



Environmental Study Report (Draft)

IAMGOLD Corporation, Côté Gold Division
3 Mesomikenda Lake
Gogama, Ontario, P0M 1W0

Prepared for:

IAMGOLD Corporation

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September 2018

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List of Acronyms

AAQC	Ambient air quality criteria
CAPMoN	Canadian Air Precipitation Monitoring Network
CCME	Canadian Council of Ministers of the Environment
CEAA	Canadian Environmental Assessment Act
CO ₂	Carbon dioxide
CGP	The Côté Gold Project
CWQG	Canadian Water Quality Guidelines
CWS	Canada-wide Standard
DS	Distribution station
EA	Environmental Assessment
EER	Environmental Effects Review
EIS	Environmental Impact Statement
ESR	Environmental Study Report
FN	First Nation
FRI	Forest Resource Inventory
GHG	Greenhouse Gas
Hydro One	Hydro One Networks Inc.
IAMGOLD	IAMGOLD Corporation
MECP	Ministry of the Environment, Conservation and Parks
MENDM	Ministry of Energy, Northern Development and Mines
MNO	Métis Nation of Ontario
MNRF	Ministry of Natural Resources and Forestry
MOE	Ministry of the Environment
MOECC	Ministry of the Environment and Climate Change
NAD	North American Datum
NAPS	Canadian National Air and Pollution Surveillance
NO ₂	nitrogen dioxide
NO _x	nitrogen oxides
O.Reg	Ontario Regulation
OEAA	Ontario Environmental Assessment Act
PM	particulate matter
PWQO	Provincial Water Quality Objectives
ROW	Right-of-way
SAR	Species at Risk
SO ₂	Sulphur dioxide
SSA	Site Study Area
TK/TLU	Traditional Knowledge / Traditional Land Use
TLA	Transmission Line Alignment
TSP	total suspended particles
UTM	Universal Transverse Mercator

Units

°C	degrees Celsius
µg/m ³	micrograms per cubic metre
dBa	A-weighted decibels
km	Kilometres
km/h	kilometres per hour
kV	kilovolt
m	metre
masl	metres above sea level
mm	millimetres
MW	megawatt
ppb	parts per billion
tpd	tonnes per day

1.0 Introduction

IAMGOLD Corporation (IAMGOLD) proposes to construct and operate a new 115 kilovolt (kV) transmission line from the existing Shining Tree distribution station (DS) referred to as the Côté Gold Transmission Line Project. The Transmission Line Project will supply the required power to the Côté Gold Project (CGP), a proposed open pit gold mine to be located in the Chester and Neville Townships, District of Sudbury, in north-eastern Ontario (Figure 1-1). The proposed Shining Tree transmission line alignment (TLA) will span 44 kilometres (km), primarily along an existing corridor from a former transmission line that supplied power to the Chester #1 Mine located adjacent to the CGP. The transmission line would be constructed during the construction phase of the CGP and would be operational during the operations and closure phases of the CGP, and decommissioned thereafter when transmission line power is no longer needed.

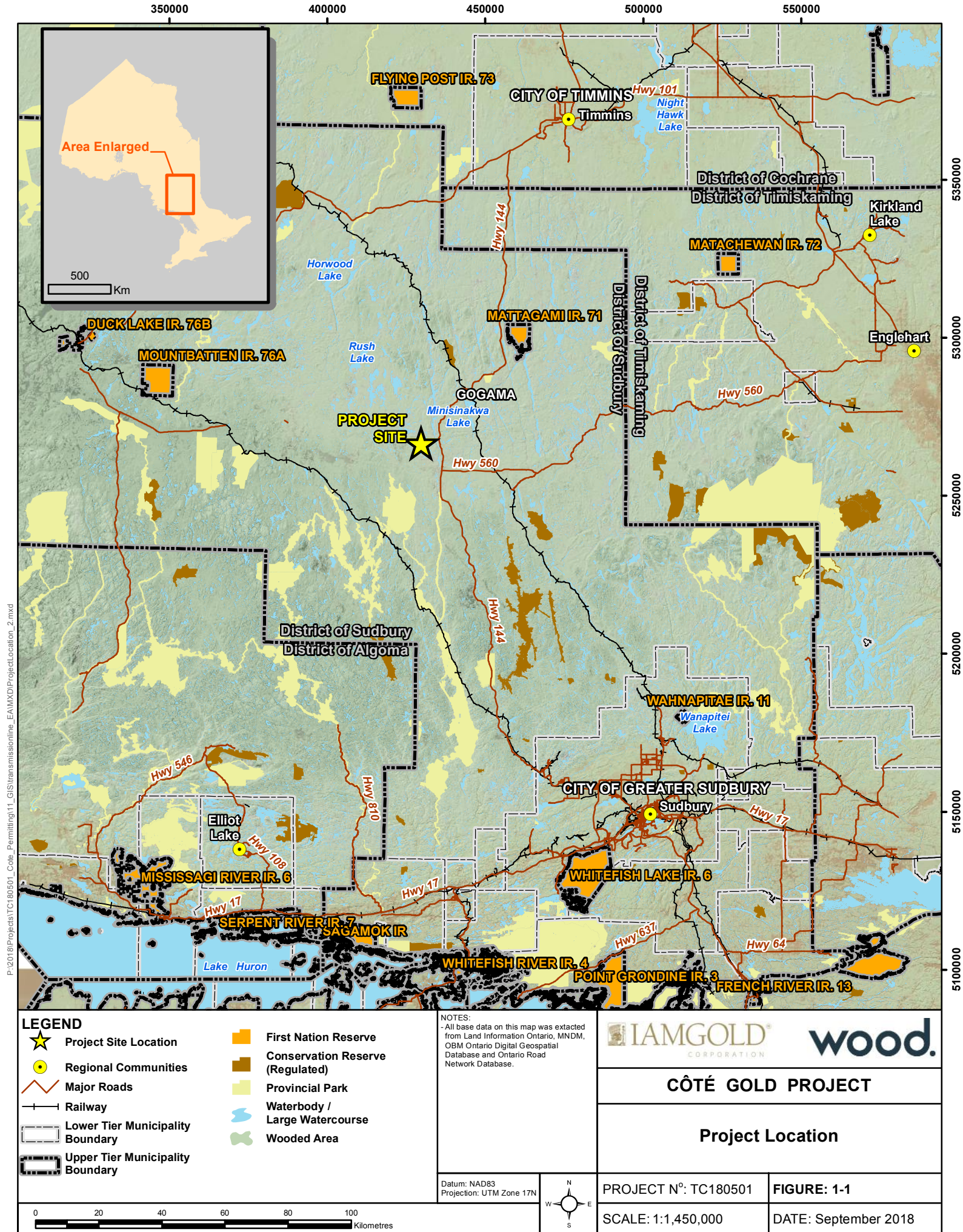
In accordance with the *Guide to Environmental Assessment Requirements for Electricity Projects*, the proposed 115 kV transmission line that spans a distance of 44 km is subject to a Category B Environmental Assessment (EA) under the Electricity Projects Regulation (O.Reg. 116/01) of the Ontario *Environmental Assessment Act*. As a Category B EA that is not associated with a generation project, it is required to follow the process under Hydro One Network Inc. (Hydro One) *Class Environmental Assessment for Minor Transmission Facilities* (Hydro One 2016).

Under the *Class Environmental Assessment for Minor Transmission Facilities*, two levels of assessment are considered: first a Class EA Screening Process, and second a full Class EA Process referred to as an Environmental Study Report (ESR). Through discussion with the Ministry of the Environment, Conservation and Parks (MECP), IAMGOLD was requested to follow the second stage of the Class EA process, which requires completion of an ESR (MECP 2018). This ESR has been prepared to meet the requirements of the Class EA Process.

The structure of this document is as follows:

- Section 1: Introduction;
- Section 2: Project Description;
- Section 3: Alternative to the Undertaking;
- Section 4: Alternatives Methods for the Undertaking;
- Section 5: Regulatory Framework;
- Section 6: Background Conditions;
- Section 7: Consultation;
- Section 8: Environmental Screening;
- Section 9: Description of Potential Environmental Effects;
- Section 10: Commitments;

- Section 11: Monitoring;
- Section 12: References; and
- Appendices.



2.0 Project Description

2.1 Project Location

The Transmission Line Project is located in a sparsely populated area of the Chester and Neville Townships, District of Sudbury, in northeastern Ontario, approximately 20 km southwest of Gogama, 130 km southwest of Timmins, and 200 km northwest of Sudbury (Figure 1-1). The closest First Nation Reserve is the Mattagami 71 Reserve located approximately 40 km north of the CGP site.

In order to provide the energy required to operate the CGP, IAMGOLD proposes to construct a new 115 kV transmission line along an existing 44 km corridor between the CGP site and the Shining Tree DS. This new transmission line will intersect with six geographic townships: Miramichi, Garibaldi, Londonderry, Champagne, Benneweis and Chester. The Universal Transverse Mercator (UTM) coordinates from the eastern terminus at the Shining Tree DS are at 5,259,333 N, 469,594 E (NAD 1983, UTM Zone 17N) and the UTM coordinates for the western terminus at the CGP site are 5,267,970 N, 428,610 E (NAD, 1983, UTM Zone 17N).

The area surrounding the proposed transmission line is generally uninhabited, although there is some use for recreational activities by locals and tourists, including fishing, camping, hunting and a few cottages located on Mesomikenda Lake. The region is also used for sustainable harvesting of timber. There is no agricultural use of the lands along the proposed transmission line route from the Shining Tree DS to the CGP site.

2.2 Background

The CGP underwent both Federal (*Canadian Environmental Assessment Act*) and Provincial (*Environmental Assessment Act*) EA processes beginning in 2013. The Federal process was successfully completed in April 2016 and the Provincial process successfully completed in January 2017. The approved Federal and Provincial EAs included provision of power to the CGP by means of a 230 kV transmission line direct from Timmins to the site.

Since completion of the Federal and Provincial EAs, IAMGOLD has completed additional engineering and optimized the CGP to address comments received during the EA processes and improve economics. As part of the optimization of the CGP, the rate of ore processing has been reduced from 60,000 to 36,000 tonnes per day (tpd), and uses more efficient rock grinding technology, subsequently reducing energy requirements.

With the reduced power requirements, the CGP no longer requires a dedicated 230 kV transmission line and a 115 kV line will be sufficient. An existing, inactive 115 kV transmission line (T2R Line) is present from Timmins to the Shining Tree DS, which is proposed to be refurbished by Hydro One and dedicated to the CGP. Any approvals required for this work will be led by Hydro One and are not considered part of the Côté Gold Transmission Line Project.

A new 115 kV, 44 km transmission line will be constructed by IAMGOLD from the Shining Tree DS along an unused, existing transmission line corridor to provide power to the CGP site (Figures 2-1). The routing of the transmission line from the Shining Tree DS to the CGP site was considered as an alternative in the Federal and Provincial EAs, but not carried forward beyond the Terms of Reference stage as it had insufficient capacity to meet the CGP needs at that time. In accordance with the *Guide to Environmental*

Assessment Requirements for Electricity Projects (MOE 2011), and based on guidance from the MECP (2018), the proposed 44 km, 115 kV transmission line from the Shining Tree DS to the CGP site is required to follow the process under the Class EA for Minor Transmission Facilities (Hydro One 2016). The route passes through primarily Crown land, including mining claims (Figure 2-2).

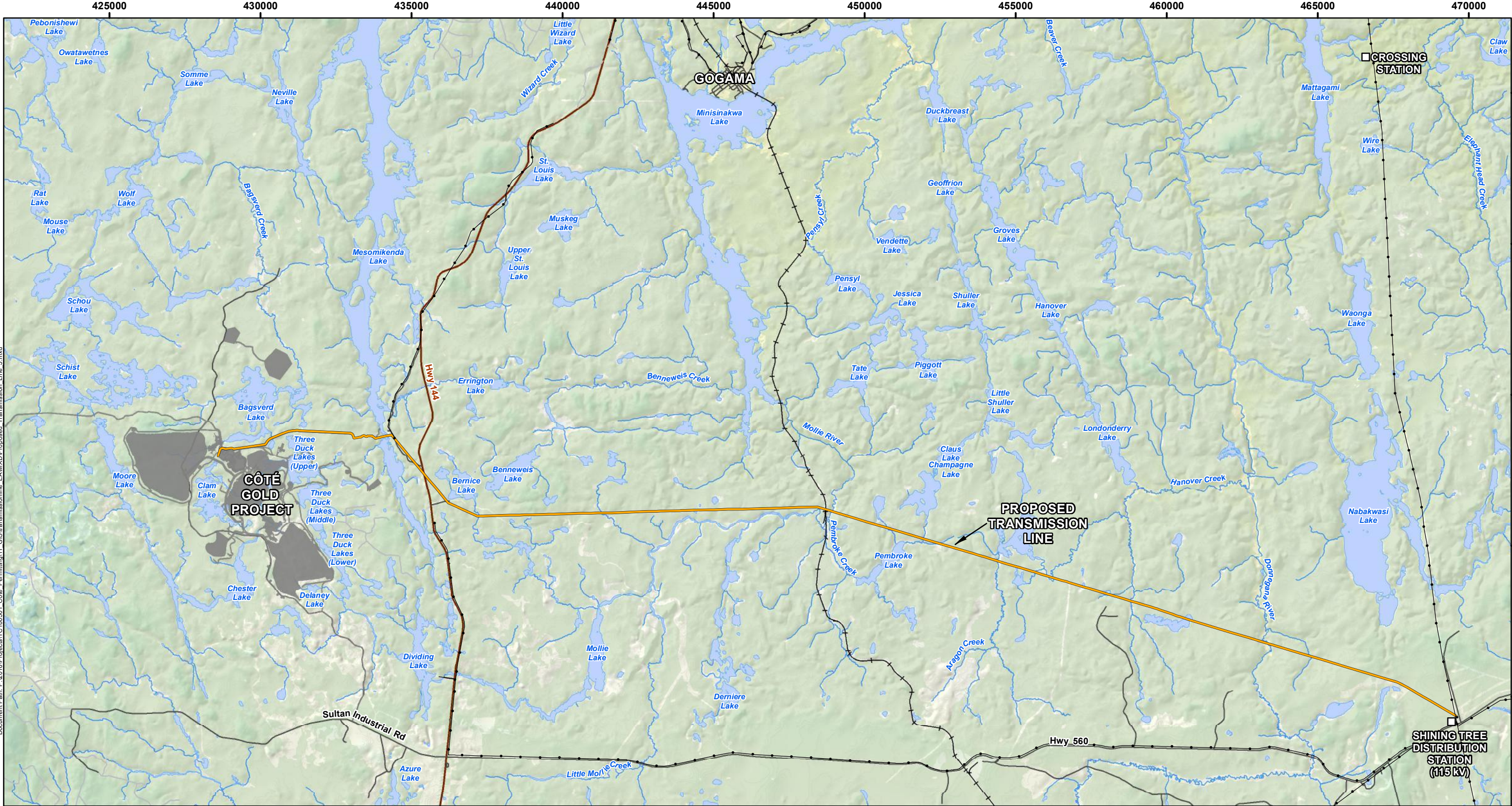
2.3 Côté Gold Transmission Line Project Design

The 44 km transmission line from the Shining Tree DS to the CGP site is proposed to be composed of wood frame structures; steel structures may be required at major water and other corridor crossings. The wood frame structures are expected to be 'H' frame portals with pole heights that range from approximately 17 metres (m) to 25 m, but may be higher in some areas where required by local topography. Anchors and guys will be used where needed to provide additional support. Depending on soil conditions, rock excavation may be required to set the structures to the required depth for stability.

Vegetation regeneration has occurred within the unused corridor between the Shining Tree DS and the CGP site (Figure 2-3, Section 6.9). The existing corridor will need to be cleared of vegetation and expanded to an average 30 m width to meet engineering setback requirements for electrical power distribution and to allow for construction access. At turning points of the transmission line, the cleared area may be extended over a small circumference for up to 50 m to allow for alternative pole configuration, if required. Electrical clearance for conductors will be in conjunction with C22.3 N°1 of the Canadian Standards Association (or as amended). Additional limited clearing may be required outside the proposed corridor to remove individual hazard trees / snags, for anchors, and potentially for temporary pole truck access where obstructions (such as steep slopes or bedrock outcroppings) are present within the corridor. Detailed clearance requirements will be confirmed as engineering designs progress.

Following completion of the CGP and assuming that there is no other use for the power infrastructure, the conductor (transmission line) will be removed, steel structures demolished and wood poles removed or cut at grade. Once the infrastructure is removed, the corridor will be left to re-vegetate naturally. As the corridor re-vegetates, the edge habitat will provide increased opportunities for wildlife. Eventually, the corridor will become consistent with the surrounding vegetation.

Detailed design of the transmission line will be provided during the permitting stage of the regulatory process.



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LEGEND

- Proposed Shining Tree Transmission Line Alignment (115 kV)
- Proposed Mine Footprint
- Power Station
- Major Road
- Local Road
- Resource / Recreation
- Railway
- Existing Transmission Line
- Watercourse
- Waterbody

0510152025Kilometres

NOTES:
- Background extracted from Provincial DEM from LIO, MNRF.



CÔTÉ GOLD PROJECT

Proposed Transmission Line Alignment

PROJECT N°: TC180501

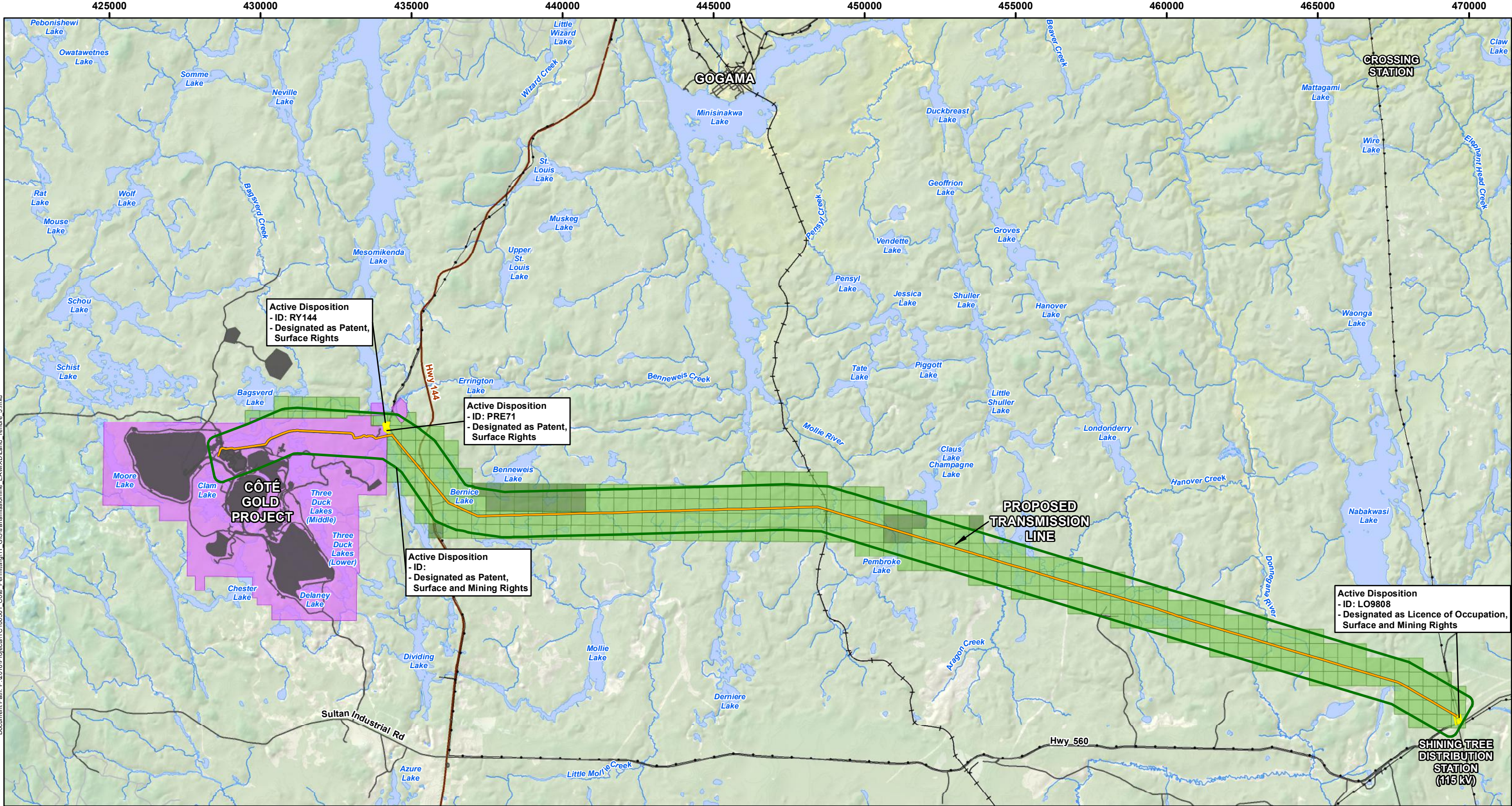
FIGURE: 2-1

SCALE: 1:122,000

DATE: September 2018

Datum & Projection:
NAD 1983 UTM Zone 17N





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LEGEND

- Proposed Shining Tree Transmission Line Alignment (115 kV)
- Transmission Line Study Area
- Proposed Mine Footprint
- Claims and / or Dispositions Held by IAMGOLD
- Claims Partially or Completely Held by IAMGOLD
- Claims Not Held by IAMGOLD
- Dispositions Not Held by IAMGOLD (Labelled with Description)
- Railway
- Existing Transmission Line
- Major Road
- Local Road
- Resource / Recreation
- Watercourse
- Waterbody

NOTES:
- Background extracted from Provincial DEM from LIO, MNRF.
- Land tenure extracted from MNDM, August 23, 2018.

Datum & Projection:
NAD 1983 UTM Zone 17N



CÔTÉ GOLD PROJECT

Land Tenure

PROJECT N°: TC180501

FIGURE: 2-2

SCALE: 1:122,000

DATE: September 2018





Figure 2-3: Existing Shining Tree Transmission Line Corridor

3.0 Alternative to the Undertaking

3.1 Background

Ensuring a reliable, cost-effective power supply is a critical component of the viability of the CGP. The majority of the power requirements are for the ore processing plant, with the balance required by the mine itself, along with ancillary needs such as pumping water, administration and other on-site activities. During the initial stages of CGP construction, the electrical power demand is expected to be relatively low, less than 5 megawatts (MW). This power demand would be met through the existing nearby transmission line (~1 MW) as well as diesel generators (less than 5 MW total available capacity). The power demands for the CGP during the mine operation phase will require a consistent and reliable supply of about 72 MW at peak operating times. A 115 kV connection is required to be in service for the later stages of construction.

Alternatives to the Côté Gold Transmission Line Project include:

- Do nothing;
- Connection via the EA-approved 230 kV transmission line¹;
- Connection via a 115 kV transmission line;
- On-site diesel fired generation;
- On-site natural gas fired generation;
- Run of river hydroelectric; and
- Other alternative forms of energy (solar, wind, forest biomass).

In determining the range of project alternatives, the following aspects were considered:

- Do they provide a viable solution for the problem or opportunity to be addressed?
- Are they proven technologies at the scale required?
- Are they technically feasible at the scale required?
- Are they consistent with other planning objectives, policies and decisions?
- Are they consistent with government priorities?
- Could they affect any sensitive environmental features?

¹ Per Section 2.2, the CGP underwent both Federal and Provincial EA processes beginning in 2013. The Federal process was successfully completed in April 2016 and the Provincial process successfully completed in January 2017. The approved Federal and Provincial EAs included provision of power to the CGP by means of a 230 kV transmission line direct from Timmins to the site.

- Are they practical, realistic financially and economically viable?
- Are they within the ability of the proponent to implement?
- Are they appropriate to the proponent doing the study?
- Are they able to meet the purpose of the *Environmental Assessment Act*?

In addition to these screening criteria, as each alternative must be reasonable from a technical, economic and environmental perspective (per the Hydro One Guidelines), the alternatives have been compared against the criteria provided below. If the alternative cannot meet all of the three criteria listed below, the alternative is considered to be unacceptable.

- **Technical applicability:** the alternative can provide sufficient power consistently (ability to provide 72 MW of peak demand). A reliable, guaranteed supply of power is critical to the uninterrupted operation of the remote mine.
- **Economic feasibility:** the alternative is economically feasible for the CGP. Cost-effectiveness relates to capital, operation, maintenance and closure / reclamation costs.
- **Environmental impact:** the alternative does not cause substantive and unnecessary disruption to the natural or socio-economic environment as compared with the other viable alternatives.

A brief description of the alternatives for the Côté Gold Transmission Line Project is provided in the following sections along with the rationale for the selection or rejection of each alternative. A summary is provided in 3.2.

3.1.1 Do nothing

Screening Criteria	Do Nothing
Technical applicability	No
Economic feasibility	No
Environmental impact	Yes
Overall	Alternative is considered unacceptable

A sufficient, reliable power supply is required to operate the CGP, and the “do nothing” approach would effectively put a stop to the mine development. Accordingly, the alternative does not meet the technical applicability criteria outlined above. Without a reliable power supply, the CGP cannot be develop, which would take away the potential positive effects that the CGP offers to the region. The CGP is not feasible without a reliable, guaranteed power supply. This alternative does not meet the economic feasibility criteria.

Proceeding with the Côté Gold Transmission Line Project as planned would provide significant positive effects to the local and regional economies (i.e., employment opportunities), and to the preservation of community character, especially given the current long-term downturn in the forestry sector, which is of general importance to the area. The CGP is anticipated to provide direct employment to approximately 1,116 persons for a 24-month period during construction and 582 persons for a 15-year period during operations. The indirect and induced employment during operations is expected to total an estimated 530

and 500 jobs, respectively. Total labour compensation from direct employment is estimated to be \$89.4 million and total labour compensation from direct, indirect and induced employment is \$147.6 million. Operations earnings are expected to be far higher than current local and regional study area median earnings: average projected earnings (including only wages and benefits) per direct employee (\$153,800) are 2.5 times the current median earnings for full time workers within the local and regional study areas.

The CGP is also forecast to create an annual average of \$648 million during construction and \$177 million during operations in contracted expenditures on goods and services that will be spent primarily on professional services, other finance and insurance, and mineral support services. The CGP's operations phase is expected to make a clearly distinguishable and positive contribution to business opportunities in the local and regional area throughout the operations phase.

This alternative does not meet the technical applicability criteria of providing sufficient power consistently to the CGP and is not economically feasible, and is therefore considered unacceptable.

3.1.2 Connection via the EA-approved 230 kV transmission line

Screening Criteria	Connection via the EA-approved 230 kV transmission line
Technical applicability	Yes
Economic feasibility	Yes
Environmental impact	Yes
Overall	Alternative is considered acceptable

Discussion with electrical authorities to date, have indicated that there is sufficient capacity within the Ontario electrical grid in the region to provide the 72 MW peak power required for the CGP. Hydro One and the Independent Electricity System Operator generally do not allow direct connection to a 500 kV transmission line, and connection to the 500 kV Hydro One transmission line located approximately 90 km east of the CGP is not carried forward as a viable option.

A review of transmission infrastructure that could serve the CGP during operations has been carried out. There are regional substations that could provide sufficient peak power supply consistently:

- Hydro One Porcupine Substation in Timmins located approximately 120 km northeast of the CGP
- Hydro One substation near Shining Tree located approximately 44 km east of the CGP

Routing of power to the site could be by means of either a 230 kV or 115 kV transmission line, based on the engineering optimization completed for the CGP.

The CGP inclusive of a 230 kV transmission line determined at that time to be required from a technical perspective, underwent both Federal (Canadian Environmental Assessment Act) and Provincial (Environmental Assessment Act) EA processes beginning in 2013. The Federal and Provincial EA processes were successfully completed April 2016 and January 2017, respectively. The proposed 230 kV transmission line would connect the site by means of a cross-country routing to the existing Hydro One Network in Timmins at the Porcupine Substation (Section 4.3). Through that EA process, it was determined that development and operation of a 230 kV transmission line met the required technical, economic and environmental criteria for the CGP.

With the lower power requirements for the CGP determined through engineering optimization, a 230 kV transmission line is no longer required for technical reasons; however, the 230 kV transmission line alternative still meets the technical criteria. The 230 kV transmission line alternative also meets the economic and environmental criteria, and remains an acceptable Project alternative.

3.1.3 Connection via a 115 kV transmission line

Screening Criteria	Connection via a 115 kV transmission line
Technical applicability	Yes
Economic feasibility	Yes
Environmental impact	Yes
Overall	Alternative is considered acceptable

As indicated in Section 3.1.2, there is sufficient capacity within the Ontario electrical grid in the region to provide the 72 MW peak power required for the CGP. Establishment of a 115 kV transmission line to the Hydro One substation near Shining Tree (located approximately 44 km east of the CGP) could provide a reliable power supply for the CGP, and sufficient peak power supply consistently, meeting the required technical criteria. Alternatively, a new 115 kV transmission line could follow the approved 230 kV route described in Section 3.1.2.

3.1.4 On-site diesel fired generation

Screening Criteria	On-site diesel fired generation
Technical applicability	Yes
Economic feasibility	No
Environmental impact	No
Overall	Alternative is considered unacceptable

Diesel power is an effective method to support construction of the CGP and can serve effectively as emergency power for critical site functions. Diesel fired power generation is planned to be used during the construction phase of the CGP with a capacity of less than 5 MW name plate power, and will be periodically used during the operations phase (and potentially during the closure phase) as needed when grid power is unavailable. Relying exclusively on the use of on-site diesel-fired power generation to support operations will result in the release of greater amounts of greenhouse gases (GHG; i.e., carbon dioxide and NO_x) and particulate air emissions than other alternatives. There is also the additional GHG and noise emissions from the required trucking of diesel fuel to the site.

Although this alternative could meet the technical applicability criteria of providing sufficient power consistently to the CGP, the cost associated with generating enough power from diesel fuel to operate the mine is not economically feasible for the CGP. This alternative is considered to be unacceptable due to the high cost of using diesel powered generation, as well as the environmental effects from the GHG emissions from the diesel use and transportation of diesel fuel. Neither the economic nor environmental criteria are met by this alternative for the operations phase.

3.1.5 On-site natural gas fired generation

Screening Criteria	On-site natural gas fired generation
Technical applicability	Yes
Economic feasibility	No
Environmental impact	No
Overall	Alternative is considered unacceptable

The closest natural gas pipeline available to the CGP is approximately 185 km east of the CGP site, from the existing TransCanada pipeline in the area of Iroquois Falls or Matheson to the site. There would need to be an 8" diameter pipeline construction through a newly cleared ~185 km ROW to the existing pipeline that would result in unnecessary environmental effects. Additionally, the cost of constructing a new natural gas pipeline to the CGP site in comparison to a shorter transmission line is much greater, as well as the added cost for a co-generation plant that would be needed on-site.

There is also the possibility of either transporting the natural gas by truck or rail from Iroquois Falls or Matheson to the site in a liquified or compressed state; however, this is a more expensive option and particularly as a rail line is not currently present.

The economic and environmental criteria cannot be met by this alternative. Although the use of natural gas as the power source for the CGP would meet the technical applicability criteria of providing sufficient power consistently to the CGP, it is considered to be unacceptable due to the added environmental effects from creating a much longer corridor for the pipeline option (as compared to transmission line grid power), or the added cost of transporting the natural gas to site via truck or rail.

3.1.6 Run of river hydroelectric

Screening Criteria	Run of river hydroelectric
Technical applicability	No
Economic feasibility	No
Environmental impact	No
Overall	Alternative is considered unacceptable

Potential hydroelectric power supply development was investigated in the region of the CGP based on inventory resources including: the *Renewable Energy Atlas* (MNR 2018), and the Ontario Waterpower Association's *Ontario Waterpower Potential Sites* (Hatch Acres 2005). Based on these sources, there are no potential hydroelectric sites closer to the CGP site than connection to the Provincial electrical grid.

Construction of a new hydroelectric generating station and the required transmission line to a more distant location is not justified; would not be financial feasible for the CGP; and would have greater unnecessary adverse effects compared with the electrical grid connection at the Shining Tree DS.

This alternative is considered to be unacceptable due to the technical complications, the greater potential environmental effects and it not being economically feasible for the CGP.

3.1.7 Other alternative forms of energy (solar, wind, forest biomass)

Screening Criteria	Other alternative forms of energy (solar, wind, forest biomass)
Technical applicability	No
Economic feasibility	No
Environmental impact	No
Overall	Alternative is considered unacceptable

Alternative energy sources such as solar and wind power were considered for primary power generation during operations; however, without viable energy storage technology, these alternatives cannot meet the CGP power requirements on a consistent basis because of the intermittent nature of solar and wind generation. As a result, the use of alternative energy sources as the primary power generation supply is considered unacceptable and has not been assessed further. Additionally, the amount of biomass needed to provide the required energy for the CGP is substantial and is not considered technically feasible.

These alternatives are considered to be unacceptable due to the lack of consistent power supply.

3.2 Summary of 'Alternatives to' the Undertaking

Based on the Assessment of 'Alternative to' the Undertaking, connection to the existing Provincial electrical grid is the only viable option for the CGP (Table 3-1). This alternative was carried forward to the 'Alternatives Methods' the Undertaking (Section 4) for further assessment.

Table 3-1: Summary of the 'Alternatives to' the Undertaking

	'Do nothing'	230 kV Transmission Line to Grid	115 kV Transmission Line to Grid	On-site Diesel Fired Generation	On-site Natural Gas Fired Generation	Run of River Hydroelectric	Alternative Forms of Energy		
							Solar	Wind	Forest biomass
Do they provide a viable solution or the problem or opportunity to be addressed?	x	✓	✓	✓	✓	✓	x	x	x
Are they proven technologies (at the scale required)?	✓	✓	✓	✓	✓	✓	x	x	x
Are they technically feasible (at the scale required)?	✓	✓	✓	✓	✓	✓	x	x	x
Are they consistent with other planning objectives, policies and decisions?	✓	✓	✓	✓	✓	✓	✓	✓	x
Are they consistent with government priorities?	x	✓	✓	✓	✓	✓	✓	✓	x
Could they affect any sensitive environmental features?	x	✓	✓	✓	✓	✓	✓	✓	✓
Are they practical, realistic financially and economically viable?	✓	✓	✓	x	x	x	x	x	x
Are they within the ability of the proponent to implement?	✓	✓	✓	✓	✓	x	x	x	x
Are they appropriate to the proponent doing the study?	x	✓	✓	x	x	x	x	x	x
Are they able to meet the purpose of the Environmental Assessment Act?	✓	✓	✓	✓	✓	✓	✓	✓	✓

4.0 Alternatives Methods for the Undertaking

4.1 Background

The alternative methods for supplying grid power by means of a transmission line to the CGP include:

- Design alternatives;
- Routing alternatives; and
- Corridor vegetation management alternatives.

The evaluations of alternatives presented herein, are based on the development of a series of performance objectives and evaluation criteria. Performance objectives are meaningful attributes that are essential for transmission line success and provide a basis for distinguishing between alternatives. Each alternative is assessed for each performance objective according to three evaluation criteria:

- Preferred;
- Acceptable; and
- Unacceptable.

The following performance objectives (or a subset thereof as appropriate for any given alternative) were used in the evaluations of alternatives:

1. Cost-effectiveness;
2. Technical applicability and reliability;
3. Effects (adverse) to the biophysical environment;
4. Effects (adverse) to the human environment; and
5. Amenability to reclamation.

For the performance objectives, the set of three criteria (preferred, acceptable and unacceptable) are applied per the following.

4.1.1 Cost-effectiveness

- Facilitates a competitive return on investment (preferred);
- Facilitates an acceptable return on investment (acceptable); and
- Cannot be financially supported by the CGP (unacceptable).

Cost-effectiveness relates to overall transmission line costs, including capital, operation, maintenance, and closure / reclamation costs. Each aspect of the project has cost implications and thus cost-effectiveness is a performance objective common to all aspects.

4.1.2 Technical Applicability and/or Reliability

- Predictably effective with contingencies if the alternative does not perform as expected (preferred);
- Appears effective based on theoretical considerations; contingencies are available if the alternative fails to perform as expected (acceptable); and
- Effectiveness appears uncertain or relies on unproven technologies (unacceptable).

'Technical applicability' and 'system integrity and reliability' are used interchangeably, as appropriate to the issue, to describe the suitability or expected performance of a given alternative.

4.1.3 Effects (adverse) to the Biophysical Environment

- Minimizes adverse effects to the biophysical environment without mitigation (preferred);
- Minimizes adverse effects to the biophysical environment with mitigation (acceptable); and
- Likely to cause significant adverse effects to the biophysical environment that cannot reasonably be mitigated (unacceptable).

The biophysical environment referred to in this performance objective is a broad term used to describe the air, bedrock, soil, water (surface and ground), and biological organisms and communities.

4.1.4 Effects (adverse) to the Human Environment

- Minimizes adverse effects to the human environment without mitigation and provides positive effects (preferred);
- Minimizes adverse effects to the human environment with mitigation (acceptable); and
- Likely to cause significant adverse human environment effects that cannot reasonably be mitigated (unacceptable).

The potential for negative human environment effects, such as the reduction of land use by Indigenous communities, is evaluated where appropriate for the alternatives for the various aspects of the transmission line. The human environment is defined herein to also include aspects of the cultural heritage environment.

4.1.5 Amenability to Reclamation

- Causes disturbance to the biophysical environment that requires limited reclamation (preferred);
- Causes disturbance to the biophysical environment that requires moderate to extensive reclamation (acceptable); and

- Mitigation of disturbance to the biophysical environment is not practical or feasible (unacceptable).

The performance objective relates to the decommissioning or reclamation of both the transmission line and its associated infrastructure.

4.1.6 Overall Evaluation

On completion of the assessment, an overall summary evaluation was completed taking all the performance objectives into consideration. There are two general approaches to summary evaluations.

One objective is to give numerical values to individual performance objectives, based on application of the criteria, and then to sum these values to arrive at an overall index. This approach typically requires some form of weighting to take into account the varying importance of the different performance objectives. Weighting factors have to be carefully justified and are thus often open to interpretation. In addition, the numerical approach may result in two or more very different alternatives that have the same, or very similar, overall index values, when it is intuitively clear that one alternative meets environmental and health and safety requirements and is technically better than the other.

The second approach, and the one used herein, is to rely on verbal distinctions inherent in the terminology of the criteria. Using this method, and with the knowledge that all performance objectives are essential to the decision process, an alternative is rejected if it attains an unacceptable rating for any single performance objective.

The alternative which receives the greatest number of preferred ratings is not necessarily the best, or most preferred, overall alternative. The relative importance of the individual performance objectives needs to be considered as well. It may be that one or two performance objectives are more important and override all other objectives, so long as the minimum rating of acceptable is attained for the less important objectives. The final evaluation of alternatives is therefore a reasoned process, in which the basis for the final selection of alternatives is easily understood at all levels.

4.2 Design Alternatives for the Undertaking

In regards to design alternatives, all facilities and equipment related to the transmission line and connection to the electrical grid must be designed according to applicable codes, regulations and best management practices. This includes: the Canadian Electrical Code, (Ontario) Transmission System Code and the Canadian Standards Association Code for Overhead Systems (CAN/CSA-C22.3 No. 1-06, or as amended).

The corridor for the transmission line will meet all regulatory requirements based on the final pole / tower design and height and are typically 30 m wide for 115 kV transmission lines. IAMGOLD has committed through the EA under the *Canadian Environmental Assessment Act*, that the corridor will not exceed 50 m in width. As a result, the only major alternatives available with respect to design to be assessed within the EA document are in regard to tower design.

The final pole / tower design will be determined through final engineering. Two vertical support designs have been identified as potentially appropriate from a technical perspective to reliably support a 115 kV transmission line in a northern Ontario environment: wooden pole 'H' frame design; and/or, steel 'V' frame tower. The pole / tower design is generally selected based on costs and considerations relating to

local topography and soil bearing capacity. Wood pole structures are generally preferred from a technical perspective in areas of poorer geotechnical support although they require closer pole spacing, while steel towers are more costly given suitable terrain. Both types of structures are used in the region depending on the transmission line voltage and the terrain.

Alternative A: Use 'H' frame wooden poles (or equivalent)

- **Cost-effectiveness:** Wooden 'H' frame towers are more cost effective due to lower costs of material and installation compared to steel towers. Generally, horizontal towers for transmission lines require a greater width of the ROW, which can add to costs for areas that require a new corridor be cleared. Wooden poles are generally less durable and require more frequent maintenance and replacement of poles than the steel structures; however, as the transmission line is only going to be operational for approximately 17 years, replacement poles are not anticipated to be needed. (Preferred)
- **Technical applicability and reliability:** wooden 'H' frame towers are extensively used for 115 kV transmission lines in northern Ontario and are effective towers for the proposed transmission line. (Acceptable)
- **Effects (adverse) to the biophysical environment:** construction of wooden 'H' frame towers would have minimal effect on the surrounding environment in the existing corridor from the Shining Tree DS to the CGP site. During construction of the transmission line, new access roads will not be constructed to install towers, wherever feasible. (Acceptable)
- **Effects (adverse) to the human environment:** Wooden 'H' frame poles are less discernable from the natural landscape and tend to be shorter height than 'V' guyed steel towers. This could have less of a perceptible visual effect from the transmission line compared to the use of 'V' guyed steel structures. (Preferred)
- **Amenability to reclamation:** Wooden 'H' frame poles are relatively easy to remove or cut at ground surface causing less overall disturbance on removal compared to 'V' guyed steel towers. (Preferred)

Alternative B: Use 'V' guyed steel towers (or equivalent)

- **Cost-effectiveness:** 'V' guyed steel towers generally cost more in material and have more labour intensive installation compared to wooden 'H' frame poles. They also require a wider corridor to accommodate the guys and anchors, which adds to the initial installation costs. There is also a greater cost associated with decommissioning the transmission line and removing the towers following operations. (Acceptable)
- **Technical applicability and reliability:** 'V' guyed steel towers are used on northern Ontario transmission lines and are suitable support towers for the 115 kV transmission line. (Acceptable)
- **Effects (adverse) to the biophysical environment:** 'V' guyed steel towers generally require a wider corridor for the guys and anchors compared to the 'H' frame structures. A wider corridor would result in more vegetation and habitat loss. They may have a longer distance between structures. (Acceptable)

- **Effects (adverse) to the human environment:** the 'V' guyed steel structures are more discernable from the natural landscape and tend to be taller than 'H' frame wooden structures. This could have more of a perceptible visual effect than the use of 'H' frame wooden structures. (Acceptable)
- **Amenability to reclamation:** Steel structures are labour intensive to remove and requires greater ground disturbance to remove foundation. (Acceptable)

Alternative C: Use of both 'H' frame wooden poles and 'V' guyed steel towers –

- **Cost-effectiveness:** Wooden 'H' frame towers are the most cost-effective alternative for the proposed transmission line for material and installation as compared to steel towers. Therefore, the use of both structure types is more cost effective than using solely steel towers and less cost effective than using solely wooden towers. (Acceptable)
- **Technical applicability and reliability:** Along the corridor from the Shining Tree DS to the CGP site, there are areas better suited for wooden 'H' frame poles, and some areas that are better suited for 'V' guyed steel poles, based on the terrain and geotechnical support of the soils. For example, IAMGOLD has committed where feasible, to avoid works in waterways and potential effects to fish and fish habitat as well as water quality. 'V' guyed steel poles allow for greater distance between poles compared to wooden 'H' frame poles and could be used to span waterways as opposed to placing poles close to the shore or in the waterways. (Preferred)
- **Effects (adverse) to the biophysical environment:** Although 'V' guyed steel poles require more intrusive installation, there are situations where the use of these poles avoids potential environmental effects. For example, IAMGOLD has committed to avoid works in waterways where feasible, to avoid potential effects to fish and fish habitat, as well as water quality. 'V' guyed steel poles allow for greater distance between poles compared to wooden 'H' frame poles and could be used to span waterways as opposed to placing poles close to the shore or in waterways. It is therefore beneficial, from a biophysical environment perspective, to include both types of poles for the transmission line to minimize the potential environmental effects from the Transmission Line Project. (Preferred)
- **Effects (adverse) to the human environment:** The 'V' guyed steel structures are more discernable from the natural landscape and tend to be taller than 'H' frame wooden structures. Where 'V' guyed steel towers are used, there could be a greater overall visual effect to the natural landscape compared to the use of wooden 'H' frame poles. (Acceptable)
- **Amenability to reclamation:** Wooden 'H' frame poles are relatively easy to remove or cut at ground surface causing less overall disturbance. 'V' guyed steel structures are labour intensive to remove and ground requires greater disturbance to remove foundation. (Acceptable)

4.3 Routing Alternatives

Based on the proximity of the CGP site and the accessibility to the Provincial electrical grid, three routing alternatives were considered, shown in Figure 4-1:

Alternative A: Cross-Country Transmission Line Alignment

The Cross-Country Transmission Line Alignment (TLA) has three segments, totaling 120 km in length (Figure 4-1): a new ROW parallel to the 115 kV transmission line south from Timmins for approximately 46 km (up to 45 m width required to avoid conflict); a new cross-country ROW through previously undisturbed land south-west towards the CGP site for approximately 68 km, closer to Highway 144 and Gogama; and 6 km along the existing ROW corridor. As discussed in Section 3.1.2, this route has already been assessed through the Federal and Provincial EA process for a 230 kV transmission line; however, this route could also be used to carry a 115 kV transmission line and still meet the MW requirements for the CGP.

- **Cost-effectiveness:** Greater overall costs associated with a longer transmission line, also requires a substantial corridor to be cleared from a greenfield. (Acceptable)
- **Technical applicability and/or reliability:** Not applicable.
- **Effects (adverse) to the biophysical environment:** This alternative would require substantial greenfield clearing of forest habitat and could result in changes to wildlife movement in the region including increased predation. (Acceptable)
- **Effects (adverse) to the human environment:** The alternative has been sited to be located outside of the viewshed from existing homes, cottages and waterways. There were no specific land use or heritage resources that intersect with the proposed route. (Acceptable)
- **Amenability to reclamation:** The reclamation of the Cross Country TLA will consist of decommissioning and removal of infrastructure within the corridor and allowing the vegetation within the corridor to reestablish itself naturally over time. As this alternative would have a longer transmission line that would have to be dismantled (120 km) it is considered to have greater reclamation requirements. (Acceptable)

Alternative B: Shining Tree Transmission Line Alignment

The Shining Tree TLA would require the construction of a 44 km 115 kV transmission line primarily through an existing corridor from the Shining Tree DS to the CGP site. The existing corridor has partially overgrown and would need to be cleared and expanded to meet the required corridor width based on a modern transmission line design.

- **Cost-effectiveness:** Less overall costs associated with a shorter transmission line in an existing corridor. Minimal clearing may be required to widen the existing corridor to meet industry standards. (Preferred)
- **Technical applicability and/or reliability:** Not applicable.
- **Effects (adverse) to the biophysical environment:** This alternative would result in minimal environmental effects as the Shining Tree TLA would utilize an existing corridor. There may be some vegetation clearing and widening of the corridor, but these effects are considered to be much less than other alternatives assessed. (Preferred)

- **Effects (adverse) to the human environment:** Like the Cross Country TLA, this alternative has been sited to be outside of the view of homes, cottages and waterways. As this alternative utilizes an existing corridor, most of the effects to the human environment have already occurred. There are limited specific land uses or heritage resources identified by Indigenous peoples or local stakeholders that intersect with the proposed route. (Acceptable)
- **Amenability to reclamation:** The reclamation of the Shining Tree TLA will consist of decommissioning and removal of infrastructure within the corridor and allowing the vegetation within the corridor to reestablish itself naturally over time. As this alternative has a shorter transmission line length, there would be less transmission line to remove. (Acceptable)

Alternative C: Highway Transmission Line Alignment

The Highway TLA would follow an existing 24.4 kV transmission line from Shining Tree to Highway 144 along Highway 560. From there a new corridor north would require the clearing along Highway 144 to the existing corridor from the historic Chester 1 Mine (Shining Tree TLA corridor). The poles of the existing Hydro One 24.4 kV transmission line along Highway 560 are capable of supporting the 115 kV transmission line for the CGP.

- **Cost-effectiveness:** Although the existing transmission line poles along Highway 560 could potentially be used to support the Highway TLA, there is a large cost associated with clearing a new corridor for the Highway TLA along Highway 144. In addition, upgrading the voltage along the Highway 560 transmission line would require that IAMGOLD compensates for the power outages to customers that use that transmission line, which would add to the cost of this alternative. (Acceptable)
- **Technical applicability and/or reliability:** Not applicable.
- **Effects (adverse) to the biophysical environment:** This alternative would result in minimal environmental effects as the Highway TLA would utilize an existing corridor along Highway 560. There would however be vegetation clearing required to create a new corridor north along Highway 144. The adverse effects to the biophysical environment for the Highway TLA would be greater than the Shining Tree TLA, but much less than the Cross-Country TLA. (Acceptable)
- **Effects (adverse) to the human environment:** This alternative would be visible along both Highway 560 and Highway 144, but is likely outside the viewshed of homes, cottages and waterways. As this alternative utilizes an existing corridor for a portion of the transmission line, some of the effects to the human environment have already occurred. There were no specific land uses or heritage resources identified by Indigenous peoples or local stakeholders that intersect with the proposed route. (Acceptable)
- **Amenability to reclamation:** The reclamation of the Highway TLA would consist of decommissioning of the infrastructure within the corridor between Highway 560 and the CGP site and allowing the vegetation within this portion of the corridor to reestablish itself naturally over time. The existing transmission line between the Shining Tree DS and Highway 144 would remain following closure of the Transmission Line Project. (Preferred)

4.4 ROW Vegetation Management Alternatives

Vegetation clearing and maintenance of the corridor can involve two processes; the use of approved herbicides or mechanical / manual clearing of vegetation.

Management Option A – Use of Approved Herbicides

An industry standard practice is the use of approved herbicides to inhibit vegetation growth within the ROW.

- **Cost-effectiveness:** The use of herbicides to discourage vegetation growth within the corridor is the most cost-effective way of managing vegetation. Herbicide sprayed in the corridor may be less frequent and less labour intensive than mechanical / manual clearing. (Preferred)
- **Technical applicability:** The use of approved herbicide sprays in corridors are widely used in transmission line maintenance and is a proven vegetation management strategy within the industry. (Acceptable)
- **Effects (adverse) to the biophysical environment:** The use of approved herbicides to manage vegetation would affect the vegetation in the corridors; however, it is less selective than mechanical / manual clearing and may result in environmental effects outside of the corridor. (Acceptable)
- **Effects (adverse) to the human environment:** There have been identified concerns from Indigenous communities regarding the use of herbicides in vegetation maintenance within the transmission line corridor and the potential effect on the environment as a result. If herbicides were used in the corridor, the public image of IAMGOLD could be negatively affected and the use of areas around the corridor for Indigenous traditional purposes or local stakeholder's recreation may be negatively affected (i.e., fishing in waterbodies that the corridor crosses due to concern over herbicide contamination in fish). Furthermore, to address the concerns identified by Indigenous communities, IAMGOLD has committed to use mechanical clearing per the approved Federal and Provincial EAs. (Unacceptable)
- **Amenability to reclamation:** Residual herbicides could potentially remain in the corridor following the decommissioning of the transmission line in the closure phase. As the remediation plan for the transmission line is to remove the infrastructure and allow the vegetation to reestablish naturally, it could take longer for the vegetation to reestablish. (Acceptable)

Management Option B – Mechanical / Manual Clearing

An industry standard practice is the periodic mechanical / manual removal of vegetation within the corridor to keep the corridor from overgrowing.

