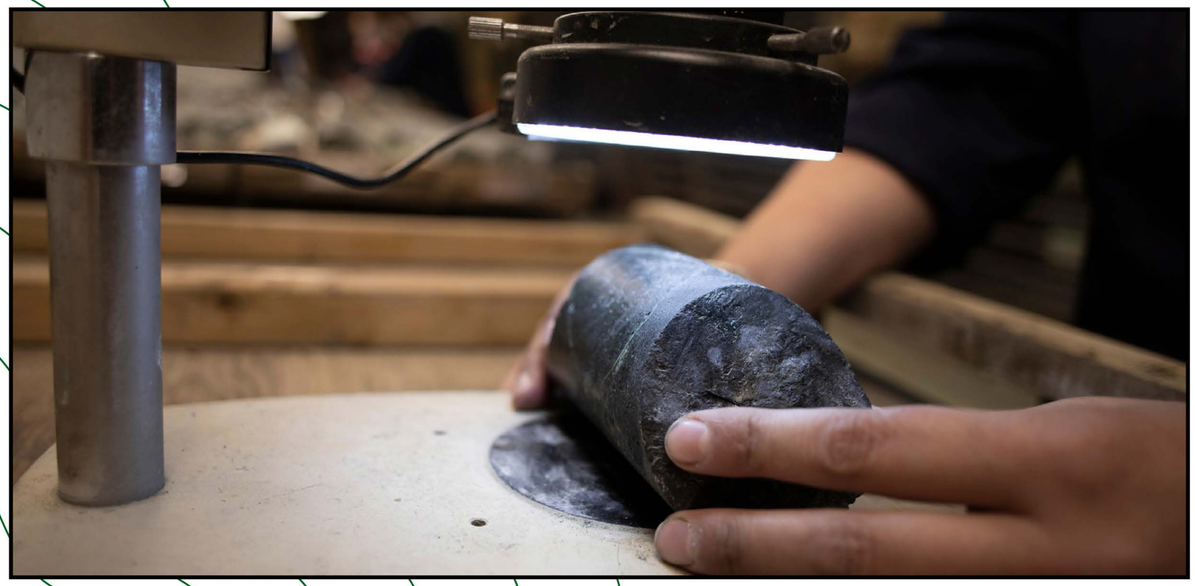
# PRELIMINARY ANTICIPATED RESIDUAL IMPACTS & KEY FINDINGS

## Cumulative Effects

Cumulative effects are defined as changes to the environment, health, social, cultural, and economic conditions as a result of the Project's residual impacts combined with the impacts of other past, existing, and reasonably foreseeable projects and physical activities. Cumulative effects may result where:

- the Project may cause residual adverse effects to valued components (such as water, wetlands, housing, etc.), and
- Valued components have been or could be affected by other past, existing, or future projects or activities

A determination of cumulative effects and potential mitigation measures within the care and control of Canada Nickel will be completed and included in the Impact Statement. This determination will look into projects and physical activities likely to have cumulative effects, in addition to present-day environmental, health, social and economic conitions that reflect the cumulative effects of past and existing activities.



**Consideration will also be given to valued components:**

- That are identified as being of particular concern by the public and by Indigenous Nations
- Where predicted effects rely heavily on uncertain mitigation measures
- For which cumulative effects were identified as a concern during the Planning Phase

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# PRELIMINARY ANTICIPATED RESIDUAL IMPACTS & KEY FINDINGS

## Economic Conditions

Impacts on economics are measured by changes to regional employment / businesses and the provincial economy.

### Summary of Anticipated Residual Impacts

- Positive impacts stemming from Project demand for labour includes increased local employment and income:
  - Construction – An average of 449 full time employees (FTEs), to a maximum of 2,000
  - Operations (Step 1) – An average of 1,200 FTEs, to a maximum of 1,290
  - Operations (Step 2) – An average of 850 FTEs, to a maximum of 1,371
  - Operations (Step 3) – An average of 300 FTEs, to a maximum of 334
  - The Project's total direct contribution to the gross domestic product of Ontario is anticipated to be approximately $2.9 billion and approximately $4.1 billion in Canada
- Expected positive impacts to local businesses and tax base due to income spending by direct and indirect workers
- Expected positive impacts from contractor expenditures on goods and services (employment with suppliers/manufacturers of materials)