- **Cost-effectiveness:** Mechanical / manual clearing of vegetation would require greater frequency of clearing the corridor and may be more labour intensive, leading to greater overall costs. (Acceptable)
- **Technical applicability:** Periodic mechanical / manual clearing of vegetation within the corridor is widely used in transmission line maintenance. (Acceptable)

- **Effects (adverse) to the biophysical environment:** Mechanical / manual clearing allows for controlled removal of vegetation within the corridor. There are therefore no secondary environmental effects outside of the corridor as a result of mechanical / manual clearing, apart from temporary noise during the clearing itself. (Preferred)
- **Effects (adverse) to the human environment:** Mechanical / manual clearing of vegetation within the corridor has not been identified as a concern to local stakeholders and Indigenous communities. (Preferred)
- **Amenability to reclamation:** Once the remediation process has begun and the infrastructure has been removed from the corridor, the corridor will begin the process of revegetating naturally. It should take less time for the vegetation to reestablish in the corridor compared to Alternative A if residual herbicide hindered reestablishment. (Preferred)

4.5 Summary

The assessment of alternative methods for the Côté Gold Transmission Line Project identified the preferred design, route and corridor vegetation management strategy for the proposed transmission line based on the cost-effectiveness, the technical applicability, effects to the biophysical and human environments and the amenability to reclamation. The summary of these assessments is provided in Tables 4-1, 4-2 and 4-3.

Overall the preferred alternatives are a transmission line comprised of wooden pole and steel structures, along the Shining Tree TLA, with the ROW maintained by manual and mechanical means as needed during operation (rather than through chemical means).

Table 4-1: Performance Evaluation – Pole / Tower Alternatives

Performance Objective	Alternatives		
	Use 'H' Frame Wooden Poles (or equivalent)	Use 'V' Guyed Steel Towers (or equivalent)	Use of Both 'H' Frame Wooden Poles and 'V' Guyed Steel Towers
Cost-effectiveness	More cost effective for material and labour Rating - Preferred	Generally costs more for materials and more labour intensive installation Rating - Acceptable	Greater cost for steel towers and labour intensive installation Rating - Acceptable
Technical applicability and reliability	Extensively used for 115 kV transmission lines in northern Ontario, but would likely require work in watercourses Rating – Acceptable	Used for 115 kV transmission lines in northern Ontario, but would not be required based on the geotechnical properties of the soils and the terrain Rating - Acceptable	Best suited for the varying types of terrain and soil types Rating - Preferred
Effects (adverse) on the biophysical environment	Less intrusive installation, but would likely require work in or close to waterways Rating - Acceptable	Intrusive installation, but would likely not require work in or close to waterways Rating - Acceptable	Less intrusive installation where wooden 'H' frames poles are used and no required work in or close to waterways because of the 'V' guyed steel poles Rating - Preferred
Effects (adverse) on the human environment	Would be less discernable from the natural landscape and tend to be shorter than steel towers Rating - Preferred	Would be more distinguishable from the natural landscape and tend to be taller than wooden 'H' frame towers Rating - Acceptable	Steel towers would be more distinguishable from the natural landscape and tend to be taller than wooden 'H' frame towers Rating - Acceptable
Amenability to reclamation	Easily removed following operations Rating - Preferred	Labour intensive to remove and ground requires greater disturbance to remove foundation Rating - Acceptable	Wooden 'H' frame poles are easily removed and 'V' guyed steel towers would be more labour intensive and ground requires greater disturbance Rating - Acceptable
SUMMARY EVALUATION	RATING – ACCEPTABLE	RATING - ACCEPTABLE	RATING - PREFERRED

Table 4-2: Performance Evaluation – Routing Alternatives

Performance Objective	Alternatives		
	Use Cross Country TLA	Use Shining Tree TLA	Use Highway TLA
Cost-effectiveness	Greater overall costs due to longer transmission line and clearing of a new corridor Rating - Acceptable	Less overall costs due to shorter transmission line through an existing corridor Rating – Preferred	Greater overall costs due to the longer transmission line, expansion of the existing corridor, removal of the existing transmission line and installation of new infrastructure Rating - Acceptable
Technical applicability	Not Applicable	Not Applicable	Not Applicable
Effects (Adverse) on the biophysical environment	Substantial greenfield clearing for a new corridor Rating - Acceptable	Minimal clearing of an existing corridor, away from other disturbances Rating – Preferred	Minimal clearing of an existing corridor, adjacent to a roadway. Rating - Acceptable
Effects (Adverse) on the human environment	Alternative sited to be outside of viewshed from homes, cottages and waterways. No specific land use or heritage resources that intersect with the proposed route. Rating - Acceptable	Alternative sited to be outside of viewshed from homes, cottages and waterways. Limited specific land use or heritage resources that intersect with the proposed route. Located in a previously disturbed area and would not further affect potential land use. Rating – Acceptable	Alternative would require construction that might require some work on roadways. The transmission line will also be very visible from the highway. Rating - Acceptable
Amenability to reclamation	Longer transmission line will take longer and more effort to decommission. Rating - Acceptable	Shorter transmission line will take less time and effort to decommission. Rating - Acceptable	Some of the transmission line will be used following decommissioning of the CGP; therefore, there will be less overall time and effort to decommission. Rating - Preferred
SUMMARY EVALUATION	RATING - ACCEPTABLE	RATING - PREFERRED	RATING - ACCEPTABLE

Table 4-3: Performance Evaluation – ROW Vegetation Management Alternatives

Performance Objective	Alternatives	
	Use of Approved Herbicides	Mechanical / Manual Clearing
Cost-effectiveness	Cost-effective way of managing vegetation within the ROW. Rating - Preferred	Labour intensive method of managing vegetation within the ROW. Rating - Acceptable
Technical applicability	Widely used method of vegetation management within the industry. Rating - Acceptable	Widely used method of vegetation management within the industry. Rating - Acceptable
Effects (adverse) to the biophysical environment	Use of approved herbicide is less selective than mechanical / manual clearing and may result in environmental effects outside the corridor. Rating - Acceptable	Allows for controlled removal of vegetation within the corridor. Rating - Preferred
Effects (adverse) to the human environment	Identified concerns from Indigenous communities about the use of herbicide with commitment made by IAMGOLD not to use herbicides in the ROW. Rating - Unacceptable	Method has not been identified as a concern to local stakeholders or Indigenous peoples. Rating - Preferred
Amenability to reclamation	Herbicide could remain in the ROW following decommissioning of the transmission line and could slow the process of vegetation reestablishing within the corridor. Rating - Acceptable	It should take less time for the vegetation to reestablish naturally in the corridor compared to Alternative A. Rating – Preferred
SUMMARY EVALUATION	RATING - UNACCEPTABLE	RATING - PREFERRED

5.0 Regulatory Framework

5.1 Provincial Class Environmental Assessment Process

The Ministry of the Environment (MOE) *Guide to Environmental Assessment Requirements for Electricity Projects* provides a guide to assist proponents in comprehending the EA requirements of Ontario Regulation (O. Reg.) 116/01 Electricity Projects under the Ontario *Environmental Assessment Act*. The Guide categorizes electricity projects into three groups (after MOE 1991):

- **Category A:** Projects which are expected to have minimal environmental effects. These projects do not require approval under the Environmental Assessment Act, and are not designated as being subject to the EA requirements under O. Reg. 116/01 but are required to comply with any other applicable existing legislative requirements.
- **Category B:** Projects that have the potential environmental effects that can be likely mitigated. Projects under Category B are subject to the Environmental Assessment Act and require an environmental screening process.
- **Category C:** Major projects with known significant environmental effects. These projects require an individual EA.

For transmission line projects, the Guide further defines the three categories based on the proposed voltage and distance of the transmission line as follows:

- **Category A:** Transmission Lines that are <115 kV, or transmission lines that are ≥115 kV and ≤2 km, unless associated with a Category B generation project.
- **Category B:** If associated with a Category B generation project and ≥115 kV, subject to Environmental Screening Process, or if not associated with a Category B generation project and 115 kV and >2 km, or between 115 kV and 500 kV and between 2 km and 50 km are subject to the Class EA for Minor Transmission Facilities.
- **Category C:** Transmission lines that are between 115 kV and 500 kV and ≥ 50 km or transmission lines that are ≥ 500 kV and > 2 km.

The proposed Shining Tree TLA is 115 kV of approximately 44 km in length and is not associated with a generation facility. It will be constructed within a preexisting corridor, which will subsequently result in minimal environmental effects. It is therefore considered a Category B project, based on the Guide description of “115 kV and greater than 2 km in length” not associated with a generation facility. In accordance with the *Guide to Environmental Assessment Requirements for Electricity Projects* (MOE 2011), and based on guidance from the Ministry of Environment, Conservation and Parks (MECP 2018), the proposed 44 km, 115 kV transmission line from the Shining Tree DS to the CGP site is required to follow the process under the Class EA for Minor Transmission Facilities (Hydro One 2016).

The process for approval of a project under the Class EA for Minor Transmission Facilities process includes two levels of assessment: a Class EA Screening Process, and a Class EA ESR Process. Through discussion with the MECP (MECP 2018), IAMGOLD was requested to follow the second stage of the Class EA process,

which requires completion of an ESR. The primary document for the Class EA process, is this ESR document.

There is a possibility that there may be refinements to the transmission line design during the detailed design phase of the transmission line. Should the minor modifications or refinements result in material negative environmental effect(s); an Addendum to the ESR would be completed in accordance to Section 3.8 of the Class EA for Minor Transmission Facilities (Hydro One 2016).

5.2 Provincial Environmental Approvals

In addition to the Provincial Class EA for Minor Transmission Facilities process that the transmission line is subject to, there are a number of Provincial permit requirements that will need approval for the construction and operation of the transmission line. The permits anticipated to be required are listed in Table 5-1.

5.3 Federal Environmental Assessment Process

The CGP (the proposed mine) was subject to CEAA, 2012 and successfully completed the CEAA process in April 2016.

5.4 Federal Environmental Approvals

No additional Federal approvals are expected to be required.

Table 5-1: Permit Requirements for the Côté Gold Transmission Line Project

Permit / License	Agency Responsible	Description
Work Permit <i>Public Lands Act / Lakes and Rivers Improvement Act</i>	MNRF	Work / construction on Crown land.
Forest Resource Licence (Cutting Permit) <i>Crown Forest Sustainability Act</i>	MNRF	Clearing of Crown merchantable timber.
Land Use Permit <i>Public Lands Act</i>	MNRF	Tenure for permanent facilities on Crown land (transmission line).
Encroachment Permits <i>Public Transportation and Highways Improvement Act</i>	Ministry of Transportation Ontario	Work upon, under or within the limits of a Provincial Highway ROW.
Leave to Construct <i>Ontario Energy Board Act</i>	Ontario Energy Board	Approval to construct a transmission line.
Other Potential Environmental Approvals:		
Permit to Take Water <i>Ontario Water Resources Act</i>	MECP	May be required to create temporary ice bridges over watercourses to provide access during transmission line construction.
Closure Plan <i>Mining Act</i>	Ministry of Energy, Northern Development and Mines (MENDM)	For decommissioning at transmission line, if ownership is retained by IAMGOLD.

6.0 Description of the Environment

6.1 Study Area

To adequately characterize the existing environment along the proposed transmission line, a Site Study Area (SSA) has been developed for the purposes of this ESR. SSA focuses on the existing corridor that will be utilized in the Shining Tree TLA, along with a 500 m buffer on either side of the corridor. This area has been used to describe the existing environment that could potentially be affected by the transmission line and is considered sufficient to characterize the biophysical and socio-economic conditions (Figure 6-1).

6.2 Climate

Active regional climate monitoring locations are located in Timmins (120 km north of the CGP site), Chapleau (110 km northwest of the CGP site), Sudbury (140 km south of the Project site) and North Bay (230 km southeast of the CGP site). Monthly temperatures at these regional sites are in the range of approximately -17° Celsius (C) to 19°C, with minimum daily average temperatures occurring in January and maximum daily average temperatures occurring in July (Golder 2014a).

The average regional annual precipitation ranges from 809 millimetres (mm) to 1,044.6 mm. The total precipitation gradient shows a decreasing trend northward (to Timmins) and westward (to Chapleau), which is consistent with gradients noted in the Hydrological Atlas of Canada (Department of Fisheries and the Environment, 1978). The proportion of total precipitation that falls as snow is reported as 37% at Timmins and 29% at Sudbury. Annual water losses, based on total water lost to the atmosphere through evapotranspiration and to deep groundwater resources are in the range of 400 mm to 600 mm (Ministry of Natural Resources, 1984). The annual water surplus is in the range of 200 mm to 500 mm, and noticeably lower in dry years.

Although there are location-specific differences in the monthly distribution of wind direction at the North Bay, Timmins and Sudbury monitoring stations, each of these sites report wind predominantly from the north through the winter and spring months, and wind predominantly from the south and southwest during summer and fall months. The average wind speed in this region ranges from 9.8 kilometres per hour (km/h) to 13.5 km/h.

A meteorological tower was installed at the CGP site in May 2012 to initiate the collection of long-term climate data for the area. This climate station includes a data logger connected to sensors for total precipitation, air temperature, relative humidity, wind speed, wind direction and solar radiation.

Based on data collected from May 2012 to July 2013 presented in the Hydrology and Climate Baseline Report (Golder 2014a), the average daily temperature at the CGP site was 5.8 degrees Celsius (°C), and based on data from June 2012 to July 2013 the total precipitation was 826.8 mm. A comparison of the data collected from the CGP site in 2012 / 2013 and the other climate monitoring locations is presented in Table 6-1. Data collected from the CGP site meteorological station indicates that precipitation and daily average temperatures at the CGP site fall within the range of average annual precipitation for the region. Wind speeds at the CGP site averaged 8.3 km / hour and the wind was predominantly from the north and south.

6.3 Geology, Topography and Soils

The transmission line is situated in the Swayze Greenstone Belt in the south-western extension of the Abitibi greenstone belt, and forms part of the well-defined Rideout syncline. Composition of rock types are ranging, from ultramafic through felsic, as well as both chemical and clastic sedimentary rocks. Igneous rocks mainly consist of both volcanic and plutonic rocks from Late Archean. The majority of the proposed transmission line will be underlain by foliated tonalite and mafic and ultramafic rock bedrock along with bedrock knobs and outwash plains of overburden (Figure 6-2).

Local elevations range from 375 metres above sea level (masl) to 425 masl, averaging approximately 400 masl near the Transmission Line Project. Lakes where present are commonly less than 10 m deep. The area of the SSA is characterized by bedrock outcrops and glacial till and is typical of the Canadian Shield. The glaciated country has a gently rolling topography that seldom exceeds 50 m. The higher ground usually has a veneer of glacial soil over bedrock, with thicker overburden present in the low-lying areas between the hills.

6.4 Air Quality

Background air quality was determined from Provincial air quality measurements obtained from Environment Canada National Air and Pollution Surveillance (NAPS 2008) Network and the Atmospheric Environment Service's Canadian Air and Precipitation Monitoring Network (CAPMoN 2011) stations in Sudbury, Sault Ste. Marie, and North Bay. Air quality monitoring equipment was also installed at the CGP site to measure local baseline concentrations of total suspended particles (TSP, including metals), particulate matter (PM₁₀), Sulphur dioxide (SO₂), nitrogen oxides (NO_x) and nitrogen dioxide (NO₂) for comparison to the long-term data from the regional climate stations. Data from these stations are summarized in Table 6-2 and Table 6-3.

Air quality at the urban sites in Sudbury, Sault Ste. Marie, and North Bay was more influenced by urban populations and are considered to be conservative when used as existing baseline data for the rural setting of the transmission line. The air quality at the proposed transmission line is anticipated to be good due to the rural setting and is influenced by natural and man-made emission transported by southern winds.

Air quality data collected at the CGP site for TSP, PM₁₀, select metals, NO₂ and SO₂, is representative of existing air quality in the SSA, and indicates good air quality. Concentrations are below current ambient air quality criteria, which can be attributed to the rural setting as there are no significant anthropogenic sources of air emissions near the proposed CGP site.

6.5 Noise and Vibration

The MECP Environmental Noise Guidelines identify four classes of acoustical environment with regard to the assessment of sound produced by industrial operations, and to classify ambient background noise environments (MOECC 2013). The classifications are as follows:

Class 1 Area: is used to describe an area with an acoustical environment typical of a major population centre, where the background sound levels are dominated by the 'urban hum'.

Class 2 Area: defines an area with an acoustical environment that has qualities representative of both Class 1 and Class 3 Areas, and in which a low ambient sound level, normally occurring only between 23:00 and 07:00 hours in Class 1 Areas, will typically be realized as early as 19:00 hours. Other characteristics which may indicate the presence of a Class 2 Area include:

- Absence of urban hum between 19:00 and 23:00 hours;
- Evening background sound level defined by natural environment and infrequent human activity; or
- No clearly audible sound from stationary sources other than from those under impact assessment.

Class 3 Area: means a rural area with an acoustical environment that is dominated by natural sounds having little or no road traffic, such as the following:

- A small community with less than 1,000 population;
- Agricultural area;
- A rural recreational area such as a cottage or a resort area; or
- A wilderness area

Class 4 Area: means an area or specific site that would otherwise be defined as Class 1 or 2 and which:

- Is an area intended for development with new noise sensitive land use(s) that are not yet built;
- Is in proximity to existing, lawfully established stationary source(s); and
- Has formal confirmation from the land use planning authority with the Class 4 area classification which is determined during the land use planning process.

Existing noise levels in the vicinity of the transmission line reflect the Class 3 rural acoustical environment (MOECC 2013) and are generally characterized by sounds of nature and minimal road traffic. There are sporadic seasonal forestry operations that could temporarily increase the noise and vibration. There may be localized areas where noise emissions are more consistent with Class 1 and Class 2 areas, depending on the work being conducted, and at road crossings. As the SSA is in an area classified as a rural (Class 3) acoustic environment, vibrations are imperceptible and intermittent in nature.

6.6 Hydrology

The proposed transmission line is contained entirely within the James Bay drainage basin and the Upper Mattagami River Watershed. In total, the transmission line would intersect with 25 discernible waterbodies ranging from small wetlands, ponds and tributaries to larger creeks, rivers and ponds. Table 6-4 and Figure 6-3 provide the water crossings width, as well as the location of each waterbody crossing along with a cross referencing number for each water crossing. The shortest waterbody crossing occurs at a Pembroke Creek Tributary (Crossing ID 10) and spans < 1 m, while the largest waterbody crossing occurs at an unnamed Lake (Crossing ID 20), which would span 220.7 m.

Flow regimes in the region typify those of northern Ontario with maximum flows during the spring freshet (April and May) and a lesser peak flow in the fall due to the lower rates of evapotranspiration. Lower flows are recorded in the summer months due to higher evapotranspiration rates and the winter due to precipitation being stored mainly as snow. This trend is evident based on the ECCC operated flow station on Mollie River at highway 144 (04LA006) shown on Table 6-5, which has been recording flow measurements at this location since 2007 (WSC 2018). The mean annual runoff yield for this station is $1.08 \text{ m}^3/\text{s}$ with minimum and maximum annual runoff yields of $0.569 \text{ m}^3/\text{s}$ and $1.58 \text{ m}^3/\text{s}$, respectively.

6.7 Surface Water Quality

Baseline water quality has been collected at the CGP site for a number of years. This data is assumed to be an appropriate representation of the water quality in waterbodies along the transmission line based on the similar terrain and soil types, although historic development and mining in the CGP area may have had a minor impairment of water quality as compared to within waterbodies along the transmission line ROW.

Surface water quality samples were taken quarterly or monthly from a total of 22 locations from September 2011 to May 2013. The results of the sampling are comparable to the Ontario Provincial Water Quality Objectives (PWQO) and the Canadian Council of Ministers of the Environment Canadian Water Quality Guidelines (CWQG) for the protection of aquatic life. Baseline sampling indicate that surface water quality is typically consistent between seasons, with variable iron, manganese, zinc and dissolved aluminum concentrations at some locations. Most other concentrations were near or below detection limits. The pH of samples was slightly acidic to slightly alkaline. Concentrations of total phosphorous, iron, zinc, copper and dissolved aluminum occasionally or consistently exceeds regulatory guidelines (i.e. PWQO and CWQG), which are generally interpreted to be naturally occurring in the vicinity of the CGP site.

6.8 Aquatic Environment

As discussed in Section 6.6, there are 25 total watercourses that will be crossed over by the transmission line of varying sizes and habitat type. In order to assess the aquatic habitat and potential fish species present at each watercourse crossing, the watercourses have been categorized by habitat type based on the approximate channel width at the crossing. The watercourse crossings have been categorized into five classes: small to medium watercourse (less than 20 m), large watercourse (greater than 20 m), pond, lake (warm water) and lake (cold water).

A detailed assessment of the waterbodies and watercourses in the vicinity of the CGP was conducted as part of the baseline assessment for the Federal and Provincial EA processes. These waterbodies are assumed to be representative of the watercourses for the region, and have been used to describe the transmission line water crossings based on similar habitat types. As there is no planned development work in water associated with the transmission line, site specific aquatic field studies along the length of the transmission line route were not completed.

6.8.1 Aquatic Habitat

The lentic habitat (lakes and ponds) that were assessed at the CGP are typically shallow (<10 m). The lakeshore habitat is generally comprised of cobble and/or boulder substrate, embedded in silty-sand, sand or silts and the littoral substrate (<2 m) primarily consists of sandy-silt with more silt with depth.

Most lakes are treed to the shoreline with varying densities of black spruce, jack pine, and eastern white cedar. Ponds are generally shallower than the lakes with largely fine silt and muck substrates and contain dense aquatic vegetation including submergent pond weeds, bladderwort, floating water shield and yellow pond lily with cattails. Wetland areas that surround the ponds include floating mats of sedge, sweet gale, alder and dead black spruce with some marsh cinquefoil and bog laurel.

The lotic habitat (streams and rivers) is dominated by small, slow meandering streams, bordered by wetlands. The low-gradient habitat generally consists of slow run, small to large pools, and frequently ponded areas as a result of beaver activity. Water depth ranged from 0.7 to 1.8 m and generally consisted of dense instream vegetation where coverage was frequently 90 to 100%. Substrate of low-gradient watercourses included organic muck (i.e., silt with high organic content) of varying thickness over hard packed clay.

Moderate-gradient habitat is characterized by run habitat interspersed with small pools. Substrate in these habitats typically included densely packed clay, sand-gravel mixes and/or soft silt. Pools within this type of habitat reached approximately 1 to 1.4 m in depth. The aquatic vegetation included dense growth of burreed, mermaid's hair, stonewort and/or pondweed with patches of quillwort, filamentous green algae and yellow pond lily. Instream vegetation commonly covered 80 to 100% of the stream bed.

6.8.2 Fish Community

Fish communities within the region typify those of northern Ontario waterbodies and watercourses and are generally diverse with northern pike and yellow perch dominating the sport fish communities and blacknose shiner, spottail shiner and Iowa darter dominating the small bodied fish communities (Minnow Environmental 2014). Mesomikenda Lake, which is crossed by the transmission line at a narrow point of the lake, is a known cold water lake that contains Lake trout (*Salvelinus namaycush*).

A complete list of the fish species observed at the CGP in the different categories of waterbodies is provided in Table 6-6, along with the corresponding waterbodies found within the transmission line.

There were no Endangered, Threatened or Special Concern fish species observed in any of the water bodies within the CGP area.

6.9 Vegetation

The vegetation communities within the transmission line SSA are representative of the Ecoregion 3E-5 (Lake Abitibi Ecoregion), and are dominated by dense mixed forest and dense coniferous forest. Black Spruce (*Picea mariana*), White Spruce (*Picea glauca*), Balsam Fir (*Abies balsamea*), Jack Pine (*Pinus banksiana*), Tamarack (*Larix laricina*), White Birch (*Betula papyrifera*), Trembling Aspen (*Populus tremuloides*) and Balsam Poplar (*Populus balsamifera*) constituting the main forest species (Golder 2014b).

As shown in the ecological land classification of the transmission line in Figure 6-4a and 6-4b, the route of the transmission line is dotted with bogs and dense deciduous forest. Areas to the eastern portions of the transmission line show signs of forestry in the region with forested areas, as well as areas of Jack Pine regeneration. In addition, vegetation within the existing corridor is of successional shrubs and grasses, as shown in the photo taken from the ROW (Figure 2-2).

There are no rare or unusual plant communities in the SSA, but the area contains a reasonable measure of biological diversity as a result of the mix of wetlands, forested areas and exposed rocklands. Furthermore, no plant Species at Risk, or species of special conservation status or rarity in the Province were recorded during field surveys.

6.10 Wildlife and Birds

6.10.1 Wildlife

6.10.1.1 Ungulates

Baseline ungulate studies in the SSA (Appendix B) focused on Moose as a result of the importance of this species to the local Indigenous and Non-indigenous peoples. The transmission line ROW intersects dense mixed, dense deciduous and regenerating forest, treed bog, treed fen and aquatic and wetland habitats, all of which may be potentially used by Moose during all seasons. The Spanish River Forestry Management Plan (MNR 2010) identifies Moose aquatic feeding areas within the SSA and the surrounding wetlands, although the plan does not identify any wintering areas in the SSA.

Evidence of Moose was observed along the transmission line between the CGP site and the Shining Tree DS during the 2017 winter and spring aerial surveys (Figure 6-5a). Tracks were observed in low to medium densities during the winter surveys and four individual Moose were observed at two locations in 2017.

6.10.1.2 Furbearers

Although a large number of furbearers potentially use the LSA, baseline studies focus on the presence of Gray Wolves, American Marten and Black Bear in the LSA due to the interest from the local stakeholders and Indigenous peoples. Significant Wildlife Habitat Criteria Schedules for Ecoregion 3E (MNRF 2015) lists specialized habitat for Gray Wolves as open bogs, burns, clearcuts, open wetlands and open forests which are often used as rendezvous sites for resting and congregating. American Marten are an ecological indicator species of mature, interior forests featuring structural complexity (MNR 2001). Preferred habitats are large areas of dense forest (coniferous, mixed and deciduous), treed bog and treed fen habitats. Suitable habitats for American Black Bear are dense deciduous and mixed forest, wetland habitats and sparse forest habitats. The vegetation surveys completed in 2013 (Golder 2014b) indicated that this section of the SSA passes through all of these forest types, several wetland communities and areas of open water. These habitats therefore have the potential to be used by these three furbearers during all seasons.

Evidence of wolf activity was observed only once along the preexisting corridor (Figure 6-5a) between the CGP site and the Shining Tree DS, during the 2017 winter aerial surveys while American Martin tracks were recorded at three locations. Evidence of Red Fox, Canada Lynx and River Otters were all observed frequently in low densities along the transmission line during the 2017 winter aerial surveys (Figure 6-5b). No evidence of American Black Bear was observed along the transmission line during any of the 2017 aerial surveys.

6.10.1.3 Bats

During the field survey completed in 2013 (AMEC 2013), five species of bat were observed in the CGP area including: Little Brown Myotis, Northern Myotis, Silver-haired Bat, Hoary Bat, Eastern Red Bat. In addition,

an acoustic survey completed in 2017 of the CGP site confirmed the presence of Little Brown Myotis, Silver-haired Bat and Hoary Bat. Very limited potential bat hibernacula or potential maternity roost colonies were observed during the 2017 investigations at site.

Although no acoustic surveys or hibernacula field investigations were complete along the SSA, there is the potential for each of the species recorded at the CGP site to be present, as well as potential bat maternity roosts and hibernacula within the SSA.

6.10.2 Birds

6.10.2.1 Song Birds

Data from the Atlas of the Breeding Birds of Ontario (Cadman et al. 2007) describes 74 species as possible, probable or confirmed breeders in the vicinity of the Transmission Line Project. Baseline studies completed in 2013 (AMEC 2013; Golder 2014c) recorded an additional 60 species in the CGP vicinity, which were not previously identified in the atlas. During the 2017 field investigations (Amec Foster Wheeler 2018), a total of 73 bird species were recorded in some manner in the CGP area, with four of these species having not been previously recorded.

Of the 133 total avian species identified through the review of background information and field surveys, 122 of the bird species are expected to be breeding or potentially breeding within the region surrounding the transmission line. As well, 103 (77.4%) of the bird species potentially present are seasonal migrants, occurring in northern Ontario only during the summer breeding season.

The species recorded within vicinity of the CGP are typical of the ecoregion, representative habitats and vegetation. The 10 most commonly recorded bird species observed in 2017 during studies for the CGP were:

- Black-capped Chickadee: 0.56 average birds / count, 38.8% of stations;
- Golden-crowned Kinglet: 0.74 average birds / count, 65.0% of stations;
- Hermit Thrush: 0.64 average birds / count, 46.3% of stations;
- Nashville Warbler: 1.44 average birds / count, 80.0% of stations;
- Ovenbird: 1.14 average birds / count, 71.3% of stations;
- Red-eyed Vireo: 1.44 average birds / count, 95.0% of stations;
- Ruby-crowned Kinglet: 0.75 average birds / count, 60.0% of stations;
- Swainson's Thrush: 0.56 average birds / count, 40.0% of stations;
- White-throated Sparrow: 0.89 average birds / count, 52.5% of stations; and
- Yellow-rumped Warbler: 0.73 average birds / count, 61.3% of stations.

6.10.2.2 Raptors

The majority of raptor species in northern Ontario nest in large trees, which are typically found in mature upland forest habitats. Two exceptions are Short-eared Owls and Northern Harriers, which typically nest in open areas such as open wetlands or grasslands. Woodland raptor nesting is associated with all natural forested ecosites. Bald Eagle and Osprey nests are associated with treed shorelines of lakes, ponds and rivers. The vegetation surveys completed by Golder (2014b) indicate that this section of the transmission line passes through all of these forest types, several wetland communities and areas of open water. These habitats therefore have the potential to be used by raptors for nesting and foraging. While adjacent forest communities are likely to be cleared during the widening of the corridor, open water and wetland communities occurring in the footprint are to be spanned by the Transmission Line Project activities and direct vegetation removal in these areas is not expected.

During the 2012 -2013 field surveys, bald eagle, red-tailed hawk and Northern Saw-whet-owl were all observed in the surrounding area of the transmission line. No nests were however, observed along the east-west route between the Shining Tree DS and the CGP site surveyed in 2017. During aerial surveys, a pair of Bald Eagles were observed near an active nest located at the west end of the transmission line corridor and adjacent to the SSA. The only other raptor species observed along the SSA in 2017 was one Northern Harrier. This species nests in large, undisturbed tracts of wetland and grasslands with low thick vegetation; as such, it is possible it is using open areas of the corridor for breeding, but could also be using nearby wetlands and using the corridor as foraging habitat. Other species of raptors are likely present within forested habitats surrounding the transmission line; however, cavity nests and smaller nests such as for Broad-winger Hawk, Sharp-shinned Hawk, American Kestrel and Barred Owl are inconspicuous or unobservable from the air.

6.11 Species at Risk

The following Species at Risk that were observed during the 2013 field studies associated with the CGP site (Golder 2014) and immediate area as shown on Figure 6-5c, and may potentially be present within the SSA:

- Little Brown Myotis (Endangered, *Endangered Species Act*);
- Eastern Whip-poor-will (Threatened, *Endangered Species Act*);
- Olive-sided flycatcher (Special Concern, *Endangered Species Act*);
- Canada warbler (Special Concern, *Endangered Species Act*);
- Bald Eagle (Special Concern, *Endangered Species Act*);
- Common Nighthawk (Special Concern, *Endangered Species Act*); and
- Rusty Blackbird (Special Concern, *Species at Risk Act*).

Based on the field studies completed in the regional area and a review of secondary source information, there is the potential for Species at Risk to occur or potentially occur within the SSA.

Common Nighthawk and Eastern Whip-poor-will were heard during crepuscular surveys within the SSA in 2013 (Golder 2014). Only a Bald Eagle was observed during the 2017 field survey of the SSA, adjacent to the CGP site (Figure 6-5c).

6.12 Land Use

The proposed transmission line will overlap with small portions of Ontario's Living Legacy Land Use Strategy Areas, which is a strategy that governs land uses on Crown Land; the transmission line develop is not in conflict with the strategy. The Primary Land Use Code that the transmission line is situated within is G1809 and a small portion in G1813 (Figure 6-6). G1809 is designated as a General Use Area with primary intent on timber production and mineral exploration and development. Additional tourism development is also encouraged as a secondary use, together with limited public recreation facilities. This area contains lakes designated for lake trout management. G1813 is also a General Use Area with the primary intent on recreational use including a combination of public recreation, cottaging and commercial tourism, forestry operations continue to be important in non-shoreline areas. The Crown land Policy Use Atlas does not exclude the development of transmission lines for either the G1809 or G1813 areas.

The transmission line is also located within the Mattagami Region Source Water Protection Plan under the Mattagami Region Conservation Authority. The main purpose of the Source Protection Plan is to protect existing and future drinking water sources in the Mattagami Region Source Protection Area by identifying what needs to be done to protect the City of Timmins' source of drinking water, and what steps need to be taken to reduce the risks of existing significant threats and to prevent new risks from developing. The majority of the waterways that intersect with the proposed transmission line are classified as Intake Protection Zone 3, which are areas within the watershed providing source water. Based on the feedback received from the MECP and the prediction of effects on water quality from the transmission line construction and operations, there will be no adverse effects on Timmins' drinking water supply.

A large portion of the region is under active mining claims or mining leases held by IAMGOLD (Figure 2-2). There are other individual and small junior companies that hold mining claims near the CGP, but none that would be directly affected by the proposed transmission line. There are twelve permitted aggregate operators, and three aggregate operators in close proximity to the CGP, but none are along the proposed transmission line or would be directly affected by the transmission line (MNRF 2018).

The majority of the land in the region is classified under the Canada Land Inventory as having little to no capacity for arable culture or permanent pasture (Agriculture and Agri-Food Canada, 2016). The Shining Tree TLA does not intersect any farms.

The transmission line will overprint portions of the Spanish River Forest Management Unit, with the Sustainable Forest Licence currently held by EACOM. However, access to forestry resources will not be altered as a result of the transmission line, and the current corridor has previously been cleared of merchantable timber resources.

Hunted species in the regional study area include black bear, moose and white-tailed deer. Trapping in the regional study area is conducted on Provincially regulated trapline areas. Trapline numbers G0032, G0033 and G0035 intersect with the Shining Tree TLA and there are identified trapper cabins near the proposed transmission line (Figure 6-6). Access to trapline areas along the proposed transmission line is expected to stay the same. No commercial fisheries occur in the regional study area, but sport fishing is

popular throughout the area lakes. Outdoor recreation users use the land within the regional study area for activities such as hiking, camping, canoeing and snowmobiling.

There are no National Parks, Provincial Parks, or ecological reserves that are located in close proximity to the transmission line (Figure 6-7). A conservation reserve (Akonesi Chain of Lakes Complex) is located just north of Gogama.

6.13 Socio-economic

The proposed Côté Gold Transmission Line Project will intersect with six geographic townships: Miramichi, Garibaldi, Londonderry, Champagne, Benneweis and Chester Townships; and is located in the Unorganized North Sudbury Subdivision. The population of the Unorganized North Sudbury Subdivision in 2016 was 2,755, which was an increase of 19.5% from the 2011 census. The average total income of households for the area was 87,013 in 2015 and the two industrial sectors driving the economy are mining and forestry (Statistics Canada 2016). There are no population centres, residence or seasonal homes within the transmission line SSA.

6.14 Cultural Heritage and Archaeology

The baseline cultural heritage and archaeology followed the *Ministry of Tourism, Culture and Sports Standards and Guidelines for Consultant Archaeologists* (2011), following the four stages of the archaeological fieldwork process in Ontario. The 4 sequential stages are:

- **Stage 1:** Preliminary assessment to determine whether there is potential for archaeological sites through background study and property inspection.
- **Stage 2:** Property assessment by a licensed archaeologist to determine if the locations identified as having archaeological potential in Stage 1 contain archaeological resources or the presence of archaeological potential areas. If archaeological sites are identified, a Stage 3 assessment is required.
- **Stage 3:** Site-specific archaeological assessment to accurately determine the spatial extent of the archaeological sites, to more completely evaluate their cultural heritage value or interest and, where necessary, to make recommendations for conducting Stage 4 strategies to mitigate development impacts.
- **Stage 4:** Development of long-term mitigation and protection strategies for archaeological sites to be impacted by the project. If mitigation and protection measures cannot be implemented, archaeological excavation will be conducted to document the site and remove the artifacts before construction begins.

The proposed Shining Tree TLA has undergone a Stage 1 assessment involving background research and predictive modelling of areas which may be impacted by the TLA (Woodland Heritage 2018). The background research reviewed early historic maps of the property as well as all existing archaeological work carried out for the property. Predictive models were used to locate areas of archaeological potential within the proposed development area. This modelling made efforts to locate level areas proximal to open water while eliminating poorly-drained areas, steep slopes, and areas of land which are difficult to access by water.

Through this Stage 1 assessment, a number of areas along the TLA were identified as having archaeological potential (Woodland 2014). Prior to construction activities or any earth works activities in these areas of archaeological potential, a Stage 2 archaeological assessment of sub-surface testing to determine if these areas contain archaeological resources will be conducted. If archaeological resources are discovered, these areas may be subject to the Stage 3 and Stage 4 archaeological assessment depending on the recommendations made by the qualified consultant archaeologist.

6.15 Traditional Land Use

IAMGOLD consulted with potentially affected Indigenous communities with respect to effects from the construction and operations of the proposed transmission line. Through advice from the Provincial and Federal Crowns, and through consultation with the Indigenous communities, IAMGOLD has determined that the transmission line is located primarily within the traditional territory of the Mattagami First Nation and the Flying Post First Nation with a small portion located within the Mattachewan First Nation traditional territory (Figure 6-8). Boundaries for these territories are determined internally between the Wabun Tribal Council members and are not shared publicly. Members of the Métis Nation of Ontario (MNO) may also exercise harvesting rights in the SSA. The Transmission Line Project is located in the MNO Region 3 harvesting area.

Information on the traditional uses of the land by Indigenous peoples included information from the Mattagami and Flying Post First Nation for the CGP and the MNO in the form of two separate Traditional Knowledge / Traditional Land Use Studies (TK/TLUS), the First Nation (FN) TK/TLUS and the MNO TK/TLU reports.

The FN TK/TLUS (McKay 2013) identified specific Sensitive Areas. A Sensitive Area is described as a key area where traditional land use and the majority of hunting, fishing, trapping and gathering take place. The only Sensitive Area that may be affected is area C, which the proposed transmission line crosses.

Plant Gathering

The FN TK/TLUS identified one plant resource that could be affected by the Transmission Line Project. Few berry plants were observed in the LSA. Construction activities within the Transmission Line Project footprint overlap with Sensitive Area C, and may be carried out in areas neighbouring blueberry patches. Some blueberries were noted along the existing Shining Tree TLA and in clear-cut areas that may be harvested by Indigenous peoples.

The MNO TK/TLUS did not identify any plant harvesting areas that could be affected by the Transmission Line Project.

Hunting

The FN TK/TLUS did not identify any hunting areas associated with the 44 km transmission line.

The MNO TK/TLUS identified a large game (i.e., moose and bear) harvesting area and upland bird (i.e., grouse and partridge) harvesting area along a section of the 44 km the proposed transmission line.

Trapping

It has been identified to IAMGOLD through engagement activities that a member of the Mattagami FN is the owner of a Provincially issued trapline that intersects with the proposed transmission line.

Fishing

The FN TK/TLUS identifies lakes within Sensitive Area C as the most popular lakes for catching walleye (known locally as pickerel). No lakes overprinted by the Transmission Line Project have been identified as popular fishing lakes. Therefore, no traditional fishing area losses will be incurred due to transmission line construction.

The MNO TK/TLUS identified a non-commercial fish harvesting site situated near the proposed transmission line at Mesomikenda Lake.

Canoeing

The FN TK/TLUS has identified a portage route (assumed to be a canoe route) that follows the chain of lakes that surround the Transmission Line Project and includes lakes: Chester, Clam, Bagsverd, Weeduck Lake, and Three Duck (Upper, Middle, and Lower). This portage route would not be affected by the proposed transmission line.

The MNO TK/TLUS did not identify any canoe routes that could be affected by the Transmission Line Project.

Cultural, Spiritual and Ceremonial Sites

The FN TK/TLUS did not identify any other spiritual or ceremonial sites that could be affected by the Transmission Line Project.

The MNO TK/TLUS did not identify any cultural, spiritual or ceremonial sites that could be affected by the Transmission Line Project.

Table 6-1: Regional and Local Meteorological Comparison

Location	Overlapping Period of Record	CGP Site	Sudbury A	Timmins A	Chapleau A	North Bay A
Average Daily Temperature (°C)	May 18, 2012 – July 31, 2013	5.8	6.6	4.4	4.7	7.3
Total Precipitation (mm)	June 12, 2012 – July 31, 2013	826.8	961.3	765.5	941.0	1017.9

Note:

Source: Golder (2014a)

Table 6-2: Background PM₁₀, PM_{2.5}, NO₂ and SO₂ at Ministry of Environment and Climate Change (MOECC) Stations and CGP Site Station

Parameter	Standard / AAQC		Station	2007	2008	2009	2010	2011	2013
	24-hour	1-hour							
PM ₁₀ (µg/m ³)	50 (Ontario AAQC)	—	¹ Sudbury	19.3	15.8	13.7	13.5	10.5	—
PM _{2.5} (µg/m ³)	30 µg/m ³ (CWS)	—	¹ Sudbury	4.9	4.1	3.4	3.6	4.0	—
			¹ Sault Ste. Marie	5.3	4.4	3.8	3.8	4.4	—
SO ₂ ppb	100 ppb – 275 µg/m ³	250 ppb – 690 µg/m ³	CGP Site	—	—	—	—	—	0.5
			¹ Sudbury	2.3	2.0	1.1	1.3	1.5	—
			¹ Sault Ste. Marie	1.8	1.2	0.6	0.7	0.8	—
NO ₂ ppb	100 ppb – 200 µg/m ³	200 ppb – 400 µg/m ³	CGP Site	—	—	—	—	—	0.3
			¹ North Bay	7.4	7.5	8.2	7.6	7.4	—
			¹ Sault Ste. Marie	5.0	5.5	5.1	5.5	5.3	—

Note:

Source: Environment Canada (2013)

Table 6-3: Background Metals, Sulphur, and Particulate SO₄ at the CGP Site

Station	Parameter	24 hr AAQC (µg/m ³)	Detection Limit (µg/m ³)	Average Concentration (µg/m ³) ¹	Maximum Concentration (µg/m ³) ¹
CGP Site	Arsenic (As)	0.3	0.0036	< MDL	< MDL
	Cadmium (Cd)	0.025	0.0012	< MDL	< MDL
	Chromium (Cr)	0.0007	0.0012	0.0009	0.0029
	Copper (Cu)	50	0.0012	0.036	0.055
	Iron Oxide (Fe ₂ O ₃)	25	0.0061	0.062	1.94
	Magnesium (Mg)	n/a	0.012	0.074	0.251
	Mercury (Hg)	2	n/a	0.0024	n/a
	Manganese (Mn)	0.4	0.0006	0.0055	0.012
	Nickel (Ni)	0.2	0.0018	0.0014	0.0059
	Lead (Pb)	0.5	0.0018	0.0013	0.0030
	Sulphur (S)	—	0.0150	0.357	0.95
	Titanium (Ti)	120	0.0006	0.0063	0.029
	Zinc (Zn)	120	0.003	0.0073	0.012
	Sulphate (SO ₄)	—	0.045	1.07	2.86

Note:

1. The metal concentrations cited are in the TSP fraction. Mercury (Hg) concentration based upon 2002 MOECC data, not the on-site air sampling

Table 6-4: TLA Waterbody Crossings

Crossing ID (Figure 6-3)	Waterbody Crossing	Channel Width (m)	Easting	Northing
a	Unnamed Creek	1	430380	5268562
1	Mesomikenda Lake	22.9	434212.1183	5268638.959
2	Unnamed Creek	1.3	434508.0043	5268466.929
3	Bernice Creek	45	437251.1418	5265985.303
4	Little Mollie Creek Tributary	2.7	441280.4356	5266092.45
5	Unnamed Pond	98	444411.0651	5266175.699
6	Mollie River	14.6	448908.9351	5266128.611
7	Unnamed Creek	1.1	450334.9852	5265707.437
8	Unnamed Creek	1.1	450735.8485	5265588.935
9	Pembroke Creek	7.2	451939.6469	5265232.508
10	Pembroke Creek Tributary	1	452470.0561	5265074.383
11	Aragon Creek	26.6	454364.6865	5264509.556
12	Unnamed Pond	42.7	455020.7193	5264312.74
13	Unnamed Creek	4.6	455647.4638	5264119.895
14	Unnamed Creek	43.2	456060.2725	5263992.877
15	Unnamed Creek	9.9	456220.3603	5263943.62
16	Unnamed Pond	59.5	457224.3319	5263637.799
17	Unnamed Pond	168.8	457992.0227	5263407.424
18	Unnamed Creek	1.7	458178.9106	5263351.342
19	Unnamed Creek	2.2	458784.1148	5263169.727
20	Unnamed Lake	220.7	460689.2933	5262586.266
21	Donnegana River	5.2	463283.0767	5261776.333
22	Donnegana River	4.1	463301.0867	5261770.955
23	Donnegana River	7.3	463343.7124	5261758.227
24	Donnegana River Tributary	1.1	464759.1946	5261335.566

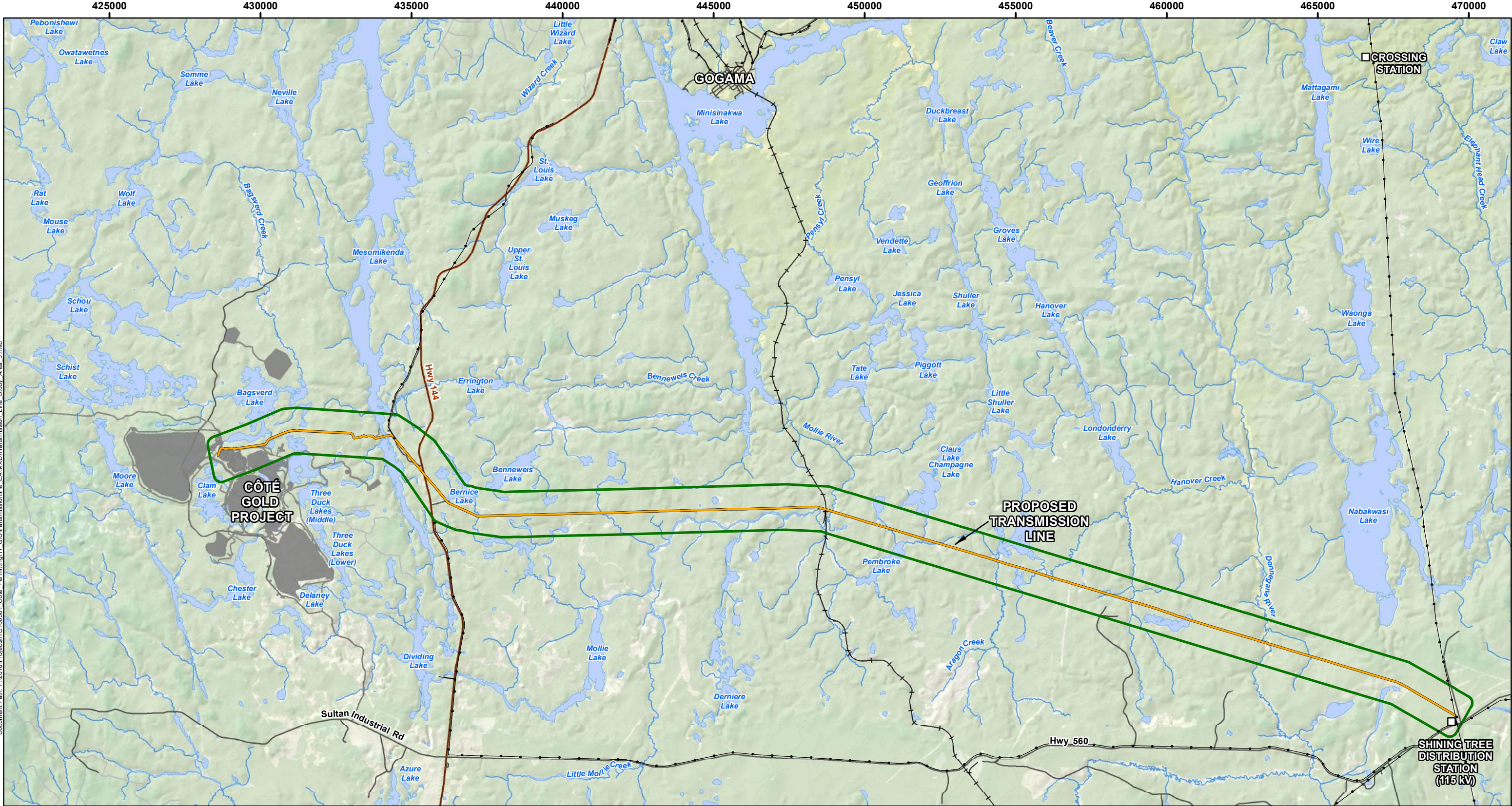
Table 6-5: Mollie River Water Survey of Canada Station 04LA006 Flow Statistics (m³/s)

Cond	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Mean
Mean	0.612	0.478	0.651	1.67	3.34	1.23	0.671	0.442	0.572	0.95	1.23	1.1	1.08
Max	0.725	0.579	1.99	2.92	5.67	1.76	1.56	0.755	1.55	3.54	2.3	1.76	1.58
Min	0.516	0.324	0.288	0.689	0.554	0.299	0.235	0.192	0.191	0.287	0.318	0.535	0.569

Table 6-5: Fish Species Captured in the Vicinity of the CGP

Waterbody Type	Representative Example from CGP Baseline Study	Equivalent TLA Waterbody Crossing	Fish Species Observed in the Baseline Study	
			Large-Bodied	Small-Bodied
Small to medium watercourse (<20 m)	<ul style="list-style-type: none"> • Bagsverd Creek 	<ul style="list-style-type: none"> • #2 Unnamed Creek • #4 Little Mollie Creek Tributary • #6 Mollie River • #7 Unnamed Creek • #8 Unnamed Creek • #9 Pembroke Creek • #10 Pembroke Creek Tributary • #13 Unnamed Creek • #15 Unnamed Creek • #18 Unnamed Creek • #19 Unnamed Creek • #21 Donnegana River • #22 Donnegana River • #23 Donnegana River • #24 Donnegana River Tributary 	<ul style="list-style-type: none"> • Northern Pike • Yellow Perch • White Sucker • Burbot 	<ul style="list-style-type: none"> • Golden Shiner • Central Mudminnow • Longnose Dace
Large watercourse (≥20 m)	<ul style="list-style-type: none"> • Mollie River 	<ul style="list-style-type: none"> • #3 Bernice Creek • #11 Aragon Creek • #14 Unnamed Creek 	<ul style="list-style-type: none"> • Northern Pike • Yellow Perch • White Sucker 	<ul style="list-style-type: none"> • Blacknose Shiner • Golden Shiner • Iowa Darter
Pond	<ul style="list-style-type: none"> • Unnamed Pond • Bagsverd Pond • Beaver Pond • East Beaver Pond • West Beaver Pond • North Beaver Pond 	<ul style="list-style-type: none"> • #5 Unnamed Pond • #12 Unnamed Pond • #16 Unnamed Pond • #17 Unnamed Pond 	<ul style="list-style-type: none"> • Northern Pike • Yellow Perch • White Sucker 	<ul style="list-style-type: none"> • Iowa Darter • Central Mudminnow • Fathead Minnow • Northern Redbelly Dace • Finescale Dace • Pearl Dace • Golden Shiner

Waterbody Type	Representative Example from CGP Baseline Study	Equivalent TLA Waterbody Crossing	Fish Species Observed in the Baseline Study	
			Large-Bodied	Small-Bodied
Lake (warm water)	<ul style="list-style-type: none"> • Côté Lake • Clam Lake (main basin) • Clam Lake (east arm) • Little Clam Lake • Bagsverd Lake (south and east arms only) • Upper Three Ducks Lake • Unnamed Lake #1 • Delaney Lake 	<ul style="list-style-type: none"> • #20 Unnamed Lake 	<ul style="list-style-type: none"> • Northern Pike • Yellow Perch • White Sucker • Lake Whitefish • Burbot • Smallmouth Bass • Walleye 	<ul style="list-style-type: none"> • Blacknose Shiner • Golden Shiner • Iowa Darter • Spottail Shiner • Johnny Darter • Fathead Minnow • Central Mudminnow • Mottled Sculpin
Lake (cold water)	<ul style="list-style-type: none"> • Mesomikenda Lake 	<ul style="list-style-type: none"> • #1 Mesomikenda Lake 	<ul style="list-style-type: none"> • Northern Pike • Yellow Perch • White Sucker • Lake Whitefish • Walleye • Lake Trout 	



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LEGEND

- Proposed Shining Tree Transmission Line Alignment (115 kV)
- Transmission Line Study Area
- Proposed Mine Footprint
- Power Station
- Railway
- Existing Transmission Line
- Major Road
- Local Road
- Resource / Recreation
- Watercourse
- Waterbody

0510152025Kilometres

NOTES:
- Background extracted from Provincial DEM from LIO, MNRF.

Datum & Projection:
NAD 1983 UTM Zone 17N



CÔTÉ GOLD PROJECT

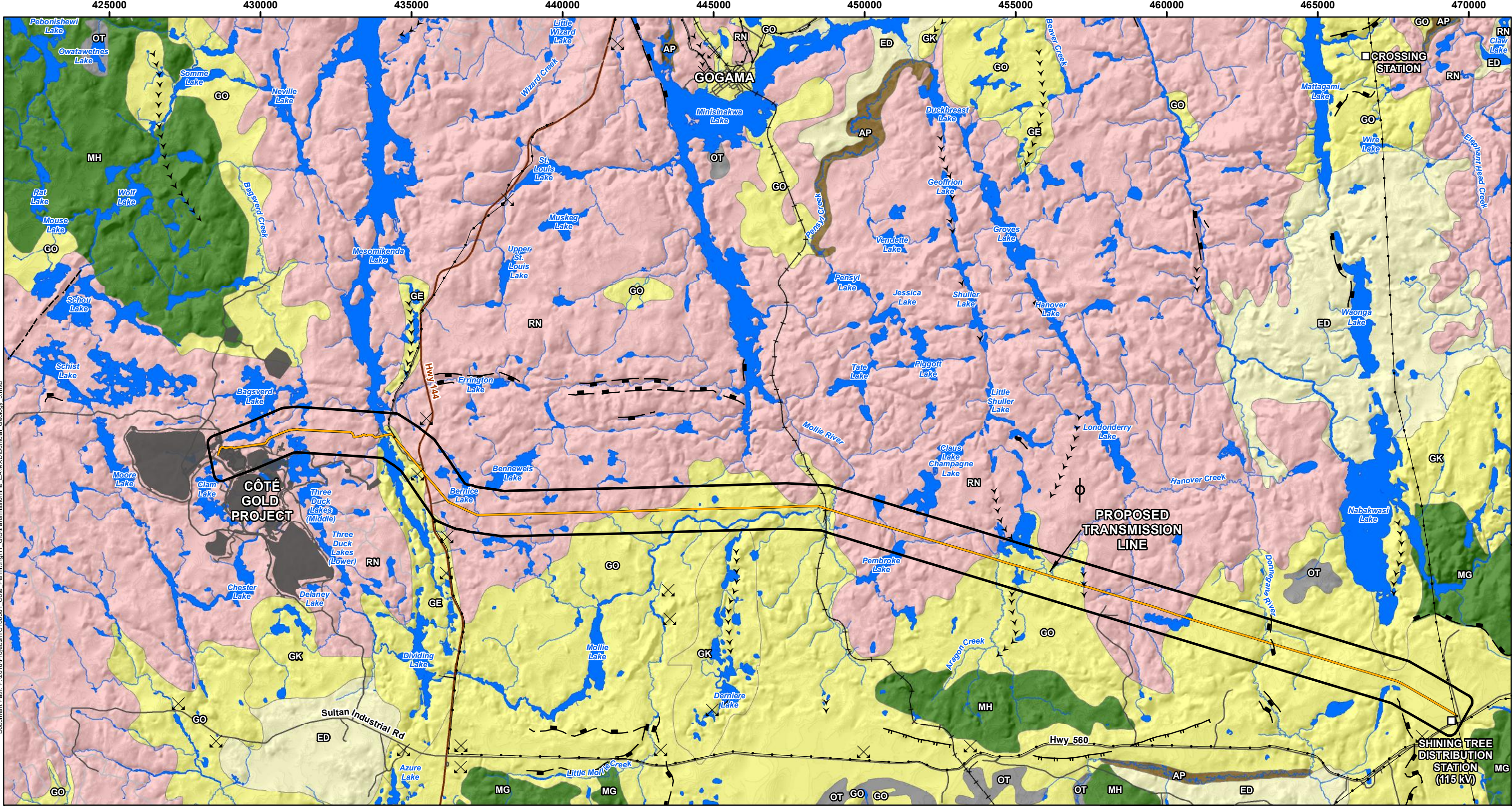
**Proposed Transmission
Line Alignment Study Area**

PROJECT N°: TC180501

FIGURE: 6-1

SCALE: 1:122,000

DATE: September 2018



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LEGEND

Proposed Shining Tree Transmission Line Alignment (115 kV)

Transmission Line Study Area

Proposed Mine Footprint

Power Station

Railway

Existing Transmission Line

Major Road

Local Road

Resource / Recreation

Watercourse

Waterbody

Northern Ontario Engineering Geology Terrain Study (NOEGTS)

Sand or Gravel Pit

Abandoned Shoreline (Continuous, discontinuous)

Escarpment

Esker Ridge (Continuous, discontinuous; the symbol does not indicate direction of flow)

Well Expressed Drumlins and Drumlinoïd Ridges

All Other Ice-flow features

Landform

Morainial
MG Ground moraine
MH Hummocky moraine

Glaciofluvial
GE Esker, esker complex, crevasse filling
GK Kame, kame field, kame terrace, kame moraine
GO Oitwash plain, valley train

Alluvial
AP Alluvial plain

Eolian
ED Sand dune

Organic
OT Organic terrain

Bedrock
RN Bedrock knob

NOTES:
- Background extracted from Provincial DEM from LIO, MNRF.

Datum & Projection:
NAD 1983 UTM Zone 17N

CÔTÉ GOLD PROJECT

Surficial Geology

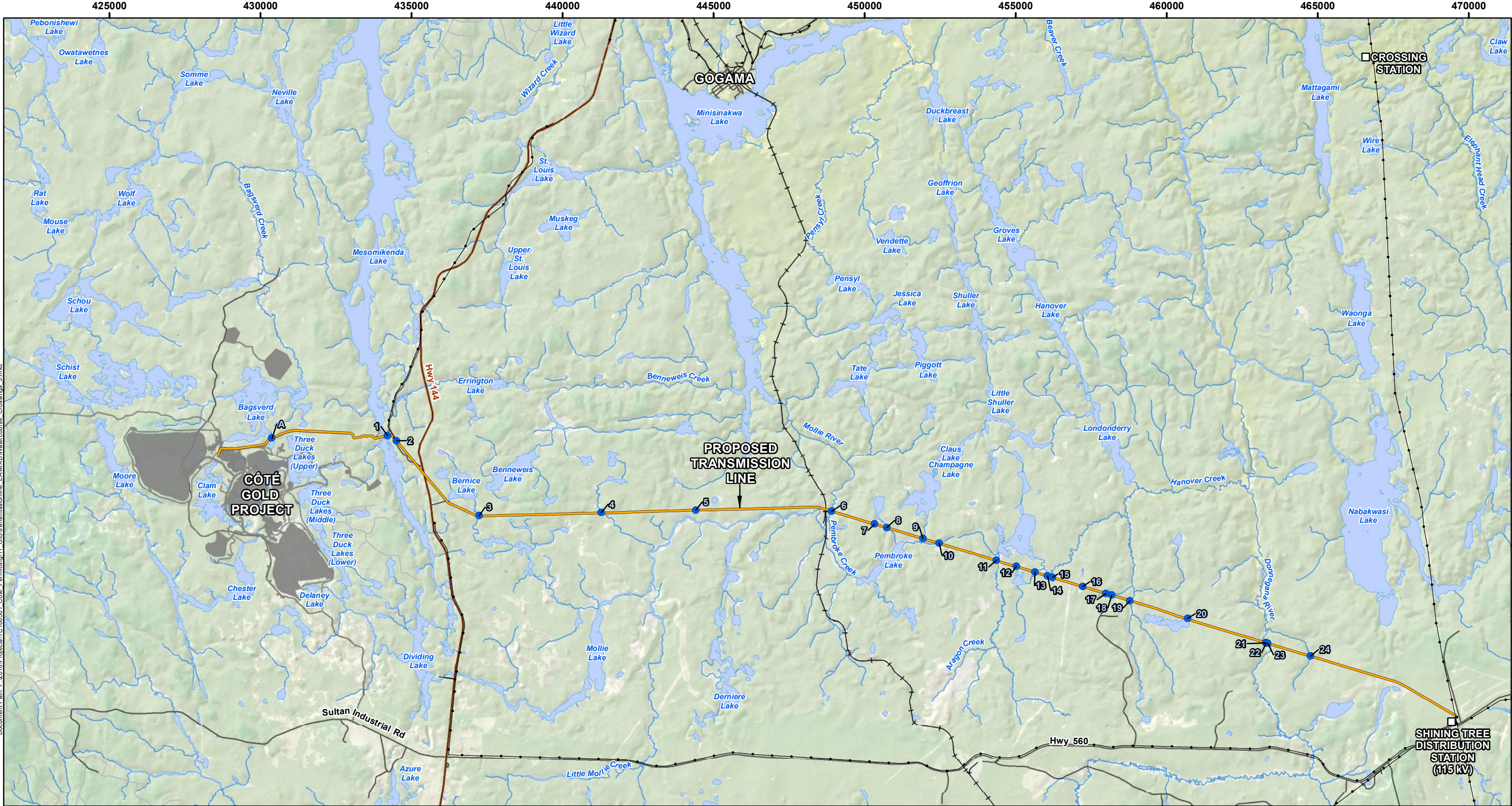
PROJECT N°: TC180501

FIGURE: 6-2

SCALE: 1:122,000

DATE: September 2018





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LEGEND

- Proposed Shining Tree Transmission Line Alignment (115 kV)
- Proposed Mine Footprint
- Watercourse / Waterbody Crossing (Labelled with ID)
- Power Station
- Railway
- Existing Transmission Line
- Major Road
- Local Road
- Resource / Recreation
- Watercourse
- Waterbody

Watercourse / Waterbody Crossing (Labelled with ID)Power StationRailwayExisting Transmission LineMajor RoadLocal RoadResource / RecreationWatercourseWaterbody

Proposed Transmission Line Watercourse / Waterbody Crossing Description			
1: Mesomikenda Lake	11: Aragon Creek	21: Donnegana River	
2: Unnamed Creek	12: Unnamed Pond	22: Donnegana River	
3: Bernice Creek	13: Unnamed Creek	23: Donnegana River	
4: Little Mollie Creek Tributary	14: Unnamed Creek	24: Donnegana River Tributary	
5: Unnamed Pond	15: Unnamed Creek		
6: Mollie River	16: Unnamed Pond		
7: Unnamed Creek	17: Unnamed Pond		
8: Unnamed Creek	18: Unnamed Creek		
9: Pembroke Creek	19: Unnamed Creek		
10: Pembroke Creek Tributary	20: Unnamed Lake		

NOTES:
- Background extracted from Provincial DEM from LIO, MNRF.



CÔTÉ GOLD PROJECT

Watercourse / Waterbody Crossings

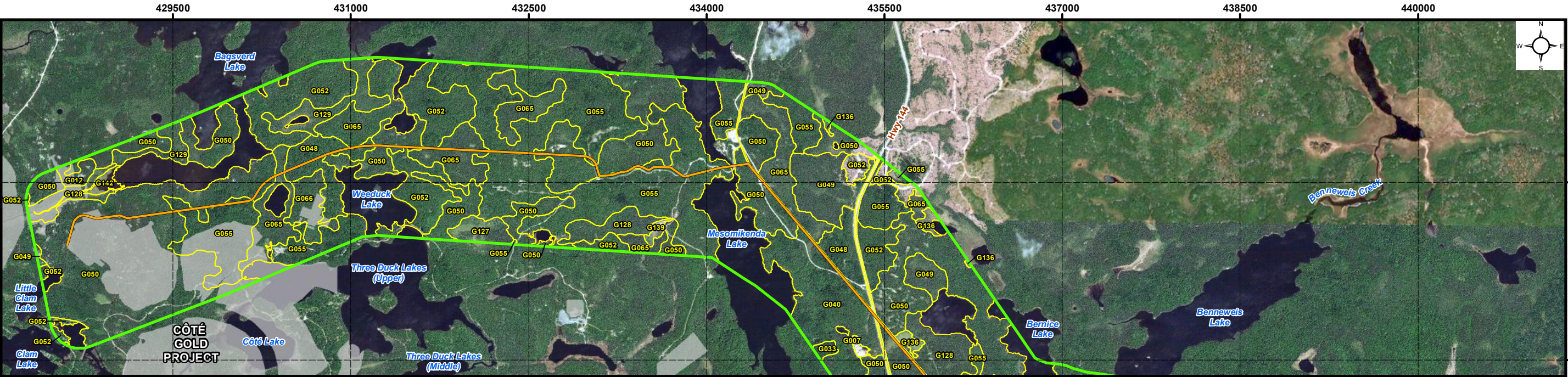
PROJECT N°: TC180501	FIGURE: 6-3
SCALE: 1:122,000	DATE: September 2018

Datum & Projection:
NAD 1983 UTM Zone 17N

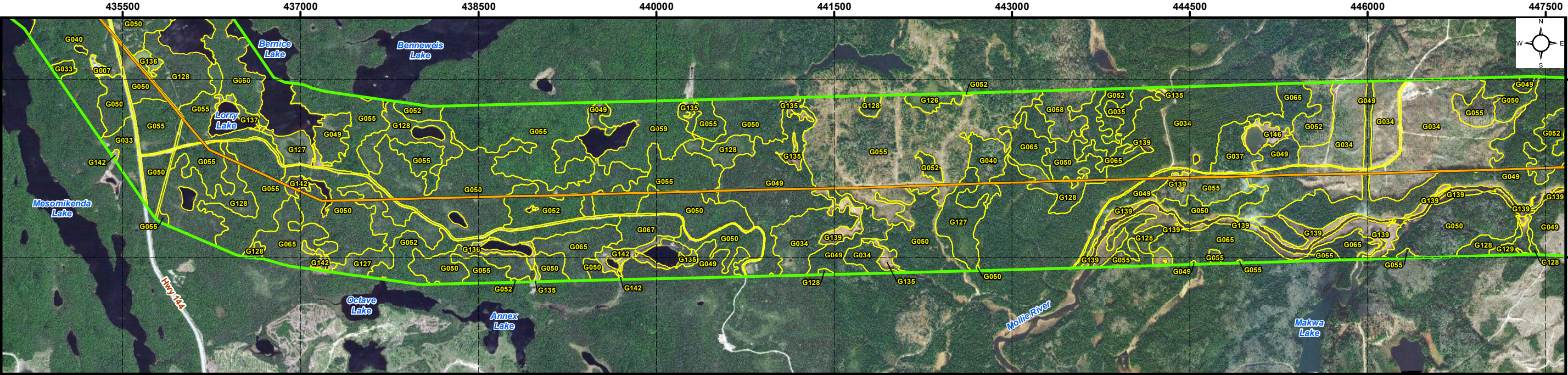


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VIEW 1



VIEW 2



LEGEND

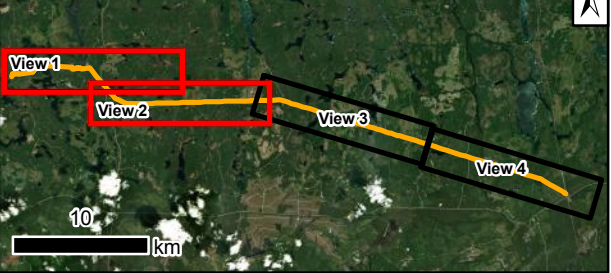
- Proposed Shining Tree Transmission Line Alignment (115 kV)
- Transmission Line Study Area
- Proposed Mine Footprint
- Ecological Land Classification (Labelled with Ecosite Code)

Ecosite Descriptions:

- G007: Active Mineral Barren
- G012: Very Shallow, Dry to Fresh: Pine - Black Spruce Conifer
- G034: Dry, Sandy: Jack Pine - Black Spruce Dominated
- G035: Dry, Sandy: Pine - Black Spruce Conifer
- G037: Dry, Sandy: Spruce - Fir Conifer
- G040: Dry, Sandy: Aspen - Birch Hardwood
- G048: Dry to Fresh, Coarse: Red Pine - White Pine Conifer
- G049: Dry to Fresh, Coarse: Jack Pine - White Black Spruce Dominated
- G050: Dry to Fresh, Coarse: Pine - Black Spruce Conifer
- G052: Dry to Fresh, Coarse: Spruce - Fir Conifer
- G055: Dry to Fresh, Coarse: Aspen - Birch Hardwood
- G058: Dry to Fresh, Coarse: Maple Hardwood
- G059: Dry to Fresh, Coarse: Mixedwood

- G065: Moist, Coarse: Pine - Black Spruce
- G066: Moist, Coarse: Hemlock - Cedar Conifer
- G067: Moist, Coarse: Spruce - Fir Conifer
- G126: Treed Bog
- G127: Poor Conifer Swamp
- G128: Intermediate Conifer Swamp
- G135: Organic Thicket Swamp
- G136: Sparse Treed Fen
- G137: Sparse Treed Bog
- G139: Poor Fen
- G142: Mineral Meadow Marsh
- G146: Open Shore Fen

KEY MAP



NOTES:

Datum: NAD83
Projection: UTM Zone 17N



CÔTÉ GOLD PROJECT

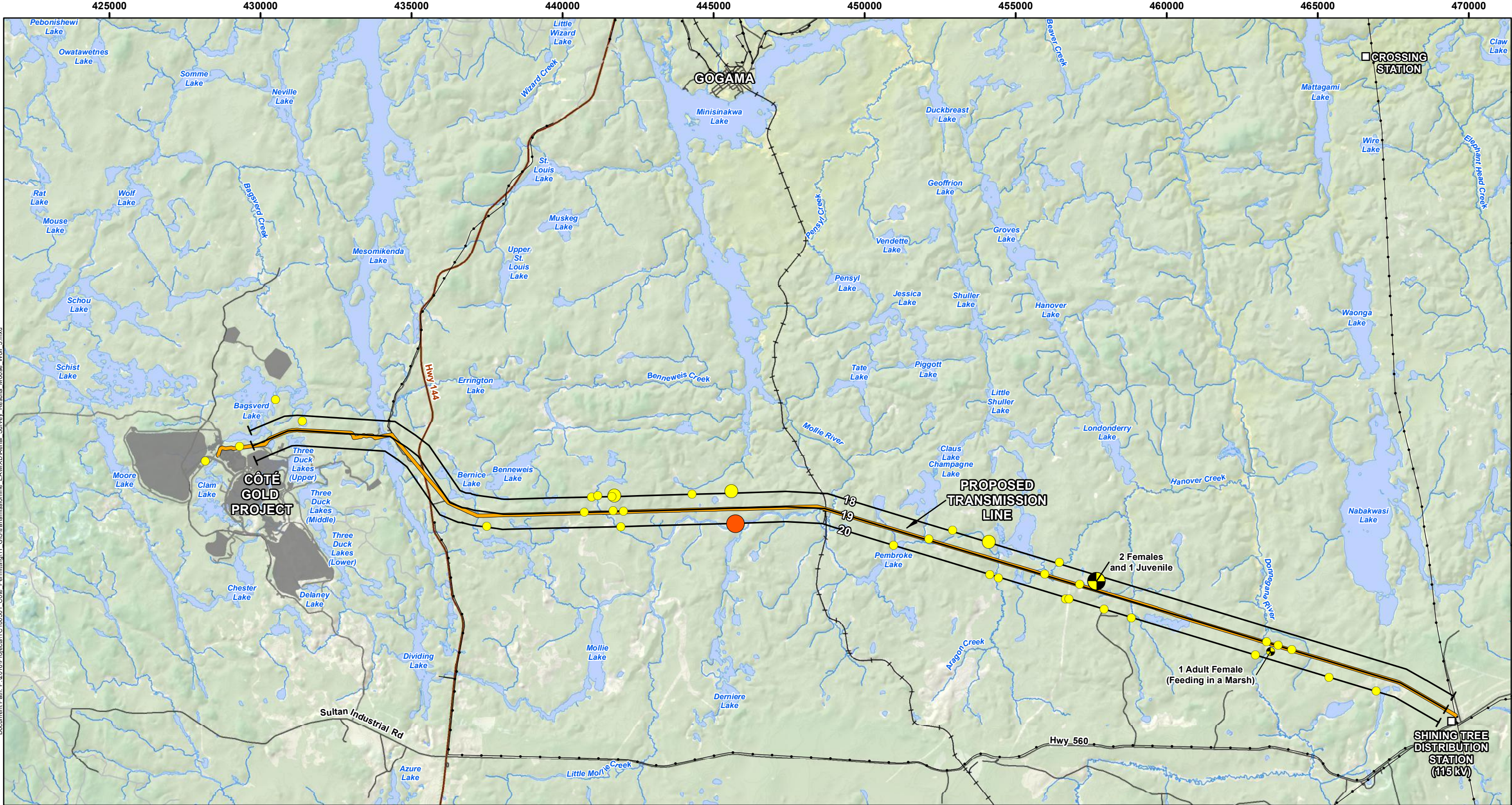
Transmission Line
Ecological Land Classification

PROJECT N°: TC180501

FIGURE: 6-4a

SCALE: 1:35,000

DATE: September 2018



LEGEND

Proposed Shining Tree Transmission Line Alignment (115 kV)

Proposed Mine Footprint

Aerial Survey Transect Line (Labelled with ID)

Power Station

Railway

Existing Transmission Line

Major Road

Local Road

Resource / Recreation

Watercourse

Waterbody

Species

Moose

Gray Wolf

Sighting*

Track Density

High

Medium

Low

NOTES:
- Background extracted from Provincial DEM from LIO, MNRF.
* Sightings are labelled with the number of individuals observed.

Datum & Projection:
NAD 1983 UTM Zone 17N

CÔTÉ GOLD PROJECT

**Aerial Survey Results
Moose and Wolf**

PROJECT N°: TC180501

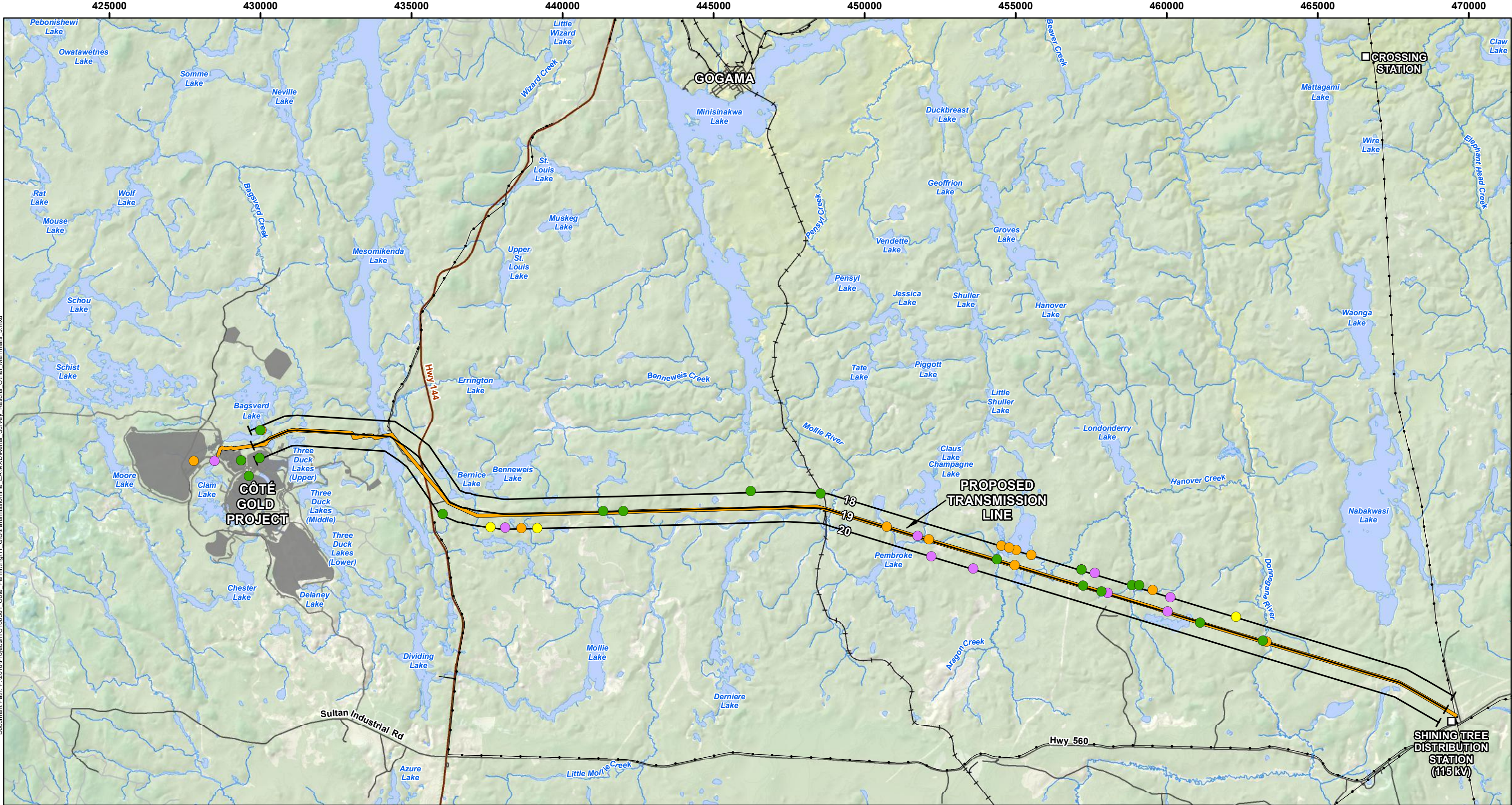
FIGURE: 6-5a

SCALE: 1:122,000

DATE: September 2018

0510152025

Kilometres



LEGEND

Proposed Shining Tree Transmission Line Alignment (115 kV)

Proposed Mine Footprint

Aerial Survey Transect Line (Labelled with ID)

Power Station

Railway

Existing Transmission Line

Major Road

Local Road

Resource / Recreation

Watercourse

Waterbody

Species (Tracks)

Red Fox

Canada Lynx

American Marten

River Otter

NOTES:
- Background extracted from Provincial DEM from LIO, MNRF.

Datum & Projection:
NAD 1983 UTM Zone 17N

CÔTÉ GOLD PROJECT

**Aerial Survey Results
Other Mammals**

PROJECT N°: TC180501

FIGURE: 6-5b

SCALE: 1:122,000

DATE: September 2018

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5

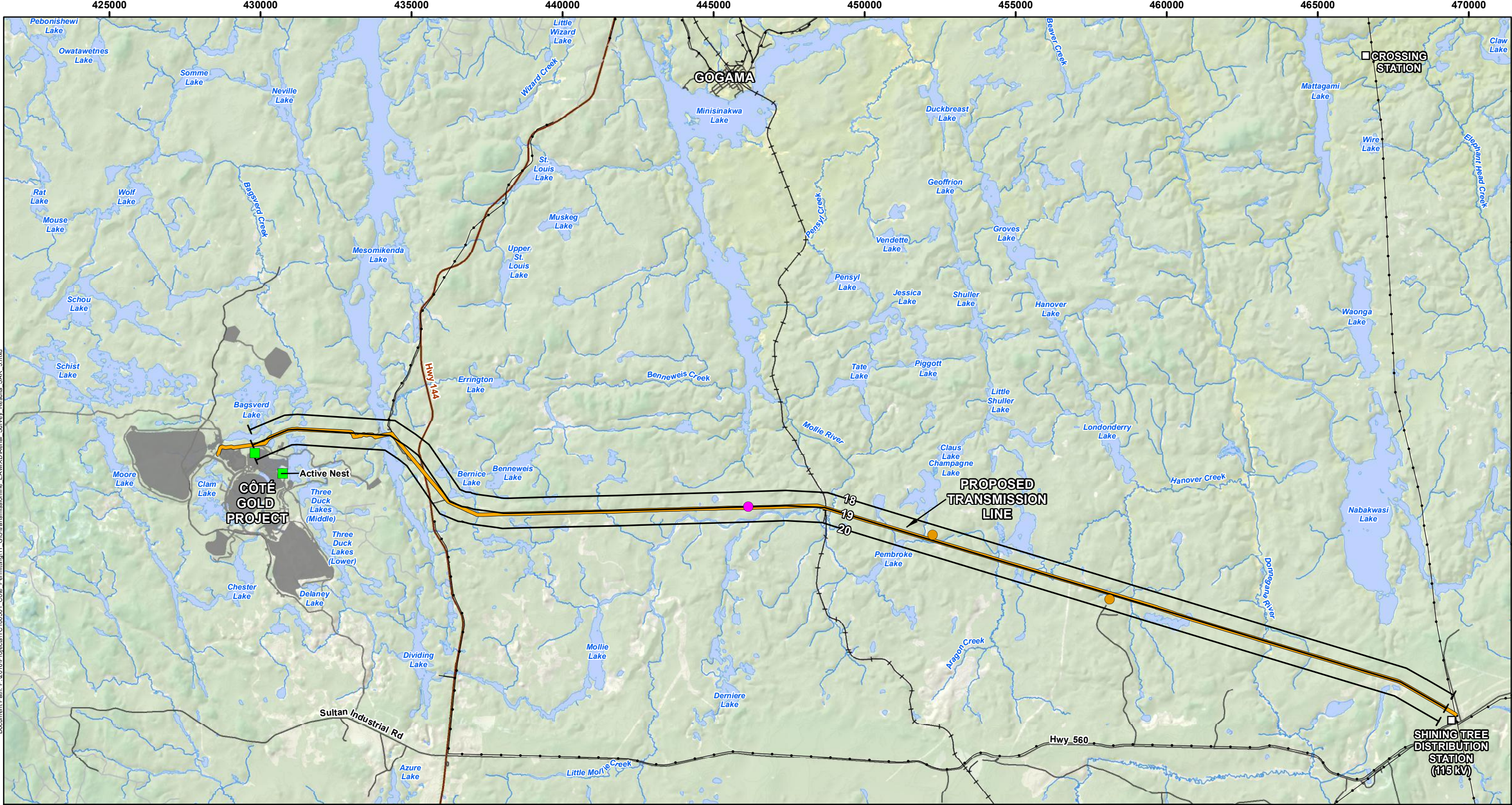
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15

20

25

Kilometres



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LEGEND

-  Proposed Shining Tree Transmission Line Alignment (115 kV)

 Proposed Mine Footprint

 Aerial Survey Transect Line (Labelled with ID)

 Power Station

 Railway

 Existing Transmission Line
-  Major Road

 Local Road

 Resource / Recreation

 Watercourse

 Waterbody
- Species at Risk

 Bald Eagle

 Common Nighthawk

 Eastern Whip-poor-will

 2017 Aerial Survey Visual Observation (Wood)

 2013 Crepuscular Bird Survey (Golder)

NOTES:
- Background extracted from Provincial DEM from LIO, MNRF.



CÔTÉ GOLD PROJECT

**Species at Risk
Survey Results**

Datum & Projection:
NAD 1983 UTM Zone 17N



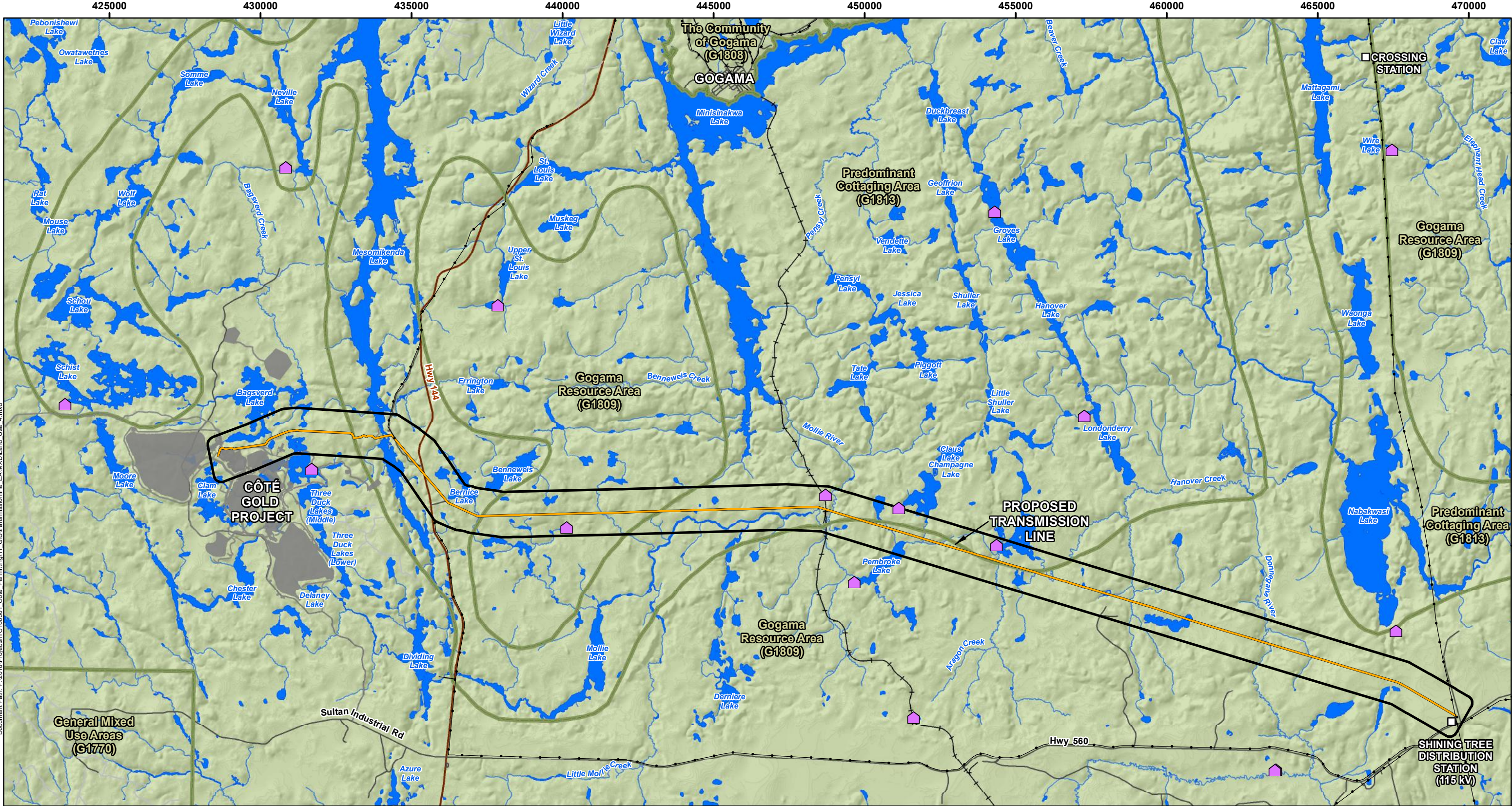
PROJECT N°: TC180501

FIGURE: 6-5c

SCALE: 1:122,000

DATE: September 2018





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LEGEND

- Proposed Shining Tree Transmission Line Alignment (115 kV)

Transmission Line Study Area

Proposed Mine Footprint

Power Station

Railway

Existing Transmission Line
- Major Road

Local Road

Resource / Recreation

Watercourse

Waterbody
- Trapper Cabins

Land Use - General Use Area (Labelled with Name and ID)

NOTES:
- Background extracted from Provincial DEM from LIO, MNRF.



CÔTÉ GOLD PROJECT

Land Use

Datum & Projection:
NAD 1983 UTM Zone 17N

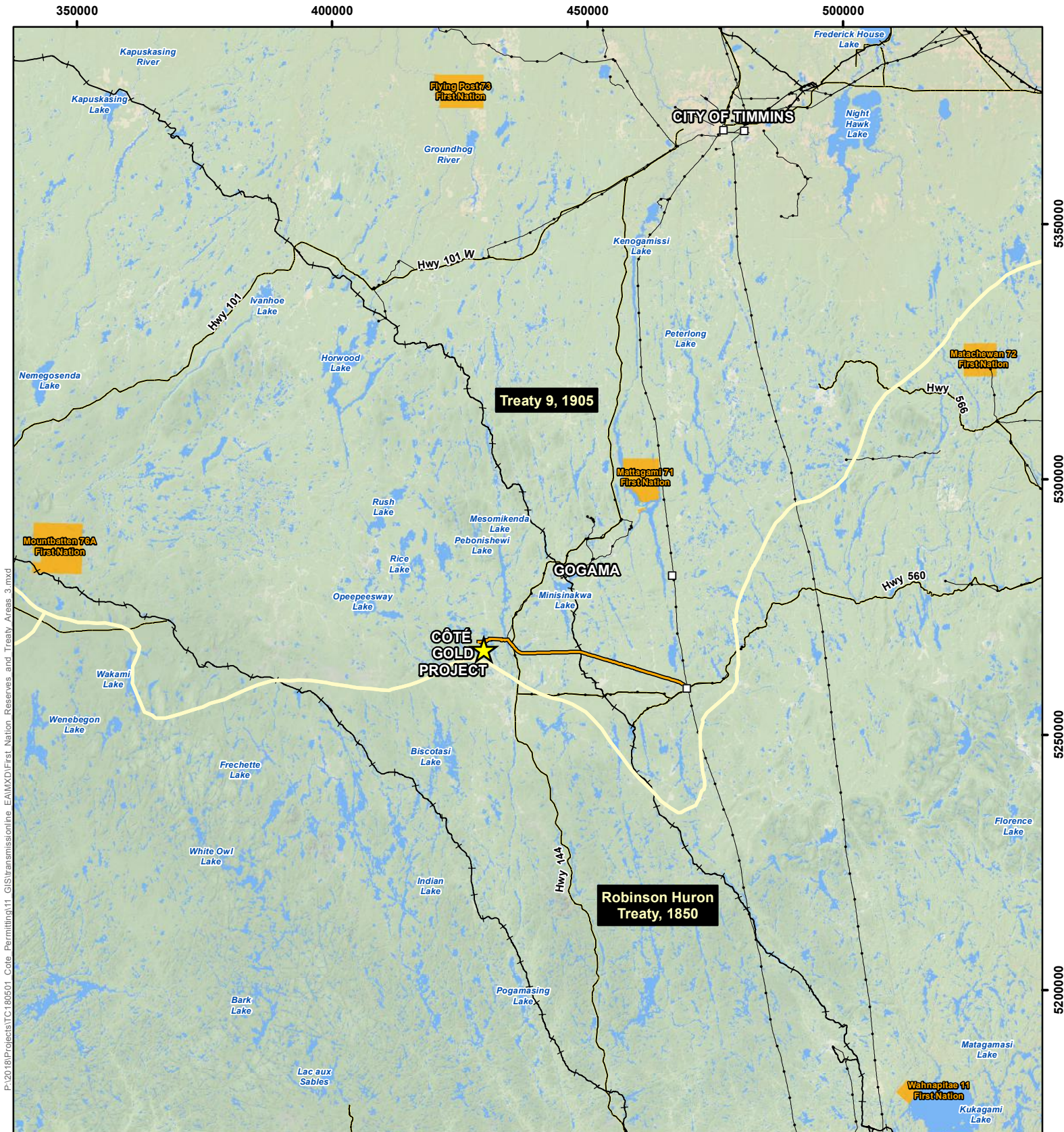


PROJECT N°: TC180501

FIGURE: 6-6









SCALE: 1:122,000

DATE: September 2018



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LEGEND

-  Project Site Location
-  Proposed Transmission Line
-  Power Station
-  Existing Transmission Line
-  Railway
-  Major Road
-  First Nation Reserve
-  First Nation Treaty Boundary

NOTES:

- Background extracted from Provincial DEM from LIO, MNRF.
- First Nation Treaty Boundaries extracted from "Historic First Nations Treaties in Canada - GIS dataset of pre 1930 treaty boundaries", 2000, Global Forest Watch Canada.

Datum: NAD83
Projection: UTM Zone 17N



CÔTÉ GOLD PROJECT

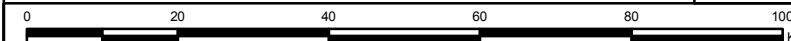
First Nation Reserves and Treaty Areas

PROJECT N°: TC180501

FIGURE: 6-8

SCALE: 1:1,000,000

DATE: September 2018



7.0 Consultation and Engagement

7.1 Consultation Overview and Principles

IAMGOLD's approach to consultation focuses on building and preserving relationships with potentially affected communities and interested stakeholders. Consultation with communities and stakeholders began in the spring of 2013, informed the Federal and Provincial EAs, and has continued since Federal approval of the CGP in April 2016 and Provincial approval in January 2017. Consultation and engagement have been divided into two key phases of the Côté Gold Transmission Line Project to date, namely:

- The Cross-country Transmission Line that was presented in the Federal and Provincial EAs (AMEC 2015); and
- The Shining Tree Transmission Line (Côté Gold Transmission Line Project) that was developed through refinements to the CGP and issues identified through engagement.

Detailed information about consultation and engagement activities for the Cross-country Transmission Line can be found in Chapter 4 and Appendix D of the Amended EIS / Final EA Report (AMEC 2015) and the information about consultation of the Shining Tree Transmission Line can be found in Chapter 3 of the EER (IAMGOLD 2018) and in Appendix A. This section highlights the relevant consultation and engagement information regarding the current Côté Gold Transmission Line Project.

7.2 Goals of Consultation

IAMGOLD's objectives for consultation related to the CGP activities to date, including permitting, have been to engage Indigenous groups, government agencies and interested stakeholders to:

- Introduce IAMGOLD to area stakeholders, groups and government agencies;
- Understand Indigenous interests and treaty rights in the area that have the potential to be affected by the Côté Gold Transmission Line Project;
- Establish positive working relationships with stakeholders, Indigenous groups and government agencies;
- Share information and gather feedback on Côté Gold Transmission Line Project documents;
- Provide status updates on exploration and mining-related activities;
- Ensure stakeholders have an appropriate opportunity to understand the proposed Côté Gold Transmission Line Project and identify potential environmental effects by reviewing and gathering feedback on:
 - results of baseline studies and/or other studies;
 - alternatives and evaluation methods;
 - final selection of criteria indicators;

- results of the selection of the preferred alternatives;
 - potential environmental effects and mitigation measures;
 - proposed monitoring and management plans; and
 - decommissioning / closure plan.
- Demonstrate and discuss how comments heard previously were addressed through Côté Gold Transmission Line Project designs or management practices to reduce or avoid the effects;
 - Discuss appropriate ways to avoid or mitigate residual effects;
 - Document and respond to any issues or concerns raised by stakeholders; and
 - Meet all regulatory requirements for Indigenous and stakeholder consultation, to the extent possible.

Stakeholders, Indigenous groups (First Nation and Métis) and government agencies who were anticipated to have an interest in the Côté Gold Transmission Line Project were identified during early consultation efforts. The list has evolved over time. Table 7-1 provides an overview of how each of these groups are categorized.

The Federal and Provincial conditions of EA approval for the CGP each included a list of Indigenous communities to be considered where relevant for the purpose of fulfilling specific conditions. The Provincial list included all Indigenous communities and/or groups that IAMGOLD communicated with during the CGP EA process, specifically:

- Aundeck Omni Kaning First Nation;
- Beaverhouse First Nation;
- Brunswick House First Nation;
- Chapleau Ojibwe First Nation;
- Conseil de la Première Nation Abitibiwinini;
- Flying Post First Nation (represented by Wabun Tribal Council);
- Matachewan First Nation;
- Mattagami First Nation (represented by Wabun Tribal Council);
- Missanabie Cree First Nation;
- M'Chigeeng First Nation;
- Serpent River First Nation;
- Taykwa Tagamou Nation;

- Wahgoshig First Nation; and
- Métis Nation of Ontario – Region 3 (which represents Northern Lights and Temiskaming Métis Councils).

The Federal list included:

- Mattagami First Nation;
- Flying Post First Nation;
- Brunswick House First Nation; and
- Métis represented by the Métis Nation of Ontario Region 3 Consultation Committee.

7.3 Information Sharing and Engagement Activities

7.3.1 Consultation During the Preparation of the EA

Open houses were held in Mattagami First Nation and Flying Post First Nation in May 2018. These were followed by open houses in Gogama, Timmins and Sudbury in June. One of the purposes of the open houses was to provide these communities with information and allow opportunities for attendees to provide input on the Côté Gold Transmission Line Project.

A summary of key consultation events is listed in Table 7-2.

A complete record of consultation related to the transmission line is located in Appendix A.

7.4 Ongoing and Future Consultation

IAMGOLD will respond to any questions or concerns raised by Indigenous groups or other stakeholders, including government agencies, regarding the CGP, including the Côté Gold Transmission Line Project. Where practicable, IAMGOLD will provide draft permit applications and supporting materials in advance of their submission to the Indigenous groups and government agencies.

A timeframe for Mattagami First Nation and Flying Post First Nation consultation has been established and agreed upon for each permit type required to develop the Côté Gold Transmission Line Project. IAMGOLD meets regularly (bi-weekly) with representatives of the two communities to review various aspects of the Project including draft permit applications.

Table 7-1: Stakeholders and Indigenous Groups

Type	Example
Stakeholders	<ul style="list-style-type: none"> Local businesses / business organizations Community organizations Non-governmental organizations Environmental non-governmental organizations Local educational / service institutes
Indigenous Groups	<ul style="list-style-type: none"> Indigenous communities Indigenous leadership Tribal Councils
Government Agencies	<ul style="list-style-type: none"> Municipal governments and representatives Provincial (Ontario) governments and representatives Federal government and representatives

Table 7-2: Summary of Côté Gold Transmission Line Project Open Houses

Event Type	Location	Date(s)	Number of Participants
Project Open Houses	Mattagami First Nation	May 28, 2018	31
	Flying Post First Nation	May 30, 2018	28
	Gogama	February 14, 2018	31
		June 13, 2018	39
	Timmins	February 13, 2018	64
		June 14, 2018	36
	Sudbury	February 15, 2018	52
		June 15, 2018	34

Note:

- Does not include IAMGOLD representatives or Project team participants

8.0 Environmental Screening

As part of the Environmental Screening Process outlined in the Class EA for Minor Transmission Facilities (Hydro One 2016), the MECP requires that the proponent go through the screening criteria to determine whether there will be potential environmental effects without the use of mitigation measures. The rationale behind this is to provide a transparent, conservative assessment of the potential effects and prove that the mitigation measures effectively minimize or negate these potential effects. The screening matrix has been provided in Table 8-1. As indicated in Section 1, the MECP determined that an ESR (this document) was required.

Table 8-1: Screening Matrix

Item	Criterion	Yes	No	Additional Information
a	conflict with the environmental goals, objectives, plans, standards, policy statements or guidelines adopted by the Province of Ontario or the municipalities or communities where the project is to be located?	—	✓	There are no applicable Provincial or municipal environmental goals, objectives, standards, policy statements or guidelines that would be conflicted by the Côté Gold Transmission Line Project.
b	have significant effects on persons or property, including lands zoned to permit residential or other sensitive land uses?	—	✓	The proposed Côté Gold Transmission Line Project would be constructed almost entirely within an existing corridor. This land is outside of the municipality on Crown Land and would not significantly affect persons or property, permits for planned residential or other sensitive land uses.
c	necessitate the irreversible commitment of any significant amount of non-renewable resources, including Prime Agricultural Land, which includes Specialty Crop Areas (as defined in the Provincial Policy Statement under the <i>Planning Act</i>) and/or Canada Land Inventory Classes 1, 2 and 3 lands?	—	✓	There are no identified agricultural lands within the existing corridor. The Canada Land Inventory Class for the lands within the corridor spans from Class 4 to 7 with some areas of Class 0 (Soil Research Institute 1971)
d	pre-empt the use, or potential use, of a significant natural resource for any other purpose?	—	✓	There are no known aggregate or petroleum resources within the corridor. IAMGOLD holds the majority of mineral rights along the transmission line route and has no plans to develop these mineral resources in the near future. The existing corridor is used to support forestry in the region.
e	result in significant detrimental effect on air or water quality, or ambient noise levels for adjoining areas?	—	✓	There are no significant detrimental effects on water quality for adjoining areas anticipated as a result of the proposed transmission line. There will be vehicle emissions from equipment that could potentially affect air quality and ambient noise levels during the construction, maintenance and decommissioning of the transmission line. These effects are not anticipated to be significant.
f	cause significant interference with the movement of any resident or migratory fish, wildlife species, Species at Risk, or their respective habitats?	—	✓	No in-water works are required and all construction activities will occur above the high-water mark. With implementation of standard construction practices, no effects to fish are expected. The proposed transmission line utilizes an existing corridor that has previously been cleared of any large woody vegetation. Habitat corridors or wildlife movement would have been altered during the initial clearing of this corridor. Therefore, there are no anticipated significant effects.

Item	Criterion	Yes	No	Additional Information
g	Will the Project... establish a precedent or involve a new technology, either of which is likely to have significant environmental effects now or in the future?	—	✓	The proposed transmission line does not establish a precedent or involve any new technology.
h	be a pre-condition to the implementation of another larger and more environmentally significant project?	✓	—	The proposed transmission line will provide power to the CGP. The CGP has already been fully reviewed and approved under the Ontario <i>Environmental Assessment Act</i> .
i	likely generate significant secondary effects, directly caused by the proponent's activities, which will adversely affect the environment?	—	✓	There are no expected secondary effects caused by the proposed transmission line that will adversely affect the environment.
j	block pleasing views or significantly affect the aesthetic image of the surrounding area?	—	✓	The proposed transmission line is located along an existing corridor. The visibility of the transmission line is expected to be limited to the corridor as forests in this area of Ontario have a high canopy height and are quite dense. Small portions of the transmission line will be visible from waterbodies and roads that the transmission line crosses; however, the presence of the transmission line would not result in blocking of pleasing views or significantly affect the aesthetics of the surrounding area (particularly as there was a transmission line in the same location previously).
k	Significantly change the social structure or demographic characteristics of the surrounding neighbourhood or community?	—	✓	The transmission line is in an undeveloped area and is not located within a community. A small workforce will be required to construct the transmission line for short period of time. The number of workers and the duration of their stay in the area are not anticipated to change the social structure or demographic characteristics of the surrounding neighbourhood or community.
l	Overtax existing community services or facilities (e.g., transportation, water supply, sanitary and storm sewers, solid waste disposal system, schools, parks and/or care facilities);	—	✓	Although there may be a temporary increase in population from the transmission line workforce, this increase will be relatively small and only short-lived, such that no changes to the local community services or facilities are expected. Power will be supplied to the 44 km transmission line from a refurbished T2R line from Timmins to Shining Tree, that is currently not in use. The transmission line will not require power from lines currently supplying power to Gogama and Mattagami First Nation and will not impair the power supply to these communities.
m	result in undesired or inappropriate access to previously inaccessible areas?	—	✓	The proposed transmission line does not create access to previously inaccessible areas that had not already been created by the existing corridor.