### Key Mitigation Measures & Monitoring Recommendations

1. Commit to priority hires among Indigenous Nations, local communities, the region, and then outside the region. Hiring practices have been developed to encourage employment of Indigenous Nations, local youth, women, and under-represented populations
2. Participate in training, education, and scholarship programs that improve employment opportunities, including local training network for Indigenous Nations, local youth, etc.
3. Provide contracting and procurement opportunities for Indigenous Nations, women-owned companies, and/or visible minorities (where feasible)
4. Develop follow-up and monitoring specific to economic conditions, including practices associated with under-represented populations

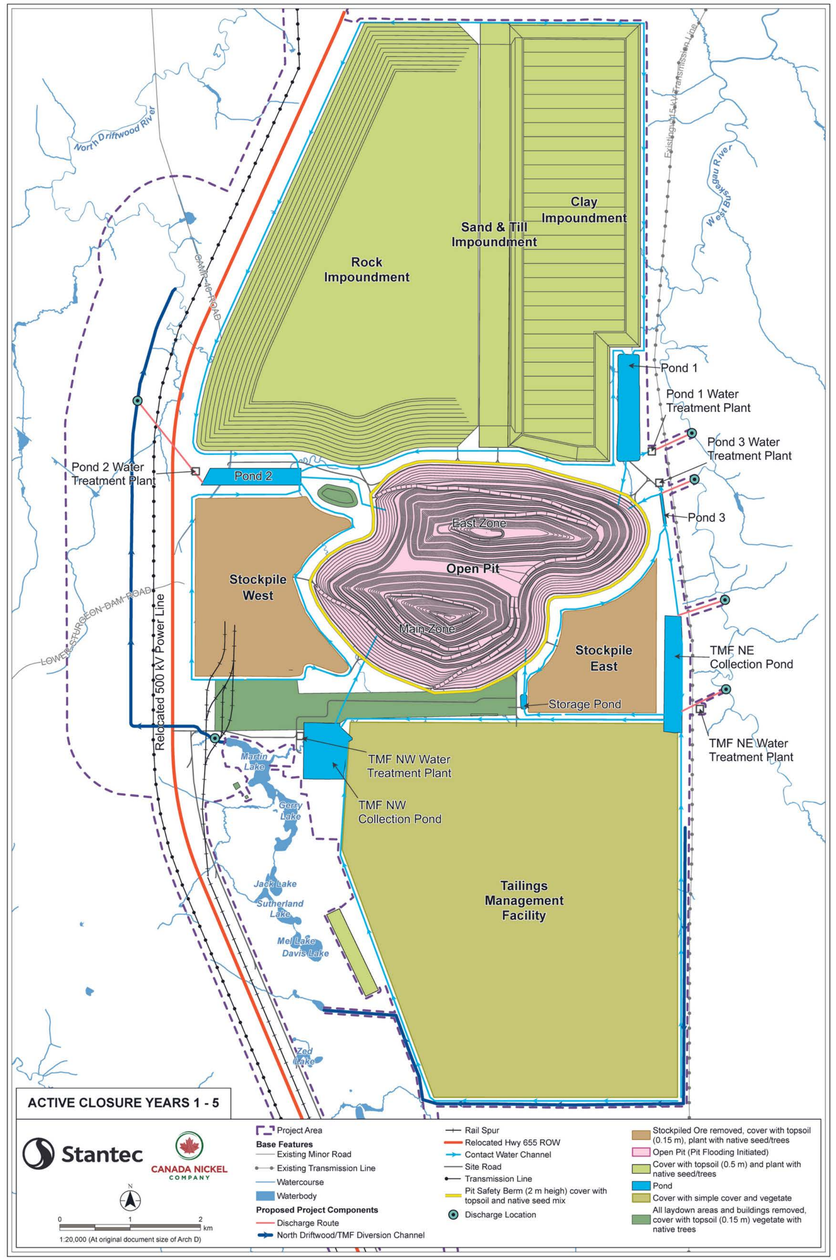
# CONCEPTUAL CLOSURE PLAN

Mine closure planning in Ontario is regulated by the province. Progressive rehabilitation will be completed throughout the operation phase with the objectives of:

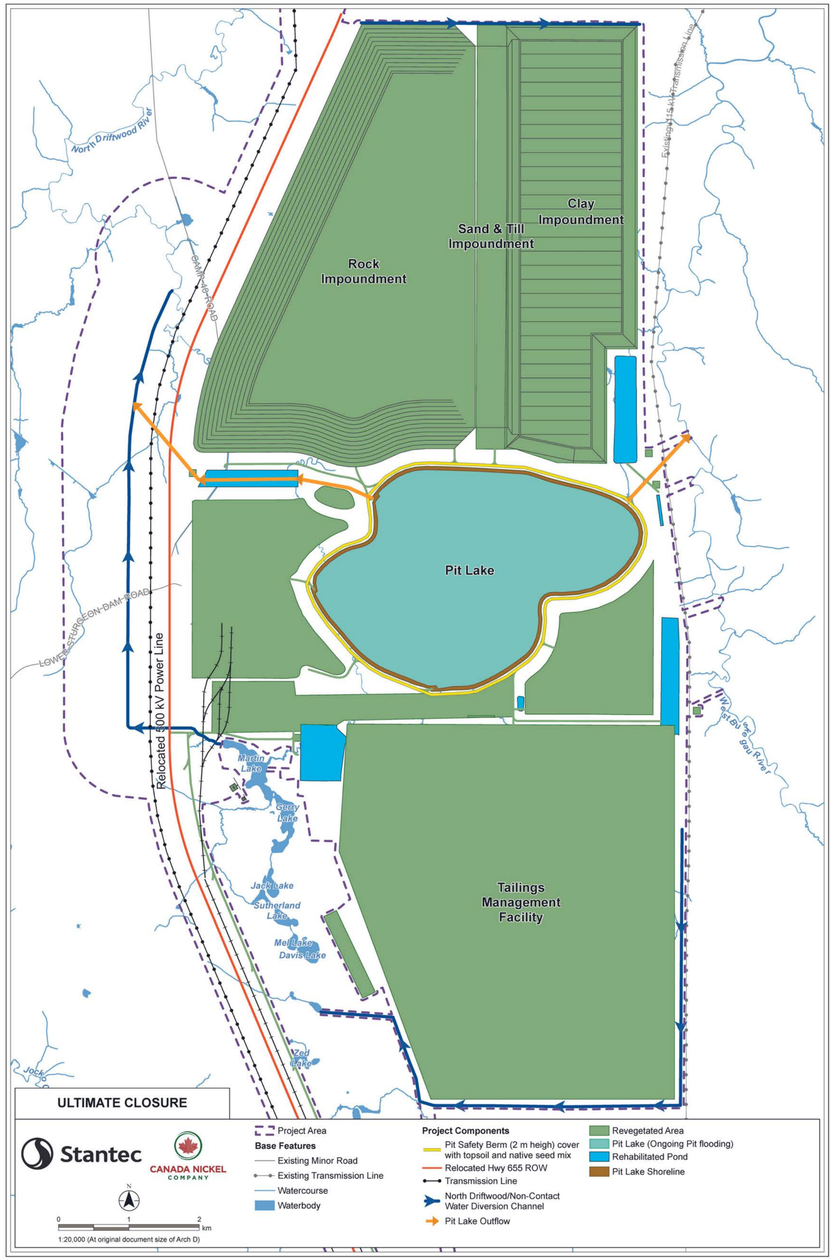
- Informing design and planning for final rehabilitation and closure
- Testing rehabilitation methods (where possible)
- Stabilizing Project components as they reach completion to meet end land use objectives
- Reducing the long-term liabilities associated with the site and thereby reducing the required financial assurance

Following the completion of ore processing, all Project operations will cease and active closure will commence. Active closure includes the removal of buildings, structures, and other infrastructure, and reclamation and site stabilization activities. Once complete, the Project will enter a passive closure phase as the pit lake fills, and closure monitoring and adaptive mitigation occur. Following pit lake filling, the Project site will be permanently closed.

## Active Closure Years 1 - 5




## Ultimate Closure



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# NEXT STEPS & FEEDBACK

**Have feedback?**
**Share it here!**

## THANK YOU FOR PARTICIPATING IN OUR COMMUNITY OPEN HOUSE EVENT!

We appreciate the time you have taken to learn about the Crawford Nickel Project.

Community feedback will be incorporated and considered as part of the Impact Statement. For additional input, please reach out to our team at:

**community@canadanickel.com**

### Next steps:

- Impact Assessment Agency of Canada Review of Draft Impact Statement
- Indigenous / Public Review of Impact Statement
- Public review of MTO and Hydro One Class Environmental Assessment Notices (30-day period)

**Looking for more information?**

IAAC Project Website

Crawford Project