Item	Criterion	Yes	No	Additional Information
n	Will the Project... create the removal of a significant amount of timber resources?	—	✓	Based on the Canada Land Inventory for Forestry, the lands within the corridor spans from Class 5 (lands having severe limitations to growth of commercial forests) and Class 7 (lands having severe limitations which preclude the growth of commercial forests). The transmission line will also be constructed in a previously cleared corridor, which allows for minimal forest resource loss.
o	result in significant effects to natural heritage resources?	—	✓	There are no identified natural heritage resources at locations where subsurface work is proposed for the transmission line (or within the corridor). Should any natural heritage resources be found, individual poles will be relocated, as appropriate.
p	result in significant effects to cultural heritage resources (which may include built heritage resources, cultural heritage landscapes, and/or archaeological resources). Significant effects to cultural heritage resources are to be determined based on technical cultural heritage studies prepared by qualified persons.	—	✓	Based on baseline work completed on the proposed transmission line route, there are no known heritage structures or sites, archaeological resources or cultural heritage landscapes in the vicinity of the proposed transmission line. Ground disturbances within areas of archaeological potential, defined by stage 1 archaeological surveys, will be further assessed by stage 2 to 4 surveys, as appropriate, or individual poles will be relocated to avoid subsurface work at these locations.

9.0 Description of Potential Environmental Effects

9.1 Construction Phase

Activities during the construction phase will include the expansion of the transmission line corridor by clearing the existing woody vegetation and constructing the transmission line.

9.1.1 Surface Water and Groundwater

There are no anticipated effects to groundwater due to the activities related to the construction of the transmission line (see Table 8-1). Therefore, only effects to surface water quantities have been considered in this section.

Although there will be no water takings, direct water discharges or works in water as a result of the transmission line construction, there are potential effects to the water quality of waterbodies the transmission line intersects. During construction, erosion of soils that are exposed from the removal of vegetation or the heavy equipment traffic could be subject to runoff that could flow into nearby waterbodies. There is also the potential that accidental spills and releases of hydrocarbons or other liquid spills related to heavy equipment usage could migrate to nearby waterbodies and affect surface water quality.

Potential effects to surrounding surface waterbodies will be minimized or negated by applying the following mitigation measures:

- Erosion control fencing and sedimentation catchments will be installed downstream of active construction areas;
- Retain existing low ground cover along transmission line ROW thereby minimizing vegetation clearing;
- Maintain vegetated buffers adjacent to creek and river transmission line crossings;
- Design or time construction activities so there are limited or no in-water works required;
- All waste oils, lubricants, solvents and cleaners will be stored with appropriate secondary containment; and
- No herbicides will be used in the corridor for vegetation control.

The potential effects to surface water quality can be minimized and avoided using the mitigation measures; therefore, there are no adverse effects to water quality as a result of the transmission line construction.

9.1.2 Land

As presented in the Screening Criteria provided in Table 8-1, effects on land have been screened out of the assessment and will therefore not be further investigated in this section.

9.1.3 Air and Noise

9.1.3.1 Air Quality

During construction of the transmission line, heavy equipment will be required to expand the corridor to the required width by clearing the woody vegetation and to construct the transmission line towers. Although the heavy equipment required for the proposed transmission line will be minimal, the burning of fossil fuels by this equipment will result in minor changes to air quality. These minor changes to air quality in the direct vicinity of the transmission line would only occur for a short period of time and would dissipate quickly.

Potential effects of the Côté Gold Transmission Line Project on air quality will be minimized or negated by applying the following mitigation measures:

- Emission reductions achieved through the use of current equipment that complies with Transport Canada's off-road engine emission criteria;
- Low sulphur fuels will be used in off-road diesel engines; this will reduce the sulphur dioxide emissions from all sources and the resultant off-site air concentrations; and
- Ensure equipment used for construction and maintenance meet the guideline limits.

The relative small potential effects from air emissions can be minimized using the mitigation measures and it will occur over a short period of time; therefore, there are no residual adverse effects to air quality as a result of the transmission line construction.

9.1.3.2 GHG Emissions

The construction of the transmission line will produce minimal GHG emissions from three main sources:

- Emissions from the heavy equipment used in construction;
- Tree clearing and CO₂ from the felled trees (the International Protocol on Climate Change only considered tree removal when calculating indirect GHG emissions); and
- Indirect GHG emissions as the removed trees will no longer store / sequester CO₂.

It is difficult to quantify the direct and indirect GHG emissions from the construction of the transmission line prior to the detailed design. For this reason, the potential GHG emissions have been assessed qualitatively.

For direct GHG emissions, the equipment that will be operating during the construction of the transmission line will be minimal and just required to remove vegetation from the corridor, construct the transmission line structures, and equipment to tension the cables. For indirect GHG emissions, the existing corridor has previously been cleared of trees. Although the corridor will likely have to be widened, it will only contribute minimally to indirect GHG emissions from the removal of trees.

Overall, the sources of potential GHG emissions from the transmission line construction are anticipated to be negligible and will not materially alter the climate on a global or regional scale. Notwithstanding the

GHG emissions as a result of the transmission line construction, the development of a transmission line to provide the main power supply to the CGP reduces the overall contribution of emissions to the environment compared to other alternatives such as diesel or natural gas-powered generators.

Potential effects of the Côté Gold Transmission Line Project on GHG emissions will be minimized by applying the following mitigation measures:

- Emission reductions achieved through the use of current equipment that complies with Transport Canada's off-road engine emission criteria;
- Low sulphur fuels will be used in off-road diesel engines; this will reduce the sulphur dioxide emissions from all sources and the resultant off-site air concentrations; and
- Ensure equipment used for construction and maintenance meet the guideline limits.

The small overall emissions of GHG from the construction of the transmission line will not result in a residual effect to the regional or global climate.

9.1.3.3 Noise

During construction of the transmission line, construction vehicles and equipment will contribute to elevated ambient noise levels in the immediate vicinity of the corridor. As previously stated in Section 6.5, the proposed transmission line is situated in a Class 3 rural acoustical environment (MOECC 2013) and is generally characterized by sounds of nature and minimal road traffic. There are sporadic seasonal forestry operations that could temporarily increase the noise and vibration. There may also be localized areas where noise emissions are more consistent with Class 1 and Class 2 areas, depending on the work being conducted. For Class 3 areas, the MOE guidelines (MOECC 2013) limits at the closest receptor (permanent or seasonal dwelling) are 45 A-weighted decibels (45 dBA) during the daytime and 40 dBA at night. However, NPC-300 guideline limits do not apply to construction activities (MOECC 2013).

There are no permanent or seasonal residence in close proximity to the transmission line and the closest receptor to the proposed transmission line that fits the MOECC 2013 criteria for a sensitive receptor is located 178 m away from the corridor on Mesomikenda Lake. This residence may be subject to short term noise from equipment operation, but is not anticipated to be over the criteria.

In addition, there are some species of local wildlife that may be sensitive to elevated levels of noise and may avoid the area for the short period of time while the transmission line is being constructed.

Potential effects of the Côté Gold Transmission Line Project on ambient noise levels will be minimized or negated by applying the following mitigation measures:

- Ensure equipment used for construction and maintenance meet the guideline limits.

Based on the minimal noise emissions from the construction of the transmission line and lack of sensitive receptors in close proximity to the corridor, there are no residual effects of noise from the construction of the transmission line.

9.1.4 Natural Environment

There are no anticipated effects to significant natural areas, fish or fish habitat, locally important or valued ecosystems or vegetation, due to the activities related to the construction of the transmission line (see Table 8-1). Therefore, only potential effects to fauna and flora Species at Risk, wetlands, wildlife and wildlife habitat and migratory birds have been considered in this section.

9.1.4.1 Effects on Rare, Threatened or Endangered Species of Flora or Fauna or their Habitat

As stated in Section 6.11, a number of wildlife Species at Risk inhabit the region where the transmission line is located. No vegetation Species at Risk were observed in the field studies.

The wildlife Species at Risk that were observed during the 2013 and 2017 field studies at the CGP site or within the transmission line corridor and may potentially be present within the SSA include:

- Little Brown Myotis;
- Eastern Whip-poor-will;
- Olive-sided flycatcher;
- Canada warbler;
- Bald Eagle;
- Common Nighthawk; and
- Rusty Blackbird.

There are two main potential effects that construction of the transmission line could have on Species at Risk:

- Potential effects to habitat loss; and
- Potential wildlife collision with vehicle.

During the construction phase of the transmission line, the existing corridor will need to be widened to provide the required width to allow for safe clearance of the transmission line structures, which would subsequently remove some terrestrial habitat. Since the corridor currently exists and will just need to be widened, there is minimal habitat that will be removed.

There is also the potential that bats and birds could collide with the transmission line causing mortality. This is more likely to occur to species that inhabit open meadow areas or in fringe areas between open areas and forest habitat. It is also more likely to occur to larger birds of prey as they have larger wingspans and are more likely to collide with the transmission line. IAMGOLD has committed to use marker balls and bird diverters on wires in high-risk areas, which will greatly reduce the potential risk to bird and bat species.

Although there is the potential to cause effects to rare, threatened or endangered species of fauna, the clearing required has been minimized as practical by re-using an existing ROW and the small surface area for birds to collide with the transmission line, there are no anticipated adverse effects. Clearing of vegetation will occur outside of the breeding bird nesting season.

9.1.4.2 Effects on Wetlands

Based on aerial imagery, the proposed transmission line will intersect with a number of wetlands and low-lying areas, between the Shining Tree DS and the CGP site. This includes bogs, fens, swamps and marshes. It is not anticipated that work within wetlands will be required as the transmission line will span across the wetlands to the extent practical using V-guyed steel structures. During the planning stages and detailed design of the Côté Gold Transmission Line Project prior to construction activities commencing, a map detailing all wetland areas along the ROW will be prepared including alternative routes to avoid travel through wetlands, to the extent practical. Acceptable travel routing will be provided to the construction team to avoid wetlands. If this is not feasible, additional mitigation measures will be developed to minimize the potential effects to the wetlands.

Potential effects of the Côté Gold Transmission Line Project on wetlands will be minimized or negated by applying the following mitigation measures:

- Where practical, avoid placement structures in waterbodies along the transmission line ROW, and to the extent practicable, in low-lying areas.

The potential effects to wetlands can be minimized and avoided using the mitigation measures; therefore, there are limited adverse effects to wetlands as a result of the transmission line construction expected.

9.1.4.3 Effects on Wildlife Habitat, Populations, Corridors or Movement

Ungulates

Evidence of Moose was observed along the transmission line between the CGP site and the Shining Tree DS during the 2017 winter and spring aerial surveys (Figure 6-5a). Tracks were observed in low to medium densities during the winter surveys and four individual Moose were observed at two locations. While adjacent forest communities are likely be cleared during the widening of the corridor, open water and wetland communities occurring in the footprint are to be spanned by the Côté Gold Transmission Line Project activities and direct vegetation removal in these areas is not expected.

Loss of terrestrial habitat is not expected to result in any direct mortalities of Moose. These habitats are common throughout the landscape in the vicinity of the transmission line ROW and Moose will be able to move into surrounding habitats. Based on the limited clearing and grubbing required, no population level effects are expected for Moose in a regional context. Vegetation clearing activities may result in temporary displacement of local individuals due to sensory disturbances caused by the presence of equipment and personnel during the construction phase. These noise effects will be temporary, subsiding once the transmission line has been constructed.

As the effects to ungulates will be minimal and only for a short period of time, there are no residual effects to ungulates from the construction of the transmission line.

Furbearers

The prediction of effects for furbearers along the transmission relates primarily to the loss of terrestrial and wetland habitats and/or portions of associated key habitat areas for furbearers. These effects are not expected to result in any direct mortalities. These habitats are common throughout the landscape in the vicinity of the transmission line, and these species will be able to move into surrounding habitats during the life of the Côté Gold Transmission Line Project. In a local context, the removal of this habitat is notable, but no population level effects are expected for any of these furbearer species in a regional context. Vegetation clearing activities may result in temporary displacement of local individuals due to sensory disturbances caused by the presence of equipment and personnel during the construction phase but these noise effects will be temporary, subsiding once the transmission line has been constructed.

The effect of the direct habitat loss from the removal of vegetation along a corridor is minor relative to the indirect effects, including alteration of predator-prey dynamics, influx of competition and disease, and potential increased mortality by humans due to ease of access. Vegetation clearing activities may result in an increase of wolf, bear and hunter access to areas previously less accessible. Wolves may benefit from this improved access, increased hunting efficiency and prey availability, while bears may benefit from early-successional vegetation induced by roadside cutting. Construction may also displace Moose or other secondary prey species which would temporarily alter movements and distribution of local wolves. Increased traffic during construction may increase the risk of vehicle collisions with furbearers. As the operation phase begins, the risk of collisions is likely to decrease. Noise may act to temporarily influence local wolf - prey dynamics during construction. As an existing corridor is being utilized, local Gray Wolf, Black Bear and American Marten populations are expected to have adapted to the local setting and no appreciable effect on furbearer behaviour after the construction phase is expected.

Bats, Raptors and Migratory Birds

Loss of terrestrial and wetland habitats and/or portions of associated key habitat areas for bats, raptors and migratory birds are not expected to result in any direct mortalities. These habitats are common throughout the landscape in the vicinity of the transmission line and these species will be able to move into surrounding habitats to avoid construction. In a local context, the removal of this habitat is notable, but no population level effects are expected for bats, raptors and migratory birds in a regional context. Vegetation clearing activities may result in temporary displacement of local individuals due to sensory disturbances caused by the presence of equipment and personnel during the construction phase but these noise effects will be temporary, subsiding once the transmission line has been constructed. Power line strikes and electrocutions may cause bird and bat mortalities. Electrocutions are a notable risk to raptors which may nest and perch on towers and power lines.

It is anticipated that the construction of the proposed transmission line may provide increased opportunities for raptor nesting and increase raptor hunting habitat. Common Ravens, Osprey and Red-tailed Hawks are all known to use transmission line poles as nesting locations. Increased traffic during construction may increase the risk of vehicle collisions with raptors and migratory birds. As the operation phase begins, the risk of collisions is likely to decrease. As an existing corridor is being utilized, local bats, raptor and migratory bird species currently roosting or nesting within the Shining Tree TLA footprint are anticipated to be more tolerant to anthropogenic disturbance.

9.1.5 Resources

As presented in the Screening Criteria provided in Table 8-1, effects on resources have been screened out of the assessment and will therefore not be further investigated in this section.

9.1.6 Socio-economic

9.1.6.1 Effects on Scenic or Aesthetically Pleasing Landscapes or Views

During construction, the visibility of the transmission line is expected to be limited to the corridor as forests in this area of Ontario have high canopy heights and are quite dense. The transmission line also does not cross direct views from permanent or seasonal residences. Small portions of the transmission line will be visible from waterbodies and roads that the transmission line intersects; however, the presence of the transmission line would not result in blocking of pleasing views or significantly affect the aesthetics of the surrounding area (particularly as there was a transmission line in the same location previously). Based on these factors, there are no residual adverse effects to the scenic or aesthetically pleasing landscapes or views of the area as a result of the transmission line.

9.1.7 Cultural Heritage and Archaeology

Prior to construction activities or any earth works activities in areas of archaeological potential, these areas will undergo a Stage 2 archaeological assessment of sub-surface testing to determine if they contain archaeological resources. If archaeological resources are discovered, these areas may be subject to the Stage 3 and Stage 4 archaeological assessment, depending on the recommendation of the qualified consultant archaeologist. If mitigation and protection measures are required, archaeological excavation will be conducted to document the site and remove artifacts before construction begins. As a result, no effects to archaeological resources are anticipated.

9.1.8 Aboriginal

9.1.8.1 Plant Harvesting

The FN TK/TLU identified blueberries as a harvested plant in the region. There is a potential for blueberry harvesting to be affected during the construction phase of the transmission line due to clearing of vegetation; however, there will be no use of chemical clearing (only mechanical clearing) along the corridor.

The MNO TK/TLUS did not identify any plant harvesting areas that could be affected by the Côté Gold Transmission Line Project.

9.1.8.2 Hunting and Trapping

Parts of the transmission line may potentially affect traditional hunting areas as identified in the FN TK/TLU studies. While a short term change in access may occur during the construction of the transmission line, the majority of hunting activity is reported to occur within the Sensitive Areas. Access to Sensitive Area C is not expected to change.

The MNO TK/TLUS identified a large game (i.e., moose and bear) harvesting area and upland bird (i.e., grouse and partridge) harvesting area along a section of the 44 km the transmission line.

Construction along the transmission line will potentially affect portions of the MNO TK/TLUS large game and upland bird harvesting areas. There is a potential for wildlife within the identified traditional hunting areas to be displaced in close proximity to construction activities. Wildlife species will likely find equally suitable habitat adjacent to the TLA during the short-term construction activities.

During the EA process, concern was expressed by Indigenous groups that the Cross-Country TLA would increase hunting by non-Indigenous people, increasing competition for resources related to increased access within the TLA. The replacement of the Cross-Country TLA with the Shining Tree TLA mitigates this concern expressed by both First Nations and Métis.

9.1.8.3 Fishing

The FN TK/TLUS identifies lakes within Sensitive Area C (Mesomikenda Lake) as the most popular lakes for catching walleye (known locally as pickerel). None of the small lakes, rivers or creeks that transmission line intersects were identified by First Nations as frequented fishing areas.

The MNO TK/TLUS identified a non-commercial fish harvesting site near the transmission line at Mesomikenda Lake.

As the proposed transmission line construction will not affect water quality or will not involve work in water, there are no residual effects to fishing at any of the water crossings.

9.1.8.4 Cultural, Spiritual and Ceremonial Sites

There are no known cultural, spiritual or ceremonial sites along the Shining Tree TLA.

9.1.9 Other

9.1.9.1 Be a Pre-condition to the Implementation of another Larger and More Environmentally Significant Project?

The proposed 44 km, 115 kV transmission line project is not a pre-condition to the implementation of the CGP, as IAMGOLD has assessed and already received approval for a 144 km, 230 kV transmission line. Should the proposed 44 km, 115 kV transmission line not receive EA approval, IAMGOLD could proceed with the approved route.

9.2 Operations Phase

Activities during the operations phase are expected to be limited to inspection, maintenance, vegetation control and emergency repair, if required.

9.2.1 Surface and Ground Water

There are no anticipated effects to groundwater due to the activities related to the operations of the transmission line (Table 8-1). Therefore, only effects to surface water quantities have been considered in this section.

During the operations phase of the transmission line, early successional meadow vegetation will establish in the expanded sections of the corridor and reduce the potential for soil erosion to reach surface waterbodies. There may be some equipment in the corridor for periodic vegetation removal to maintain the corridor; however, this is not anticipated to increase erosion and affect surface water quality. There is still the potential for leaks and spills to runoff to surrounding waterbodies from the vegetation maintenance equipment, but there is less of a potential of this to occur with the very low frequency of equipment within the transmission line ROW compared to the construction phase.

Potential effects to surrounding surface waterbodies will be minimized or negated by applying the following mitigation measures during the operations phase:

- Erosion control fencing and sedimentation catchments will be installed downstream of active construction areas;
- Retain existing low ground cover along transmission line ROW thereby minimizing vegetation clearing;
- Maintain vegetated buffers adjacent to creek and river transmission line crossings;
- Design or time construction activities so there are limited or no in-water works required;
- All waste oils, lubricants, solvents and cleaners will be stored with appropriate secondary containment; and
- No herbicides will be used in the corridor for vegetation control.

The potential effects to surface water quality during the operations phase are considered minimal and there are no residual adverse effects to surface waters as a result of the transmission line operations.

9.2.2 Land

As presented in the Screening Criteria provided in Table 8-1, effects on land have been screened out of the assessment and will therefore not be further investigated in this section.

9.2.3 Air and Noise

9.2.3.1 Air Quality

During the operation and maintenance of the transmission line, vehicle traffic through the corridor will be limited to inspection and maintenance equipment, as required. No material effects to air quality are expected.

Potential effects of the Côté Gold Transmission Line Project on air quality will be minimized by applying the following mitigation measures:

- Emission reductions achieved through the use of current equipment that complies with Transport Canada's off-road engine emission criteria;
- Low sulphur fuels will be used in off-road diesel engines; this will reduce the sulphur dioxide emissions from all sources and the resultant off-site air concentrations; and
- Ensure equipment used for construction and maintenance meet the guideline limits.

There are no residual adverse effects to air quality as a result of the transmission line operations.

9.2.3.2 Greenhouse Gas (GHG)

The operations and maintenance of the transmission line will produce minimal GHG emissions from the limited use of inspection and maintenance equipment. Potential effects of the Côté Gold Transmission Line Project on GHG emissions will be minimized by applying the following mitigation measures:

- Emission reductions achieved through the use of current equipment that complies with Transport Canada's off-road engine emission criteria;
- Low sulphur fuels will be used in off-road diesel engines; this will reduce the sulphur dioxide emissions from all sources and the resultant off-site air concentrations; and
- Ensure equipment used for construction and maintenance meet the guideline limits.

The extremely small overall emissions of GHG from the operation and maintenance of the transmission line will not result in residual effects to the regional or global climate.

9.2.3.3 Noise

During operations and maintenance of the transmission line, maintenance vehicles and equipment will contribute to periodic elevated ambient noise levels in the immediate vicinity of the corridor. There may also be localized areas where noise emissions are temporarily more consistent with Class 1 and Class 2 areas, depending on the work being conducted. There are no permanent or seasonal residence in close proximity to the transmission line and the closest receptor to the proposed transmission line that fits the MOECC 2013 criteria for a sensitive receptor is located 176 m away from the corridor. This residence may be subject to short term noise from maintenance equipment operation, but is not anticipated to be over the regulatory criteria.

In addition, there are some species of local wildlife that may be sensitive to elevated levels of noise and may avoid the area for the short period of time while the transmission line is being maintained.

Potential effects of the Côté Gold Transmission Line Project on ambient noise levels will be minimized or negated by applying the following mitigation measures:

- Ensure equipment used for construction and maintenance meet the guideline limits.

Based on the minimal noise emissions from the operation and maintenance of the transmission line and lack of sensitive receptors in close proximity to the corridor, the impacts to noise from the transmission line is considered to be insignificant.

9.2.4 Natural Environment

There are no anticipated effects to significant natural areas, fish or fish habitat, locally important or valued ecosystems or vegetation, due to the operations of the transmission line (Table 8-1). Therefore, only effects to Species at Risk, wetlands, wildlife and wildlife habitat, and migratory birds are considered in this section.

9.2.4.1 Effects on Rare, Threatened or Endangered Species of Flora or Fauna or their Habitat

No vegetation Species at Risk species were observed in the field studies within the SSA.

Wildlife Species at Risk that were observed during the 2013 and 2017 field studies at the CGP site or within the transmission line corridor and may potentially be present within the SSA include:

- Little Brown Myotis;
- Eastern Whip-poor-will;
- Olive-sided flycatcher;
- Canada warbler;
- Bald Eagle;
- Common Nighthawk; and
- Rusty Blackbird.

During the operations phase of the transmission line, there are minimal effects to Species at Risk that may occur in the vicinity of the transmission line: potential for collision with maintenance equipment, or with the transmission line. Potential effects on Species at Risk will be minimized or negated by applying the following mitigation measures:

- Keep a wildlife log of species observed within the ROW; and
- A speed limit within the ROW will be enforced to limit the potential collisions of maintenance equipment with wildlife.

Although there are potential effects to rare, threatened or endangered species of fauna, the minimal vehicle maintenance traffic that will occur along the corridor and the small surface area of the transmission line itself for collision will minimize these potential effects.

9.2.4.2 Effects on Wetlands

No effects on wetlands are expected from the transmission line operation. Maintenance equipment will avoid travel in wetland. If alternative routes are not available to circumvent wetlands, maintenance will be postponed until the winter.

9.2.4.3 Effects on Wildlife Habitat, Populations, Corridors or Movement

Maintenance activities within the corridor may result in temporary displacement of local individuals due to sensory disturbances caused by the presence of equipment and personnel during the operations phase. The potential effects will be minimal and only for a short period of time, there are no residual effects from the operation of the transmission line.

Power line strikes and electrocutions are a source of bird and bat mortalities associated with transmission line operation. Electrocutions are a notable risk to raptors which may nest and perch on towers and power lines. IAMGOLD has committed to use marker balls and bird diverters on wires in high-risk areas, which will greatly reduce the potential risk to bird and bat species.

It is anticipated that the installation of the proposed transmission line may provide increased opportunities for raptor nesting and increase raptor hunting habitat. Common Ravens, Osprey and Red-tailed Hawks are all known to use transmission line poles as nesting locations.

9.2.5 Resources

As presented in the Screening Criteria provided in Table 8-1, effects on resources have been screened out of the assessment and will therefore not be further investigated in this section.

9.2.6 Socio-economic

During operations, the visibility of the transmission line is expected to be limited to the corridor as forests in this area of Ontario have high canopy heights and are quite dense. The transmission line also does not cross direct views from permanent or seasonal residences. Small portions of the transmission line will be visible from waterbodies and roads that the transmission line intersects; however, the presence of the transmission line would not result in blocking of pleasing views or significantly affect the aesthetics of the surrounding area (particularly as there was a transmission line in the same location previously). Based on these factors, there are negligible adverse effects to the scenic or aesthetically pleasing landscapes or views of the area as a result of the transmission line.

9.2.7 Cultural Heritage and Archaeology

Potential effects to cultural heritage and archaeologic resources if any, would have previously been mitigated during the construction phase. There would be no additional effects to cultural heritage and archaeological resources during the operations phase.

9.2.8 Aboriginal

9.2.8.1 Plant Harvesting

The FN TK/TLU identified blueberries as a harvested species. It is expected that blueberry patches will establish themselves in the transmission line corridor as blueberries are prone to grow in disturbed areas with lots of light. Harvesting of blueberries in the transmission line could occur as early as four years after clearing.

Vegetation clearing during operations will occur periodically in the transmission line via mechanical methods and no use of herbicides is planned, thereby protecting the quality and/or health of blueberries.

9.2.8.2 Hunting and Trapping

The potential effects on hunting during the operations phase are anticipated to be the same as those outlined in the construction phase with the exception of the following changes:

- The development of the transmission line through a closed forest will open up the canopy, creating edges that encourage the growth of shrubs preferred by moose; and
- Linear corridors may also be considered habitat enhancement if these corridors act as travel corridors for moose in otherwise unsuitable habitat.

9.2.8.3 Fishing

The potential effects on fishing during the operations phase are anticipated to be the same as those outlined in the construction phase (Section 9.1.8).

9.2.8.4 Cultural, Spiritual and Ceremonial

There are no anticipated effects on cultural, spiritual or ceremonial aspects related to the transmission line operation.

9.2.9 Other

9.2.9.1 Be a Pre-condition to the Implementation of another Larger and More Environmentally Significant Project?

As indicated in Section 9.1.9.1, the proposed 44 km, 115 kV transmission line project is not a pre-condition to the implementation of the CGP, as IAMGOLD has assessed and already received approval for a 144 km, 230 kV transmission line, connecting the CGP site to the Provincial electrical grid.

The proposed Côté Gold Transmission Line Project is required to provide power to the CGP, the effects of this Project have been assessed and described in the Amended EIS / Final EA Report. This assessment determined that there were no significant adverse effects from the CGP (AMEC 2015). The Federal and Provincial EAs were approved in 2016 and 2017, respectively.

Should the proposed 44 km, 115 kV transmission line not receive EA approval, IAMGOLD could proceed with the approved route.

9.3 Decommissioning Phase

Activities during the decommissioning phase are expected to be limited to the removal of the transmission line structures as ROW will be left to revegetate naturally.

9.3.1 Surface and Ground Water

There are no anticipated effects to groundwater due to decommissioning of the transmission line (Table 8-1).

The effects to surface water are similar to those described in the construction phase. During decommissioning, erosion of soils that are exposed from the heavy equipment traffic could be subject to runoff that could flow into nearby waterbodies. There will however, be less potential for erosion of soil and creation of sediment-laden runoff than the construction phase, as there will be no vegetation clearing exposing the soil during decommissioning. There is limited potential that accidental spills and releases of hydrocarbons or other liquid spills related to heavy equipment usage could migrate to nearby waterbodies and affect surface water quality with implementation of proposed best management practices.

Potential effects to surrounding surface waterbodies will be minimized or negated by applying the following mitigation measures:

- Erosion control fencing and sedimentation catchments will be installed downstream of active construction areas;
- Retain existing low ground cover along transmission line ROW thereby minimizing vegetation clearing;
- Maintain vegetated buffers adjacent to creek and river transmission line crossings;
- Design or time construction activities so there are limited or no in-water works required;
- All waste oils, lubricants, solvents and cleaners will be stored with appropriate secondary containment; and
- No herbicides will be used in the corridor for vegetation control.

The potential effects to surface water quality can be minimized and avoided using the mitigation measures; therefore, there are no anticipated material effects to water quality as a result of the transmission line decommissioning.

9.3.2 Land

As presented in the Screening Criteria provided in Table 8-1, effects on land have been screened out of the assessment and will therefore not be further investigated in this section.

9.3.3 Air and Noise

9.3.3.1 Air Quality

The effects to air quality during the decommissioning of the transmission line will be the same as those identified in the construction phase (Section 10.1.3).

9.3.3.2 GHG Emissions

The decommissioning of the transmission line will produce minimal GHG emissions from heavy equipment used in decommissioning. For direct GHG emissions, the equipment that will be operating during the decommissioning of the transmission line will be minimal and just required to remove the transmission line cables and structures. Overall, the sources of potential GHG emissions from the transmission line decommissioning are anticipated to be negligible and will not materially alter the climate on a global or regional scale.

Potential effects of the Côté Gold Transmission Line Project on GHG emissions will be minimized by applying the following mitigation measures:

- Emission reductions achieved through the use of current equipment that complies with Transport Canada's off-road engine emission criteria;
- Low sulphur fuels will be used in off-road diesel engines; this will reduce the sulphur dioxide emissions from all sources and the resultant off-site air concentrations; and
- Ensure equipment used for construction and maintenance meet the guideline limits.

9.3.3.3 Noise

The effects to noise during the decommissioning of the transmission line will be the same as those identified in the construction phase (Section 9.1.3).

9.3.4 Natural Environment

9.3.4.1 Effects on Rare, Threatened or Endangered Species of Flora or Fauna or their Habitat

The potential effects to Species at Risk species during the decommissioning of the transmission line will be the same as those identified in the operations phase (Section 9.2.4).

9.3.4.2 Effects to Wetlands

The limited potential for effects to wetlands during the decommissioning of the transmission line will be the same as those identified in the construction phase (Section 10.1.4).

9.3.4.3 Effects on Wildlife Habitat, Populations, Corridors or Movement

The potential effects to wildlife habitat, populations, corridors and movement during the decommissioning of the transmission line will be the similar to those identified in the construction phase, although of a lesser magnitude (Section 9.1.4).

9.3.5 Resources

As presented in the Screening Criteria provided in Table 8-1, effects on resources have been screened out of the assessment and will therefore not be further investigated in this section.

9.3.6 Socio-economic

Removal of the transmission line will allow natural revegetation to occur, resulting in a positive effect on the local aesthetics of the landscape where the transmission line is visible during operation.

9.3.7 Cultural Heritage and Archaeology

Potential effects to cultural heritage and archaeological resources if any, would have occurred and been mitigated during the construction phase. There would be no additional effects to cultural heritage and archaeological resources during the decommissioning phase.

9.3.8 Aboriginal

9.3.8.1 Plant Harvesting

Indigenous peoples have identified blueberries as a harvested species. There is a potential for blueberry harvesting to be affected during the decommissioning phase of the transmission line due to vehicle traffic within the corridor; however, this effect will be minor and will be short in duration.

9.3.8.2 Hunting and Trapping

The potential effects to hunting and trapping by Indigenous peoples during the decommissioning phase will be the same as those identified in the construction phase (Section 9.1.8).

9.3.8.3 Fishing

The potential effects on fishing during the decommissioning phase are anticipated to be the same as those outlined in the construction phase (Section 9.1.8).

9.3.8.4 Cultural, Spiritual and Ceremonial Sites

There are no anticipated effects on cultural, spiritual and ceremonial sites during the decommissioning phase.

9.3.9 Other

9.3.9.1 Be a Pre-condition to the Implementation of another Larger and More Environmentally Significant Project?

As indicated in Section 9.1.9.1, the proposed 44 km, 115 kV transmission line project is not a pre-condition to the implementation of the CGP, as IAMGOLD has assessed and already received approval for a 144 km, 230 kV transmission line. Should the proposed 44 km, 115 kV transmission line not receive EA approval, IAMGOLD could proceed with the approved route.

10.0 Commitments

Commitments that are specific to the transmission line have been provided in Table 10-1 and have been segregated to the specific discipline it applies. The commitments made by IAMGOLD were developed with direct input from Indigenous communities, local stakeholders and government agencies and were designed to address some of the concerns identified through the CGP engagement process. All commitments made regarding the CGP are summarized in the Amended EIS / Final EA Report (AMEC 2015).

Table 10-1: List of Commitments

Issue / Concern / Interaction	Project Phase	Commitment
Surface and Ground Water		
Adverse effects to water quality due to elevated suspended solids in runoff	Construction Decommissioning	Erosion control fencing and sedimentation catchments will be installed downstream of active construction areas.
		Retain existing low ground cover along transmission line ROW thereby minimizing vegetation clearing.
		Maintain vegetated buffers adjacent to creek and river transmission line crossings.
		Design or time construction activities so there are limited or no in-water works required
Adverse effects to water quality due to accidental spills and releases of hydrocarbons from equipment working on the transmission line	Construction Operations Decommissioning	All waste oils, lubricants, solvents and cleaners will be stored with appropriate secondary containment
Air Quality		
Exhaust from trucks and off-road mobile equipment	Construction Operations Decommissioning	Emission reductions achieved through the use of current equipment that complies with Transport Canada's off-road engine emission criteria.
Sulphur dioxide (SO ₂) emissions from diesel fuel use	Construction Operations Decommissioning	Low sulphur fuels will be used in off-road diesel engines; this will reduce the sulphur dioxide emissions from all sources and the resultant off-site air concentrations.
Construction Equipment Noise Limits	Construction Operations Decommissioning	Ensure equipment used for construction and maintenance meet the guideline limits.
Natural Environment		
Adverse effects to ungulates (Moose) and furbearers (Wolves, Bears, Marten) due to the loss of habitat or noise disturbance.	Construction	Minimize the width of the transmission line ROW to the proposed less than 50 m.
	Construction Operations Decommissioning	Utilize existing infrastructure for access and minimize construction of new roads where practical.
	Construction Operations Decommissioning	No hunting by Project personnel will be permitted while working or residing on-site.
	Construction Operations Decommissioning	Enforce speed limits along Project roads.

Issue / Concern / Interaction	Project Phase	Commitment
	Construction Operations Decommissioning	Include wildlife awareness information in regular safety and environmental inductions.
Adverse effects to bats due to loss of habitat or noise disturbance.	Construction	Minimize the width of the transmission line ROW to the proposed 50 m.
	Construction Operations Decommissioning	Enforce speed limits along Project roads and reduce vehicular traffic associated with construction.
Adverse effects to migratory birds and avian Species at Risk due to loss of habitat or noise disturbance.	Construction	Minimize the width of the transmission line ROW to the proposed 50 m.
	Construction	Retain existing low-lying vegetation ground cover along the transmission line ROW thereby minimizing vegetation clearing.
	Construction	Vegetation clearing to take place outside of the migratory bird nesting season (May 1 to August 15). If under unforeseen circumstances minor vegetation removal is necessary between May 1st and August 15th, non-intrusive surveys such as point counts for singing male birds will be completed by qualified individuals. If singing males are recorded then it will be assumed that a nesting female is nearby and proper Provincial and Federal species-specific nest buffers will be established around the singing male; no vegetation removal will occur within these buffers between July 1st and August 15th. A mitigation / management plan will be developed in consultation with Environment Canada and the Ministry of Natural Resources to address potential impacts to breeding birds.
	Construction Operations Decommissioning	Utilize existing infrastructure for access and minimize construction of new roads.
	Construction Operations Decommissioning	No hunting by Project personnel will be permitted while working or residing on-site.
	Construction Operations Decommissioning	Enforce speed limits along Project roads.
	Construction Operations Decommissioning	Include wildlife awareness information in regular safety and environmental inductions.
	Construction Operations	Use marker balls and bird diverters on wires in high-risk areas.

Issue / Concern / Interaction	Project Phase	Commitment
During construction water quality may be impaired due to elevated suspended solids in runoff which can affect aquatic species.	Construction Operations Decommissioning	Erosion control fencing and sedimentation catchments will be installed downstream of active construction areas.
	Construction	Retain existing low ground cover along transmission line ROW thereby minimizing vegetation clearing.
	Construction Operations Decommissioning	Maintain vegetated buffers adjacent to creek and river transmission line crossings.
Construction and operation of the transmission line can result in bird and bat strikes and increase mortality of migratory and non-migratory bird and bat species.	Construction Operations	Use bird and bat, deterrents and deflectors on transmission lines in high use areas (e.g., waterfowl movement corridors).
Attractants (e.g., food waste, oil products) may increase carnivore-human encounters and result in the loss (destruction or relocation) of individual animals. Attractants may also increase predator numbers and thereby increase predation risk on prey species.	Construction Operations	Education and reinforcement of proper waste management practices will be provided to all Project personnel.
	Construction Operations Decommissioning	Prohibit littering.
	Construction Operations Decommissioning	Prohibit feeding of wildlife.
	Construction Operations Decommissioning	Dispose of waste in accordance to a Waste Management Plan which will limit the presence of food attractants.
	Construction Operations Decommissioning	All Project personnel will be provided with environmental awareness training.
	Construction Operations Decommissioning	Presence of wildlife will be monitored and communicated to Project site personnel.
Adverse effects to wetlands.	Construction	Where practical, avoid placement structures in waterbodies along the transmission line ROW, and to the extent practicable, in low-lying areas
Adverse effects to vegetation communities due to activities associated with the maintenance of the transmission line wires and poles (dust production by service vehicles) and the need for periodic clearing of tall woody vegetation to ensure adequate clearance below the conductors.	Construction Operations Decommissioning	Minimize the speed of service vehicles along the transmission line ROW.

Issue / Concern / Interaction	Project Phase	Commitment
Adverse effects to vegetation communities due to activities associated with the removal of the transmission line wires and poles.	Decommissioning	Remove transmission line infrastructure in the winter and minimize disturbance to vegetation during closure activities.
	Construction Operations Decommissioning	Minimize the speed of service vehicles along Project roads and along the transmission line ROW to lessen dust production.
Socio-economic		
Labour Market / Population Demographics– cultural awareness training	Construction Operations Decommissioning	Develop a cultural awareness-training program including with respect to such items as raptors nests, and require employees and contractors to complete the training.
Other Recreational Use – access limitations along transmission line alignment	Construction Operations Decommissioning	Consult with local snowmobile clubs and organizations, as applicable, to minimize potential conflicts with snowmobilers during construction of the transmission line.
Heritage and Culture		
Disturbance to Archaeological sites	Construction	Archaeological assessment at identified areas
Aboriginal		
Trapping – relocation of trapper cabins or buildings along transmission line alignment	Construction	Discuss with the MNRF and the affected trappers about appropriate effects management strategies for the removal of trapper cabins or associated buildings that may be overlap with the selected transmission line alignment.
Plant Harvesting (traditional) – contamination of vegetation from use of chemical agents for vegetation management along transmission line alignment	Construction Operations	No use of chemical agents for vegetation clearing along transmission line right of way; use of mechanical vegetation management only.
Fishing (traditional) – in-water works along transmission line alignment	Construction	In-water works are limited during construction of the transmission line alignment.

11.0 Monitoring

Monitoring during the construction, operations and decommissioning phases of the transmission line will ensure that all of the mitigation measures and commitments proposed in Sections 10 are effective at minimizing the identified potential effects. It will also ensure that the transmission line will be compliant with all regulatory matters, including legislation and project-specific environmental approvals and permits. IAMGOLD will audit its contractors to ensure responsible environmental stewardship on a weekly basis during clearing of the ROW and construction of the transmission line. Contractors and subcontractors will be subject to the findings of the auditing / monitoring program including completion of remedial actions.

Monitoring during the operations phase does not appear to be warranted as potential effects are directly related to potential maintenance of the transmission line. Should maintenance activities be required, monitoring similar to that carried out during construction and decommissioning will be conducted.

Environmental monitoring will include (but will not be limited to) inspection of:

- Effectiveness and implementation of erosion control;
- Equipment to ensure the it is in good working order and maintained;
- Walk around of the equipment before use each day;
- Inspect the ROW to ensure excessive vegetation clearing is not conducted;
- Spill emergency response package easily accessible and contains everything that is required;
- Complaints of noise are recorded and further mitigation measures are implemented;
- There is no work being conducted within the high water line of waterbodies and watercourses;
- A wildlife log is up to date including wildlife sightings and fatalities;
- Construction will be supervised by a qualified archaeologist at identified areas of high archaeological potential; and
- Adherence to speed limits.

The results of the audits conducted by IAMGOLD will be documented and follow-up actions, if any, delineated. Completion of follow-up actions will be confirmed during the subsequent inspection. Inspection frequency will be increased should the magnitude of the infraction(s) require, or if there are a significant number of follow-up actions needed.

In addition to the audits conducted by IAMGOLD, a procedure will be developed for local stakeholders and Indigenous peoples to submit feedback formally regarding the transmission line to address concerns during the construction, operations and decommissioning phases. A response protocol will also be established to ensure that a response to the formal complaint is provided.

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Appendix A

Consultation Documentation

- Appendix A-1 Advertisements for Open Houses**
- Appendix A-2 Open House Presentation (Transmission Line Only)**
- Appendix A-3 Posters Presented at Open Houses**
- Appendix A-4 Summary of Comments from the May / June 2018
Open Houses with Mattagami First Nation, Flying Post
First Nation, Gogama, Sudbury and Timmins**
- Appendix A-5 Notice of Commencement**
- Appendix A-6 Government Agency Notification**
- Appendix A-7 Land Use Letter of Commencement**
- Appendix A-8 Request for Guidance on Engagement**
- Appendix A-9 Summary of Transmission Line Comments**
- Appendix A-10 Permitting Consultation Updates Meetings**

Appendix A-1

Advertisements for Open Houses

Lively’s Duhamel leads the way

Accent: She and partner Eric Radford vault Canada into top spot at the Olympic team skating event

DAN BARNES
POSTMEDIA NETWORK

GANGNEUNG — Meagan Duhamel loves it when a plan comes together.

The plucky Canadian teamed with partner Eric Radford for a solid, second-place finish in the pairs short program on Friday afternoon, but picked up enough placement points to vault Canada into top spot after the first day of Olympic team event action.

“Yaaaaayy, that was the plan,” she said.

Duhamel and Radford were good for nine placement points, Patrick Chan chipped in eight for a third-place finish in the men’s short program earlier on Friday and Canada leads the 10-nation race with 17 points.

The USA is in second with 14, followed by Japan and a squad of Olympic Athletes from Russia with 13 each.

Women and dance teams skate their short programs Sunday, the field is then cut to five teams, and medals are awarded after the four long program performances.

“That was a good skate,” Duhamel said of the program that fetched 76.57 points, second only to Evgenia Tarasova and Vladimir Morozov, Olympic Athletes from Russia, who rode a brilliant, flawless program to 80.92.

“Anything between 75 and 80 is a really high score for us, so we’re happy with that,” said Duhamel. “In particular, all the pair elements



AFP PHOTO / MLADEN ANTONOVMLADEN ANTONOV/AFP/GETTY IMAGES

Canada’s Meagan Duhamel (centre) and Canada’s Eric Radford (second right) react after competing in the figure skating team event pair skating short program during the Pyeongchang 2018 Winter Olympic Games at the Gangneung Ice Arena in Gangneung on February 9, 2018.

I think were very good; our twist, our throw, our death spiral, the lift, all the pair stuff, and we’ll look forward to a cleaner jump.”

Chan needs to clean up his act, too. He took two falls and managed just 81.66 points, but those hard landings were softened by a spotty overall performance from the men, who flipped and flopped all over the ice.

“You would think at the Olympics everybody is firing and ready and calm and confident. Sometimes you just can’t plan these sort of days,” said Chan, who figured the morning start time of the competition affected everybody negatively.

Japan’s Shoma Uno fell once but landed a quad-triple toe combo

and took top spot with 103.25 points. Israel’s Alexei Bychenko was a surprising second after skating clean. Nathan Chen of the U.S. was fourth, again after an imperfect skate. He landed a quad-triple toe combo but popped another quad, fell on a triple Axel and finished with 80.61 points.

And Olympic Athlete from Russia Mikhail Kolyada was the worst of the top flight though, falling on both quad attempts and popping a triple Axel into a brutal single. He managed just 74.36 points and fell in behind Korean and Chinese skaters from the first flight.

Chan fell on an attempted quad toe off the top of the program and

had to abandon the triple toe on the back half of the combination. It got worse. He landed a triple Lutz but popped a double toe in combination, then fell on a triple Axel as he lurched toward the end of the program.

“I just used the upper body way too much in all the jumps,” he said. “I felt pretty good actually today cardiovascularly. I felt really trained, in shape. All the spins were still good quality, fast, footwork was clean. I think that’s where the training shows, being able to pick yourself up, regaining the momentum and still managing to keep the quality on the other elements, other than the jumps.”

He got off the ice and was met by a wall of Canadian smiling faces, the beauty of the team event on full display.

“Yes, normally if it was just me by myself I would start analyzing it and being disappointed in the skate. But they were all so supportive. No need to apologize to them or anything. I think that’s the greatness of the team event. We always have to remember this isn’t about me, this is about all of us. Each discipline can support each other, even if some of us have mistakes or bad days.”

Duhamel and Radford talked about that team togetherness as well. In fact, they told one another not to look at their rather effusive teammate Scott Moir during the performance.

“We told each other, ignore Scott in that kiss and cry while we’re skating because I imagined that he was going to be crazy,” said Duhamel.

They would be right. This team is crazy for one another, having spent so much time together.

“We’re a strongly connected team,” said Radford. “There is just a great energy building around the entire team. I think it’s because we just come through our careers together. I lived with Scott over a summer when he was just a little annoying 10-year-old boy. He was like the annoying little brother. We’ve known each other so long and it’s this incredible story that we’ve been through and it’s sort of coming to its conclusion and we want to make it the best possible.”

That would involve a gold medal, and Canada’s best bet for top spot on the podium is most certainly in this event. They were second to the Russians in Sochi four years ago with many of these same skaters on the squad.

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Wants to be part of team that wins Olympic medal

ACCENT from A1

But there’s a caveat. Somebody, anybody on the Canadian men’s cross-country ski team has to win a medal at the Pyeongchang Olympics. Because Kershaw won’t see another Games, and he walks away happily with 15 World Cup medals and a 2011 World Championship team sprint title, but there’s a hole in the Canadian men’s trophy case.

“I’ve been saying this for years; this is why I’m still skiing. I want to be a part of a team on which a man could get a medal at the Olympic Games in cross-country skiing, because we accomplished all those other goals. Yes I want it to be me, of course. But maybe my best chances were in 2010 and 2014. You never know.

“If it’s Alex who gets that medal or Len or someone else, I will be in tears. Because it has meant a lot to me and I have always believed, through my entire senior career that Canada could be good and could accomplish it. So I really hope that’s the way my Olympic career ends, with a Canadian standing on the podium.”

Alex Harvey and Len Valjas would like nothing better. Their era is ending too. But nobody knows it better than Kershaw. It’s time for him to finish that university education and find a real job. His wife, Kristin Stormer Steira, understands the game, having skied for Norway. So he feels supported.

But enough is enough, and he wants to finish the job he started in the early 2000s, when the Canadian team wasn’t nearly as good or deep as it is today. Nobody cracked the top 30 back then.

“We believed we could be good but we had no mentors, and we had no reason to believe it. Pierre Harvey had the last World Cup podium in 1988. Pierre Harvey was just a name. I didn’t know who he was at all.”

Kershaw worked hard and turned talent into results. He made his first World Cup podium in 2006 and quickly became the team leader. By the time Valjas and Pierre’s son Alex came along, there was reason to believe.

“It wasn’t some farfetched dream, it was something tangible. When Alex joined the World Cup team, I had been on the podium multiple times. So you come onto the circuit with a little more swagger than when I came on the circuit with shoulders hunched, feeling small. Alex came in with shoulders high, knowing Canadians can compete on the world stage.

“So in that way, I think our generation paved the trail for Alex.”

With hard work, discipline and unmatched talent, Harvey took it to another level. He happily credits his forerunners.

“I think it was more mental, just having the confidence, knowing it was possible even as a Canadian to medal on the World Cup. That breaks the mental barrier. That’s everything in high performance sport. A lot of it comes down to confidence and training with a purpose. It was kind of like a glass ceiling that was broken early in my career. That was really helpful for sure.

“And it was really good for me as a young skier to get to train with Devon and see how professional and how strong he was and he still is. He’s able to beat me in training a lot still.”

But on race day, Harvey shines brightest, while Kershaw has had a tough World Cup campaign. In fact, the entire quadrennial was a grind. Small injuries, major illnesses, the odd top-10 and just one relay podium. But he hung in because he needed to get to Pyeongchang.

“I still believe on a good day, if I’m in shape, I can be top 10, and that’s

my big goal. In our sport, if you’re top 10, chances are you’re within striking distance of the podium, and at that point it’s all positioning and where you are in the last 500 metres.”

Nobody knows that better than Kershaw. He was on the wrong side of the coin flip in the closest 50-kilometre classic race in history at the Vancouver Olympics. The top five men were separated by 1.6 seconds, after more than two hours of skiing.

“One hundred per cent that haunts me. I was like 99.9999 per cent good enough. I got beat by four men that were better on that day, but just barely, and that breaks my heart.

“But no one said sport was going to be ice cream cones, rainbows and puppies. It is one, two, three and who cares in some ways, right.”

His next and last chance at a 50-km classic comes in Pyeongchang.

“Since Vancouver, this has been circled in my mind, that the 2018 Olympics was going to be my next chance to race a 50-km classic. There will be a lot of emotions for me in that competition.”

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POSTMEDIA FILE PHOTO

Devon Kershaw speeds to first place in Open Men 15-km medium interval classic on Tuesday, March 21, 2017.

You’re Invited...

To come out to one of our community events to learn more about the Côté Gold Project

IAMGOLD Corporation is hosting community open houses to share information about the Côté Gold Project, a proposed open pit gold mine, located 20 kilometres southwest of Gogama, Ontario. Since the last community open houses on the Project, IAMGOLD received approvals from the Canadian Environmental Assessment Agency in April 2016 and the Ministry of the Environment and Climate Change in January 2017.

IAMGOLD considered the valuable feedback provided on the Project to date and has worked to optimize the Project design to reduce potential effects on the environment and local communities.

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3:00 to 7:00 pm

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BUSINESS

MARKETS Yesterday's close, 4 p.m.

S&P/TSX Down 31.08 15,034.53	Dow Up 330.44 24,190.90	NASDAQ Up 97.33 6,874.49	Nikkei Down 508.24 21,382.62	Oil Down \$1.93 \$59.22	Gold Down \$1.80 \$1,317.20	British£ Down 1.65¢ \$1.7408 CDN	Euro Up 0.02¢ \$1.5431 CDN	Dollar Up 0.089¢ 79.429¢US	Bitcoin Up \$285.00 \$8,610 US
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RRSP tips and tricks as deadline looms

JAMIE GOLOMBEK
FINANCIAL POST

There are just three weeks left of “RRSP season,” meaning that if you want to be eligible to claim a deduction on your 2017 tax return, you need to make your contribution by the March 1 midnight deadline.

To give you that extra motivation to contribute, here's a few lesser-known tips and tricks that you may wish to consider.

Should I even bother with RRSPs?

In a previous column, I make the case that unless you are in the lowest tax bracket (roughly income under \$45,000, depending on your province of residence), then you probably should be saving for retirement using an RRSP. If your tax rate is the same in the year of contribution that it is in the year of withdrawal, an RRSP effectively provides a completely tax-free rate of return on your net contribution. And, if your tax rate is lower in the year of withdrawal, you'll get an even better after-tax rate of return on your RRSP investment. Even if your tax rate is higher in the year of withdrawal, you are still likely better off with an RRSP than non-registered investments due to the long-term compounding that is effectively tax-free.

On the other hand, for those currently in the lowest tax bracket, your tax bracket could only remain the same or be higher in retirement, making a TFSA the better choice than an RRSP, especially if you will face an income-test claw-back (repayment) of tax credits or



GETTY IMAGES

If you want to be eligible to claim a deduction on your 2017 tax return, you need to make your contribution by March 1 at midnight.

government benefits.

Of course, the numbers don't always tell the full story since TFSAs are much more flexible than RRSPs. TFSA withdrawals can be re-contributed in a future year, while RRSP withdrawals cannot, without using additional RRSP contribution room.

Are spousal RRSPs still relevant given we can pension split via a RRIF?

If you're married or living common-law, you may want to consider making this year's RRSP contribution to a spousal RRSP. That is, an RRSP that belongs to your spouse but to which you contribute.

My view is that if you predict that, upon retirement, you will have

either a higher projected retirement income than your spouse or partner or you will have accumulated more retirement assets, it may be more beneficial to contribute to a spousal RRSP than an RRSP in your own name. Here's why.

A spousal RRSP strategy is often used to accomplish post-retirement income splitting since withdrawn funds are generally taxable in the hands of the RRSP owner instead of in the hands of the contributor spouse. If the owner spouse is in a lower tax bracket than the contributor spouse in the year of withdrawal, there may be an absolute and permanent tax savings.

But, even without a spousal

RRSP, you have the option of splitting pension income, which is defined to include RRIF withdrawals after age 65, with your spouse or partner. So, why bother with a spousal RRSP?

For two reasons: first of all, spousal RRSPs allow an individual to split more than 50 per cent of your pension income. With a spousal RRSP, one could theoretically “split” up to 100 per cent of RRSP or RRIF income with a lower-income spouse as all the withdrawals would generally be taxed in the hands of the withdrawing spouse.

Secondly, if an individual is under 65, you can't income split RRIF withdrawals. On the other hand, if you had a spousal RRSP, the owner spouse can generally withdraw the funds prior to age 65 and have such withdrawals taxed in the hands of that lower-income spouse.

I've heard I can use my RRSP to help me buy a home, including even holding my own mortgage! But, does it make sense?

Maybe. You may have heard someone say that they used their RRSP to buy their home. While an RRSP can't actually own real estate, there are two other ways it can be used to facilitate home ownership.

The first is the Home Buyers' Plan (HBP) which allows you to withdraw up to \$25,000 tax-free from your RRSP. Your spouse (or partner) may also be able to withdraw \$25,000, for a combined total of \$50,000 per couple. You generally won't qualify for an HBP

withdrawal if either you or your spouse has owned a home in the past five years and occupied it as a principal residence. Amounts withdrawn under the HBP must be repaid over a maximum of 15 years or the amount not repaid in a year is added to your income for that year.

But beyond the HBP is the possibility of using your RRSP to obtain what's known as a “non-arm's length mortgage,” which must be administered by an approved lender under the National Housing Act. The interest rate and other terms and conditions must reflect normal commercial practices and you must purchase private or CMHC mortgage insurance.

The advantage of investing in a mortgage through your RRSP is that you are making principal and interest payments regularly to yourself instead of to a third-party lender. But this should be weighed against the costs and risks involved.

In addition to the typical one-time mortgage expenses, such as set up costs and legal fees, most approved lenders charge a mortgage administration fee each year. But by far the biggest upfront cost is the mortgage-insurance premium, which can typically range from 0.6 per cent to 4.5 per cent of the amount of the mortgage.

Keep in mind that if you use your RRSP to invest in your own mortgage, your repayments are restricted under the terms of the mortgage, including being liable for early pre-payment penalties.

Be sure to seek financial advice before walking down this route. *Jamie.Golombek@CIBC.Com*

Canada's volatile jobs survey posts biggest monthly drop since 2009

ANDY BLATCHFORD
THE CANADIAN PRESS

OTTAWA — The vigour that carried the Canadian labour market on its impressive run in 2017 hit a speed bump to start this year with its largest one-month job drop in nine years.

The economy lost 88,000 positions — all of them part time — in January for its biggest employment decline in a single month since 2009, Statistics Canada's latest jobs survey revealed Friday.

The dip helped push the national unemployment rate up to 5.9 per cent, from a revised 5.8 per cent the previous month.

The decrease was driven by the loss of 137,000 part-time positions, including more than 59,000 in Ontario. It was the biggest one-month collapse in part-time work since the agency started gathering the data in 1976.

For Ontario, some experts raised the possibility of a link between the provincial drop and the introduction last month of a controversial minimum-wage hike.

To partially offset the declines, Statistics Canada said the economy added 49,000 full-time positions last month. The survey also detected stronger wage growth in January of 3.3 per cent, which also led some to point out possible connections to Ontario.

However, several experts made sure to note that before trying to draw conclusions from the January report, one should consider the well-known month-to-month volatility in the jobs figures.

“The Canadian economy experienced a very large setback in January ... but it also needs to be kept in perspective — we had outstandingly strong job growth over the course of last year,” Craig Alexander, chief economist for the Conference Board of Canada, said in an interview.

“Quite frankly, we were overdue for a bad number.”

Despite Canada's healthy economic performance last year, Alexander said the surprising pace of job creation had been stronger than the other data. He said the losses reported Friday brought

the monthly jobs average more in line with the other economic numbers.

“I don't think that the January number is the start of a whole series of declines — I think it's more of a reflection of the fact that we were tracking abnormally strong numbers behind us,” Alexander said.

When it comes to the Bank of Canada's possible reaction to the January report, Alexander noted the “bad number” could delay the timing of governor Stephen Poloz's next rate hike. Poloz has repeatedly said future rate decisions will be highly data dependent.

Others didn't expect the January report, on its own, to have a significant impact on the outcome of the Bank of Canada's next rate announcement.

CIBC chief economist Avery Shenfeld said he thought it probably leaves Poloz right where he

was before the survey results came out.

“This is a mixed bag for the Bank of Canada because we did see a significant rise in wage inflation ... which might counter the disappointment on the headline jobs count,” Shenfeld said.

Even with the decline, Canada has had a strong run of job creation that's generated 414,100 full-time jobs over a 12-month period. The growth represents an increase of 2.8 per cent.

Over that same period, the number of part-time positions fell by 125,400 for a contraction of 3.5 per cent.

A closer look at the January data showed the number of paid employee positions also experienced a significant loss last month by shedding 112,000 positions.

By comparison, the number of people who identified as self-



RYAN REMIORZ/THE CANADIAN PRESS

The number of jobs in Canada fell by 88,000 in January to give the labour market its steepest one-month drop in nine years, Statistics Canada said Friday. People wait for the Service Canada centre to open in Montreal.

employed workers — often seen as a less desirable category that includes unpaid work in a family business — increased last month by 23,900.

The wage improvements in January arrived the same month that saw Ontario take the controversial step of raising its minimum wage. The report also said Ontario shed 50,900 jobs last month — with

all of the net losses in part-time work.

Most analysts cautiously highlighted the potential connection. They'll scrutinize incoming data over the next few months to get a better sense of the kind of impact Ontario's minimum-wage increase could have on the provincial job market.

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Accent: City group impressed

ACCENT from A1

Bigger, who visited the Outokumpu ferrochrome production facility in Tornio, Finland with Ward 6 Coun. Rene Lapierre, Chief Ted Roque of the Wahnapiitae First Nation, as well as several city hall staffers, said following their trans-Atlantic trip that he is convinced Sudbury should be home to Noront's ferrochrome smelter. The Outokumpu plant uses the same closed furnace technology that Noront is proposing.

"We wanted to ensure we had the strongest bid possible, and that comes from the best understanding of the technology that Noront Resources has identified," Bigger said. "The second reason we went was to ensure that we're doing the right thing in welcoming a ferrochrome plant to our community."

As Bigger pointed out, Finland has some of the strictest environmental regulations in the European Union.

Lapierre travelled with the group in his role as chair of the board of health. He spoke with several people in Finland and said the moonscapes that defined Sudbury for much of the 20th century are unlikely to be replicated. He has no concerns about the smelter or its impacts to the local environment.

"Based on the information we were able to gather with my discussion with health officials and the director of health and social services for Tornio, I feel the risks associated with the style of smelter used in Outokumpu is very low, therefore would not be of concern to our residents," he said. "Outokumpu has been doing annual and some biannual environmental assessments. They test water, aquatic life, plants, animals, some grubs and more to see if there are any changes to the surroundings of the smelter. ... They have not had any environmental changes to these due to the smelting process."

The group spoke with dozens of stakeholders in Tornio and the process is safe, Lapierre added.

"From the discussion with local officials and staff and environmental experts at Outokumpu the system they use is very safe," he noted. "Not only is it safe for the environment, but for the workers who are part of the processing the risks for danger are low. Where there are any inclinations of higher risk the company is a large advocate of employee safety and all the proper personal protective equipment is issued to mitigate the risks."

While there have been concerns about the safety of hexavalent chromium, Bigger said chromium-6 is not part of the processing in the Outokumpu smelter.

"Chromium-6 is not produced by the process," Bigger said. "(Noront's) processes do not create any hazardous materials out of that process. That's why it is the best technology in the world and that's why we feel comfortable welcoming this plant into our community."

Bigger said the trip cost taxpayers \$15,000-20,000. But it was money well spent.

"I have no concerns," he said. "That's the level of confidence I wanted to come back with, with the entire team. We asked questions of all of the people we met, looking for any concerns whatsoever on their part. We found none. On my part, I have full confidence in welcoming a ferrochrome facility into our community. I think it'll go well with our plans to diversify our economy and attract investment to create jobs. It fits in with the long-term strategy of growing our community."

The city filed its bid Friday for the \$1 billion facility that would process ore from the mineral-rich Ring of Fire area in northwestern Ontario. So far, deposits of chromite, nickel-copper-platinum-palladium and copper-zinc have been found in the area. Noront Resources is a Toronto-based mining company and has the largest land position in the Ring of Fire; on their website, the company says it has acquired more than 80 per cent of all claims in the district. It has ownership or a controlling interest in all the major discoveries to date in the region.

Three other cities, including Sault Ste. Marie, Timmins and Thunder Bay, are also in the running for the smelter. The construction of the ferrochrome production facility is proposed to begin within the next five to 10 years. It would create about 350 permanent and about 150 indirect jobs within the community, and would be located in Coniston.



SUPPLIED BY OUTOKUMPU

The arc furnace at the Outokumpu ferrochrome plant in Tornio, Finland.

"The ferrochrome facility would cost about \$1 billion and take three years to build. The plant would provide approximately 1,200 jobs during construction and about 350 full-time jobs for operation," Stan Sudol, who manages the Republic of Mining website (republicofmining.com) and works as a communications consultant for the mining industry, told The Star. "And don't forget those 350 direct jobs would probably result in an additional 500 to 700 service support jobs in the community's world-class mining supply and service sector."

The ferrochrome smelter in Tornio has birthed an entire ecosystem of mining supply companies, Bigger said, and the spinoff benefits in Sudbury could be equally significant.

"The ferrochrome furnace will also complement and build on the smelting/refining and metallurgical expertise that already exists in Sudbury with the Vale nickel smelter and refinery, and the Glencore nickel smelter," Sudol noted. "I might add there is no other region in Canada that boasts the concentration or cluster of mines, mills, smelters and one refinery. It is something that is rather unique and we should be rightly proud of as our poly-metallic mines – nickel, copper, cobalt, platinum group metals and others – will play a vital role in supplying the key metals companies like Tesla, Ford and GM need to build the electric vehicles of the future."

If Sudbury wins the lottery, the smelter could prompt new mining supply companies, which could solidify the Nickel City's reputation as an expert in all things mining.

"The economic impact is extremely large," Lapierre said. "One company who builds and designs various steel drill bits for mining, as well as other steel tools for the smelting process, has sales of more than \$60 million and that was only one of the companies we visited."

Sudol said the production facility could actually undo some of the population decline the Nickel City has experienced in recent years.

"The economic growth that would accompany the ferrochrome

plant would help stem the continuing population decline in the Sudbury region and provide many well-paying jobs for younger workers who would like to stay in the community and raise their families," he noted.

"Let's remember the two smelters – Vale's Copper Cliff and Glencore's Falconbridge, which were built in the 1930s – and the Vale refinery, built in 1973, have provided middle-class jobs for many, many generations of Sudburians. This facility would also provide long-term, multi-generational prosperity for the community."

Bigger said Sudbury's bid could be the strongest of the four. While Thunder Bay is closer to the Ring of Fire – the deposits are just 500 km northeast of the city in the James Bay lowlands region – it is not a mining community.

"I don't believe we have any significant weaknesses; we have a very strong proposal," Bigger noted.

Sudol said none of the other cities vying for the smelter have easy access to the railway and only one has any history with mining.

"Unfortunately, Thunder Bay doesn't have a direct class one rail link due to the fact that the Kinghorn rail line between that city and Longlac (275 km) – which is close to where the chromite ore will be loaded onto rail – has been dismantled. And that community doesn't have a history of mineral processing like both Sudbury and Timmins," Sudol pointed out. "Timmins, like Sudbury, has a long history of mineral processing; however, it is also not serviced by a class one rail link and is unfortunately too far north. Why add the additional distance when Sudbury is a few hundred kilometres closer to your main markets in the USA? While the Sault Ste. Marie location on the Great Lakes is a definite plus, the community is also not connected by a class one rail line, doesn't have the historical mining expertise that we have in Sudbury and shockingly has a small but vocal group of individuals who are questioning whether the facility would be a good fit for the community on environmental issues."

Sudol believes Sudbury is the right choice for the ferrochrome smelter.

"The facility in Finland does not have a detrimental effect on their local environment or workers. It will be the same in Sudbury," he said. "Sudbury is serviced by two class one rail lines, has a number of brownfield sites that can be used to construct and expand the facility and has no issues with power availability."

"With strategic clusters of mine supply and services, mining education – two colleges and a university – and a wide assortment of underground, metallurgical, environmental, and health and safety research in the community, Noront can take advantage of more than 135 years of mining expertise that is unmatched anywhere else in Northern Ontario or the entire country for that matter."

"And generations of Sudburians understand and are welcoming to the mining and refining sector. In my somewhat subjective opinion – I was born and raised in Sudbury – there are no weaknesses. Let's also remember that Sudbury was Cliffs original choice due to its central rail location, ease of access to power, and mining and metallurgical expertise bar none"

A ferrochrome smelter ultimately prepares and transforms chromite ore deposits into ferrochrome, the product used to create stainless steel products.

Ferrochrome is created with iron, chrome and oxygen. The high-grade chromite ore taken from the Ring of Fire area is ground and put through an arc furnace that requires high levels of energy to melt the ore and add carbon to separate the oxygen from the iron and chrome. The completed iron and chrome product is called ferrochrome.

The ferrochrome would be exported to industrial regions in the northeast United States, such as Ohio and Pennsylvania, to make stainless steel. Currently, companies get their ferrochrome from Africa and Asia.

"The ferrochrome product would initially be used in the American stainless steel market to displace higher-cost ferrochrome imported

from South Africa. But there is a huge, huge potential of doubling the size of the facility and direct and indirect jobs when the market warrants with sales to Europe and Asia," Sudol said. "The other attractiveness of a Sudbury/Northern Ontario location is security of supply for this strategic material. Ferrochrome is a critical material for stainless steel production and a host of other uses, including military products."

"The current primary sources of this material – South Africa and Kazakhstan – are not the most politically stable jurisdictions. Stainless steel manufacturers in the United States would probably be overjoyed to be able to secure competitively priced strategic ferrochrome from a politically stable economic partner like Canada."

As Bigger pointed out, there are several advantages to hosting the smelter. In addition to the increased tax base from the smelter and any spinoff businesses that pop up, the slag from processing – which is benign – could be used on the city's roads.

"The slag is used as an engineered aggregate for road construction," he said. "That could be a significant opportunity in Sudbury in road construction. The roads are excellent and the engineered aggregates they make from the slag are benign, so it's safe for the environment. The slag is part of their secret to these roads. They're 100 km south of the Arctic Circle, so they have freeze-thaws and the cold weather like we have."

Since Sudbury would be adopting the same processes as the Outokumpu plant, adding ferrochrome slag to our roadways is "absolutely" something Sudbury could do, Bigger said.

There seems to be significant public support for the arc furnace. The Greater Sudbury Development Corporation engaged Oraclepoll Research to undertake a survey of residents to assess support for the construction of the smelter. A 77 per cent majority of those surveyed support the facility.

"The Greater Sudbury Development Corporation understands that this facility is a 'once-in-a-generation' opportunity for our city," board chair Wendy Watson said Thursday. "We were happy to support the work of economic development staff as they short-listed potential sites and undertook specific analyses to bolster the business case for a Greater Sudbury location."

Noront Resources has said it is committed to environmental sustainability and will conduct a comprehensive environmental assessment on the selected site.

"Simply by being recognized as the preferred location for a plant for all of the reasons that are strong and compelling – the skilled and talented workforce, support businesses and mining service and supply companies, the availability of land, transportation networks and electricity ... it would be significant to Sudbury to be identified as that location," Bigger said. "It builds off our skills and talent base, but it also is diversifying into other spinoff businesses."

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WORLD BRIEFS

Inmate faces charge for killing cellmate

MARIANA, Fla. — Florida authorities say an inmate who killed his cellmate last month while awaiting trial for killing another cellmate in 2015 is now in solitary confinement. The News Herald reports 21-year-old Frederick Patterson III said he killed his 82-year-old cellmate Arthur Williams on Jan. 15, and told correctional officers that “there’s one less child molester on the streets.” Patterson, a convicted burglar, was sentenced Thursday to life in prison for killing 45-year-old Scott Collinsworth, a convicted robber, in the Apalachee Correctional Institution. Patterson now faces a first-degree murder charge. Williams, who allegedly tried to lure a nine-year-old boy into his car, had been ruled incompetent 10 days earlier and was being held in the Jackson County Correctional Facility awaiting transfer to a mental facility.

Greece rejects Turkey extradition request

ATHENS, Greece — A Greek court on Friday rejected an extradition request for the first of nine suspected left-wing militants from Turkey who were arrested in November, a few days before a visit to Athens by Turkish President Recep Tayyip Erdogan. The court accepted the recommendation by prosecutor Efstathia Kapagianni that Mehmet Dogan, a 60-year-old Turkish citizen of Kurdish origin, should not be extradited as he had already been granted refugee status in France and was at risk of torture or inhumane treatment if he were returned to Turkey. The nine suspects were arrested for alleged links to the Revolutionary People’s Liberation Party-Front, which Turkey, the U.S. and the European Union have deemed a terrorist organization. The arrests took place about a week before Erdogan’s visit to Greece in early December. They were charged with terrorism-related offences, forgery, arms and explosives possession and resisting arrest. All denied the charges.

Russian astronauts work to upgrade antenna

CAPE CANAVERAL, Fla. — Russian astronauts are taking a spacewalk to upgrade an antenna at the International Space Station. Commander Alexander Misurkin and Anton Shkaplerov floated outside Friday. Their job is to replace an old electronics box for the main antenna on the Russian side of the space station. Original to the outpost, these parts have been up there since 2000. The new electronics box will improve communications with Moscow Mission Control. It’s the second spacewalk in as many weeks. On Jan. 23, two U.S. astronauts went out to give a new hand to the station’s big robotic arm. NASA had planned another spacewalk this week, but bumped it to mid-February because engineers needed extra time to get the mechanical hand working.

France helicopter crash leaves 5 dead

PARIS — Two French military training helicopters collided and crashed Friday in a wooded area of Provence, killing five people aboard, police said. Officials said the crash occurred between the small towns of Cabasse and Carces, in the picturesque Var region. Police cordoned off roads around the crash site, and some three dozen police and military officials were dispatched to the scene, according to a local gendarme. The gendarme said three people aboard one helicopter were killed and two people on the other. Officials gave conflicting information about how many people were aboard altogether and whether anyone had survived the crash. Debris was scattered across two large zones, but the area is uninhabited and no one on the ground was hurt, said the gendarme, who wasn’t authorized to be publicly identified. A spokeswoman for the French army said the helicopters came from the army’s light aviation school based in nearby Le-Cannet-des-Maures. The school includes a special joint training program with German military pilots, and its pilots are sometimes used for firefighting operations in the area. *The Associated Press*

Shooting an accident

Girl arrested after gun goes off at school, wounding 2 of her fellow students

AMANDA LEE MYERS
THE ASSOCIATED PRESS

LOS ANGELES — Jordan Valenzuela was in class when he heard the bang, and then the screaming.

In a classroom next door, a 15-year-old boy had been shot in the head, a 15-year-old girl was shot in the wrist and several others were struck by broken glass.

Jordan says that his 12-year-old classmate at Salvador B. Castro Middle School told him it was an accident.

The sobbing girl told him: “I didn’t mean to. I had the gun in my backpack and I didn’t know it was loaded and my backpack fell and the gun went off,” the seventh-grader said.

The shooting was reported just before 9 a.m. at the school, which has about 365 students in grades 6-8.

The girl was taken into custody minutes after the shooting.

TV video from helicopters showed a dark-haired girl in a sweatshirt being led from the school in handcuffs as anxious parents and family members gathered on a street corner, many crying and talking on their phones as they waited.

Police interviewed the girl and agreed it was an accident. On Thursday evening, long hours after chaos and panic had subsided, the girl was booked into Juvenile Hall on suspicion of negligently discharging a firearm on school grounds.

Five people were injured in the shooting. The most seriously hurt was a 15-year-old boy who was shot in the head but doctors said the bullet didn’t hit anything vital or life-threatening.

“This child was extremely lucky,”



DAMIAN DOVARGANES/THE ASSOCIATED PRESS
People pick up students after a shooting at the Salvador B. Castro Middle School near downtown Los Angeles, Calif., on Thursday. A 15-year-old boy was shot in the head and a 15-year old girl was shot in the wrist.

said Dr. Aaron Strumwasser at Los Angeles County-USC Medical Center. “I think he will do fine ... I anticipate he’ll make a full recovery.”

A 15-year-old girl was shot in the wrist but Strumwasser said the injury was minor.

Three other people had minor face or head injuries, some from broken glass, but weren’t shot, officials said.

An 11-year-old boy and a 12-year-old girl were treated at the hospital and released while a 30-year-old woman who is a school staff member had only minor injuries, Los Angeles city police said in a statement.

Shallin Lopez, a seventh-grader, was in the room at the time of the shooting. She said she never saw a gun.

“I just saw something pop,” she said. “It was loud. I didn’t see her shoot.”

Jordan Valenzuela, the 12-year-

old student who was next door, said by telephone that after her heard the gunshot and screaming, children in the other classroom started banging on the door connecting the two rooms.

He and some other children opened it and began trying to help the victims. Jordan said he noticed his friend sitting at her desk with her hands covering her face.

Jordan said later, the girl asked him to hide the backpack with the gun in it.

“I said ‘No,’ ” he said. “Then I moved away from her because I was a little bit scared.” But, he said, “she doesn’t do bad things, she just stays quiet.”

The shooting left parents shaken.

Claudia Anzueto, Jordan Valenzuela’s mother, said the boy was crying when he called her from a borrowed cellphone to tell her he was OK.

“Not safe, very insecure,”

Anzueto said of the school. “I fear for my son’s life. You know what I mean, you really hear about things like this in the news, and just to hear that something like that happened so close to home, it scared the life out of me.”

Most weapons “that our young people get their hands on” come from their homes or those of other family members, Los Angeles School Police Department Chief Steve Zipperman said.

It wasn’t immediately clear how she managed to bring it into class, he said.

The district has a policy requiring every middle and high-school campus to conduct daily random searches by metal-detector wands at different hours of the school day for students in the sixth grade and up.

Student Melanie Valencia, 13, said the school did a random security search Thursday, but that she has never been checked.

Turkish airstrikes kill 2 in Syria

ANKARA, Turkey — A barrage of rockets fired at two Turkish border villages from a Kurdish enclave in Syria killed two people and wounded 19 others Friday, Turkish officials said, as fighting raged on the Syrian side of the border, officials and opposition activists said.

The Hatay provincial governor’s office issued a statement saying at least six rockets targeted the town of Reyhanli damaging a home, a workplace and a road close to the marketplace. Eighteen people were wounded, including two who later died in a hospital. Three more rockets hit the town of Kilis, northeast of Reyhanli, where at least three people were wounded, said Gov. Mehmet Tekinarslan.

Turkey launched a cross-border offensive into Afrin on Jan. 20 to

rout the Syrian Kurdish militia group it says is linked to insurgents fighting inside Turkey.

Friday’s deaths raised to six the death toll from rocket attacks on the two towns since then. The victims include a teenage girl and two Syrian refugees.

On the Syrian side of the border, intense fighting broke out near Afrin as Turkish troops and Turkey-backed opposition fighter tried to advance further in the Kurdish enclave.

The Britain-based Syrian Observatory for Human Rights said the fighting is concentrated in the village of Billeh, adding that Turkish warplanes are conducting airstrikes in the region. The group also reported that Kurdish fighters struck a vehicle inflicting casualties among Turkey-backed



ABDULMONAM EAASSA/GETTY IMAGES
Syrian flee their homes following an airstrike in the rebel-held besieged town of Arbin, in the eastern Ghouta region on the outskirts of the capital Damascus on February.

fighters.

The Observatory said that since the offensive against Afrin began, Turkish troops and their allies have captured 15 villages and 68 civilians, including 21 children, have been killed since.

Mustafa Bali, spokesman for the Kurdish-led Syrian Democratic Forces, said Turkish troops also shelled the town of Jandrees and nearby areas.

To the east, Syrian troops and their allies captured the village of

Tel Alloush, bringing them closer to the rebel stronghold of Saraqeb, according to the Observatory and the government-controlled Syrian Central Military Media (SCMM).

The SCMM said Syrian troops and their allies are now 13 km from a rebel-held part of the highway that links the capital Damascus with the northern city of Aleppo, the country’s largest and once commercial centre. The highway passes through Saraqeb.

The Associated Press

You’re Invited...

To come out to one of our community events to learn more about the Coté Gold Project

IAMGOLD Corporation is hosting community open houses to share information about the Côté Gold Project, a proposed open pit gold mine, located 20 kilometres southwest of Gogama, Ontario. Since the last community open houses on the Project, IAMGOLD received approvals from the Canadian Environmental Assessment Agency in April 2016 and the Ministry of the Environment and Climate Change in January 2017.

IAMGOLD considered the valuable feedback provided on the Project to date and has worked to optimize the Project design to reduce potential effects on the environment and local communities.

We invite you to come and hear about the improvements to the Project and learn about the planned timeline for development.

To ask questions or provide comments about the Côté Gold Project please contact:

Dave Brown
Manager of Environment, Côté Gold Project
cotegold@iamgold.com

Steve Woolfenden
Director, Environment
cotegold@iamgold.com

IAMGOLD Corporation - Côté Gold Project

3 Mesomikenda Lake Rd | P.O. Box 100 | Gogama, ON P0M 1W0 | cotegold@iamgold.com

IAMGOLD
CORPORATION

PLEASE DROP BY ONE OF OUR COMMUNITY OPEN HOUSES:

Timmins – Tuesday, February 13
3:00 to 7:00 pm

McIntyre Arena Auditorium
85 McIntyre Road (Schumacher)

Gogama – Wednesday, February 14
3:00 to 7:00 pm

Gogama Community Centre
Highway 661

Sudbury – Thursday, February 15
3:00 to 7:00 pm

Holiday Inn
1696 Regent St

Money may be tight, economist warns new government

COURTING FORD from A1

The mayor said such meetings usually occur two or three times a year, but the city also stresses its positions on occasions to government representatives attending events such as Association of Municipality of Ontario meetings and the Ontario Good Roads Association conference.

Bigger said he thinks the city will do well under the new government.

“They are talking about investing,” he explained. “They are talking about growing the economy and creating jobs, working with small businesses. In Sudbury, we are in such a good position with all of the new development moving forward in 2019 with Vale and Glencore and KGHM’s new Victoria Mine, the IAMGOLD development. There’s billions and billions of dollars in new development lots of new jobs being created the next few years. This is the time for every government involved to have meetings, and eye new investment in our community.”

Noront also plans to build a ferrochrome smelter in Sudbury, Sault Ste. Marie, Timmins or Thunder Bay. A decision on where is expected this summer.

When asked if he is optimistic that either Ross Romano in Sault Ste. Marie or Vic Fedeli in Nipissing will be the next minister of Northern Development and Mines, Bigger said he is and that Greater Sudbury will play a big role with the ministry as the largest city in the North.

“It’s a very exciting time for our community,” he said. “There’s so many opportunities for the provincial government (in the North),” he said. “Certainly, Sudbury is going to see its fair share.”

Greater Sudbury Chamber of Commerce board chairman Michael Macnamara said voters across the province sent a strong “signal” to Queen’s Park that they wanted change.

Macnamara said the chamber would like to see the new government get things moving faster with the Ring of Fire mining development in the northwest and the ferrochrome smelter needed to smelt the ore. He is also optimistic the new government will reduce regulatory red tape” freeze the current \$14 an hour minimum wage, and not go ahead with a scheduled increase to \$15 an hour in the New Year.

“We don’t want to see it actually rolled back,” he said. “But, there’s definite room to improve in Bill 148.”

What Macnamara would like

an analysis of the impact increasing the minimum wage has had on businesses, and research into what another increase could do.

The chamber has about 850 members, the vast majority of which are in Greater Sudbury.

For Sudbury Green Party candidate David Robinson, an economics professor at Laurentian University, the election saw party leader Mike Schreiner elected.

“Now, we have a voice (at Queen’s Park) and that’s certainly the big gain,” he said. “It’s good for the next election and people who work in the Green Party ... (But) we know it’s a long fight.”

Robinson said Schreiner will show Ontarians that a vote for the Green Party is not a wasted vote, and that he will draw attention to environmental issues such as climate change.

“I think it’s going to make a real difference to provincial politics in the long run,” he said.

As for the new premier’s plans to cut taxes, while spending more on other areas, Robinson said reality will set in once Ford discovers he needs the tax revenues to continue paying the bills. What will happen, he predicted, is changes will occur

down the road after cabinet ministers and deputy ministers are appointed, and staff reviews and studies the planned changes.

“He doesn’t have a cabinet yet,” said Robinson. “You can’t give any indication to your cabinet until the cabinetry is made up and there’s deputy ministers. If you are in the economy portfolio, you wouldn’t want to say anything for three, four months.”

Robinson said one area the North will do well is Ford’s pledge to share resource revenues with municipalities, as Sudbury may finally get a cut of mining taxes.

Robinson said the Ford promise to cut hydro bills will be difficult because the only way to do that will be to borrow money.

“That’s what (Liberal Premier) Kathleen Wynne did and (New Democrat Party Leader) Andrea Horwath was going to do. ‘We will pay your hydro for you and cover it out of increased taxes.’”

Robinson said a cut in gasoline taxes will be good for motorists, but will hurt municipalities that receive a portion of that revenue.

“If he keeps his promise he is going to cut the gas tax, that will mean a smaller share for things

such like (public) transit,” he said.

Robinson also said Ford will find it difficult to end such programs as free prescriptions for people 25 and younger. What will happen, he forecasted, is fees will be introduced and what is now available will be cut back.

Robinson also doesn’t expect to see the local health integration network (LHIN) offices eliminated, but their workload and role shifted.

“If you try to reduce a specific responsibility, it can’t go away,” he said.

He also expects to see down-loading of more provincial services to municipalities just former PC premier Mike Harris did. The costs associated with running airports and provincial roads within city boundaries are likely targets, he said.

Robinson said one move that Ford could make that would make

economic sense and help the Ring of Fire development would be to have Ontario Northland develop and operate a rail line into the area, a move that would benefit isolated First Nation communities on the route and be more economical than building a road.

Overall, Robinson said Ford is going to find it very hard to deliver on the many promises he made during the election such as cancelling long-term power purchasing contracts.

“He may be able to do some of that, but he may have to buy his way out of it and it may cost too much. He made too many promises. Those promises will cost a lot of money for his government and he is proposing to cut revenues. How he is going to complete the circle and make it happen is unclear.”

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STAN BEHAL/TORONTO SUN
Ontario Premier-designate Doug Ford arrives at the Postmedia offices in Toronto for an interview with the Toronto Sun and greets supporters on his way into the building on Friday June 8, 2018.

Police still investigating case

DAMASCUS CAFÉ from A1

The company will visit Damascus next Thursday to repair the windows, along with those who donated money. Qarqouz will be presented with a cheque.

Gainer would not tell The Star how much he had raised, saying only it was “in the thousands of dollars,” but media reports indicated that as of Wednesday, donations had exceeded \$2,000. The extra money will be offered to Qarqouz to allow him to spruce up his small restaurant.

“After the windows were replaced, maybe they would have enough money to replace some old, ratty tables and chairs that were left inside the building when they took over the bakery,” Gainer said. “We have enough money for that. It’s been a spontaneous outpouring from downtown merchants – not all downtown merchants. I thought there would be more than we actually ended up with, but enough downtown merchants to get the windows done, the furniture done and perhaps some painting on their building. I had a kind spot in my heart for this story.”

Qarqouz and his family fled the war in Syria and arrived in Sudbury on New Year’s Eve in 2015. Before the war, he ran a bakery in Al-Qusayr, a city about the size of Sudbury located 40 km south of Homs, near the border of Lebanon.

Qarqouz opened Damascus in mid-April. Business has been brisk and a quick visit to the bakery’s Facebook page indicates great community enthusiasm for its lip-smacking confections, which include a delicious shawarma, falafels, baklava and other savoury Syrian treats.

Caught during a busy Friday afternoon, Qarqouz said he was very happy to learn his window would be replaced.

The Greater Sudbury Police Service said investigators believe an Airsoft gun caused the damage to the window at the bakery. But they stressed they did not believe there was any danger to the community.

“Based on this single act, we are confident there is no overt public safety threat to the owners, patrons or area residents,” the police said.

Airsoft guns are replica weapons that fire non-metallic spherical projectiles, or BBs, and are considered safe for recreational purposes, provided safety gear is worn.

Police said the damage was done sometime overnight May 28, but not reported to officers until a couple of days later.

Anyone with information is asked to contact police at 705-675-9171 or Crime Stoppers at 705-222-TIPS, online at sudburycrimestoppers.com or by texting TIPSUD and the information to CRIMES (274637).

mkkeown@postmedia.com
Twitter: @marykkeown
705 674 5271 ext. 505235

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BUSINESS


MARKETS Yesterday's close, 4 p.m.

 **S&P/TSX**
Up 9.91
16,202.69

 **Dow**
Up 75.12
25,316.53

 **NASDAQ**
Up 10.44
7,645.51

 **Nikkei**
Down 128.76
22,694.50


 **Oil**
Down \$0.31
\$65.64

 **Gold**
Down \$0.70
\$1,300.00

 **British£**
Down 0.37¢
\$1.7368 CDN

 **Euro**
Down 0.79¢
\$1.5250 CDN

 **Dollar**
Up 0.271¢
77.355¢ US

 **Bitcoin**
Down \$40.59
\$7,647.41 US

Tax implications for self-employed

Ignoring CRA's quarterly instalment reminders can be costly

JAMIE GOLOMBEK
FINANCIAL POST

Friday, June 15, is an important tax date, not only for those who are self-employed (your 2017 tax return is due then) but also for those taxpayers who are required to pay taxes by quarterly instalments.

If you're one of those taxpayers, hopefully you didn't simply hang up if you recently received an automated telephone message purporting to be from the Canada Revenue Agency because chances are it was actually from the CRA.

At the end of May, the CRA starting sending automated telephone messages to certain taxpayers who may be required to pay their tax by quarterly instalments and have either missed a payment or been charged instalment interest in the past, to remind them of the June 15 due date.

The messages will continue to be sent through Monday. The message neither includes any personal taxpayer information nor does it ask for any. Note that since the due-date reminder message is not a telemarketing call, the National Do Not Call List, which allows Canadians to opt out of receiving telemarketing calls, does not apply. (You can still, however, opt out of these calls by contacting the CRA yourself.)

The instalment system is a tricky one and doesn't apply to everyone. For example, if you're an



POSTMEDIA FILES

If you earn self-employment income, net rental income, investment income or realize capital gains in a non-registered account, you may have an obligation to pay tax by instalments.

employee and your employment is your main, if not only, source of income, then you likely don't have an obligation to make quarterly instalments. But, if you earn self-employment income, net rental income, investment income or realize capital gains in your non-registered account, you may have an obligation to pay tax by instalments. Failure to do so can result in arrears interest and, in some cases, instalment penalties.

Under the technical tax rules, quarterly tax instalments (due March 15, June 15, Sept. 15 and Dec. 15) are required for 2018 if your "net tax owing" this year will be more than \$3,000 (\$1,800 for Quebec tax filers) and was also greater than \$3,000 in either 2017 or 2016. The definition of net tax owing is effective

ly your net federal and provincial taxes, less income tax withheld at source. If you are self-employed, your instalments must include any CPP contributions and voluntary EI premiums.

You have three methods to determine how much you need to pay each quarter: the no-calculation method, the prior-year method and the current-year method. You can choose the one that results in the lowest payments.

Under the no-calculation option, the CRA calculates your March and June instalments based on 25 per cent of the net tax owing on your 2016 assessed return. The Sept. 15 and Dec. 15 instalments are then calculated based on the net tax owing from your 2017 return, less the March and June instal-

ments you already paid. Provided you stick to the amounts the CRA tells you to pay and you remit the amounts on time, no interest or penalties will be assessed, even if you do end up owing some additional tax when you file your 2018 return next spring. If your income, deductions and credits don't vary much from year to year, this is the simplest option.

By contrast, the prior-year option bases the calculation solely on last year's (2017) income. You calculate your 2018 instalments based on your 2017 tax owing and pay 25 per cent of the amount on each instalment date. Choose this option if you estimate that your 2018 income, deductions and credits will be very similar to 2017 but significantly different than 2016.

Third, under the current-year method, you can simply base your 2018 instalments on the amount of estimated tax you think you will owe in 2018. Simply pay one-quarter of your estimated amount on each of the four instalment dates. This option is useful if the income source that gave rise to instalments in a prior year no longer applies. For example, if you've sold your rental property last year and no longer have significant income not subject to deductions at source, you may not need to make any 2018 instalments, despite receiving a call or instalment reminder from the CRA. But be warned because if your estimate is inaccurate and you make instalments that are lower than the no-calculation option above, you could be hit with arrears interest.

If that happens, you do have the right to object and go to court. But,

as a recent tax case shows, simply ignoring the CRA instalment reminders could be a costly error.

The case involved a taxpayer who was assessed arrears interest because he failed to pay the required tax instalments for the 2013 tax year. The Tax Court found that the taxpayer was indeed required to pay instalments of tax due and since he did not do so on a timely basis, he was liable for interest. The taxpayer appealed this decision to the Federal Court of Appeal, which released its decision late last year.

The court simplified the rule: the taxpayer is off the hook for instalments provided his "net tax owing for the particular year" does not exceed the individual's instalment threshold (\$3,000) for that year.

In court, the taxpayer admitted that his net tax owing for the 2013 taxation year was greater than \$3,000, namely \$6,207.75. The taxpayer's net tax owing for the 2011 taxation year was also over \$3,000.

The taxpayer submitted that he was "misled" by instalment reminders sent out to him by the Canada Revenue Agency. He submitted that the notices told him his net tax owing for 2013 was only \$2,888.

The Tax Court, however, found that the notices actually told him that \$2,888 was the total of the instalments he was required to make, not his net tax owing for 2013. Thus, the Tax Court and, subsequently, the appellate court found that the reminders were not misleading and upheld the arrears interest charged.

Jamie.Golombek@Cibc.Com

Business groups look forward to Ford's industry-friendly policies, seek details

ALEKSANDRA SAGAN
THE CANADIAN PRESS

Incoming Ontario premier Doug Ford promised a business-friendly government during the provincial election campaign, but now industry groups want the details about what that is going to look like.

"Now what we want is definition of the mandate," said Rocco Rossi, president of the Ontario Chamber of Commerce. "Because it's not enough to say, 'We're open for business.' What is the plan for business?"

Ford, a first-time candidate in provincial politics, promised during the campaign to eliminate red tape and regulations, lower hydro rates and fight a federally-mandated carbon tax. He also pledged to cut the corporate tax rate from 11.5 per cent to 10.5 per cent.

Rossi said the chamber of commerce is looking forward to working with the government to put the meat on the bones of the proposals.

The Canadian Manufacturers & Exporters was encouraged by some of Ford's proposals, including his pledge to lower hydro bills by 12 per cent.

"Ontario manufacturers — whether you're a food processor, or fabricator or assembler — you're paying among the highest electricity rates in North America," CEO Dennis Darby said.

When companies look at where to invest capital, Ontario looks like a difficult jurisdiction with a lot of headwinds, including those high electricity costs, he said, and it appears they are not investing and re-investing in the province.

"Electricity is a key part of that."

The tech community is also anticipating working with the new government.

The Council of Canadian Innovators, which is comprised of CEOs from the country's fastest-growing tech companies, plans "to remain active in advocating for support of domestic high-growth tech companies with the newly elected leaders," executive director Benjamin Bergen said in a statement.

The council is hopeful the new government will work with these

companies to help them access more of the capital, customers and talent needed to grow, he said.

Industry groups also pointed to Ford's promise to retract a Liberal-government mandated minimum wage increase to \$15 in the new year as good news.

The outgoing Liberal government already increased minimum wage from \$11.60 to \$14 an hour as of Jan. 1, 2018. The increase prompted some businesses to raise prices and cut staff hours and employee benefits. Some large, national operators said they would turn to increased automation to offset rising labour costs.

Restaurants Canada, which represents 30,000 businesses in the food service industry, is one group that opposed the fast pace of changes and is happy with the change of direction promised by Ford.

"The time frame that (the Liberal

“*Ontario manufacturers — whether you're a food processor, or fabricator or assembler — you're paying among the highest electricity rates in North America*”

Dennis Darby, CEO of Canadian Manufacturers & Exporters

government) imposed on us was very harmful to the industry," said James Rilett, vice-president of central Canada for the group. He added



NATHAN DENETTE/THE CANADIAN PRESS

Ontario premier-elect Doug Ford speaks to the media after winning the Ontario election in Toronto, on Friday.

Restaurants Canada is not opposed to a \$15 minimum wage, but wants to be careful in how the province gets there.

It's a sentiment echoed by the Auto Parts Manufacturers' Association.

"When you move so quickly and you shock the system, you also shock the available labour pool," president Flavio Volpe said.

Most auto parts manufacturers offer starting pay above \$15 an hour, he said, but when the entry-

level floor is raised, those companies would also have to raise their wages.

"We're glad maybe we're going to pump the breaks a bit here," said Volpe.

But even that Ford promise requires more details, said Rossi.

Ford has indicated he may increase minimum hourly wages by 25 cents for each year of his four-year term or tie future increases to inflation, Rossi said.

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PLEASE JOIN US AT:

Mattagami First Nation
Community Complex

Monday, May 28

2:00 to 3:00	Presentations
3:00 to 4:00	Open House
4:00 to 5:00	Community Discussions
5:00 to 6:00	Community Feast
6:00 to 7:00	Presentations (same as 2:00)
7:00 to 8:00	Open House

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PLEASE JOIN US AT:

Flying Post First Nation
Nipigon Community Center
138 Wadsworth Drive, Nipigon

Wednesday, May 30

2:00 to 3:00	Presentations
3:00 to 4:00	Open House
4:00 to 5:00	Community Discussions
5:00 to 6:00	Community Feast
6:00 to 7:00	Presentations (same as 2:00)
7:00 to 8:00	Open House



Appendix A-2

Open House Presentation (Transmission Line Only)



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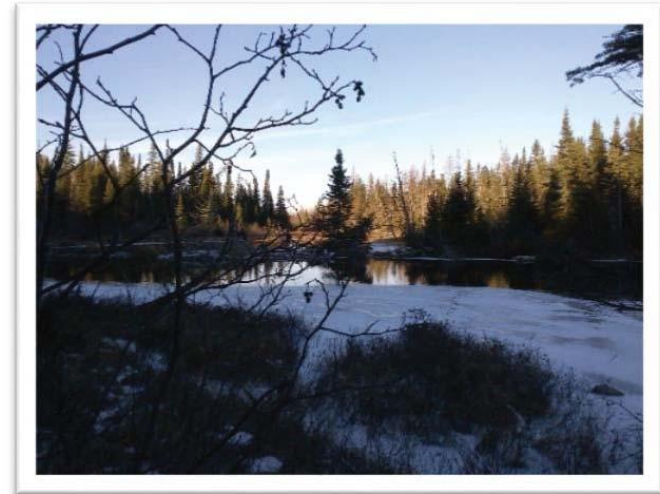
The Côté Gold Project – Project Update February 2018

Project Optimizations

■ Considered feedback received during environmental assessment

- › Local communities
- › First Nations and Métis
- › Technical experts
- › Government regulators

■ Pre-feasibility study assessed different options to improve environmental performance



Overview of Key Optimizations and Responses to Concerns

Issues and Concerns Raised during the EA Process

- Increased access for hunting and use of new transmission line right-of-way
- Potential effects on wildlife

How the Optimized Project Layout Addresses Issues and Concerns

Use of existing transmission line alignment and infrastructure (Shining Tree)

- Visual and noise effects of Tailings Management Facility (TMF) from Mesomikenda Lake
- Watercourse realignments (number and length)
- Overall Project footprint

New location for Tailings Management Facility (TMF)

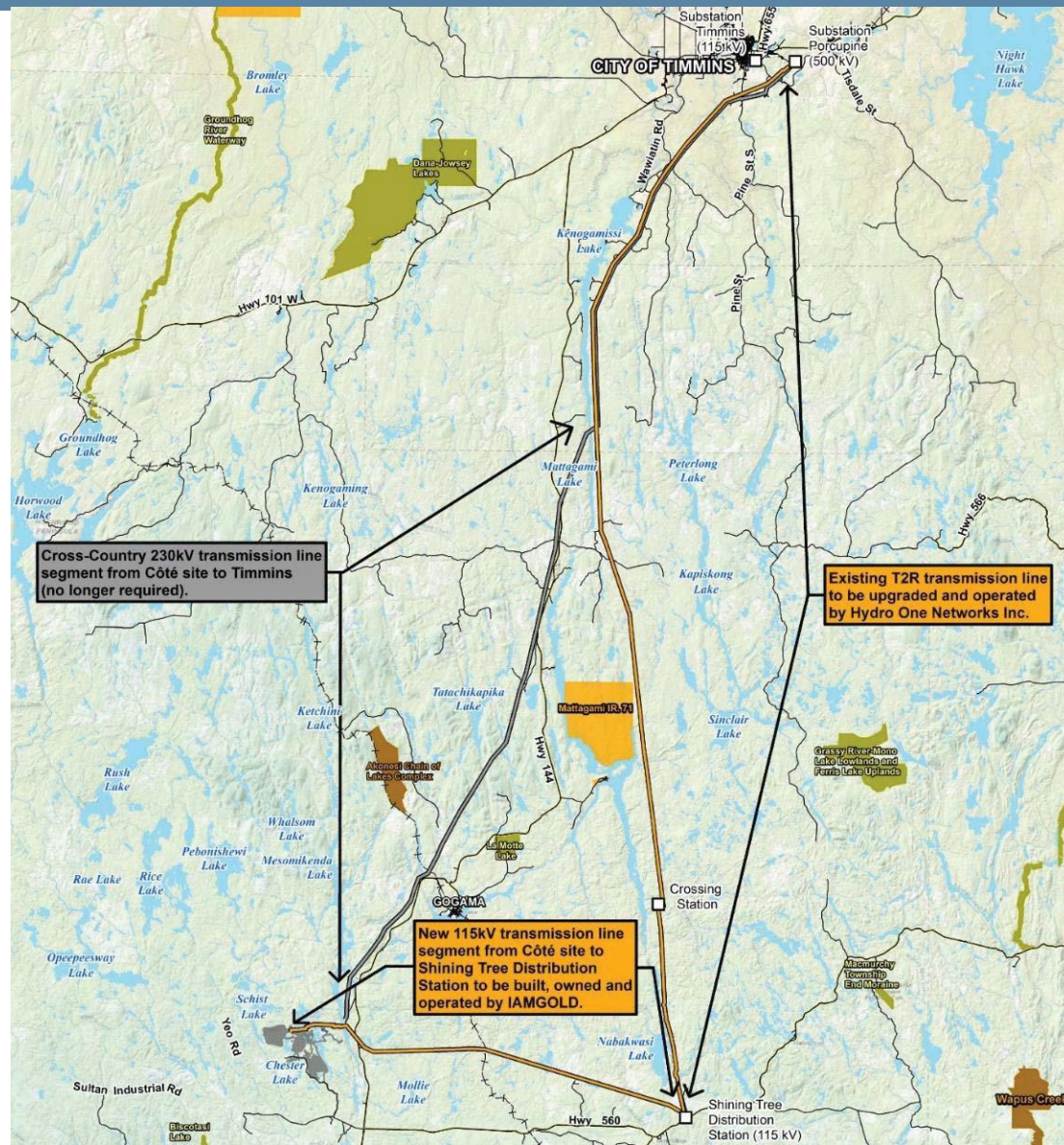
- Loss of habitat from draining Côté Lake
- Surface water loss

Creation of a new lake

- Project footprint

Smaller Project footprint

Transmission Line Alignment



Overview of Key Optimizations

Component	Previous Project Design (EA)	Current (EER)
Footprint	1,700 hectares (ha)	1,050 ha
Life of Mine	15 years	17 years
Open Pit		
Footprint	210 ha	145 ha
Mining Rate	60,000 tonnes per day (tpd)	36,000 tpd
Ore	261 million tonnes (Mt)	196 Mt
Mine Rock Area		
Footprint	400 ha	300 ha
Quantity	850 Mt	559 Mt
Tailings Management Facility (TMF)		
Location	North of open pit (overprinting portions of Bagsverd Creek)	Northwest of open pit
Footprint	840 ha	478 ha
Storage Capacity	261 Mt	200 Mt
Maximum Dam Height	45 metres (m)	70 m
Water Discharge Location	Bagsverd Creek	Three Duck Lakes (Upper)
Camp Location	Northwest of Open Pit	Between Three Duck Lakes and Bagsverd Lake
Overburden Stockpile	Integrated in Mine Rock Area	Southwest of Open Pit
Watercourse Realignments	7.9 km (7 realignments)	2.4 km (2 realignments)
Transmission Line Alignment	230 kilovolt (kV) Cross Country Alignment from Timmins (approximately 120 km)	Existing Hydro One Line from Timmins to Shining Tree and 115 kV transmission line alignment from Shining Tree (44 km)

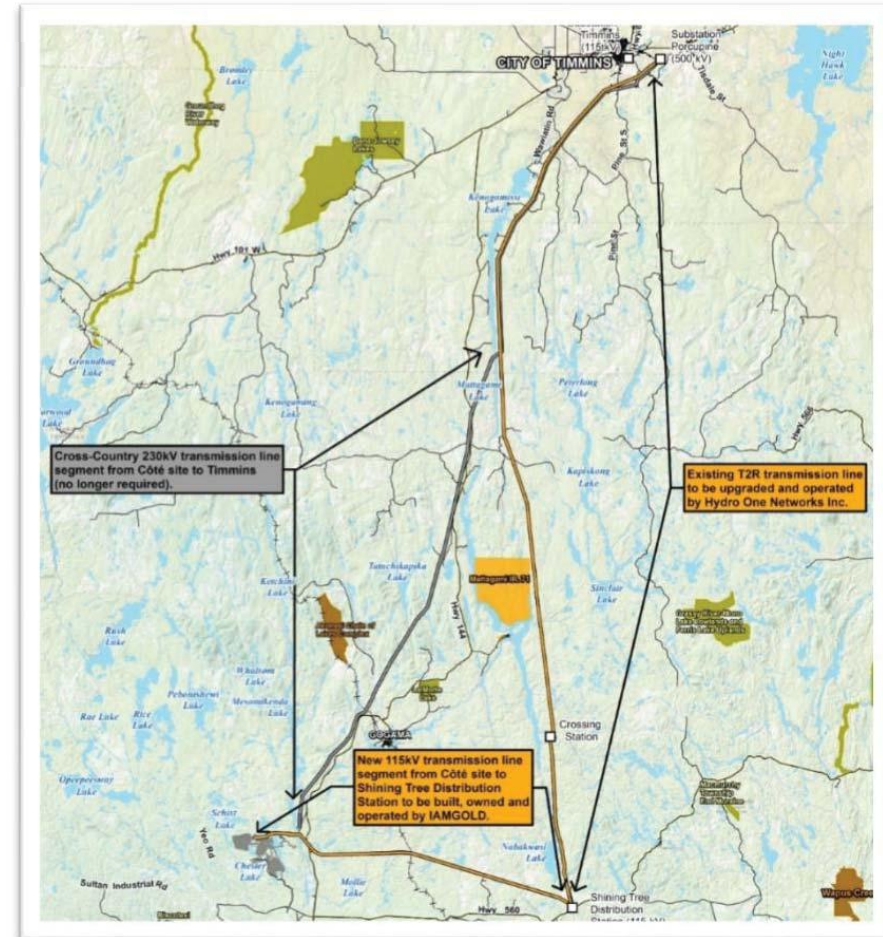
Transmission Line Environmental Assessment

Required for new 115 kV transmission line

- Project site to Shining Tree Distribution Station (44 km)
- Will be owned and operated by IAMGOLD

Process

- › Requires a screening report
- › Consultation opportunities
 - › Today's open house
 - › 30 day review and comment period once screening report is filed





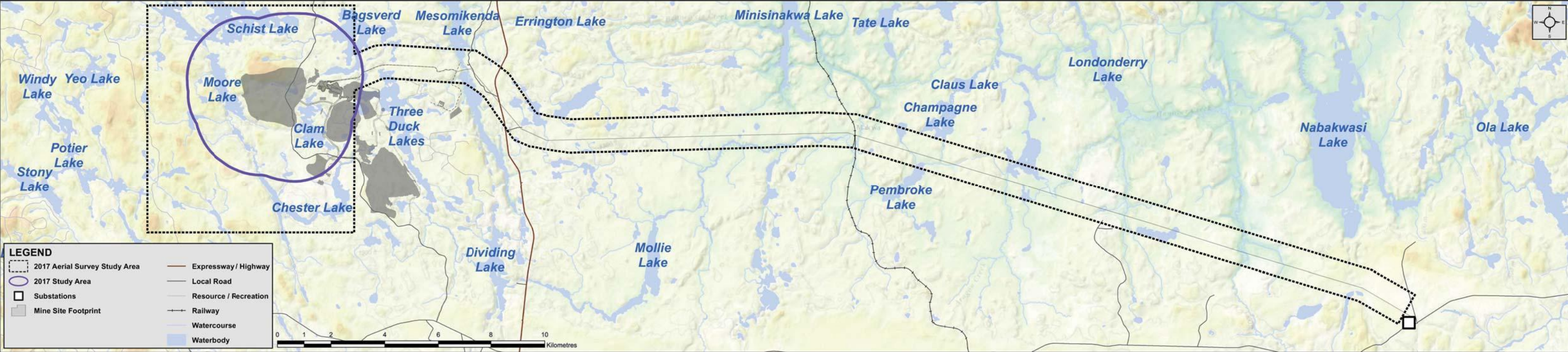
Appendix A-3

Posters presented at Open Houses

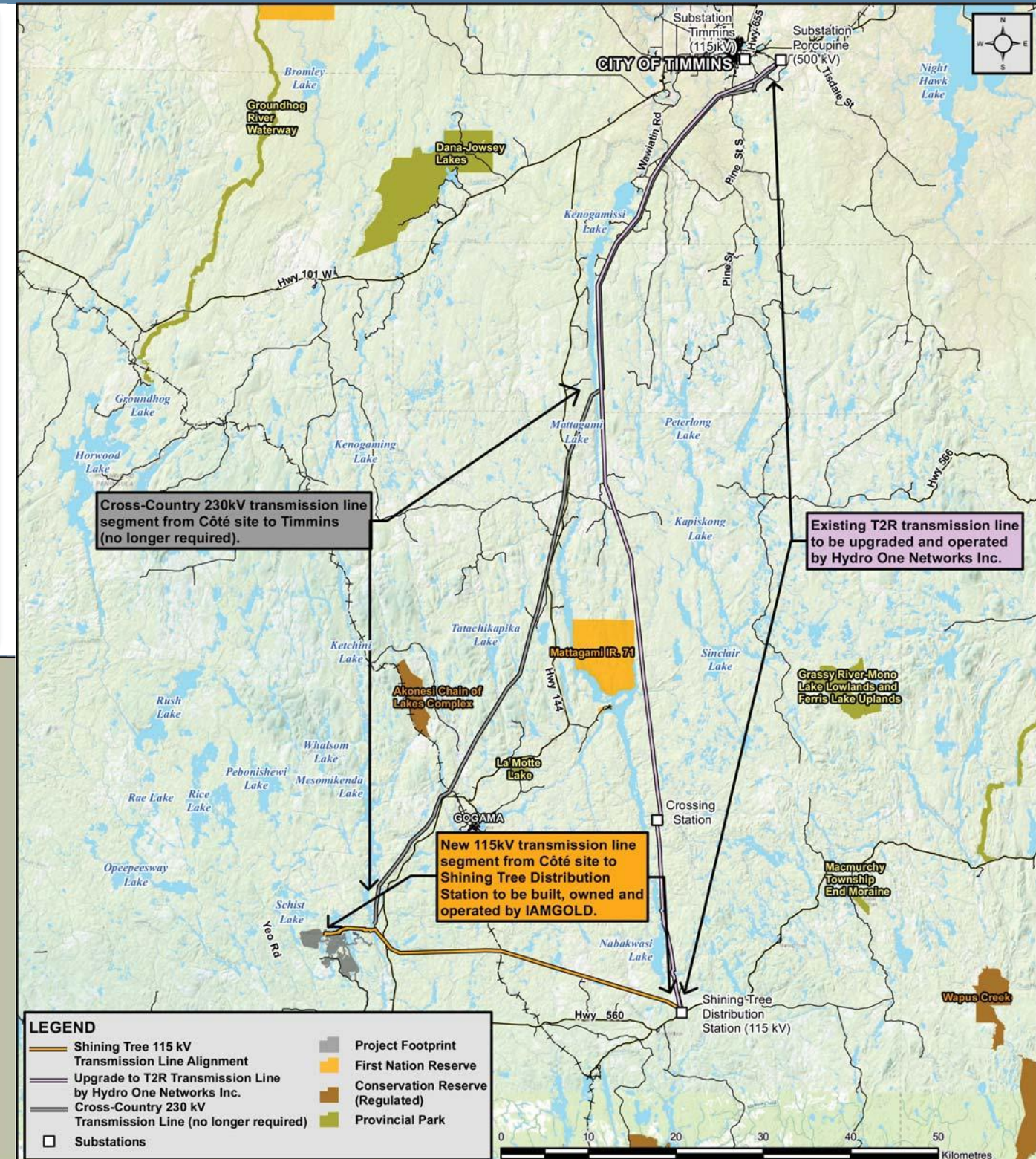
Transmission Line from Project Site to Shining Tree DS



2017 Biological Inventory Study Areas



Transmission Line from Project Site to Shining Tree DS



Typical H-Frame Transmission Line and Poles



Source: Detour Gold

Transmission Line Alignment Côté Gold Project to Shining Tree Distribution Station

■ Proposed 44 km, 115 kV transmission line

- Located almost entirely along an existing right-of-way
- Minor vegetation clearing will use mechanical means

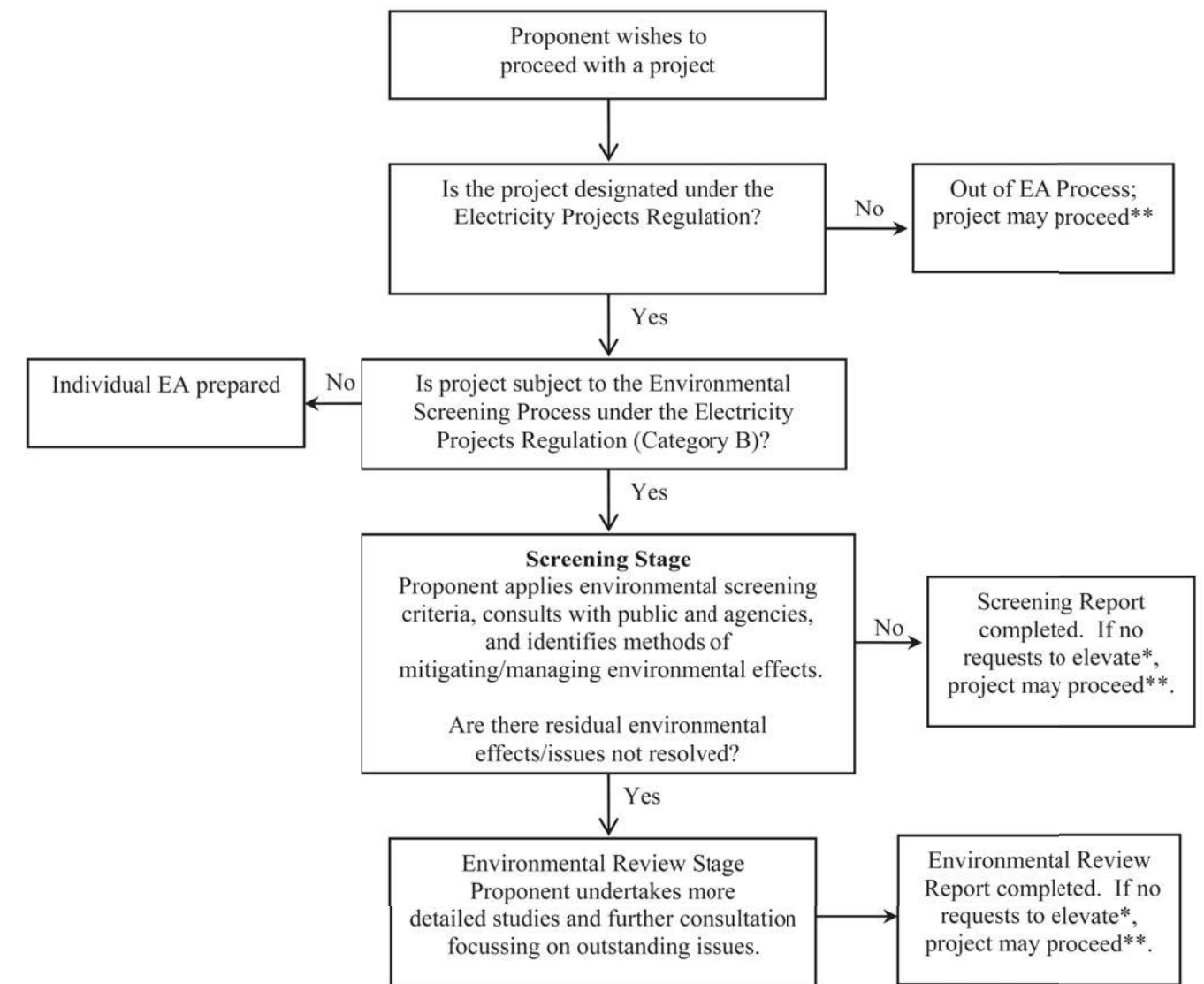
■ Additional baseline studies (2017)

■ Class Environmental Assessment is required

- Screening report will identify potential environmental effects and proposed mitigations
- 30-day review period for screening report

Key Features of the Environmental Screening Process

Note: This flow chart is to be read in conjunction with the Environmental Screening Process for electricity projects



* see section B.4.1.1 and Figure 3 in Part B of this Guide for information on elevation requests.

** project may proceed subject to any other required approvals

Source: Guide to Environmental Assessment Requirements for Electricity Projects (2011)

Appendix A-4

Summary of Comments from the May / June 2018 Open Houses with Mattagami First Nation, Flying Post First Nation, Gogama, Sudbury and Timmins

Open House Summary Report – Environmental Effects Review Consultation

Côté Gold Project – Mattagami First Nation, May 28, 2018

Open House

An open house was held in the community to share information about the Project and provide community members and opportunity to share their comments and concerns on various aspects of the Project, including, but not limited to:

- Improvements to the Project design since the environmental assessment process
- Mine Closure – how the mine will be shut down at the end of mining operations and what the land will look like after mining ends
- Archaeological studies and findings, including a display with artefacts found at the Project site
- Results of the Environmental Effects Review
- Transmission line environmental assessment
- Alternatives considered to address mine waste
- Plans for creation of new fish habitat

Participation

Mattagami First Nation Participants

31 individuals attended the event and four (4) consultants to the First Nation participated.

IAMGOLD Project Team Participants

Steve Woolfenden, IAMGOLD, Director of Environment

Dave Brown, Côté Gold Project, Manager of Environment and Community Relations

Christian Naponse, Côté Gold Project, Coordinator, Community Affairs

Stephan Theben, SLR

Don Carr, Wood

Krista Maydew, Wood

Ryan Primrose, Woodland Heritage Consultants

Participant Comments and Responses Regarding Transmission Line

Q. Is the 44 km transmission line part of the Environmental Effects Review?

A. No, it will be looked at through a separate environmental assessment screening process.

Q. What do you mean by “discussion” about curation of archaeological artefacts?

A. The Ministry of Tourism, Culture and Sport is working on their processes and the discussion will focus on access to artefacts – the best way to store them, make them available for display and make them accessible for researchers in future.

Q. Concern for the potential for effects related to the vegetation clearing in the area where the transmission line will cross Mesomikenda Lake.

A. IAMGOLD has committed to using mechanical means for vegetation clearing and will not use herbicides.



Q. What/where is the scope for the First Nation to review the EA process on the transmission line?

A. No class EA is required and it is a two-step process that begins with a screening to determine if further study is required.

Open House Summary Report – Environmental Effects Review Consultation Côté Gold Project – Flying Post First Nation, May 30, 2018

Open House

An open house was held in the community to share information about the Project and provide community members and opportunity to share their comments and concerns on various aspects of the Project, including, but not limited to:

- Improvements to the Project design since the environmental assessment process
- Mine Closure – how the mine will be shut down at the end of mining operations and what the land will look like after mining ends
- Archaeological studies and findings, including a display with artefacts found at the Project site
- Results of the Environmental Effects Review
- Transmission line environmental assessment
- Alternatives considered to address mine waste
- Plans for creation of new fish habitat

Participation

Flying Post First Nation Participants

28 individuals attended the event and four (4) consultants to the First Nation participated.

Copies of the sign-in sheets are located in Appendix A.

IAMGOLD Project Team Participants

Steve Woolfenden, IAMGOLD, Director of Environment

Dave Brown, Côté Gold Project, Manager of Environment and Community Relations

Christian Naponse, Côté Gold Project, Coordinator, Community Affairs

Stephan Theben, SLR

Don Carr, Wood

Krista Maydew, Wood

David Gadzala, Woodland Heritage

Participant Comments and Responses

Q. When will the Project start?

A. Construction activities are expected to start in 2019.

Other Comments

- IAMGOLD so far has been a great partner. So far IAMGOLD has been really good at working with us.



Open House Summary Report – Environmental Effects Review Consultation Côté Gold Project – Gogama, Sudbury, Timmins, June 13 to 15, 2018

Open houses were held in Gogama, Timmins and Sudbury to share information about the Project and provide an opportunity for people to share their comments and concerns on various aspects of the Project, including, but not limited to:

- Improvements to the Project design since the environmental assessment process
- Mine Closure – how the mine will be shut down at the end of mining operations and what the land will look like after mining ends
- Archaeological studies and findings, including a display with artefacts found at the Project site
- Results of the Environmental Effects Review
- Transmission line environmental assessment
- Alternatives considered to address mine waste
- Plans for creation of new fish habitat

Dates, Location and Participation

Location	Date	Number of Participants
Gogama	June 13, 2018	39
Timmins	June 14, 2018	36
Sudbury	June 15, 2018	34

IAMGOLD Project Team Participants

Steve Woolfenden, IAMGOLD, Director of Environment

Dave Brown, Côté Gold Project, Manager of Environment and Community Relations

Christian Naponse, Côté Gold Project, Coordinator, Community Affairs

Stephan Theben, SLR

Don Carr, Wood

Krista Maydew, Wood

Ryan Primrose, Woodland Heritage Consultants (Gogama and Sudbury open houses)

David Gadzala, Woodland Heritage Consultants (Timmins open house)

Participant Comments and Responses Regarding Transmission Line

Gogama

- Q. One community member identified they have a camp and trapline near the 44 km transmission line. During the community meeting they did not want to provide information to IAMGOLD so that IAMGOLD could directly contact them regarding the transmission line.
- A. IAMGOLD will work with MNRF to distribute letters to trapline holders.
- Q. How will trappers be notified of engagement opportunities.



- A. IAMGOLD provided a notice of commencement of screening in local newspapers, and will provide further notices as the Transmission Line EA process progresses. IAMGOLD is also directly reaching out to trappers by letter, to be distributed by the MNRF.

Other Comments:

- It is better that the TMF is now closer to the open pit; this will also reduce pumping and power requirements.

Timmins

Other Comments:

- The new 44 km transmission line is a much better route.
- A Gogama lodge owner commented that she is concerned on how the transmission line could affect the Gogama power supply. Gogama has a lot of power interruptions that affect her business. The response noted that the Ontario Energy Board process includes a system impact assessment.
- Overall the changes to the project are good and it is a better transmission line route.

Sudbury

- Q. A member of the public identified they have a cottage on Wolf Lake and are concerned about the changes to public access along Chester Road and noted this would add about 20 to 30 kilometres to their commute. They identified an alternative access along the transmission line from Highway 144, north of the Project site, to Chester Road.
- A. IAMGOLD will look into this alternative access. It was initially screened out due to an emulsion plant along the route that has clearance requirements, but that plant has since been moved.
- Q. Where are the archaeological artifacts to be stored?
- A. Currently they are in storage with Woodland Heritage Services Northeast but we are working with Mattagami and IAMGOLD to create a facility to store them for future research and education.



Appendix A-5

Notice of Commencement

Christian Naponse

From: CoteGold
Sent: June 15, 2018 8:37 AM
To: Christian Naponse
Cc: Maydew, Krista; imgsiiims@amecfw.com
Subject: FW: Northern Region - Timmins, Electricity Screening Process, Côté Gold Project

Follow Up Flag: Follow up
Flag Status: Flagged

Categories: SIIMS task

From: CoteGold [<mailto:cotegold@iamgold.com>]
Sent: June-14-18 11:31 AM
To: imgsiiims@amecfw.com; abbeyray17@hotmail.com; Dimatteo, Aime [IC-IC]; alama4849@msn.com; Alayna.johnson@aadnc-aandc.gc.ca; Berman, Allison [AANDC-AADNC]; andrew.marks@timmins.ca; billd@ontera.net; brenda.camirand@timmins.ca; bronraine@ntl.sympatico.ca; catherine.matheson@greatersudbury.ca; Charlie, Angus [HOC-CDC]; Claude, Gravelle [HOC-CDC]; corey.dekker@ceaa-acee.gc.ca; crystalray04@hotmail.com; d_ella27@hotmail.com; dan@gordsrentals.com; david.vallier@timmins.ca; david_krupka@hotmail.com; dj_keay@hotmail.com; dlajeunesse@blueheronenv.com; edkikauka@gmail.com; gary.scripnick@timmins.ca; gerry@canadianshieldconsultants.com; ghughes@miningexcellence.ca; gilles.veronneau@eacom.ca; Restoule, Glenda G [NC]; goodwin409@msn.com; [hfuroy@tbaytel.net](mailto:hfuoy@tbaytel.net); j.leclerc@cgvbuiders.ca; Sutherland, James JB [NC]; Joe.Torlone@timmins.ca; john.curley@timmins.ca; kathryn.oleary@greatersudbury.ca; kengoudreau999@hotmail.com; leezo@ontera.net; lenellis1972@hotmail.com; marshallj.a.42@gmail.com; melanie.dufresne@collegeboreal.ca; michael.doody@timmins.ca; morry.brown@netcentral.on.ca; mray@shaw.ca; noella.rinaldo@timmins.ca; pat.bamford@timmins.ca; preid@blueheronenv.com; probinson_440@sympatico.ca; Regent.Dickey@NRCan-RNCan.gc.ca; rickand; robins_oscar@hotmail.com; rory@mininglifeonline.net; ryanray@shaw.ca; scott.tam@timmins.ca; simard1@bell.net; steph13perkins@gmail.com; stephanie.davis@ceaa-acee.gc.ca; steven.black@timmins.ca; t_goodwin8@hotmail.com; tanner@rlpfab.ca; thomas.parisi@rci.rogers.com; todd.lever@timmins.ca; tom.schwan@eacom.ca; valeriepbull@hotmail.com; vanessabull@hotmail.ca
Subject: FW: Northern Region - Timmins, Electricity Screening Process, Côté Gold Project

This Notice of Commencement is provided to inform the public, Indigenous communities and interested parties that **IAMGOLD Corporation** (IAMGOLD) is beginning an environmental study to determine the potential environmental effects of the installation of a 115 kV transmission line connecting the **Côté Gold Project** to the Hydro One transmission network near the Shining Tree Distribution Station, to provide permanent power for the proposed mine.

Members of the public, Indigenous communities and other interested persons are encouraged to actively participate in the planning process.

Notice of all upcoming consultation events will be advertised in local papers and published at:
www.iamgold.com/cotegold-events

More information about the Côté Gold Project is available at:
www.iamgold.com/cotegold

Please direct any inquiries, comments or requests regarding the **Côté Gold Transmission Line Project** to:

Steven Woolfenden
Director, Environment
IAMGOLD Corporation
401 Bay Street, Suite 3200, P.O. Box 153
Toronto, ON M5H 2Y4
T: 416-360-4710

E-mail: cotegold@iamgold.com



Empowering People,
Extraordinary Performance



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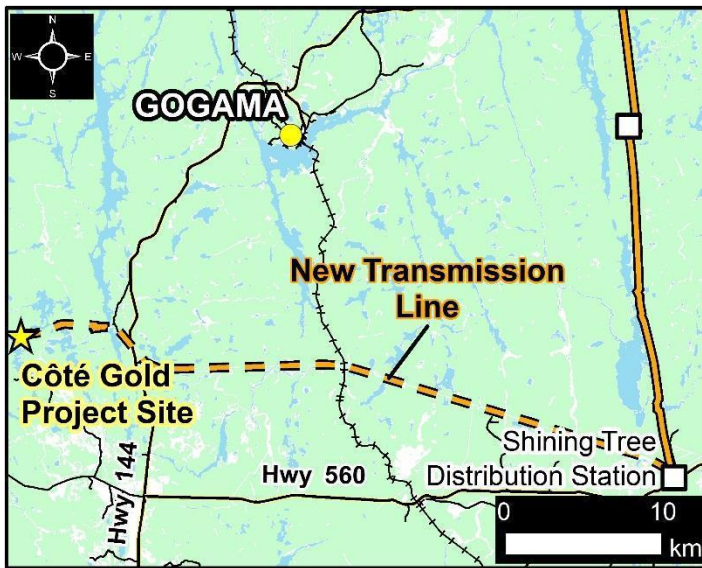
Notice of Commencement of a Screening



Côté Gold Project Transmission Line

The Study

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The Process

The study will be carried out in accordance with the Ministry of the Environment and Climate Change Environmental Screening Process for Category B Projects set out in Ontario Regulation 116/01 (the *Electricity Projects Regulations*) and the Hydro One *Class Environmental Assessment for Minor Transmission Line Facilities* under the Ontario *Environmental Assessment Act*.

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More information about the Côté Gold Project is available at:
www.iamgold.com/cotegold

Please direct any inquiries, comments or requests regarding the **Côté Gold Transmission Line Project** to:

Background

The Côté Gold Project is majority owned by IAMGOLD, and consists of a proposed open pit gold mine with related processing facilities and infrastructure. The Côté Gold Project is located approximately 20 kilometres southwest of Gogama in northeastern Ontario. Development of the mine requires a reliable power supply for the construction and operations phases.

IAMGOLD proposes to construct a new 115 kV transmission line of approximately 44 km length, from a location near the Shining Tree Distribution Station to the mine. The new transmission line will be constructed primarily along an existing transmission line right-of-way.

Steven Woolfenden
Director, Environment
IAMGOLD Corporation
401 Bay Street, Suite 3200, P.O. Box 153
Toronto, ON M5H 2Y4
T: 416-360-4710
E-mail: cotegold@iamgold.com

All personal information included in a submission – such as name, address, telephone number and property location – is collected, maintained and disclosed by the Ministry of the Environment and Climate Change for the purpose of transparency and consultation. The information is collected under the authority of the *Environmental Assessment Act* or is collected and maintained for the purpose of creating a record that is available to the general public as described in s.37 of the *Freedom of Information and Protection of Privacy Act*. Personal information you submit will become part of a public record that is available to the general public unless you request that your personal information remain confidential. For more information, please contact the Project Officer or the Ministry of the Environment and Climate Change's Freedom of Information and Privacy Coordinator at (416) 327-1434.

Accent: Electric cars fuel demand

ACCENT from A1

But it can take years to discover a deposit, secure financing to build a mine and then actually start extracting ores. With exploration around Cobalt just beginning, the town has a narrow window of time to capitalize on high cobalt prices, which could crumble if the electric vehicle market tanks or for any number of other reasons.

“In 10 years time, we may not even be focusing on lithium ion anymore,” said Jack Bedder, an analyst at Roskill Information Services who studies the cobalt market. “But, certainly, cobalt is in the mix for the next decade or so according to our forecasts.”

For those in Cobalt who dream that mining will revive the town’s fortunes, there may be good reason for optimism. Mining companies are exploring old mining towns across Canada to see if modern geology and mining techniques can turn up deposits that previous generations missed or ignored. In Cobalt, some companies are targeting lower-grade deposits, where metals are present, but dispersed over a wide area.

The dream is to find an enormous deposit that could be quickly mined as an open pit — rather than a more expensive and complex underground mine — which would sustain years of activity. Chitaroni knows the odds, and how mining companies, which face higher safety and environmental standards today than they did 100 years ago, operate in a ruthlessly efficient manner.

“Mining is mining,” he said, “but it’s not the way it was. What you see here is the result of 100 years of practice you can’t do anymore, so when you go up to a mine today, they’re closing it down as fast as they’re opening it up.”

His family has lived the history: In 1909, his grandfather arrived in Cobalt from Italy, during the first great silver rush. At a time when most people still relied on horse and buggy for transit, Cobalt had a railway connecting it to Toronto, a streetcar and an elevated tramway crossing its eponymous lake. It also had a stock exchange, and theatres where one could catch an opera.

Silver sustained town

According to the Canadian Mining Hall of Fame, more than 460 million ounces of silver have been dug up and hauled out of the area — about US\$7.6-billion worth at today’s prices.

The silver was so abundant that it sustained decades of mining. Even in the 1960s, Chitaroni’s father owned and operated a silver mine near town, just across the lake.

Chitaroni, 55, spent years working in the local silver mines, including for Agnico Eagle Ltd, which started in the silver camps and has since morphed into one of the world’s largest gold companies. But as the 1990s dawned and silver prices hit rock bottom, the company left town, closing the last remaining mine.

Afterwards, Chitaroni found plenty of ways to earn a living: arranging land sales for other mining companies that wanted to explore if not in Cobalt, then nearby, running an assay business to test drill samples for explorers in Northern Ontario and helping manage a campsite his family owns.

In 2016, with silver prices still scraping the bottom, nearly everyone was caught off guard by the sudden interest in cobalt deposits — perhaps Chitaroni most of all.

“Three years ago, you could not have sold, you couldn’t give away, a silver or cobalt property,” he said.

That’s why, in November 2015, a company where Chitaroni was the former president — the now-defunct Canagco Mining Corp., which he said had lost funding and needed to unload its property — was involved in a land sale that in retrospect looks ill-timed: For \$55,000 in cash, plus about 3.2 million shares in Vancouver-based Brixton Metal Corp., Canagco sold 2,500 hectares of land in the area, including a renowned former silver mine.

By June 2017, with the price of cobalt clearly rising, Brixton recouped all its costs. For \$325,000, all in cash, it sold 848 hectares or about 33 per cent of the land it bought from Canagco to Toronto-based First Cobalt Corp. First Cobalt Corp. Not long after, Brixton, which came to the area hoping to find silver, joined the hordes looking for cobalt, too.

“We didn’t have the foresight that cobalt was going to go through the roof,” said Gary Thompson,



TYLER ANDERSON/POSTMEDIA FILES

An employee of Forage Asinii Drilling works at one of two drill sites near the small town of Cobalt.

Brixton’s chief executive.

But, he added, at least the company paid essentially zero for its land in the area, and has a head start on exploration.

Chitaroni said he wanted to hold the land, but investors in the company, and the costs associated with keeping the land, necessitated a sale.

Drilling out core samples, launching a helicopter to conduct airborne surveys and paying geologists to study rock formations all cost money. Trent Mell, chief executive of First Cobalt, said he’s

budgeted \$7 million to spend in the next 12 months on exploration around Cobalt, which wasn’t the first place he thought to look for cobalt.

Several years ago, when he first formed a cobalt exploration company, Mell said the first place he thought about exploring was the Democratic Republic of Congo, in Central Africa, where as much as three-quarters of the world’s cobalt may come from in the next year, according to analyst forecasts. But it’s also a country that has been riven by civil war and

violence, a wave of proposed new taxes on mining and widespread knowledge that children are forced to work in some mines.

Instead, Mell decided to look around Cobalt, precisely because the area has been so heavily mined. Through decades in mining, he said he’s been involved in discovering two mines, both in areas that were formerly mined.

His theory is that previous miners in the Cobalt area mainly dug up the high-grade deposits — the pockets of earth that were dense with silver. Areas where met-

als are present in the soil, but at lower grades, and spread out over a much larger area, are more likely to have been ignored. After all, the original homesteaders would have had a hard time digging up such deposits.

Mell would love to find a high-grade deposit, but he’s not counting on it. Instead, his strategy is to look for the spots where cobalt and silver are present at low grades throughout a large area.

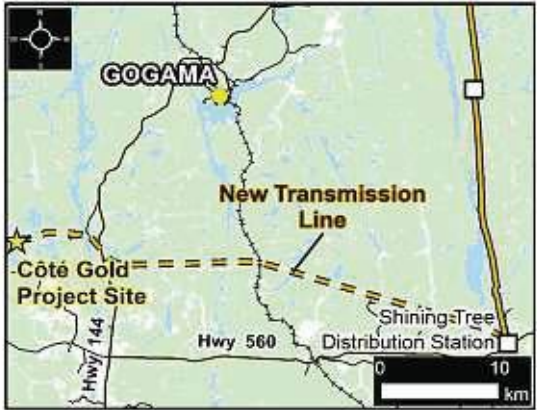
He wants to digit all up in a giant, open pit mine.

See **ACCENT** | A6



The Study

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Background

The Côté Gold Project is majority owned by IAMGOLD, and consists of a proposed open pit gold mine with related processing facilities and infrastructure. The Côté Gold Project is located approximately 20 kilometres southwest of Gogama in northeastern Ontario. Development of the mine requires a reliable power supply for the construction and operations phases.

IAMGOLD proposes to construct a new 115 kV transmission line of approximately 44 km length, from a location near the Shining Tree Distribution Station to the mine. The new transmission line will be constructed primarily along an existing transmission line right-of-way.

**Notice of Commencement
of a Screening**

**Côté Gold Project
Transmission Line**

The Process

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More information about the Côté Gold Project is available at: www.iamgold.com/cotegold

Please direct any inquiries, comments or requests regarding the **Côté Gold Transmission Line Project** to:

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Director, Environment
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401 Bay Street, Suite 3200, P.O. Box 153
Toronto, ON M5H 2Y4
T: 416-360-4710
E-mail: cotegold@iamgold.com

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‘A script that no one saw being written’

JOSHUA CLIPPERTON
THE CANADIAN PRESS

George McPhee is happy to talk about the Vegas Golden Knights, the team he built over the last year that now sits four wins from an improbable Stanley Cup.

But, his old club? The one that stands in the way? Not so much.

As the Knights prepare to host the Washington Capitals in Game 1 of the final Monday, McPhee’s fingerprints are everywhere on the series.

While the Vegas general manager’s shrewd moves in the expansion draft have been well-documented, he also laid the groundwork for the Capitals’ success, even though he wasn’t around to see it through.

Washington’s GM for 17 seasons, McPhee drafted 12 of the players on the current roster that beat the Tampa Bay Lightning 4-0 on the road in Game 7 of the Eastern Conference final.

McPhee’s Capitals made it all the way to the Cup in 1998 before getting swept by Detroit in his first season in charge, but never again got past the second round before he was fired in April 2014.

Four years later, and to almost everyone’s surprise, McPhee’s new team and McPhee’s old team — one that has suffered so much playoff heartbreak — are the only clubs left standing.

“It’s a script that no one saw being written,” he said in a phone interview earlier this week. “We’re not supposed to be here.”

But, the man that drafted Alex Ovechkin, Braden Holtby, Nicklas Backstrom, Evgeny Kuznetsov, John Carlson and a host of other Capitals, didn’t have any time to



JASON HALSTEAD/GETTY IMAGES

Vegas Golden Knights forward Tomas Nosek celebrates a second period goal by Ryan Reaves (not pictured) against the Winnipeg Jets in Game 5 of the Western Conference Finals during the 2018 NHL Stanley Cup Playoffs, at Bell MTS Place, on May 20, in Winnipeg.

reflect on his own personal journey when it became clear Vegas would be facing Washington.

“I was just trying to be ana-

lytical,” said McPhee, choosing his words carefully. “Right now it’s just more about our club and what we’re going to have to do in

the next couple of weeks rather than rooting for or pulling for or wishing for an opponent.”

While not wanting to discuss

opposing players — even ones he drafted — McPhee did add that he was especially happy for Ovechkin, who he watched take a lot of heat for the Capitals’ playoff failures.

“Unwarranted,” McPhee said of the criticism his former captain endured.

But, his sole focus right now is his own team, which roared out of the gate to start the season and never slowed down, finishing with 109 points to top the Pacific Division before sweeping the Los Angeles Kings, downing the San Jose Sharks in six games, and the Winnipeg Jets in five on the way to a 12-3 mark in the playoffs.

The Knights have demonstrated in the post-season they can play whatever style the opposition wants. Vegas took down the defensively sound Kings, the speedy Sharks and the physical, high-scoring Jets.

“We’ve played different types of teams to get here,” McPhee said. “We’re ready to play the next team and see what develops.”

And as the hockey world tries to wrap its collective head around the development of a first-year franchise making it this far, McPhee and the Knights can’t be bothered trying to figure it out themselves.

“There’s not a lot of time reflect and to sit back and think like that,” McPhee said. “It’s all about keeping moving forward and trying to do whatever we can to keep our standards high.”

“You cross your fingers and hope it continues to work and doesn’t turn to dust in a few days ... once we started well we wanted to keep playing well and haven’t had time to get sentimental or reflective.”

That will no doubt come after the final.

Noah Dobson enjoying a special season ahead of NHL draft

RYAN MCKENNA
THE CANADIAN PRESS

REGINA — When Noah Dobson was 15, he made the decision to forgo playing midget hockey in Canada and instead travelled to Austria to play for EC Red Bull Salzburg.

Dobson said the move allowed him to get daily ice time and improve his skills. And although it’s a long way from his hometown of Summerside, P.E.I., the star defenceman for the Acadie-Bathurst Titan said it also helped him mature as a person.

“The whole experience part of growing up, living on your own in Europe for a year was pretty incredible to see different parts of the world,” Dobson said in a recent interview at the Memorial Cup. “Just the whole experience was great for me and I really took it all in.”

The Quebec Major Junior Hockey League’s Titan drafted Dobson sixth overall in 2016 — and he has found success ever since.

The 18-year-old is the top prospect for June’s NHL draft playing at the Canadian major junior championship. He helped the Titan capture their first league title since 1999 with a six-game victory over the Blainville-Boisbriand Armada in the QMJHL final.

Acadie-Bathurst (2-1 at the Memorial Cup) advanced directly into the championship game at the national tourney and faces the winner of Friday’s semifinal between the Ontario Hockey League’s Hamilton Bulldogs (2-1) and host Regina Pats (2-1) on Sunday.

Dobson has seven points through three games, leading all defencemen.

“It’s been an exciting year,” said Dobson, who is the No. 5-ranked North American skater in NHL Central Scouting’s most recent draft report. “I think years like this only happen once in a lifetime.”

“Just been trying to enjoy the experience and have fun with it and take it all in.”



The Study

This Notice of Commencement is provided to inform the public, Indigenous communities and interested parties that **IAMGOLD Corporation** (IAMGOLD) is beginning an environmental study to determine the potential environmental effects of the installation of a 115 kV transmission line connecting the **Côté Gold Project** to the Hydro One transmission network near the Shining Tree Distribution Station, to provide permanent power for the proposed mine.



Background

The Côté Gold Project is majority owned by IAMGOLD, and consists of a proposed open pit gold mine with related processing facilities and infrastructure. The Côté Gold Project is located approximately 20 kilometres southwest of Gogama in northeastern Ontario. Development of the mine requires a reliable power supply for the construction and operations phases.

IAMGOLD proposes to construct a new 115 kV transmission line of approximately 44 km length, from a location near the Shining Tree Distribution Station to the mine. The new transmission line will be constructed primarily along an existing transmission line right-of-way.

Notice of Commencement of a Screening

Côté Gold Project Transmission Line

The Process

The study will be carried out in accordance with the Ministry of the Environment and Climate Change Environmental Screening Process for Category B Projects set out in Ontario Regulation 116/01 (the *Electricity Projects Regulations*) and the Hydro One *Class Environmental Assessment for Minor Transmission Line Facilities* under the *Ontario Environmental Assessment Act*.

On completion of the study, an Environmental Screening Report will be completed and made available for a 30-day public review period. A Notice of Completion will advise interested parties of the locations where the report can be reviewed.

Comments

Members of the public, Indigenous communities and other interested persons are encouraged to actively participate in the planning process.

Notice of all upcoming consultation events will be advertised in local papers and published at: www.iamgold.com/cotegold-events

More information about the Côté Gold Project is available at: www.iamgold.com/cotegold

Please direct any inquiries, comments or requests regarding the Côté Gold Transmission Line Project to:

Steven Woolfenden
Director, Environment
IAMGOLD Corporation
401 Bay Street, Suite 3200, P.O. Box 153
Toronto, ON M5H 2Y4
T: 416-360-4710
E-mail: cotegold@iamgold.com

All personal information included in a submission — such as name, address, telephone number and property location — is collected, maintained and disclosed by the Ministry of the Environment and Climate Change for the purpose of transparency and consultation. The information is collected under the authority of the *Environmental Assessment Act* or is collected and maintained for the purpose of creating a record that is available to the general public as described in s.37 of the *Freedom of Information and Protection of Privacy Act*. Personal information you submit will become part of a public record that is available to the general public unless you request that your personal information remain confidential. For more information, please contact the Project Officer or the Ministry of the Environment and Climate Change’s Freedom of Information and Privacy Coordinator at (416) 327-1434.

BUSINESS

MARKETS Yesterday's close, 4 p.m.

S&P/TSX Up 9.91 16,202.69	Dow Up 75.12 25,316.53	NASDAQ Up 10.44 7,645.51	Nikkei Down 128.76 22,694.50	Oil Down \$0.31 \$65.64	Gold Down \$0.70 \$1,300.00	British£ Down 0.37¢ \$1.7368 CDN	Euro Down 0.79¢ \$1.5250 CDN	Dollar Up 0.271¢ 77.355¢ US	Bitcoin Down \$40.59 \$7,647.41 US
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Tax implications for self-employed

Ignoring CRA's quarterly instalment reminders can be costly

JAMIE GOLOMBEK
FINANCIAL POST

Friday, June 15, is an important tax date, not only for those who are self-employed (your 2017 tax return is due then) but also for those taxpayers who are required to pay taxes by quarterly instalments.

If you're one of those taxpayers, hopefully you didn't simply hang up if you recently received an automated telephone message purporting to be from the Canada Revenue Agency because chances are it was actually from the CRA.

At the end of May, the CRA starting sending automated telephone messages to certain taxpayers who may be required to pay their tax by quarterly instalments and have either missed a payment or been charged instalment interest in the past, to remind them of the June 15 due date.

The messages will continue to be sent through Monday. The message neither includes any personal taxpayer information nor does it ask for any. Note that since the due-date reminder message is not a telemarketing call, the National Do Not Call List, which allows Canadians to opt out of receiving telemarketing calls, does not apply. (You can still, however, opt out of these calls by contacting the CRA yourself.)

The instalment system is a tricky one and doesn't apply to everyone. For example, if you're an employee and your employment is your main, if not only, source of income, then you likely don't have an obligation to make quarterly instalments. But, if you earn self-employment income, net rental income, investment income or realize capital gains in your non-registered account, you may have an obligation to pay tax by instalments. Failure to do so can result in arrears interest and, in some cases, instalment penalties.

Under the technical tax rules, quarterly tax instalments (due March 15, June 15, Sept. 15 and Dec. 15) are required for 2018 if your "net tax owing" this year will be more than \$3,000 (\$1,800 for Quebec tax filers) and was also greater than \$3,000 in either 2017 or 2016. The definition of net tax owing is effectively your net federal and provincial taxes, less income tax withheld at source. If are you self-employed, your instalments must include any CPP contributions and voluntary EI premiums.

You have three methods to determine how much you need to pay each quarter: the no-calculation method, the prior-year method and the current-year method. You can choose the one that results in the lowest payments.

Under the no-calculation option, the CRA calculates your March and June instalments based on 25 per cent of the net tax owing on your 2016 assessed return. The Sept. 15 and Dec. 15 instalments are then calculated based on the net tax owing from your 2017 return, less the March and June instalments you already paid. Provided you stick to the amounts the CRA tells you to pay and you remit the amounts on time, no interest or penalties will be assessed, even if you do end up owing some additional tax when you file your 2018 return next spring. If your income, deductions and credits don't vary much from year to year, this is the simplest option.

By contrast, the prior-year option bases the calculation solely on last year's (2017) income. You calculate your 2018 instalments based on your 2017 tax owing and pay 25 per cent of the amount on each instalment date. Choose this option if you estimate that your 2018 income, deductions and credits will be very similar to 2017 but significantly different than 2016.

Third, under the current-year method, you can simply base your 2018 instalments on the amount of estimated tax you think you will



POSTMEDIA FILES

If you earn self-employment income, net rental income, investment income or realize capital gains in a non-registered account, you may have an obligation to pay tax by instalments.

owe in 2018. Simply pay one-quarter of your estimated amount on each of the four instalment dates. This option is useful if the income source that gave rise to instalments in a prior year no longer applies. For example, if you've sold your rental property last year and no longer have significant income not subject to deductions at source, you may not need to make any 2018 instalments, despite receiving a call or instalment reminder from the CRA. But be warned because if your estimate is inaccurate and you make instalments that are lower than the no-calculation

option above, you could be hit with arrears interest.

If that happens, you do have the right to object and go to court. But, as a recent tax case shows, simply ignoring the CRA instalment reminders could be a costly error.

The case involved a taxpayer who was assessed arrears interest because he failed to pay the required tax instalments for the 2013 tax year. The Tax Court found that the taxpayer was indeed required to pay instalments of tax due and since he did not do so on a timely basis, he was liable for interest. The taxpayer appealed

this decision to the Federal Court of Appeal, which released its decision late last year.

The court simplified the rule: the taxpayer is off the hook for instalments provided his "net tax owing for the particular year, does not exceed the individual's instalment threshold (\$3,000) for that year."

In court, the taxpayer admitted that his net tax owing for the 2013 taxation year was greater than \$3,000, namely \$6,207.75. The taxpayer's net tax owing for the 2011 taxation year was also over \$3,000.

The taxpayer submitted that

he was "misled" by instalment reminders sent out to him by the Canada Revenue Agency. He submitted that the notices told him his net tax owing for 2013 was only \$2,888.

The Tax Court, however, found that the notices actually told him that \$2,888 was the total of the instalments he was required to make, not his net tax owing for 2013. Thus, the Tax Court and, subsequently, the appellate court found that the reminders were not misleading and upheld the arrears interest charged.

Jamie.Golombek@CIBC.Com

Thinking about quitting?  **smokers'HELPLINE**
CANADIAN CANCER SOCIETY
TOLL-FREE
1-877-513-5333

NOTICE OF PUBLIC MEETING FOR CLOSURE PLAN

This Notice of Public Meeting is provided to inform the public, Indigenous communities and interested parties that **IAMGOLD Corporation (IAMGOLD)** will be holding Public Meetings for the **Côté Gold Project Closure Plan**.

The Côté Gold Project is majority owned by IAMGOLD, and consists of a proposed open pit gold mine with related processing facilities and infrastructure. The Côté Gold Project is located approximately 20 kilometres southwest of Gogama in northeastern Ontario.



Closure Plan and Project Update

Public Meetings will be held to discuss the Project's Closure Plan, which is currently being developed in accordance with Ontario Regulation 240/00 (as amended) under Part VII of the Mining Act. The Closure Plan will include information about how the mine will be shut down at the end of mining operations, how the affected land will be rehabilitated, and the associated costs. This plan must be developed before

mine development can begin. The expected mine life of the Côté Gold Project is 17 years, with operations anticipated to start in 2021.

Meeting Information

Notice of all upcoming consultation events will be advertised in local papers and published at: www.iamgold.com/cotegold-events

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Gogama – Wednesday, June 13
4:00 to 7:00 pm
26 Clarke Street

Timmins – Thursday, June 14
4:00 to 7:00 pm
McIntyre Arena Auditorium
85 McIntyre Road (Schumacher)

Sudbury – Friday, June 15
4:00 to 7:00 pm
Holiday Inn
1696 Regent Street

Comments

Members of the public, Indigenous communities and other interested persons are encouraged to actively participate in Project consultation events, and to contact IAMGOLD directly with information requests, comments or questions.

More information about the Côté Gold Project is available at: www.iamgold.com/cotegold

Please direct any inquiries, comments or requests regarding the Côté Gold Project to:

Steven Woolfenden
Director, Environment
IAMGOLD Corporation
401 Bay Street, Suite 3200, P.O. Box 153
Toronto, ON M5H 2Y4
T: 416-594-2884
E-mail: cotegold@iamgold.com

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Rock ink Sullivan’s nephew

New forward’s father, Chris Brousseau, was franchise’s first captain during 1991-91 season

THOMAS PERRY
THE DAILY PRESS

Riley Brousseau has decided to make the jump to Junior ‘A’ hockey and sign with his hometown Timmins Rock.

It wasn’t an easy decision, however, for the 2001-birth-year forward who still has a year of midget eligibility left and could have returned to the Timmins Majors.

After being part of a Majors franchise that struggled to a Great North Midget League-worst 2-32-1-1 record in 2016-17, Brousseau was part of a team that turned things around in 2017-18 (13-21-1-1) and swept the Soo Greyhounds in a best-of-three series before bowing out to the North Bay Trappers in three-straight games.

“I was talking to people and saying, ‘should I play here, should I play there?’” he said. “And obviously the OHL Under-18 Priority Selection was in my head, so I was kind of wondering where I should play.

“Beersy (Rock coach Corey Beer) told me if I play here he can get me to tryouts in the QMJHL, the OHL or NCAA or CIS schools.”

Brousseau plans to eventually go to school when his Junior ‘A’ days are behind him.

In the meantime, he is grateful for those who have helped him get the opportunity he is now embracing.

“I really want to thank the Timmins Majors, the coaching staff and all of my teammates, as well as my sponsors for a great season,” he said.

Brousseau (regular season: 34, 13-12-25, 55; playoffs: 5, 0-4-4,



THOMAS PERRY/THE DAILY PRESS

Timmins Rock coach Corey Beer and forward Riley Brousseau hold the 2001-birth-year forward’s white road jersey. The Rock officially announced on Friday that Brousseau, who played seven regular season games and 13 more in the playoffs as an affiliate player, has signed to play for them in 2018-19. He joins former Timmins Majors teammate Austin Holmes and defenceman Carson Burlington on the roster.

2) was one of the top snipers for the Majors last season and he also spent time with the Rock as an affiliate player (regular season: 7, 1-1-2, 2; playoffs: 13, 2-2-4, 0).

“I just played my game and it helped that the boys brought me in and made me part of the Rock

family right away,” he said.

“It is a lot faster and they guys are a lot bigger. Obviously, I was a 16 year old playing up as an AP.

“In the Great North Midget League, you have a lot more room to play. Hopefully, I can step in this year and prove myself.”

Brousseau had also played with a number of Rock players — including Riley Robitaille, who started the season with the Majors — in the past, which helped boost his confidence level, as well.”

During conversations with Beer and Rock general manager Kevin

Peever, Brousseau got a clear understanding of what the team is hoping to see from him in 2018-19.

“They assigned me a role for the upcoming season,” he said.

“It is to get at least 25 goals as a rookie. Hopefully, I can accomplish that.”

Brousseau, who was officially listed at 6-0 and 154 pounds last season, has been working hard this off season to add to his 175 pound frame.

“I have been in the gym every day, seven days a week at Discover Fitness and I have been working on my legs,” he said.

“It is has really helped me. Hopefully, I can get stronger and faster.”

Brousseau is confident being bigger and stronger will help him make the adjustment to playing against NOJHL players this season.

“Oh, for sure,” he said.

Brousseau didn’t have far to look to find a positive role model in the world of hockey when he was growing up.

“I have always looked up to my uncle, Steve Sullivan,” he said.

Sullivan, of course, is a senior advisor with the Rock and played for the franchise in its first year in the NOJHL, back when it was known as the Golden Bears, before going on to an illustrious NHL career that saw him play 1,011 regular season games and another 50 in the playoffs.

“I would like to follow in his footsteps, hopefully,” Brousseau said.

“I see him once a year, at the Molson Lever-Sullivan Classic, and we chat a little bit. He has told me to always make sure I keep my feet moving.”

Sullivan’s No. 26 is, of course, retired, so there is no chance Brousseau will get to wear his uncle’s number this season.

See **ROCK** | B2

ON TAP

LOCAL SPORTS

SUNDAY, JUNE 10

TLL: Junior/Senior Division, Red Sox vs Jays at Parc Thériault, 1:15 p.m.; Red Sox vs Pirates at Parc Thériault, 4:15 p.m.

TMSC: Rebels vs Kap Longhorns at Carlo Catarello Field in Kapuskasing, time TBA.

MONDAY, JUNE 11

TLL: Minor Division, Home Improvement Center Orioles vs All North Electric Red Sox at D&R Little League Park, 5:30 p.m.; Major Division, Dailey’s YIG Orioles vs Krazy Krazy Red Sox at D&R Little League Park, 7:30 p.m.

TwSC: Rehab Plus vs Porcupine Kinsmen at Roland Michener Secondary School, 6 p.m.; Timmins Terminators vs Family Eye Care at Roland Michener Secondary School, 7:30 p.m.

TMBL: Red Sox vs Brewers at Parc Thériault, 6:15 p.m.

TUESDAY, JUNE 12

TLL: Minor Division, TPA Athletics vs Guillemette Masonry Blue Jays at D&R Little League Park, 5:30 p.m.; Major Division, TVF Athletics vs OPG Blue Jays at D&R Little League Park, 7:30 p.m.

TMBL: Pirates vs Orioles at Parc Thériault, 6:15 p.m.

TMSC: TUFC vs Rebel at Timmins Regional Athletics & Soccer Complex, 7:30 p.m.; Juvenis Fabula vs Blizzard at Timmins Regional Athletics & Soccer Complex, 9 p.m.

WEDNESDAY, JUNE 13

TLL: Minor Division, All North Electric Red Sox vs TPA Athletics at D&R Little League Park, 5:30 p.m.; Major Division, Krazy Krazy Red Sox vs TVF Athletics at D&R Little League Park, 7:30 p.m.

TLL: Junior/Senior Division, Pirates vs Jays at Parc Thériault, 6:15 p.m.

TwSC: Dunrite Rubber Wolfpack vs Rehab Plus at Roland Michener Secondary School, 6 p.m.; Porcupine Kinsmen vs Restore Physiotherapy Pandas at Roland Michener Secondary School, 7:30 p.m.

THURSDAY, JUNE 14

TLL: Minor Division, Guillemette Masonry Blue Jays vs Home Improvement Center Orioles at D&R Little League Park, 5:30 p.m.; Major Division, OPG Blue Jays vs Dailey’s YIG Orioles at D&R Little League Park, 7:30 p.m.

TMBL: Brewers vs Pirates at Parc Thériault, 6:15 p.m.

TMSC: Blizzard vs Lets Try Soccer Again at Timmins Regional Athletics & Soccer Complex, 7:30 p.m.

TwSC: Rehab Plus vs Timmins Terminators at Roland Michener Secondary School, 6 p.m.; Family Eye Care vs Porcupine Kinsmen at Roland Michener Secondary School, 7:30 p.m.

FRIDAY, JUNE 15

TMBL: Orioles vs Whiskey Jacks at Parc Thériault, 6:15 p.m.

SATURDAY, JUNE 16

TwSC: Restore Physiotherapy Pandas vs Dunrite Rubber Wolfpack at Roland Michener Secondary School, 10:30 a.m.; Timmins Terminators vs Porcupine Kinsmen at Roland Michener Secondary School, 1 p.m.; Family Eye Care vs Rehab Plus at Roland Michener Secondary School, 2:30 p.m.

NOTICE OF PUBLIC MEETING FOR CLOSURE PLAN

This Notice of Public Meeting is provided to inform the public, Indigenous communities and interested parties that **IAMGOLD Corporation (IAMGOLD)** will be holding Public Meetings for the **Côté Gold Project Closure Plan**.

The **Côté Gold Project** is majority owned by IAMGOLD, and consists of a proposed open pit gold mine with related processing facilities and infrastructure. The **Côté Gold Project** is located approximately 20 kilometres southwest of Gogama in northeastern Ontario.



Closure Plan and Project Update

Public Meetings will be held to discuss the Project’s Closure Plan, which is currently being developed in accordance with Ontario Regulation 240/00 (as amended) under Part VII of the *Mining Act*. The Closure Plan will include information about how the mine will be shut down at the end of mining operations, how the affected land will be rehabilitated, and the associated costs. This plan must be developed before

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mine development can begin. The expected mine life of the **Côté Gold Project** is 17 years, with operations anticipated to start in 2021.

Meeting Information

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Holiday Inn
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Comments

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Steven Woolfenden
Director, Environment
IAMGOLD Corporation
401 Bay Street, Suite 3200, P.O. Box 153
Toronto, ON M5H 2Y4
T: 416-594-2884
E-mail: cotegold@iamgold.com



Appendix A-6

Government Agency Notification

Christian Naponse

From: Projectmail - IMGsiims <IMGsiims@amecfw.com>
Sent: June 15, 2018 8:31 AM
To: Christian Naponse
Subject: FW: Northern Region - Timmins, Electricity Screening Process, Côte Gold Project - for SIIMS
Attachments: Northern Region - Timmins - Electricity Screening Process - Côte Gold P....pdf;
Northern Region - Timmins - Electricity Screening Process - Côte Gold P....xlsx;
Cote_NoticeofCommence_EA_Trans_Line.pdf
Follow Up Flag: Follow up
Flag Status: Flagged
Categories: SIIMS task

From: CoteGold [mailto:cotegold@iamgold.com]
Sent: Thursday, June 14, 2018 11:18 AM
To: Projectmail - IMGsiims <IMGsiims@amecfw.com>
Subject: FW: Northern Region - Timmins, Electricity Screening Process, Côte Gold Project

From: Lindsey Taylor
Sent: June 13, 2018 8:56 AM
To: eanotification.nregion@ontario.ca
Cc: CoteGold <cotegold@iamgold.com>
Subject: Northern Region - Timmins, Electricity Screening Process, Côte Gold Project

Good morning,

We are pleased to submit the notice of a screening for the proposed 44 km 115 kV transmission line required for development of the Côte Gold Project. As per the new process for submitting streamlined environment assessments (EAs), please find attached a copy of the project information form and project notice.

If you have any questions, I invite you to contact Steven Woolfenden at +1 (416) 360-4710, extension 122884.

Sincerely,

LINDSEY TAYLOR, EIT
Environmental Coordinator

Lindsey_Taylor@iamgold.com
401 Bay Street, Suite 3200, P.O. Box 153
Toronto, Ontario, Canada M5H 2Y4
T 416 607 7989
www.iamgold.com

Ontario Government Complex
5520 Highway 101 E, P.O. Bag 3080
South Porcupine, Ontario, P0N 1H0
(705) 235-1513 | (705) 235-1520 email: steven.momy@ontario.ca



The contents of this communication, including any attachment(s), are confidential and may be privileged. If you are not the intended recipient (or are not receiving this communication on behalf of the intended recipient), please notify the sender immediately and delete or destroy this communication without reading it, and without making, forwarding, or retaining any copy or record of it or its contents. Thank you.

From: David Brown [mailto:David_Brown@iamgold.com]
Sent: May 11, 2018 1:42 PM
To: Momy, Steven (MOECC)
Cc: Guindon, Jean (MOECC); imgsiims@amecfw.com
Subject: MOECC "Notice of Commencement of a Screening" for your review.

Hi Steve,

Would you be able to circulate the attached "Notice of Commencement of a Screening" internally for a quick review prior to IAMGOLD finalizing and issuing to the public.

We just want to make sure we have captured the proper criteria for the notice. Hopefully we can finalize and issue to all stakeholders at the end of next week.

Have a great weekend.

Dave Brown
Manager of Environment and Community Relations, COTE GOLD JV
Mobile: + 1-705-923-3369
Email: David_Brown@iamgold.com



Notice of Commencement of a Screening



Côté Gold Project Transmission Line

The Study

This Notice of Commencement is provided to inform the public, Indigenous communities and interested parties that **IAMGOLD Corporation** (IAMGOLD) is beginning an environmental study to determine the potential environmental effects of the installation of a 115 kV transmission line connecting the **Côté Gold Project** to the Hydro One transmission network near the Shining Tree Distribution Station, to provide permanent power for the proposed mine.



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Comments

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www.iamgold.com/cotegold-events

More information about the Côté Gold Project is available at:
www.iamgold.com/cotegold

Please direct any inquiries, comments or requests regarding the **Côté Gold Transmission Line Project** to:

Background

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Director, Environment
IAMGOLD Corporation
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Toronto, ON M5H 2Y4
T: 416-360-4710
E-mail: cotegold@iamgold.com

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Appendix A-7

Land Use Letter of Commencement

From: Christian Naponse [mailto:christian_NAPONSE@iamgold.com]
Sent: June 20, 2018 9:24 AM
To: Rigg, Owen (MNRF)
Cc: David Brown
Subject: RE: Local Trapper Notices
Importance: High

Good Morning,

To follow up on the email below, I await further instruction with regards to distribution of Notices to the local trappers in the area of the proposed transmission line.

Christian Naponse
Community Affairs Coordinator, Cote Gold
Email: Christian.Naponse@iamgold.com



From: David Brown
Sent: June 17, 2018 2:24 PM
To: Rigg, Owen (MNRF) <Owen.Rigg@ontario.ca>
Cc: Christian Naponse <christian_NAPONSE@iamgold.com>
Subject: Local Trapper Notices

Hi Owen,

As part of the Transmission Line Screening Process we would like to send out Notices to the local Trappers in the area of the proposed transmission line.

Previously we have sent envelopes with notice information with stamps and MNRF would address and mail out these notices. (this is due privacy, FOIA)

Can Christian Purolate them to you or who would be the best person to send this to?

Below is the address to be mailed:

Ministry of Natural Resources and Forestry Timmins District
Ontario Government Complex
5520 Hwy 101 East P.O. Bag 3090
South Porcupine, Ontario P0N 1H0
Telephone: 705-235-1333
Facsimile: 705-235-1377

Thanks,

Dave Brown
Manager of Environment and Community Relations, COTE GOLD JV
Mobile: + 1-705-923-3369

From: Christian Naponse [mailto:christian_NAPONSE@iamgold.com]
Sent: June 20, 2018 1:25 PM
To: Rigg, Owen (MNRF)
Cc: David Brown
Subject: RE: Local Trapper Notices

Hi Owen,

I have the notices, which include a map, as well as some envelopes. I will get stamps and add those to the package and send it to you at...

Ministry of Natural Resources and Forestry Timmins District
Ontario Government Complex
5520 Hwy 101 East P.O. Bag 3090
South Porcupine, Ontario P0N 1H0

Is this address accurate?

Thanks,

Christian Naponse
Community Affairs Coordinator, Cote Gold
Email: Christian_Naponse@iamgold.com



From: Rigg, Owen (MNRF) [<mailto:Owen.Rigg@ontario.ca>]
Sent: June 20, 2018 1:05 PM
To: Christian Naponse <christian_NAPONSE@iamgold.com>
Cc: David Brown <David_Brown@iamgold.com>
Subject: RE: Local Trapper Notices

Hey Christian,

We will send the notice on behalf of IAMGOLD.

We will need to be provided stamps, the formal notice and a map of the proposed area.

But no issue getting the information out.

-Owen

Owen Rigg
Senior Lands and Waters Technical Specialist
Ministry of Natural Resources and Forestry
Timmins District
705-235-1333

Christian Naponse

From: Maydew, Krista <krista.maydew@woodplc.com>
Sent: July 13, 2018 9:08 AM
To: Christian Naponse
Cc: Carr, Don
Subject: FW: Local Trapper Notices - please enter into SIIMS

Categories: SIIMS task

From: David Brown [mailto:David_Brown@iamgold.com]
Sent: Tuesday, July 10, 2018 2:29 PM
To: Rigg, Owen (MNRF) <Owen.Rigg@ontario.ca>
Cc: Projectmail - IMGsiims <IMGsiims@amecfw.com>; Christian Naponse <christian_NAPONSE@iamgold.com>
Subject: RE: Local Trapper Notices

Hi Owen,

Just following up to see if you received the letters to be sent to the trappers ?

Please let me know if they have been sent.

Thanks,

Dave

From: Rigg, Owen (MNRF) [<mailto:Owen.Rigg@ontario.ca>]
Sent: June 20, 2018 1:26 PM
To: Christian Naponse <christian_NAPONSE@iamgold.com>
Cc: David Brown <David_Brown@iamgold.com>
Subject: RE: Local Trapper Notices

The address is correct.

Just make it to my Attention.

Thanks again.

-Owen

Owen Rigg
Senior Lands and Waters Technical Specialist
Ministry of Natural Resources and Forestry
Timmins District
705-235-1333

June 15, 2018

RE: Environmental Assessment for a 44 Kilometre Transmission Line Between the Shining Tree Distribution Station and the Côté Gold Project

Dear community member,

IAMGOLD Corporation (IAMGOLD) is proposing to develop a new open-pit gold mine approximately 20 kilometres southwest of Gogama, Ontario and will require power to operate the Project, including processing of the ore. IAMGOLD is studying the potential effects of a proposed 44 kilometre, 115 kilovolt (kV) transmission line to connect the Côté Gold Project to the Hydro One Networks Incorporated transmission line near the Shining Tree Distribution Station. As part of the environmental assessment process, IAMGOLD welcomes feedback from people who are interested in, or may be affected by the transmission line. IAMGOLD will endeavor to address your questions, comments and concerns related to the construction and operation of the proposed transmission line.

The Ministry of Natural Resources and Forestry (MNRF) has addressed and sent this letter to you on IAMGOLD's behalf, as the MNRF has you listed as a land user in the vicinity of the proposed transmission line right-of-way. The MNRF is unable to release your contact information to IAMGOLD without consent and has elected to mail this letter without releasing your contact information.

Please see the attached Notice of Commencement of a Screening that was published in the Timmins Press and Sudbury Star on May 26, 2018. The Notice includes information on the Project, and contact information for submitting any questions or comments you may have. Additional Project information is available at: www.iamgold.com/cotegold

If you would like to be notified of updates to the Côté Gold Project and the environmental assessment process, including documents available for public review, please let IAMGOLD know at your earliest convenience. Please note that any personal information you submit will become part of the public record that is available to the general public, unless you request your personal information remains confidential.

In closing, IAMGOLD looks forward to hearing from and working with affected stakeholders to mitigate potential effects associated with the transmission line. If you would like to meet with IAMGOLD to discuss the Project or the proposed transmission line, please contact us.

Sincerely,



Steven Woolfenden
Director, Environment
IAMGOLD Corporation
E-mail: cotegold@iamgold.com

Attachment: Notice of Commencement of a Screening

Notice of Commencement of a Screening



Côté Gold Project Transmission Line

The Study

This Notice of Commencement is provided to inform the public, Indigenous communities and interested parties that **IAMGOLD Corporation** (IAMGOLD) is beginning an environmental study to determine the potential environmental effects of the installation of a 115 kV transmission line connecting the **Côté Gold Project** to the Hydro One transmission network near the Shining Tree Distribution Station, to provide permanent power for the proposed mine.



The Process

The study will be carried out in accordance with the Ministry of the Environment and Climate Change Environmental Screening Process for Category B Projects set out in Ontario Regulation 116/01 (the *Electricity Projects Regulations*) and the Hydro One *Class Environmental Assessment for Minor Transmission Line Facilities* under the Ontario *Environmental Assessment Act*.

On completion of the study, an Environmental Screening Report will be completed and made available for a 30-day public review period. A Notice of Completion will advise interested parties of the locations where the report can be reviewed.

Comments

Members of the public, Indigenous communities and other interested persons are encouraged to actively participate in the planning process.

Notice of all upcoming consultation events will be advertised in local papers and published at:
www.iamgold.com/cotegold-events

More information about the Côté Gold Project is available at:
www.iamgold.com/cotegold

Please direct any inquiries, comments or requests regarding the **Côté Gold Transmission Line Project** to:

Background

The Côté Gold Project is majority owned by IAMGOLD, and consists of a proposed open pit gold mine with related processing facilities and infrastructure. The Côté Gold Project is located approximately 20 kilometres southwest of Gogama in northeastern Ontario. Development of the mine requires a reliable power supply for the construction and operations phases.

IAMGOLD proposes to construct a new 115 kV transmission line of approximately 44 km length, from a location near the Shining Tree Distribution Station to the mine. The new transmission line will be constructed primarily along an existing transmission line right-of-way.

Steven Woolfenden
Director, Environment
IAMGOLD Corporation
401 Bay Street, Suite 3200, P.O. Box 153
Toronto, ON M5H 2Y4
T: 416-360-4710
E-mail: cotegold@iamgold.com

All personal information included in a submission – such as name, address, telephone number and property location – is collected, maintained and disclosed by the Ministry of the Environment and Climate Change for the purpose of transparency and consultation. The information is collected under the authority of the *Environmental Assessment Act* or is collected and maintained for the purpose of creating a record that is available to the general public as described in s.37 of the *Freedom of Information and Protection of Privacy Act*. Personal information you submit will become part of a public record that is available to the general public unless you request that your personal information remain confidential. For more information, please contact the Project Officer or the Ministry of the Environment and Climate Change's Freedom of Information and Privacy Coordinator at (416) 327-1434.

Appendix A-8

Request for Guidance on Engagement

-----Original Message-----

From: Smithanik, Shereen (ENERGY) <Shereen.Smithanik@ontario.ca>

Sent: Wednesday, August 22, 2018 1:28 PM

To: Steven Woolfenden <Steven_Woolfenden@iamgold.com>

Cc: Allen, Paula (MECP) <Paula.Allen@ontario.ca>; Testa, Antonia (MECP) <Antonia.Testa@ontario.ca>; Dagssie, Yves (MECP) <Yves.Dagssie@ontario.ca>; Guindon, Jean (MECP) <jean.guindon@ontario.ca>; Momy, Steven (MECP) <Steven.Momy@ontario.ca>; McCabe, Shannon (ENERGY) <Shannon.McCabe@ontario.ca>; Samuel, Aisha (MNDM) <Aisha.Samuel@ontario.ca>; Maydew, Krista <krista.maydew@woodplc.com>; David Brown <David_Brown@iamgold.com>; Christian Naponse <christian_NAPONSE@iamgold.com>; Lindsey Taylor <Lindsey_Taylor@iamgold.com>; Carr, Don <don.carr@woodplc.com> Subject: RE: Cote Gold Project - Environmental Assessment for Minor Transmission Facilities – Request for Guidance / Confirmation of Consultation Requirements

Hi Steven,

Thank you for providing us with this information. Under the Class EA for minor transmission, the Ministry of Energy, Northern Development and Mines (formerly the Ministry of Energy) provides consultation direction for these transmission projects. I can see how this may be confusing given that our Ministry is also handling permitting for the mine, as you pointed out. I encourage you to continue with your consultations and I will be in touch to go over the process a bit further. For the record, our assessment focus is solely on the transmission line. Please let me know a time that works and I can schedule a phone call with myself and my colleague Shannon McCabe to go over the process a little bit. Please feel free to contact me if you have any questions or concerns.

Best regards,

Shereen Smithanik

Senior Policy Advisor

Ministry of Energy, Northern Development and Mines

416-326-0513

shereen.smithanik@ontario.ca<<mailto:shereen.smithanik@ontario.ca>>

From: Steven Woolfenden [Steven_Woolfenden@iamgold.com]

Sent: 22 August 2018 11:36

To: Smithanik, Shereen (ENERGY)

Cc: Allen, Paula (MECP); Testa, Antonia (MECP); Dagssie, Yves (MECP); Guindon, Jean (MECP); Momy, Steven (MECP); McCabe, Shannon (ENERGY); Samuel, Aisha (MNDM); Maydew, Krista; David Brown; Christian Naponse; Lindsey Taylor; Carr, Don; Maydew, Krista

Subject: Cote Gold Project - Environmental Assessment for Minor Transmission Facilities – Request for Guidance / Confirmation of Consultation Requirements

Dear Ms. Smithanik:

IAMGOLD Corporation (IAMGOLD) initiated a study under the Class Environmental Assessment (Class EA) for Minor Transmission Facilities for the installation of a 115 kilovolt (kV) transmission line connecting the Côté Gold Project to the Hydro One transmission network at the Shining Tree Distribution Station, to provide power for the proposed mine.

The Côté Gold Project is majority owned by IAMGOLD and consists of a proposed open pit gold mine with related processing facilities and infrastructure. The Côté Gold Project is located approximately 20 kilometres southwest of Gogama in northeastern Ontario.

Development and operations of the mine require a reliable power supply.

As per direction provided to IAMGOLD on August 8, 2018 from the Ministry of Environment, Conservation and Parks, IAMGOLD is writing to confirm our approach to Indigenous consultation for the Class EA for the proposed 115 kV transmission line.

IAMGOLD received approvals on its proposed Côté Gold Project from the Canadian Environmental Assessment Agency on April 13, 2016 and a positive decision statement from the provincial Ministry of the Environment and Climate Change on December 22, 2016. The proposed connection to Hydro One's existing distribution station, replaces the need for IAMGOLD to construct a new 230 kV line from the site to the Porcupine Substation in Timmins, which was assessed and approved as part of the Côté Gold Project Individual EA.

Both decision statements set out conditions which outlined the communities required to be consulted going forward. The provincial and federal lists of Indigenous communities to be consulted vary substantially, as described below:

Provincial Indigenous Consultation Requirement:

Federal Indigenous Consultation Requirement:

- Aundeck Omni Kaning First Nation
- Beaverhouse First Nation
- Brunswick House First Nation
- Chapleau Ojibwe First Nation
- Conseil de la Première Nation Abitibiwinni
- Flying Post First Nation (represented by Wabun Tribal Council)
- Matachewan First Nation
- Mattagami First Nation (represented by Wabun Tribal Council)
- Missanabie Cree First Nation
- M'Chigeeng First Nation
- Serpent River First Nation
- Taykwa Tagamou Nation
- Wahgoshig First Nation
- Métis Nation of Ontario – Region 3 (which represents Northern Lights and Temiskaming Métis Councils)
- Mattagami First Nation
- Flying Post First Nation
- Brunswick House First Nation
- Métis represented by the Métis Nation of Ontario Region 3 Consultation Committee

In addition to the conditions provided by the federal and provincial governments, IAMGOLD's approach to consultation is inclusive of the consultation plan approved by then Ministry of Northern Development and Mines (MNDM) to guide consultation throughout the EA process and the direction provided in the EA approvals. IAMGOLD is of the opinion that the provincial list of communities to consult (above) is inclusive of any communities that could potentially have an interest in the proposed transmission line.

It is our understanding that as of early August, MENDM was in the process of preparing a letter of guidance outlining direction on Indigenous consultation related to the Notice of Project Status for the Côté Gold Project provided to MNDM on March 22, 2018. In the absence of direction from the Ministry, IAMGOLD will continue to engage with the communities listed within this letter. Should the Ministry identify a different list of communities to engage, IAMGOLD will work to revise our efforts at that point.

We look forward to receiving a response from the Ministry.

Respectfully,

Steve

STEVEN WOOLFENDEN

Director, Environment

Empowering People, Extraordinary Performance

401 Bay Street Suite 3200, PO Box 153

TORONTO ON M5H 2Y4 Canada

T – (416) 594-2884 C (416) 670-6153

www.iamgold.com<https://urldefense.proofpoint.com/v2/url?u=https-3A__na01.safelinks.protection.outlook.com_-3Furl-3Dhttp-253A-252F-252Fwww.iamgold.com-252F-26data-3D02-257C01-257CShereen.Smithanik-2540ontario.ca-257Cb726572f052c487b8cec08d60845053d-257Cddc1229ac2a4b97b78a0e5cacb5865c-257C0-257C0-257C636705489869568380-26sdata-3DUDNZ-252F169zBeADBmk9oV85Jr19xSR-252F3LF27uf0ZHW8mE-253D-26reserved-3D0&d=DwlF-g&c=ZWY66qCYUTYUcOev9C2GIDEcKuYKzoWDVNR_L93Z9mQ&r=rmj6VXS0bPjdIKyyHpkU89f1q66rQX-7k3fELx5PtWA&m=wqwlBQyb94sm5YimGntC4lAfEOKygXOXRuTnZrGls5E&s=80w0ryPoSyLEzcyFqLtO7aEDxp02VzlBMJM1IWTP-DE&e=>

[Description: IAMGOLD Sig]



Appendix A-9

Summary of Transmission Line Comments

Comments and Responses Related to Transmission Line – June 27, 2012 to August 30, 2018

ROC	Event Type	Date	Event Summary	Participating Organizations	Comments	Official Response
5	Meeting	06/27/2012	Minister of Northern Development and Mines (MNDM) met with IAMGOLD on 2012-06-27 and pledged support and assistance for the Côté Gold Project, indicated that the Project is eligible for the provincial power rebate, and provided guidance on First Nations consultations.	Ministry of Northern Development and Mines, IAMGOLD Corporation	1) Minister of MNDM indicated that the Côté Gold Project is eligible for the provincial power rebate.	IAMGOLD thanks MNDM for the information and will follow-up accordingly.
46	Meeting	11/15/2012	IAMGOLD provided a PowerPoint presentation on the current status of the Project Description of the Côté Gold Project, primarily to understand the Environmental Assessment (EA) requirements, and show maps of: the project location/setting, location of local First Nations (FNs), regional and local watershed boundaries, a preliminary site layout (including proposed tailings storage areas, mine rock areas, the open pit, plant site facilities, camp location, water diversions, transmission line routes). A currently proposed high level EA,	Amec Foster Wheeler Environment & Infrastructure, Canadian Environmental Assessment Agency, Mattagami Region Conservation Authority, Ministry of Natural Resources, Ministry of Northern Development and Mines, Ministry of the Environment, Amec Foster	1) For a new (more direct) route for the power transmission line, the Ministry of Natural Resources (MNR) would require: "values" to be assessed; consideration of different options for power; advantages/ disadvantages of different routes; identification of impact(s) on Navigable Waters and cottagers. May need to also contact Transport Canada regarding interference of wires on floatplanes.	IAMGOLD will assess the alternatives transmission corridors within the coordinated EA.

ROC	Event Type	Date	Event Summary	Participating Organizations	Comments	Official Response
			permitting and construction schedule was also presented.	Wheeler Environment & Infrastructure, IAMGOLD Corporation		
29	Meeting	11/19/2012	Meeting between IAMGOLD and the Ministry of Northern Mines and Development (MNDM). IAMGOLD introduced the Côté Gold Project, and the specific related aspects of power, aboriginal engagement, and permitting.	Ministry of Northern Development and Mines, IAMGOLD Corporation	1) IAMGOLD highlighted the importance of power relating to project viability and cost management at Côté Gold. 2) MNDM encouraged IAMGOLD to coordinate with the Ministry of Energy.	IAMGOLD has been engaging in dialogue with the Ministry of Energy.
174	Meeting	02/20/2013	IAMGOLD met with various government representatives from the Ministry of the Environment (MOE), Ministry of Natural Resources (MNR), Ministry of Northern Development and Mines (MNDM), and Ministry of Transportation (MTO) to discuss the Côté Gold Draft Project Description.	Amec Foster Wheeler Environment & Infrastructure, Ministry of Natural Resources, Ministry of Northern Development and Mines, Ministry of the Environment, Amec Foster Wheeler Environment & Infrastructure,	1) The substation that would need to be added on the 500kV line is a major undertaking and would take approximately 7 years to build. 2) If IAMGOLD goes with the transmission line alternative route, how much longer will it take?	IAMGOLD is not proposing a transmission line that would require new substation construction on the 500 kV line.

ROC	Event Type	Date	Event Summary	Participating Organizations	Comments	Official Response
				IAMGOLD Corporation		
174	Meeting	02/20/2013	IAMGOLD met with various government representatives from the Ministry of the Environment (MOE), Ministry of Natural Resources (MNR), Ministry of Northern Development and Mines (MNDM), and Ministry of Transportation (MTO) to discuss the Côté Gold Draft Project Description.	Amec Foster Wheeler Environment & Infrastructure, Ministry of Natural Resources, Ministry of Northern Development and Mines, Ministry of the Environment, Amec Foster Wheeler Environment & Infrastructure, IAMGOLD Corporation	1) We want to be involved in the transmission lines as soon as possible and be sure to do the work for several of the options, not just your preferred one. Have two alternatives for the lines, something might come up and again, involve us soon.	IAMGOLD will conduct an assessment of the transmission line alternatives and involve MNR and other government agencies in this assessment as appropriate. The preferred alternative will be presented and assessed in the EA report.
221	Meeting	05/23/2013	IAMGOLD and AMEC met with the Ministries of Northern Development and Mines (MNDM), Environment (MOE), and Natural Resources (MNR) to provide a Project update and to review the Draft Terms of Reference.	Canadian Environmental Assessment Agency, Government of Ontario, Ministry of Natural Resources, Ministry of Northern Development and Mines, Ministry of	1) Why are you crossing Kenogamissi Lake with the transmission line? There has been some clearing for a potential transmission line to link a new dam located between Mattagami and Kenogamissi Falls which may provide another option for the alignment.	IAMGOLD is working with the Ontario Power Generation on the routing options but obviously it would be good to check on this if there could be some synergies with new dams/power sources.

ROC	Event Type	Date	Event Summary	Participating Organizations	Comments	Official Response
				the Environment, Amec Foster Wheeler Environment & Infrastructure, IAMGOLD Corporation		
224	Letter	06/07/2013	The Ministry of Tourism, Culture and Sport (MTCS) - Northern Policy and Planning Unit provided comments on the Côté Gold Project Draft Terms of Reference (ToR) for the Environmental Assessment (EA).	Ministry of Tourism, Culture and Sport, IAMGOLD Corporation	1) MTCS notes the comments from the Ministry of Natural Resources relating to the proposed transmission line that suggests IAMGOLD contact Transport Canada regarding potential interference of the transmission wires on floatplanes. MTCS looks forward to additional information regarding IAMGOLD's discussions with Transport Canada in this regard and any resulting modifications to the Project in the final ToR.	IAMGOLD acknowledges the potential concerns with the proposed transmission line crossing of Kenogamissi Lake. IAMGOLD is reviewing the proposed alignment and alternative route in order to avoid or minimize the concern. If needed IAMGOLD will engage Transport Canada regarding the transmission line, all discussions will be documented in either the Proposed ToR, Record of Consultation and/or the environmental assessment report.
228	Letter	06/07/2013	The Ministry of Natural Resources (MNR) provided comments on the Côté Gold Project Draft Terms of Reference (ToR).	Ministry of Natural Resources, IAMGOLD Corporation	1) Transmission Line crossing Kenogamissi Lake, is not a good idea as indications are that airplanes frequently land on this lake and the transmission line may be a safety hazard. If this is to remain as one of the options, we would suggest that it cross between Kenogamissi Lake and Mattagami Lake (Mattagami Lake Dam / Tembec Bridge area).	This information has been passed on to the engineering team and will be further considered in the design of the Project. The engineering team will also contact OPG to discuss alignment options.

ROC	Event Type	Date	Event Summary	Participating Organizations	Comments	Official Response
					Recommend talking to OPG as there may have already been initial work looking at a transmission line around here (at least as far as the dam). 2) Transmission Line placement was not included as assessment for alternatives, yet there are two proposed options given. Should include the decision process for determining transmission line placement.	
228	Letter	06/07/2013	The Ministry of Natural Resources (MNR) provided comments on the Côté Gold Project Draft Terms of Reference (ToR).	Ministry of Natural Resources, IAMGOLD Corporation	1) The disposition of land for the transmission line is missing.	The Proposed ToR will be revised to specifically incorporate disposition of land for the transmission line.
228	Letter	06/07/2013	The Ministry of Natural Resources (MNR) provided comments on the Côté Gold Project Draft Terms of Reference (ToR).	Ministry of Natural Resources, IAMGOLD Corporation	Does the outlined reclamation apply to the entire length of the transmission line or only to a measured portion?	Closure of the transmission line is addressed in Section 4.2.3.11 of the EA. The reclamation measures apply to the entire length of the transmission line.
246	E-mail	06/07/2013	The Ministry of Natural Resources (MNR) - Timmins District provided comments on the Draft Terms of Reference (ToR) for the Environmental Assessment (EA).	Ministry of Natural Resources	1) The transmission line placement was not included as assessment for alternatives, yet there are two proposed options given. Should include the decision process for determining transmission line placement.	The transmission line placement is considered in Section 5.3.1.12 as well as in the summary in Table 5-7.
246	E-mail	06/07/2013	The Ministry of Natural Resources (MNR) - Timmins District provided comments	Ministry of Natural Resources	1) With reference to Page 5-22, the transmission line crossing Kenogamissi Lake, is not a good	This information has been passed on to the engineering team and will be further considered in the design of the Project.

ROC	Event Type	Date	Event Summary	Participating Organizations	Comments	Official Response
			on the Draft Terms of Reference (ToR) for the Environmental Assessment (EA).		idea as indications are that airplanes frequently land on this lake and the transmission line may be a safely hazard. If this is to remain as one of the options, we would suggest that it cross between Kenogamissi Lake and Mattagami Lake (Mattagami Lake Dam/Tembec Bridge area). The MNR recommends contacting Ontario Power Generation (OPG) as there may have been initial work completed to look at a transmission line around here (at least as far as the dam).	The engineering team will also contact OPG to discuss alignment options.
246	E-mail	06/07/2013	The Ministry of Natural Resources (MNR) - Timmins District provided comments on the Draft Terms of Reference (ToR) for the Environmental Assessment (EA).	Ministry of Natural Resources	1) With reference to Section 4.2.3.6, does the outlined reclamation apply to the entire length of the transmission line or only to a measured portion?	Closure of the transmission line is addressed in Section 4.2.3.11. The reclamation measures apply to the entire length of the transmission line.
236	Letter	06/10/2013	On 2013-06-10, the Ministry of the Environment (MOE) project officer provided comments to IAMGOLD on the Côté Gold Project Draft Terms of Reference (ToR) for the Environmental Assessment (EA).	Ministry of the Environment, IAMGOLD Corporation	1) In section 4.2.3.11, you may wish provide more clarity by stating that transfer of ownership of the 230 kV transmission line will be evaluated at the end of the Project.	Text will be revised as suggested for clarity.

ROC	Event Type	Date	Event Summary	Participating Organizations	Comments	Official Response
236	Letter	06/10/2013	On 2013-06-10, the Ministry of the Environment (MOE) project officer provided comments to IAMGOLD on the Côté Gold Project Draft Terms of Reference (ToR) for the Environmental Assessment (EA).	Ministry of the Environment, IAMGOLD Corporation	1) Considering the great distance over which the 230 kV transmission line will be built (130 to 170 km), it is unclear to the reader why there are only two routing alternatives that will be considered. The Rainy River Gold Project included four alternative routings for the 230 kV transmission line, and this was over a distance of less than 20 km. Please provide a rationale as to why more routes will not be considered for the Project	The Proposed ToR will be revised to include a rationale for no further routings being proposed.
236	Letter	06/10/2013	On 2013-06-10, the Ministry of the Environment (MOE) project officer provided comments to IAMGOLD on the Côté Gold Project Draft Terms of Reference (ToR) for the Environmental Assessment (EA).	Ministry of the Environment, IAMGOLD Corporation	1) Section 5.3.1.13: I recall during at least one of the interministerial meetings, IAMGOLD made reference to a third transmission line route, which I understand is no longer being considered. Because it was an alternative route which was considered for the Project, it should be mentioned in the ToR – and if it were screened out, then a rationale for having done so should be provided, as it was both for onsite diesel-fired power generation and for renewable energy as the primary power source for site operations.	All options considered to date are described in the Draft ToR. The ‘third option’ was, we believe, the concept of tying into the 115 kV line at Shining Tree. However, the Project power demands have increased such that a 230 kV line is required. Therefore this third option is no longer suitable.
302	Meeting	07/03/2013	On 2013-07-03 an Intergovernmental agency	Canadian Environmental	1) Comments about transmission line - in particular the absence of a	The transmission line was a 115kV line that would not be sufficient capacity to

ROC	Event Type	Date	Event Summary	Participating Organizations	Comments	Official Response
			meeting was held with representatives from AMEC, IAMGOLD, the Canadian Environmental Assessment Agency (CEA Agency), the Ontario Ministry of Northern Development and Mines, and the Ontario Ministry of the Environment to discuss the Draft Terms of Reference (ToR) responses and an overview of consultation planning. The meeting notes were finalized on 2013-08-06.	Assessment Agency, Ministry of Northern Development and Mines, Ministry of the Environment, Amec Foster Wheeler Environment & Infrastructure, IAMGOLD Corporation	third routing was not well understood. 2) At a past meeting there was a mention of a third route (Shining Tree Route) that was not included in the draft ToR.	serve the Project needs and was therefore removed from the assessment of alternatives. One of the remaining two options follows the same routing as this previously considered option. There were other comments on routing that we are considering in the Project designs.
304	Interview	07/15/2013	AMEC conducted an interview with a representative from Tata Chika Pike Lodge to gather data on local outfitter lodges to support the Land and Resource Use Baseline Study.	Tata Chika Pike Lodge, Amec Foster Wheeler Environment & Infrastructure	1) We provide fishing and hunting; BMA CP-31-054 (along the cross-country transmission line. Clients hunt and fish around the lodge). They hunt for grouse, black bear and moose. We have not noticed any changes in the taste, quality or abundance of animals for hunting.	Thank you for your comment. The information collected will be used to support the Land and Resource Use Baseline Study.
350	E-mail	08/14/2013	The Ministry of the Environment (MOE) provided comments on the IAMGOLD Proposed Terms of Reference (ToR) on behalf of a representative from the Ministry of Northern Development and Mines related to questions about the terminology and scope of	Ministry of Northern Development and Mines, Ministry of the Environment, IAMGOLD Corporation	1) Table 5-7 currently does not include alternative methods for assessing or mitigating AMIS or Mine Hazards that may be encountered in the building of the transmission line or on the Project site itself.	Thank you for your comment. AMIS or Mine Hazards are existing features primarily related to other sites (not a result of the Project development), some of which may affect the ultimate transmission line route (to avoid/minimize encountering these features), but assessing alternatives methods for mitigating these features is not within the scope of the EA for the

ROC	Event Type	Date	Event Summary	Participating Organizations	Comments	Official Response
			the Proposed Terms of Reference.			Project. The AMIS or Mine Hazards, however, will be considered in the Project planning, as well as in the contingency plans.
352	E-mail	08/14/2013	The Ministry of the Environment provided comments on the IAMGOLD Proposed Terms of Reference (ToR) on behalf of the Ministry of Northern Development and Mines related to mine hazards.	Ministry of Northern Development and Mines , Ministry of the Environment, IAMGOLD Corporation	1) Are there any rehabilitated hazards en route the proposed transmission corridor? - If so under the Mining Act, they are required to seek Director approval to disturb any previously rehabilitated mine features (including the mine proposed areas and the area associated with the proposed transmission line). This site should be identified prior to moving forward with construction so permissions can be given.	Thank you for your comment. AMIS or Mine Hazards will be considered in the Project planning, as well as in the contingency plans. Appropriate authorization will be obtained prior to undertaking any construction of the Project.
353	E-mail	08/19/2013	The Ministry of the Environment provided comments on the IAMGOLD Proposed Terms of Reference (ToR) on behalf of the Ministry of Energy relating to Power Supply and Routing.	Ministry of Energy , Ministry of the Environment, IAMGOLD Corporation	1) The ministry does not have any comments on the Record of Consultation, but we do have comments on the draft EA, specifically the section dealing with Power Supply and Routing (section 5.3.14). IAMGOLD has made an effort to respond to initial comments from Ministry staff, however we are still seeking more detail with respect to the anticipated power needs of the project.	Thank you for your comment. This will be addressed in the EA report.

ROC	Event Type	Date	Event Summary	Participating Organizations	Comments	Official Response
					The proponent should describe the anticipated power needs in the draft Terms of Reference or state that this will be described more in detail in the EA. The power requirements for the project are usually described for each phase (for example the construction phase and the operation phase) and should include approximate dates when the power requirements would begin, and the MWs required at the height of the mine's operations. This information would support the identified need for a 230 kV transmission line connection.	
359	E-mail	08/22/2013	The Ministry of the Environment provided comments on the IAMGOLD Proposed Terms of Reference (ToR) on behalf of the Wabun Tribal Council.	Ministry of the Environment, Wabun Tribal Council, IAMGOLD Corporation	1) The Proposed ToR indicates (onp.5-24) that a "review of transmission infrastructure that could serve the Project operations has been carried out". The review is not attached to the Proposed ToR and so the scope of the review is unclear to reviewers. The Proposed ToR indicates that: "there is a 115kV transmission line located approximately 50 km east of the Project, however a 115kV will not be sufficient for the Project". It is not stated whether the "insufficiency" is the result of	Thank you for your comment. The Côté Gold Project is a low-grade Project. To be economically viable, low-grade projects require a high mining rate. A 230kV line is preferred for capacity reasons but also to prevent energy shortfalls. IAMGOLD has thoroughly reviewed whether it is viable or not to run the Project with a 115kV line. Based on the infrastructure requirements for the Project, a 230kV transmission line has been deemed necessary, and a 115kV line is not considered a technically and financially realistic and economically viable solution for

ROC	Event Type	Date	Event Summary	Participating Organizations	Comments	Official Response
					<p>the electrical capacity or energy shortfalls or both. Presuming it is capacity, was consideration given to reducing the mine production capacity of the facilities (i.e. lengthening the production phase) as a means of lowering power demand? We recommend that the proposed ToR carry forwards to the environmental assessment stage a consideration of alternatives that do not involve the construction of a 230kV transmission line as well as the alternative of constructing the 230kV transmission line.</p>	<p>IAMGOLD. A 115kV line could provide a maximum of 70-80 MW. The current project design requires 120 MW. In addition the capacity of the 115 kV line would be at its limits at 70-80 MW and the stability of the system would be questionable, meaning the ability of the 115kV line to deliver consistent power for a facility needing 70-80 MW would be severely stretched. Also, from an efficiency standpoint, smaller lines have greater line loss rates, as such, use of a 115kV line would waste power and increase power costs. Moreover, with greater power capacity available through a 230 kV line, IAMGOLD will assess the potential to a more power-intensive mining method (in-pit crushing and conveying, IPCC). IPCC use if deemed appropriate can significantly reduce the GHG emissions typically emitted from the truck fleet. The 120 MW estimate does not include the power which would be required to operate IPCC, as IPCC is still being evaluated by the Project team. Also, with the 230 kV line, IAMGOLD would have capacity in the power system to support potential future expansions of the mine and/or local needs, whereas with a 115kV line, expansion options would be significantly entirely eliminated or extremely limited.</p>

ROC	Event Type	Date	Event Summary	Participating Organizations	Comments	Official Response
320	E-mail	08/29/2013	On 2013-08-26 IAMGOLD shared with a representative from the Ministry of Natural Resources (MNR) information related to the traplines, bear management areas and bait fish harvest blocks that overlap the Project site and those that are near the proposed transmission line. In response, on 2013-08-28 the representative requested that AMEC, on behalf of IAMGOLD, share the results of the effects prediction study to help the Ministry prepare to send out letters outlining these effects to potentially impacted resource harvesters. On 2013-08-29 AMEC, on behalf of IAMGOLD, responded and noted that they would share the study with the Ministry once they have finished with data collection and analysis.	Ministry of Natural Resources, Amec Foster Wheeler Environment & Infrastructure, IAMGOLD Corporation	1) The trapline areas near the transmission line alignment that have cabins include: GO028, GO032, and GO033.	Thank you for your comment. This information will be used to support the Land and Resource Use Baseline study.
320	E-mail	08/29/2013	On 2013-08-26 IAMGOLD shared with a representative from the Ministry of Natural Resources (MNR) information related to the traplines, bear	Ministry of Natural Resources, Amec Foster Wheeler Environment &	1) Bear Management Areas GO-31-064 overlaps the Project site and GO-290-066 overlaps the transmission line alternative.	Thank you for your comment. This information will be used to support the Land and Resource Use Baseline study.

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			management areas and bait fish harvest blocks that overlap the Project site and those that are near the proposed transmission line. In response, on 2013-08-28 the representative requested that AMEC, on behalf of IAMGOLD, share the results of the effects prediction study to help the Ministry prepare to send out letters outlining these effects to potentially impacted resource harvesters. On 2013-08-29 AMEC, on behalf of IAMGOLD, responded and noted that they would share the study with the Ministry once they have finished with data collection and analysis.	Infrastructure, IAMGOLD Corporation		
362	E-mail	10/04/2013	IAMGOLD emailed the Ministry of the Environment (MOE) to provide all of the official responses to Wabun Tribal Council's comments on the Proposed Terms of Reference. In addition, IAMGOLD requested that the MOE proceeds with obtaining approval of the Proposed	Ministry of the Environment, Wabun Tribal Council, IAMGOLD Corporation	1) The current project configuration envisions the construction of a 230 kV transmission line of approximately 160 km in length originating in Timmins. This transmission line adds considerably to the capital costs of the proposed Project and substantially expands the Project footprint. Considering also that this 230 kV line would currently have no useful purpose following	Thank you for your comment. The Cote Gold Project is a low-grade Project. To be economically viable, low-grade projects require a high mining rate. A 230 kV line is preferred for capacity reasons but also to prevent energy shortfalls. IAMGOLD has thoroughly reviewed whether it is viable or not to run the Project with a 115 kV line. Based on the infrastructure requirements for the Project, a 230 kV transmission line has been deemed necessary, and a 115 kV

ROC	Event Type	Date	Event Summary	Participating Organizations	Comments	Official Response
			Terms of Reference for the Project.		<p>construction, we see the importance of considering carefully options for avoiding construction of the transmission line, and the need to justify the preferred alternatives during the environmental assessment. The Proposed ToR indicate (at p.5-24) that a "review of transmission infrastructure that could serve the Project operations has been carried out". The review is not attached to the Proposed ToR and so the scope of the review is unclear to reviewers.</p> <p>The Proposed ToR indicates that: "there is a 115 kV transmission line located approximately 50 km east of the Project, however, 115 kV will not be sufficient for the Project." It is not stated whether the "insufficiency" is the result of electrical capacity or energy shortfalls or both. Presuming it is capacity, was consideration given to reducing the mine production capacity of the facilities (i.e. lengthening the production phase) as a means of lowering power demand? We note that diesel power has been considered for "periodic use during the operations phase (and potentially</p>	<p>line is not considered a technically, financially realistic and economically viable solution for IAMGOLD. A 115 kV line could provide a maximum of 70-80 MW. The current project design requires 120 MW. In addition the capacity of the 115 kV line would be at its limit at 70-80 MW and the stability of the system would be questionable, meaning the ability of the 115 kV line to deliver consistent power for a facility needing 70-80 MW was severely stretched. Also, from an efficiency standpoint, smaller lines have greater line loss rates, as such, use of a 115kV line would waste power and increase power costs. Moreover, with greater power capacity available through a 230 kV line, IAMGOLD will assess the potential to a more power-intensive mining method (in-pit crushing and conveying, IPCC) IPCC use if deemed appropriate can significantly reduce the GHG emissions typically emitted from the truck fleet. The 120 MW estimate does not include the power which would be required to operate IPCC, as IPCC is still being evaluated by the Project team. Also, with the 230 kV line, IAMGOLD would have capacity in the power system to support potential future expansions of the mine and/or local needs, whereas with a 115kV line, expansion options</p>

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					<p>during the closure phase) as needed when power grid is unavailable" but it does not appear that diesel power has been considered as a supplement to grid power to lessen capacity or energy requirements from the grid in order to avoid construction of the 230 kV transmission lines. Other options may also be available to lower the requirements for grid power but it is unclear whether they were considered.</p> <p>In summary, the dismissal of alternatives that do not require the construction of a 230 kV transmission line is not traceable in the Proposed ToR. While dismissing these alternatives may be justified, this cannot be determined from the information provided in the Proposed ToR. If the referenced "review of transmission alternatives" evaluated alternatives that adequately considered changes to the mine design, then we recommend that it be appended to the Proposed ToR. This would meet the requirement of the Code of Practice to "provide justification in the terms of reference for</p>	would be significantly entirely eliminated or extremely limited.

ROC	Event Type	Date	Event Summary	Participating Organizations	Comments	Official Response
					limiting the examination of alternatives." However, we do not know if the review of the proponent has completed has considered changes to the mine production rate or other design aspects that would lower the electricity demand of the proposed Project in order to avoid construction of the 230 kV transmission line. In this case, we recommend that the proposed ToR carry forwards to the environmental assessment stage a consideration of alternatives that do not involve the construction of the 230 kV transmission line as well as the alternative of constructing the 230 kV transmission line.	
362	E-mail	10/04/2013	IAMGOLD emailed the Ministry of the Environment (MOE) to provide all of the official responses to Wabun Tribal Council's comments on the Proposed Terms of Reference. In addition, IAMGOLD requested that the MOE proceeds with obtaining approval of the Proposed Terms of Reference for the Project.	Ministry of the Environment, Wabun Tribal Council, IAMGOLD Corporation	1) Of the alternatives listed for consideration, we note that the mine production rates (in other words, the length of the mine operations phase) have not been considered. The length of the mine operations phase is a key consideration in assessing the sustainability of the socio-economic benefits of the proposed project for local communities, including potentially affected First Nations, particularly in terms of	Thank you for your comment. The Pre-Feasibility Study currently underway takes into account the financial aspects of the Project. IAMGOLD understands that a longer operations phase leads to longer periods of employment. If the Project's operation phase is extended, this would lead to a reduction in the workforce required for operation. This would change the circumstances applicable to the socio-economic benefits, but may not make them better. The duration of the mine life is

ROC	Event Type	Date	Event Summary	Participating Organizations	Comments	Official Response
					<p>employment and business opportunities. We recommend that the length of the mine operations be assessed in the environmental assessment, including the interactions of the mine life with other alternative analyses, potentially including alternatives related to water management and power supply and routing (see "Power Supply and Routing" below).</p>	<p>determined by multiple factors which include the global market, the return on investment, the availability and cost of workforce and the proponent's operational and economic targets. For this low-grade Project the throughput rate was benchmarked against other low grade projects such as Canadian Malartic and Detour Gold, which have comparable production rates. Benchmarking is a method commonly used to compare the feasibility of future projects with projects that are already in production or that are more advanced from an engineering standpoint. The Project, as currently defined in the Proposed ToR, has been optimized for economic viability. Significant Project life extensions would render the Project uneconomical. Therefore, an extension in mine life is not a viable alternative to be assessed in the EA. Note that this issue is related to the chosen transmission line alternative (i.e. 115 kV vs 230 kV). As such this issue will be addressed in more detail in the reponse to comment #9 below. IAMGOLD will sign a non-disclosure agreement relating to the disclosure of detailed Project information, which is intended to support the parties' discussions on an Impact Benefit Agreement.</p>

ROC	Event Type	Date	Event Summary	Participating Organizations	Comments	Official Response
363	E-mail	10/04/2013	The Ministry of the Environment (MOE) provided IAMGOLD with a letter sent from the Executive Director of Wabun Tribal Council which outlines a revised response to Wabun Tribal Council's initial submission of comments on IAMGOLD's Proposed Terms of Reference.	Ministry of the Environment, Wabun Tribal Council, IAMGOLD Corporation	1) The Proponent has provided adequate clarification as to why the following were screened out of the environmental assessment solely or primarily based on cost-effectiveness: Mining - Open pit and underground mining; Mine Rock and Overburden Management - Establish a temporary stockpile location...returned to the pit at closure; Non-hazardous - Incineration. With respect to the power supply alternatives, IAMGOLD has committed to provide further information to Wabun Tribal Council in order to better assess these alternatives. No changes to the Proposed ToR are requested.	Thank you for your comment. IAMGOLD will provide Wabun Tribal Council with further information related to power supply alternatives, as requested.
363	E-mail	10/04/2013	The Ministry of the Environment (MOE) provided IAMGOLD with a letter sent from the Executive Director of Wabun Tribal Council which outlines a revised response to Wabun Tribal Council's initial submission of comments on IAMGOLD's Proposed Terms of Reference.	Ministry of the Environment, Wabun Tribal Council, IAMGOLD Corporation	1) IAMGOLD has committed to provide further information to Wabun Tribal Council in order to better assess power supply and routing. See additional comments above in relation to 4. Financial Thresholds and 6. Mine Production Rates. No changes to the Proposed ToR are requested.	Thank you for your comment. IAMGOLD will provide information to Wabun Tribal Council related to power supply and routing, as requested.

ROC	Event Type	Date	Event Summary	Participating Organizations	Comments	Official Response
369	Meeting	10/09/2013	On 2013-10-09, IAMGOLD met with Chief and Council from Flying Post First Nation and Wabun Tribal Council to provide a presentation on, and answer questions regarding the effects prediction and mitigation strategies for the Project. Issues raised related to questions about transmission line alternatives, water channel realignments and the impact of the Project on traditional land uses.	Flying Post First Nation, Wabun Tribal Council, Amec Foster Wheeler Environment & Infrastructure, IAMGOLD Corporation	1) The cross-country transmission line alignment will create access for hunting that did not exist before and might therefore bring in more 'external' hunters.	This comment will be addressed in the EA report.
369	Meeting	10/09/2013	On 2013-10-09, IAMGOLD met with Chief and Council from Flying Post First Nation and Wabun Tribal Council to provide a presentation on, and answer questions regarding the effects prediction and mitigation strategies for the Project. Issues raised related to questions about transmission line alternatives, water channel realignments and the impact of the Project on traditional land uses.	Flying Post First Nation, Wabun Tribal Council, Amec Foster Wheeler Environment & Infrastructure, IAMGOLD Corporation	1) Do visual aesthetics assessment for transmission line, where visible.	IAMGOLD will consider if this is required based on the risk of an effect.

ROC	Event Type	Date	Event Summary	Participating Organizations	Comments	Official Response
370	Meeting	10/15/2013	On 2013-10-15, IAMGOLD met with Chief and Council from Mattagami First Nation and Wabun Tribal Council to provide a presentation on, and answer questions regarding the effects prediction and mitigation strategies for the Project. Issues raised related to questions about the Tailings Management Facility (TMF), the methodology and data collected for the baseline studies, transmission line alternatives, channel realignments and the impact of the Project on traditional land uses.	Mattagami First Nation, W.C. McKay Consulting Services, Wabun Tribal Council, Amec Foster Wheeler Environment & Infrastructure, IAMGOLD Corporation	1) Will transmission line maintenance be subcontracted to third parties?	This has not been decided yet.
370	Meeting	10/15/2013	On 2013-10-15, IAMGOLD met with Chief and Council from Mattagami First Nation and Wabun Tribal Council to provide a presentation on, and answer questions regarding the effects prediction and mitigation strategies for the Project. Issues raised related to questions about the Tailings Management Facility (TMF), the methodology and data collected for the baseline	Mattagami First Nation, W.C. McKay Consulting Services, Wabun Tribal Council, Amec Foster Wheeler Environment & Infrastructure, IAMGOLD Corporation	1) What is the transmission line capacity?	This information will be provided in the EA reports.

ROC	Event Type	Date	Event Summary	Participating Organizations	Comments	Official Response
			studies, transmission line alternatives, channel realignments and the impact of the Project on traditional land uses.			
370	Meeting	10/15/2013	On 2013-10-15, IAMGOLD met with Chief and Council from Mattagami First Nation and Wabun Tribal Council to provide a presentation on, and answer questions regarding the effects prediction and mitigation strategies for the Project. Issues raised related to questions about the Tailings Management Facility (TMF), the methodology and data collected for the baseline studies, transmission line alternatives, channel realignments and the impact of the Project on traditional land uses.	Mattagami First Nation, W.C. McKay Consulting Services, Wabun Tribal Council, Amec Foster Wheeler Environment & Infrastructure, IAMGOLD Corporation	1) Cross-country transmission line will provide hunting access to areas currently not accessible (to people not from the area).	This issue will be assessed in the EA. However, it should be noted that it is likely that both alignments will open access to habitat.
370	Meeting	10/15/2013	On 2013-10-15, IAMGOLD met with Chief and Council from Mattagami First Nation and Wabun Tribal Council to provide a presentation on, and answer questions regarding the effects prediction and mitigation	Mattagami First Nation, W.C. McKay Consulting Services, Wabun Tribal Council, Amec Foster Wheeler Environment &	1) Will pesticides be used for transmission line clearing and maintenance?	The current understanding is that brushing and clearing would be carried out without the use of pesticides.

ROC	Event Type	Date	Event Summary	Participating Organizations	Comments	Official Response
			strategies for the Project. Issues raised related to questions about the Tailings Management Facility (TMF), the methodology and data collected for the baseline studies, transmission line alternatives, channel realignments and the impact of the Project on traditional land uses.	Infrastructure, IAMGOLD Corporation		
370	Meeting	10/15/2013	On 2013-10-15, IAMGOLD met with Chief and Council from Mattagami First Nation and Wabun Tribal Council to provide a presentation on, and answer questions regarding the effects prediction and mitigation strategies for the Project. Issues raised related to questions about the Tailings Management Facility (TMF), the methodology and data collected for the baseline studies, transmission line alternatives, channel realignments and the impact of the Project on traditional land uses.	Mattagami First Nation, W.C. McKay Consulting Services, Wabun Tribal Council, Amec Foster Wheeler Environment & Infrastructure, IAMGOLD Corporation	1) The impacts will be the same for both transmission line alignments.	Thank you for your comment. No further action is required.

ROC	Event Type	Date	Event Summary	Participating Organizations	Comments	Official Response
381	Meeting	10/30/2013	IAMGOLD met with some Matachewan First Nation Councillors and their Lands and Resources Coordinator to present an overview of the Project, discuss the transmission line alignment alternatives and to provide an opportunity for representatives to ask questions about the Project.	Matachewan First Nation, IAMGOLD Corporation	1) We believe the transmission line is located in Matachewan First Nation's area.	IAMGOLD recognizes that the potential transmission line will fall within Matachewan First Nation traditional territory.
381	Meeting	10/30/2013	IAMGOLD met with some Matachewan First Nation Councillors and their Lands and Resources Coordinator to present an overview of the Project, discuss the transmission line alignment alternatives and to provide an opportunity for representatives to ask questions about the Project.	Matachewan First Nation, IAMGOLD Corporation	1) We would like to see the baseline for the transmission line.	IAMGOLD will provide it to you as soon as it is available for viewing. We are currently working to complete it.
527	E-mail	07/14/2014	The Ministry of Northern Development and Mines provided IAMGOLD with comments on the Environmental Impact Statement / Environmental Assessment Report.	Ministry of Northern Development and Mines, IAMGOLD Corporation	1) Are there any rehabilitated hazards en route the proposed transmission corridor? - If so under the Mining Act, they are required to seek Director approval to disturb any previously rehabilitated mine features (including the mine proposed areas and the area associated with the proposed transmission line).	So far, during the baseline work carried out, no rehabilitated hazards have been identified that would be disturbed by construction and operation of the transmission line. Should any previously rehabilitated mine features be discovered during further Project planning, authorization will be sought.

ROC	Event Type	Date	Event Summary	Participating Organizations	Comments	Official Response
					Site should be identified prior to moving forward with construction so permissions can be given. NOTE- this is not a 'permit' but simply authorization through a formal request/letter to the Director.	
533	E-mail	07/20/2014	Wabun Tribal Council, on behalf of Flying Post First Nation and Mattagami First Nation provided IAMGOLD with comments on the Environmental Impact Statement / Environmental Assessment Report.	Canadian Environmental Assessment Agency, Wabun Tribal Council, IAMGOLD Corporation	1) WTC-IR#6: Transmission Line Alignment, Chapter 4, Section 4.4.4.9"Stakeholders have expressed some concerns about the construction of a new 230 kV transmission line in the Project area. Subsequently, IAMGOLD is addressing these concerns in the EA by outlining the potential effects on wildlife and potential increase in traffic in the area. Furthermore, IAMGOLD has taken these concerns into consideration by proposing that the transmission line would be removed at closure to rehabilitate the site, unless otherwise negotiated with Aboriginal groups and local communities." (p.4-34)Elsewhere in the EIS at Section 5.16.2.9, the following is noted:The off-site portion of the 230 kV transmission line will be evaluated at the end of the Project for transfer to the local utility for care and maintenance and/or potential reuse. Should the	As described in the EA it is assumed that IAMGOLD will remove the transmission line, unless otherwise transferred to another operator as needed to service regional needs. This will be determined in consultation with stakeholders near the end of the operations phase.The Amended EIS / Final EA Report has been revised to be consistently worded.

ROC	Event Type	Date	Event Summary	Participating Organizations	Comments	Official Response
					transfer to the local utility prove itself not feasible it will be dismantled. Rehabilitation would include removal and recycling/reuse of electrical equipment. Poles would be removed or cut at grade, and either reused or disposed of. The two proposals are not the same. Please clarify the fate of the transmission line following mine closure and whether it will be removed and, if so, under what conditions.	
533	E-mail	07/20/2014	Wabun Tribal Council, on behalf of Flying Post First Nation and Mattagami First Nation provided IAMGOLD with comments on the Environmental Impact Statement / Environmental Assessment Report.	Canadian Environmental Assessment Agency, Wabun Tribal Council, IAMGOLD Corporation	<p>1) WTC-IR#89: Terrestrial Biology for the Transmission Line, Chapter 9, Section 9.8.2.1 Construction Phase - Species at Risk</p> <p>"Development of the Cross-Country transmission line alignment (TLA) footprint would result in the removal of 549.2 ha of vegetated land including 232.9 ha of deciduous mixed forest, 170.3 ha of coniferous forest and 146 ha of coniferous swamp." (p.9-43)</p> <p>In discussions on the effects to various SAR, it is acknowledged that suitable habitat for SAR is present along the TLA footprint, but that the habitat loss will not have an</p>	Field studies along the two potential transmission line alignments did not record species listed as Threatened or Endangered under the Ontario Endangered Species Act. Similarly, the effects assessment in Section 11 of the Amended EIS / Final EA Report has determined that Sections 9 and 10 of the Endangered Species Act will not be contravened, as no harm to SAR will occur and no habitat loss of protected species will result from Project activities. Detailed mitigation measures are presented in the EA (see Chapter 10) and a monitoring plan (see Chapter 16) will be developed in cooperation with the MNRF and Environment Canada to address potential instances where protected species are encountered

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					<p>effect at the regional level. For a number of these species, the ESA regulations only recognize protection of general habitat, and potential habitat is regulated in areas where the species are known to occur. How does the project address adverse effects to habitat with respect to the ESA?</p> <p>Please clarify how ESA regulations will be implemented to address adverse effects.</p>	<p>within the Project footprint. Resulting actions would thus fulfill protective requirements satisfying both Provincial and Federal regulations. Detailed mitigation measures and a detailed monitoring plan will be outlined in a mitigation / management plan as committed in Appendix Y (EA Commitments Table).</p>
533	E-mail	07/20/2014	Wabun Tribal Council, on behalf of Flying Post First Nation and Mattagami First Nation provided IAMGOLD with comments on the Environmental Impact Statement / Environmental Assessment Report.	Canadian Environmental Assessment Agency, Wabun Tribal Council, IAMGOLD Corporation	<p>1) WTC-IR#91: Mitigation Measures – Terrestrial Biology, Chapter 10, Table 10-2</p> <p>"Mitigation Measures</p> <p>Utilize existing infrastructure for access and minimize construction of new roads and other corridors wherever alternatives exist." (p.10-27)</p> <p>It is agreed that limiting loss of habitat is a primary mitigation measure. However, this mitigation measure appears to have not been appropriately weighted in the comparison of transmission line alignment alternatives, considering that the Cross Country alignment</p>	<p>The referenced mitigation measure primarily addressed effect mitigation at the Project site. It should be noted that less vegetation will need to be removed for the Cross-Country alignment compared to the Shining Tree alignment. This and other effects on terrestrial vegetation and wildlife are analyzed and considered in Appendix U9.</p>

ROC	Event Type	Date	Event Summary	Participating Organizations	Comments	Official Response
					<p>requiring a new corridor was selected as the preferred alternative.</p> <p>Please provide additional rationale for the assessment of the transmission line alignments in relation to effects on the terrestrial environment and on use of existing infrastructure.</p>	
533	E-mail	07/20/2014	Wabun Tribal Council, on behalf of Flying Post First Nation and Mattagami First Nation provided IAMGOLD with comments on the Environmental Impact Statement / Environmental Assessment Report.	Canadian Environmental Assessment Agency, Wabun Tribal Council, IAMGOLD Corporation	1) WTC-IR#81: Assessment of Alternatives for Project Components, Chapter 7, Section 7.3.15 and Appendix U9 The assessment considered two alternatives, the Shining Tree Alignment and the Cross-Country Alignment. Elements of the Shining Tree Alignment will utilise existing transmission line corridors, while the Cross-Country Alignment will include a new greenfield corridor for 68 km. For the detailed assessment of these two alternatives we are directed to Appendix U9. The analysis for the effects on Terrestrial Species and Habitat is general, not specific to groups of wildlife, and uses wording such as "some" and "likely". As the Cross-Country Alternative will remove existing habitat and result in greater	It is acknowledged that the Cross-Country alignment results in fragmentation effects. However, the effects predictions found no significant impacts from the development of this alignment on wildlife. As the Cross-Country alignment is significantly shorter it will result in substantially less vegetation required to be cleared compared to the alternative Shining Tree alignment. Also, further widening of the Shining Tree alignment in addition to the existing transmission line corridor would further expose wildlife to predators and widen the fragmentation along this corridor.

ROC	Event Type	Date	Event Summary	Participating Organizations	Comments	Official Response
					fragmentation of the existing habitat, more detailed assessment of the impacts of this alternative should have been provided. Please provide a discussion on the alternatives assessment with respect to the weighting of the impact of habitat removal and fragmentation for the two transmission line alignment alternatives.	
533	E-mail	07/20/2014	Wabun Tribal Council, on behalf of Flying Post First Nation and Mattagami First Nation provided IAMGOLD with comments on the Environmental Impact Statement / Environmental Assessment Report.	Canadian Environmental Assessment Agency, Wabun Tribal Council, IAMGOLD Corporation	<p>1) WTC-IR#83: Study Areas For Assessment of Project Effects on the Terrestrial Environment, Chapter 9, Section 9.1.2.2 Local Study Area</p> <p>The local study area for the assessment of potential effects related to air quality, noise and vibration is identified as the area where most of the noise and vibration effects of the Project are expected to occur. Based on this, the local study area is defined as an area that extends approximately 5 km from the main Project noise sources. For terrestrial biology, the local study area encompasses a 2 km buffer around the Project footprint and extends to the southwest to include Chester Lake.</p>	The justification for the extent of each study area is provided in Section 9.1.2 of the Amended EIS / Final EA Report. The selection of the study area does not limit the scope of the prediction of effects. If the analysis were to show that certain wildlife species are affected by noise within a 5 km radius, then this effect would be considered in the impact assessment. Table 2-3 in Appendix L (Wildlife TSD) includes noise effects on wildlife that are considered in the analysis. Therefore these effects are carried forward to the Amended EIS / Final EA Report and Chapter 11 assesses these impacts. Specifically Tables 11-3 and 11 4 look at effects on Ungulates and Furbearers, including noise (i.e., 'general disturbance') and it is concluded that these effects potentially extend into the regional study area.

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					<p>As discussed in the EIS, noise can impact on the use of an area by mammals, particularly larger mammals such as moose, bear, wolf, and birds, particularly birds of prey, marsh birds and waterfowl. Given that noise impacts to the terrestrial environment are identified as a project effect, it would seem that the local study area for the terrestrial environment should encompass the same area as the air, noise and vibration study area. It is for the transmission line alignment, a 1 km buffer on either side the line.</p> <p>Please provide a justification as to why the Terrestrial Environmental study area is not 5 km from the main Project noise sources, at least for specific animal groups.</p>	
534	E-mail	07/20/2014	Wabun Tribal Council, on behalf of Flying Post First Nation and Mattagami First Nation provided IAMGOLD with comments on the Environmental Impact Statement / Environmental Assessment Report.	Canadian Environmental Assessment Agency, Wabun Tribal Council, IAMGOLD Corporation	<p>1) WTC-IR#132: Transmission Line effects on Traditional Hunting, Chapter 9, Section 9.11</p> <p>"The new transmission line alignment corridor may attract non-traditional hunters to hunt in the area that is currently principally used for hunting by the</p>	In accordance with the EIS guidelines, levels of uncertainties are included in the assessment, where applicable. It should, however, be noted that in Chapter 11, a level of magnitude has been assigned for this potential impact. Therefore, no additional information is required to

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					<p>Mattagami First Nation. This could in turn negatively affect traditional hunting. The magnitude of this effect is uncertain." (p.9-64)</p> <p>It is unclear why the magnitude of this effect is uncertain or was not determined.</p> <p>a) Please explain why the magnitude of the effect of the proposed new transmission corridor on Aboriginal hunting could not be determined.</p> <p>b) Please indicate (or provide) the additional information necessary to determine the magnitude of the effect of the proposed transmission corridor on Aboriginal hunting.</p>	support the effects prediction for this indicator.
538	E-mail	08/01/2014	The Canadian Environmental Assessment Agency (CEA Agency) provided IAMGOLD with comments on the Environmental Impact Statement / Environmental Assessment Report.	Canadian Environmental Assessment Agency, IAMGOLD Corporation	1) HC-31Chapter 5 of the EIS - Section 5.12 (Transmission Line and Power Supply)According to Section 5.12 of the EIS, the project includes the construction and operation of a 120 km, 230 kV transmission line. In the event that concerns are expressed about EMF, additional information can be collected.HC suggests that if concern is expressed, an assessment of EMF effects may be	No other comments related to electromagnetic fields were received on the EIS / Draft EA Report. If through ongoing continuing consultation substantial concerns were expressed with regard to electromagnetic fields, IAMGOLD would follow Health Canada's guidance.

ROC	Event Type	Date	Event Summary	Participating Organizations	Comments	Official Response
					undertaken by considering the factors listed under section 5 of HC Useful Information for Environmental Assessments document, available at: http://www.hc-sc.gc.ca/ewh-sent/pubs/eval/enviro_assess-eval/index-eng.php	
475	Open House	08/19/2014	IAMGOLD hosted an open house in Brunswick House First Nation for interested community members to hear a presentation about the Project and ask questions or raise concerns about the Project. There were 9 attendees. Comments generally focused on environmental mitigations, and Project design.	Brunswick House First Nation, Amec Foster Wheeler Environment & Infrastructure, IAMGOLD Corporation	1) Why have you chosen the South Porcupine substation for the 230kv transmission line?	It is the substation closest to the Project that has the capacity to accommodate the new transmission line.
482	Open House	08/23/2014	IAMGOLD hosted members of the Mesomikenda Cottagers Association to an open house on the Project site. The purpose of the open house was to give local cottagers an opportunity to listen to and ask questions about the Project, where IAMGOLD was at in the environmental assessment process and the findings presented in the	Cottager, Individual - GP, Individual - Sudbury, Mesomikenda Cottagers Association, Mesomikenda Lake Cottage Owner, Unknown Individual, Amec Foster Wheeler	1) Will the transmission line impact the crossing of boats and will we see it?	It will not impact land or navigable waterway use. However, you may be able to see it on Mesomikenda Lake near the bridge.

ROC	Event Type	Date	Event Summary	Participating Organizations	Comments	Official Response
			Draft Environmental Assessment/Environmental Impact Statement Report. There were 20 members from the Association in attendance.	Environment & Infrastructure, IAMGOLD Corporation		
557	Meeting	03/10/2015	IAMGOLD presented to the Métis Nation of Ontario (MNO) Regional Consultation Committee and provided an overview of the Project and summary of the environmental assessment (EA) results and key comments received. During the meeting discussions included the timeline for future conversations related to the MNO's comments on the draft EA report and submission of the Traditional Knowledge and Land Use Study (TKLUS).	Chapleau Métis Council, Métis Nation of Ontario, Northern Lights Métis Council, Temiskaming Métis Council, Amec Foster Wheeler Environment & Infrastructure, IAMGOLD Corporation	1) For the transmission line, will IAMGOLD utilize the existing 115 KV towers?	No, the proposed transmission line will run parallel to the current 115 KV towers. IAMGOLD will develop a new clearing along it and then clear for the additional 115 kilometres required for the new line.
663	Letter	06/09/2015	On 2015-06-09, IAMGOLD provided the Ministry of the Environment and Climate Change (MOECC) with a copy of the official responses to comments provided by Wabun Tribal Council on the Amended Environmental Impact Statement / Final	Ministry of the Environment, Wabun Tribal Council, IAMGOLD Corporation	1) Several matters need to be addressed in the Closure plan, including: the 230 kV transmission line need to be removed at the end of closure the expectation that the MRA will contain vegetation quality of comparable productivity to baseline conditions	Agreed. IAMGOLD will consider this comment during preparation of the Closure Plan.

ROC	Event Type	Date	Event Summary	Participating Organizations	Comments	Official Response
			Environmental Assessment Report.			
663	Letter	06/09/2015	On 2015-06-09, IAMGOLD provided the Ministry of the Environment and Climate Change (MOECC) with a copy of the official responses to comments provided by Wabun Tribal Council on the Amended Environmental Impact Statement / Final Environmental Assessment Report.	Ministry of the Environment, Wabun Tribal Council, IAMGOLD Corporation	1) The creation of a new transmission line corridor will constitute a far more significant effect for MFN hunting in the area than is acknowledged in the Amended EIS / Final EA. The project area will be made less capable of supporting traditional hunting and trapping activities as a result of the permanent project facilities, and less suitable as a result of hunting and trapping competition facilitated by increased access.	IAMGOLD intends to work collaboratively with affected Aboriginal communities to identify key aspects of a monitoring program that meets the needs and priorities of the communities and of the Project. Once the EA has been approved and a decision to construct has been made, IAMGOLD will continue discussion with respect to monitoring programs within an adaptive management framework. IAMGOLD anticipates that ongoing discussions with affected Aboriginal groups with respect to the development a socio-economic / community management plan to address potential Project-related socio-economic / community effects identified through the EA process as well as those that may emerge or be identified during later stages of the Project may include effects related to traditional hunting and trapping activities.
663	Letter	06/09/2015	On 2015-06-09, IAMGOLD provided the Ministry of the Environment and Climate Change (MOECC) with a copy of the official responses to comments provided by Wabun Tribal Council on the	Ministry of the Environment, Wabun Tribal Council, IAMGOLD Corporation	1) Please explain why the term "principally" has been removed from Section 9.11.2.2. The referenced materials appear to be in Table 11-4 on p.11-51 of the Amended EIS / Final EA. The magnitude assigned to the	During preparation of the EIS / Draft EA Report, the primary land use information IAMGOLD used to develop the effects assessment was provided from members of the Mattagami First Nation. Using this information, and a conservative assumption that other land users do not

ROC	Event Type	Date	Event Summary	Participating Organizations	Comments	Official Response
			Amended Environmental Impact Statement / Final Environmental Assessment Report.		<p>potential that “the transmission line corridor may attract nontraditional hunters to hunt in the area that is currently principally used for hunting by the Mattagami First Nation” is given as level II – “The Project overlaps with portions of traditional hunting areas but does not limit the ability to carry out hunting activities”. The arrival of non-Aboriginals into this area that is currently principally used by MFN would limit the ability to carry out hunting activities due directly to an expected decline in species availability and indirectly as the MFN members may avoid an area that has become commonly used by non-Aboriginals. A magnitude level III is more appropriate: The Project overlaps with traditional hunting areas and limits the ability to carry out hunting activities. With respect to geographic extent, though direct access would be within the transmission line corridor, it is reasonable to presume that hunting by non-Aboriginals will occur beyond the corridor as a result, and that effects on harvestable species will also occur</p>	<p>typically use this land along the transmission line, a level II magnitude was assigned. Since the Amended EIS / Final EA Report has been issued, IAMGOLD has received additional land use information that identifies members of the MNO also use the region which the transmission line crosses. Additionally, the effects of the transmission line have been considered with respect to existing access and disturbances. Given the above information, IAMGOLD is of the opinion that the transmission line will not significantly increase the non-Aboriginal access and use. In light of this information, IAMGOLD remains of the opinion that a level II magnitude, as well as the levels of the assigned assessment criteria, is conservative, but appropriate.</p>

ROC	Event Type	Date	Event Summary	Participating Organizations	Comments	Official Response
					beyond the local study area and into the regional study area, meaning that the geographic extent is also level III. Regarding reversibility, the consistent and long-standing experience of the MFN and other First Nations is that once non-Aboriginals use an area it is very unlikely to become available again for use principally by First Nations. This is the case regardless of efforts by the MNRF, proponents or others to mitigate access by non-Aboriginals during or following the activities that initially created the access. As a result, reversibility should also be considered level III. In summary, we remain concerned that the creation of a new transmission line corridor will constitute a far more significant effect for MFN hunting in the area than is acknowledged in the Amended EIS / Final EA.	
663	Letter	06/09/2015	On 2015-06-09, IAMGOLD provided the Ministry of the Environment and Climate Change (MOECC) with a copy of the official responses to comments provided by Wabun Tribal Council on the Amended Environmental Impact Statement / Final	Ministry of the Environment, Wabun Tribal Council, IAMGOLD Corporation	1) Terrestrial Environment It is acknowledged that overall the terrestrial environment within the local and regional study area has been well enough inventoried and assessed so that potential significant landscape level effects of the Project can be determined. However, at a site and/or local	The survey methods used and the distribution of the survey stations (coverage of the study area including the Project's footprint) were approved by the MNRF and EC. It is our professional opinion that the number of survey stations and their locations provides appropriate coverage of all areas of interest and for all species being

ROC	Event Type	Date	Event Summary	Participating Organizations	Comments	Official Response
			Environmental Assessment Report.		study scale, concerns remain that survey methods for fauna may have missed the occurrence of significant species. In addition, though impacts to populations of larger mammal species have been reasonably addressed at the regional level, for the local study area there is no assessment regarding impacts to individual numbers of key species that are of importance to the local First Nations, including moose, black bear, and furbearers. We believe that this level of impact assessment can and should be completed. Several of the comments and responses relate to the selection of the Cross-Country alignment compared to the Shining Tree transmission line alignment alternative (e.g. comment 256). We still disagree with the proponent's conclusion that the Cross-Country alignment is preferred with respect to lesser impacts on the terrestrial environment. Also, based on our review of the project's Tailings Management Facility (TMF), comment was provided that potential impacts on shorebirds and waterfowl that are exposed to	surveyed. Since the study area is large, systematic sampling was chosen and designed in such a way that all representative habitat types present in the study area were sampled multiple times. These surveys therefore also covered the habitat types of all species including species at risk and species of conservation concern. Please see responses to Comments #256 and 271 (Appendix Z). Various mitigation measures have been proposed in the EA (see Table 10-2) and these have been discussed and agreed upon by government regulators. Since it was concluded that no measurable residual effects to population abundance and distribution are expected, it was also concluded that extensive wildlife monitoring was not required.

ROC	Event Type	Date	Event Summary	Participating Organizations	Comments	Official Response
					<p>tailings or surface water associated with ponds of the TMF had not been addressed in the Ecological Health Risk Assessment (EHRA). This issue remains outstanding (see comment 271). Finally as a general comment, environmental effects predictions have been reasonable and acceptable, but uncertainties remain with a project of this size and scope. In response it is stated that, with the inclusion of the mitigation measures described in Chapter 10 of the EA, no measurable residual effects to population abundance and distribution are anticipated. However, the Final EA document provides little detail with respect to specific mitigation measures, and little to no monitoring of the terrestrial environment is proposed. Given the scope of this Project, to reduce concerns in the uncertainties of the effects assessments, more detail regarding mitigation measures is required at the EA stage to be able to support the statement that there will be no measureable effects on the terrestrial environment.</p>	

ROC	Event Type	Date	Event Summary	Participating Organizations	Comments	Official Response
660	Letter	06/12/2015	On 2015-06-12, IAMGOLD provided the Ministry of the Environment and Climate Change (MOECC) with official responses to comments provided by the MOECC on the Amended Environmental Impact Statement / Final Environmental Assessment Report.	Ministry of the Environment, IAMGOLD Corporation	1) Comment #420; Section 5.12, Page 5-31 The proponent has indicated that the transmission line crossing at Mesomikenda Lake will be optimized during feasibility studies when questioned about the location of the water crossing at Mesomikenda Lake. Assessment of alternatives for the project need to be finalized in the EA document. This is used to adequately assess potential impacts and mitigation. MNRF requests more information in light of the proponents desire to address this issue during feasibility studies.	The assessment of alternatives addressed two different transmission line alignments at a macro scale consistent with the MOECC EA branches objectives for Individual EAs. Once the Project moves into the feasibility studies, IAMGOLD expects some minor optimization may occur within the established corridor to accommodate ground level interactions. As noted, this will include consideration of the Mesomikenda Lake crossing location with respect to the location of the Mesomikenda Lake boat ramp. IAMGOLD is confident that minor changes to the alignment will not alter the conclusions of the assessment and will only serve to mitigate potential effects.
660	Letter	06/12/2015	On 2015-06-12, IAMGOLD provided the Ministry of the Environment and Climate Change (MOECC) with official responses to comments provided by the MOECC on the Amended Environmental Impact Statement / Final Environmental Assessment Report.	Ministry of the Environment, IAMGOLD Corporation	1) Comment #421; Section 5.12, Page 5-31 The proponent has indicated that the transmission line crossing at Mesomikenda Lake will be optimized during feasibility studies when asked if the 230Kv line could be buried. Assessment of alternatives for the project need to be finalized in the EA documents. This is used to adequately assess potential impacts and mitigation. MNRF requests more information in light of the proponents desire to	The assessment of alternatives addressed different transmission line alignments. The use of underwater cables is not currently considered for the crossing of Mesomikenda Lake. As noted previously, IAMGOLD is willing to consider minor changes to optimize the 230kv line. These changes will be considered during the he feasibility studies and IAMGOLD will consult with MNRF on any changes which may further reduce or mitigate environmental effects of the transmission line corridor.

ROC	Event Type	Date	Event Summary	Participating Organizations	Comments	Official Response
					address this issue during feasibility studies.	
660	Letter	06/12/2015	On 2015-06-12, IAMGOLD provided the Ministry of the Environment and Climate Change (MOECC) with official responses to comments provided by the MOECC on the Amended Environmental Impact Statement / Final Environmental Assessment Report.	Ministry of the Environment, IAMGOLD Corporation	1) MTCS-3 Table 4-17; p. 4-64 MNRF reference to effect of transmission line on tourism at Mesomikenda Lake. Company says line crossing will be optimized during feasibility studies. We recognize that optimizing of the line will occur in the future but does the proponent envision any tourism-related concerns at this time? In general, feasibility studies should be completed prior to a final EA being issued.	IAMGOLD has assessed all Project effects for all Project components, including the development of the transmission line.
660	Letter	06/12/2015	On 2015-06-12, IAMGOLD provided the Ministry of the Environment and Climate Change (MOECC) with official responses to comments provided by the MOECC on the Amended Environmental Impact Statement / Final Environmental Assessment Report.	Ministry of the Environment, IAMGOLD Corporation	1) Draft EA Comment #561 Section 1.3; p. 1-7 Can you please clarify what is meant by additional easements and land requirements are being considered? Are proposed project components (i.e. transmission line, access road) on land currently not owned by IAMGOLD Corporation? Are additional lands required in order to construct project? Provide additional information regarding land requirements for specific project components in the EA report.	One of the purposes of the individual EA is to consider the disposition of Crown land for the Project, including the transmission line. Figure 1-3 shows land tenure in the Project area. IAMGOLD is working with MNDM to secure leases pending the EA outcome. The majority of the Project will occur on land leased from the Crown. A portion of the transmission line routing near Timmins will be accessed through agreements with land owners.

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660	Letter	06/12/2015	On 2015-06-12, IAMGOLD provided the Ministry of the Environment and Climate Change (MOECC) with official responses to comments provided by the MOECC on the Amended Environmental Impact Statement / Final Environmental Assessment Report.	Ministry of the Environment, IAMGOLD Corporation	1) MTCS-13 Table 9-1; p. 9-4 Describes disciplines and related indicators Why are effects indicators for specific species only indicated for the transmission line corridor but not the project site?	Effects indicators were established by discipline leads to best reflect aspects of the environment with respect to their study area and Project component. Specific species along the transmission were established in indicators because of the potential for impacts to these species while the Project site requires the use of different indicators.
660	Letter	06/12/2015	On 2015-06-12, IAMGOLD provided the Ministry of the Environment and Climate Change (MOECC) with official responses to comments provided by the MOECC on the Amended Environmental Impact Statement / Final Environmental Assessment Report.	Ministry of the Environment, IAMGOLD Corporation	1) MTCS-6 Section 6.4.3; p. 6-49 to 6-64 Describes wildlife baseline data for the local and regional study areas. Why is there no information on large mammals like moose, bear in Section 6.4.3? Why is there no table similar to Table 6-23 in Section 6.4.6.2 that outlines observed mammals during field surveys along the proposed transmission line alignments (includes moose, bear, and deer). Also see pages 6-82, 6-83 and 6-87 for information on moose and bear in the proposed transmission line alignments.	IAMGOLD appreciates MTCS sharing Sudbury District tourism data for 2011 and 2012 and welcomes continued information sharing throughout the Project. Section 6.4.3 refers the reader to baseline studies presented in the Wildlife TSD (Appendix L) for results from large mammal surveys conducted around the proposed Project site.
661	Letter	09/11/2015	On 2015-09-11, IAMGOLD provided the Ministry of the Environment and Climate Change (MOECC) with official response back to follow-up comments the MOECC had	Ministry of the Environment, IAMGOLD Corporation	1) There is no issue with future disposition of Crown land or future land requirements for the proposed Project. The EA does not clearly describe what the actual Project site boundary is and	The Project site (i.e., non-transmission line infrastructure) is located on Crown land with surface leases. This area is approximately 1,700 ha during the operations phase. The transmission line is considered an off-site component of

ROC	Event Type	Date	Event Summary	Participating Organizations	Comments	Official Response
			submitted to IAMGOLD on the Amended Environmental Impact Statement / Final Environmental Assessment Report.		what part of that boundary is on Crown land, private land or active claim land. The EA describes the layout of the proposed facilities but is not clear what the project site footprint/boundary is in relation to the project infrastructure/facilities. Figure 1-3 shows that the proposed Project facilities are located on land that is either active claim areas or disposition areas. Based on this figure, it does not appear that the project facilities are being proposed on private land. Please clarify what IAMGOLD means by 'majority of the Project will occur on land leased from the Crown'. Please clarify, if possible, the size of the Project boundary and what portion of that is leased land, disposition and private land (if any). Please describe how many landowners (agreements) are affected by the transmission line corridor. What specific section of the transmission line corridor requires agreements with landowners?	the Project. Two transmission line alignments are considered in the EA. The preferred transmission line alignment (Cross-Country TLA) runs approximately 120 km from Timmins to the Project site. This alignment requires the clearing of approximately 675 ha of land. Most of the Cross-Country TLA occurs over crown land and 46 km segment runs adjacent to a Hydro One 115 kV transmission line. Several small portions of the Cross-Country TLA near Timmins will occur over private land or land held under surface lease by another party. This land will be accessed through agreements with local land owners and surface rights holders. The proportion of the Cross-Country TLA occurring over Crown land is approximately 88.2%, the proportion over crown dispositions is 0.8%, and the proportion over private land is approximately 11%. IAMGOLD would like to note that the status of commercial arrangements with any land rights holders is not material to assessing the effects and significance of the Project.
610	Meeting	10/16/2015	IAMGOLD met with Mattagami First Nation.	Mattagami First Nation, IAMGOLD Corporation	1) Mattagami First Nation identified that they would like to receive updates on the Côté Gold Project from Steve Woolfenden. 2)	(1) no response identified. (2) IAMGOLD identified that this had been updated to

ROC	Event Type	Date	Event Summary	Participating Organizations	Comments	Official Response
					Individual identified that they were not area that the transmission line extended to Timmins. 3) Individual questioned if this will result in pushing back negotiations.	C & C and community members. (2) no response identified.
662	Letter	12/16/2015	On 2015-12-16, IAMGOLD provided the Ministry of the Environment and Climate Change (MOECC) with official response back to Final comments submitted by the MOECC on the Amended Environmental Impact Statement / Final Environmental Assessment Report.	Ministry of the Environment, IAMGOLD Corporation	1) Proposed EA Condition: MNRF be engaged in determining the final location regarding the crossing at Mesomikenda Lake. Purpose: MNRF requests more information on the potential effects of the transmission line crossing at Mesomikenda Lake to ensure that mitigation of those effects will be appropriately measured.	IAMGOLD has previously committed to engaging MNRF on the final Cross-Country Transmission Line Alignment given the potential interactions with the users of the Mesomikenda Lake boat launch and MNRF's authority in managing Crown land. IAMGOLD is of the opinion that this proposed condition is already addressed through our stated EA commitment and the requirements inherent in the land tenure process.
692	Meeting	04/19/2018	IAMGOLD met with the Métis Nation of Ontario, Region 3 Consultation Committee representatives to provide a Project update.	Chapleau Métis Council, Métis Nation of Ontario, Northern Lights Métis Council, Temiskaming Métis Council, IAMGOLD Corporation, Wood E&IS	1) Will the transmission line be constructed with wooden poles?	Yes.
785	Open House	05/28/2018	IAMGOLD held an open house in Mattagami First Nation. There were 31 participants. Community members were invited to ask	Camerado Energy, Hutchinson Environmental Services Ltd.,	1) Concern for the potential for effects related to the vegetation clearing in the area where the transmission line will cross Mesomikenda Lake.	IAMGOLD had committed to using mechanical means for vegetation clearing and will not use herbicides.

ROC	Event Type	Date	Event Summary	Participating Organizations	Comments	Official Response
			questions and learn about: improvements to the Project design since the environmental assessment process; how the mine will be shut down at the end of mining operations and what the land will look like after mining ends; archaeological studies and findings, including a display with artifacts found at the Project site; results of the Environmental Effects Review; transmission line environmental assessment; alternatives considered to address mine waste; and plans for creation of new fish habitat.	Individual - GP , Mattagami First Nation, M'hiigan LP (Mattagami First Nation), Odonaterra, IAMGOLD Corporation, SLR Consulting (Canada) Ltd., Wood E&IS, Woodland Heritage Services Ltd		
785	Open House	05/28/2018	IAMGOLD held an open house in Mattagami First Nation. There were 31 participants. Community members were invited to ask questions and learn about: improvements to the Project design since the environmental assessment process; how the mine will be shut down at the end of mining operations and what the land will look like after	Camerado Energy, Hutchinson Environmental Services Ltd., Individual - GP , Mattagami First Nation, M'hiigan LP (Mattagami First Nation), Odonaterra, IAMGOLD Corporation, SLR	1) What/where is the scope for the First Nation to review the EA process on the transmission line?	No class EA is required and it is a two-step process that begins with a screening to determine if further study is required.

ROC	Event Type	Date	Event Summary	Participating Organizations	Comments	Official Response
			mining ends; archaeological studies and findings, including a display with artifacts found at the Project site; results of the Environmental Effects Review; transmission line environmental assessment; alternatives considered to address mine waste; and plans for creation of new fish habitat.	Consulting (Canada) Ltd., Wood E&IS, Woodland Heritage Services Ltd		
785	Open House	05/28/2018	IAMGOLD held an open house in Mattagami First Nation. There were 31 participants. Community members were invited to ask questions and learn about: improvements to the Project design since the environmental assessment process; how the mine will be shut down at the end of mining operations and what the land will look like after mining ends; archaeological studies and findings, including a display with artifacts found at the Project site; results of the Environmental Effects Review; transmission line environmental assessment;	Camerado Energy, Hutchinson Environmental Services Ltd., Individual - GP , Mattagami First Nation, M'hiigan LP (Mattagami First Nation), Odonaterra, IAMGOLD Corporation, SLR Consulting (Canada) Ltd., Wood E&IS, Woodland Heritage Services Ltd	1) Is the 44 km transmission line part of the EER?	No, it is a separate EA screening process.

ROC	Event Type	Date	Event Summary	Participating Organizations	Comments	Official Response
			alternatives considered to address mine waste; and plans for creation of new fish habitat.			
846	Email	06/27/2018	Odonaterra, on behalf of Mattagami First Nation and Flying Post First Nation, provided summaries of comments and concerns expressed by both communities during meetings held between the First Nations and their technical consultants in conjunction with the May 2018 community open houses. Initial ideas to inform the development of the Aboriginal Consultation Plan required as part of the provincial approval conditions were also shared.	Camerado Energy, Flying Post First Nation, Hutchinson Environmental Services Ltd., Mattagami First Nation, Odonaterra, Petersen Consulting, IAMGOLD Corporation, SLR Consulting (Canada) Ltd., Wood E&IS	1) Use of chemical sprays to manage vegetation along the transmission line corridor and in particular near water crossings was a concern. Chemical sprays adversely impact birds, animals and fish that are harvested for food near transmission line corridors. The approval condition and company commitment to only use mechanical methods for controlling vegetation in the right of way must be honoured.	IAMGOLD remains committed to the use of mechanical clearing for clearing and managing vegetation along the transmission line corridor, as committed to in the EA and as per the federal condition of approval (5.1).
846	Email	06/27/2018	Odonaterra, on behalf of Mattagami First Nation and Flying Post First Nation, provided summaries of comments and concerns expressed by both communities during meetings held between the First Nations and their technical consultants in conjunction	Camerado Energy, Flying Post First Nation, Hutchinson Environmental Services Ltd., Mattagami First Nation, Odonaterra, Petersen	1) MFN and their environmental advisors were not previously aware of the need for a provincial class EA in relation to the 44 km section of the transmission line from Shining Tree to the Cote Gold site. Any work to review the Class EA is out of the current scope of services funded by IAMGOLD for MFN and PPFN. In future, notice of	The transmission line is subject to the Class EA for Minor Transmission Facilities; it is a two-step process that begins with a screening to determine if further study (Environmental Study Report) is required.

ROC	Event Type	Date	Event Summary	Participating Organizations	Comments	Official Response
			with the May 2018 community open houses. Initial ideas to inform the development of the Aboriginal Consultation Plan required as part of the provincial approval conditions were also shared.	Consulting, IAMGOLD Corporation, SLR Consulting (Canada) Ltd., Wood E&IS	commencement of any EA process related to the Cote Gold project must come in advance of them being placed in local newsletters. A scope change will be prepared to financially support review of the Environmental Screening Report (ESR). 2) Concerns were raised about potential impacts to indigenous traditional land uses from the construction and ongoing operation/maintenance of the transmission line. 3) Known uses and cultural values in the area include use of a traditional trap ground, hunting and several cultural value sites.	
846	Email	06/27/2018	Odonaterra, on behalf of Mattagami First Nation and Flying Post First Nation, provided summaries of comments and concerns expressed by both communities during meetings held between the First Nations and their technical consultants in conjunction with the May 2018 community open houses. Initial ideas to inform the development of the Aboriginal Consultation Plan required as part of the	Camerado Energy, Flying Post First Nation, Hutchinson Environmental Services Ltd., Mattagami First Nation, Odonaterra, Petersen Consulting, IAMGOLD Corporation, SLR Consulting	1) MFN experiences chronic power supply shortages throughout the year with debilitating socio-economic effects on the community. MFN needs to know if a system (supply capacity) assessment has been completed and what impacts, if any, there will be on the supply of power to the community. 2) There was a concern that there could be an increase in service charges for power to community members as a result of the power line upgrades. It was clarified that the costs to upgrade the power	It was clarified that the costs to upgrade the power transmission line is borne solely by IAMGOLD.

ROC	Event Type	Date	Event Summary	Participating Organizations	Comments	Official Response
			provincial approval conditions were also shared.	(Canada) Ltd., Wood E&IS	transmission line is borne solely by IAMGOLD.	
846	Email	06/27/2018	Odonaterra, on behalf of Mattagami First Nation and Flying Post First Nation, provided summaries of comments and concerns expressed by both communities during meetings held between the First Nations and their technical consultants in conjunction with the May 2018 community open houses. Initial ideas to inform the development of the Aboriginal Consultation Plan required as part of the provincial approval conditions were also shared.	Camerado Energy, Flying Post First Nation, Hutchinson Environmental Services Ltd., Mattagami First Nation, Odonaterra, Petersen Consulting, IAMGOLD Corporation, SLR Consulting (Canada) Ltd., Wood E&IS	1) The spatial data for the project footprint as well as the transmission line corridors has been requested from IAMGOLD/Wood so that an initial investigation of the potential impacts on Indigenous uses of the corridor and surrounds may be undertaken to inform the ESR and help determine appropriate mitigation, management and accommodations for any potential impacts.	IAMGOLD provided the requested Project boundary shapefiles on 2018-07-18.

ROC	Event Type	Date	Event Summary	Participating Organizations	Comments	Official Response
864	Community Meeting	08/30/2018	<p>IAMGOLD hosted a site tour for the Mattagami First Nation Chief, Councillors and community members as well as the community's technical consultants. The tour focused on the location of proposed site infrastructure, including the Tailings Management Facility and open pit. Following the site tour, meetings were held at Mattagami First Nation. A formal agenda was not provided to IAMGOLD prior to the meetings. IAMGOLD was informed upon arrival at the meetings that they were expected to make a presentation on the Closure Plan. During previous teleconferences with the technical consultant representing the community, IAMGOLD had indicated they would be there to participate in answering questions after the Closure Plan review was presented by the consultants but would not be making a presentation. IAMGOLD was able to provide a presentation based on supporting</p>	<p>Camerado Energy, Hutchinson Environmental Services Ltd., Mattagami First Nation, Odonaterra, Petersen Consulting, IAMGOLD Corporation, SLR Consulting (Canada) Ltd.</p>	<p>1) You're putting in a transmission line for this mine, is it always going to be there?</p>	<p>Until the mine site no longer needs power the transmission line will be live and once this is no longer needed IAMGOLD will have the infrastructure removed. Unless there is an alternate use for the powerline.</p>

ROC	Event Type	Date	Event Summary	Participating Organizations	Comments	Official Response
			<p>materials, including a visual simulation and display boards brought along to aid in answering questions. IAMGOLD also shared copies of the August 2018 Let's Talk newsletter. The Closure Plan session for the afternoon had approximately 15 attendees and the evening session had approximately 20-25 attendees.</p>			



Appendix A-10

Permitting Consultation Updates Meetings

Permitting Consultation Updates Meeting

Date / time July 19, 2018 | 1pm | *Location* Various – teleconference

Invited	Attendees
IAMGOLD <ul style="list-style-type: none"> • Steve Woolfenden • David Brown • Christian Naponse • Stephan Theban (SLR) • Zahir Jina (SLR) • Krista Maydew (Wood) 	<ul style="list-style-type: none"> Steve Woolfenden - IAMGOLD Christian Naponse - IAMGOLD Dave Brown - IAMGOLD Krista Maydew – Wood Plc. Caroline Burgess - Odonoterra Tim Harvey – Mattagami Rick Hendricks – Camerado Energy Brent Parsons – Hutchinson Environmental Neil Hutchinson – Hutchinson Environmental
Mattagami FN/Flying Post FN <ul style="list-style-type: none"> • Caroline Burgess • Neil Hutchison • Brent Parsons • Rick Hendricks • Chief Boissoneau • Chief Ray • Ken Petersen • Cheryl Naveau 	

Agenda

1. Environmental Effects Review (EER)

- Update on status of completion of the EER (previously indicated to be available for review by July 17)
- Update on status of responses to FN comments on the UTMs

2. First Nation Review Approvals Summary

- Updates to the schedule provided on May 31 (update a commitment of June 26 meeting)
- Status of the Closure Plan (previously indicated to be provided for review by July 3)
- Updated timing for PTTW and ECA for plant site (scheduled for early August)

3. Shining Tree TL ESR

- Status of the ESR and when it will be available for review (previously indicated "sometime in July")
- Status of a response to FN request for the TL spatial data
- Discussion of potential impacts to Mattagami Trap line permit holder

4. Community Consultation and Site Visit

- Need to schedule community consultation meetings on EER and potentially come permits in August, if possible
- Need to schedule project site visit in conjunction with the community consultations

Meeting Notes

IAMGOLD provided an update on the status of the Closure Plan. There had been discussions taking place amongst engineering about making some changes to the mine plan. These discussions have been resolved and the current scenario that has already been brought to the communities is still moving forward with considerations for future mining scenarios. An updated permitting schedule will be provided by IAMGOLD during the week of July 23.

1. Environmental Effects Review (EER)

- The technical reviewers for the First Nations requested that responses to comments provided on the draft UTMs be included when IAMGOLD sends the EER

2. First Nation Review Approvals Summary

- An updated permitting schedule will be sent next week with changes reflective of the delays, no later than the 27th
- The draft Closure Plan will be sent before by the 27th as well. The First Nations will have 40 business days for review as per the funding agreement.

3. Shining Tree TL ESR

- Transmission line – step one of the EA process is to develop a screening report; this will be released shortly for review. An ESR is required only if issues are identified at the screening stage
- Spatial Data requested has been received
- Caroline Burgess and Sue Prince will be walking the trap line on July 20th and the consultants will be speaking with the community on their views on the trap line and its impacts. A report will be provided on the results.

4. Community Consultation and Site Visit

- MFN/FPFN Consultants potential community meeting the last week of August update and inform the community on the EER and UTMs and receive feedback
- Potential site visit for FN consultant team – end of August

Permitting Consultation Updates Meeting

Date / time August 2, 2018 | 1pm | *Location* Various – teleconference

Invited

IAMGOLD

- Steve Woolfenden
- David Brown
- Christian Naponse
- Stephan Theban (SLR)
- Zahir Jina (SLR)
- Krista Maydew (Wood)

Mattagami FN/Flying Post FN

- Caroline Burgess
- Neil Hutchison
- Brent Parsons
- Rick Hendriks
- Chief Boissoneau
- Chief Ray
- Ken Petersen
- Tim Harvey

Attendees

Christian Naponse - IAMGOLD
Dave Brown - IAMGOLD
Krista Maydew – Wood
Stephan Theben – SLR
Tim Harvey – Mattagami First Nation
Rick Hendriks – Camerado Energy
Brent Parsons – Hutchinson Environmental
Zahir Jina - SLR
Steve Woolfenden- IAMGOLD

Agenda (provided by Odonoterra)

1. Closure Plan
2. TL Screening Report – clarification on review timeframes
3. Approval Conditions – need timing schedule
4. Schedule format – suggest one that better facilitates community consultation planning
5. Community Consultation – confirm timing

Meeting Notes

IAMGOLD provided a response via email regarding agenda item #1 on July 31:

“With respect to item #1 on the proposed agenda, IAMGOLD would like provide a point of clarification about the draft Cote mine closure plan you received. In the initial planning and discussions with the communities, it was discussed that IAMGOLD would be producing a mine closure plan that was scoped to the construction phase of the mine and potentially included the first three years of operation. IAMGOLD WAS subsequently advised that the province requires a

full Life of Mine plan, as such, the draft plan you received considers the full build out and operations of the mine revised mine plans. The benefit of preparing a full LOM closure plan is that the communities have the opportunity to comment on our vision for the site once operations cease and the progressive reclamation opportunities.

With respect to the draft document content, IAMGOLD notes that we have not provided Chapters 12 and 13. These chapters include the cost tables and specifics of the financial security. These sections are subject to discussions IAMGOLD will have with MENDM in the coming weeks. Information related to the anticipated closure costs will be available with the release of the FS and closure plan submission to MENDM.”

1. Closure Plan

- Consultants for FPFN/MFN inquired as to latitude on date for comments as they will be reviewing it next week but will be unable to present their review to FPFN until after Labour day and possibly not until a couple of weeks into September. The request for an extension beyond the agreed-upon 40 days is not reflective of the time needed for the consultants to review the documents but their ability to present it to the community.
- IAMGOLD noted that the community had previously agreed to the timelines and 40 business days was anticipated to be sufficient to review the Closure plan and present information to the communities. IAMGOLD informed FNP that a delay in review of the CP means a delay on approvals and construction. IAMGOLD mentioned that if an extension is being requested then a formal request in writing with detailed reasons as to why then IAMGOLD would consider.
- IAMGOLD informed FNP that the draft CP will not include financial appendices and the closure costs will be included in the feasibility report and will be made available by feasibility team.
- FNP indicated to IAMGold that differences of vision between FNP and IAMGold related to the Closure Plan objectives and state of the site at closure often result in different views about costs, and FNP is requesting the cost tables for discussion with IAMGold in advance of submission of the Closure Plan to MENDM to try to resolve any differences of views.

2. Transmission Line Screening Report – clarification on review timeframes

- The current schedule outlines the timeline allowances to be in business days.
- IAMGOLD will know by August 6 if the screening report will be issued or if IAMGOLD will move directly to developing the Environmental Study Report.

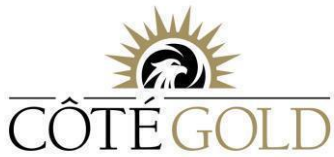
3. Approval Conditions

- FNP interested in having a schedule showing when conditions of approval will be fulfilled (e.g., management plans, monitoring programs)

4. Schedule format – suggest one that better facilitates community consultation planning

- SLR will draft changes to the schedule to reflect the permitting conditions and Indigenous consultation at the required stages.

5. Community Consultation – confirm timing



- FNP requests to have a site visit during the last week of August to coincide with their planning of a community information session with MFN regarding the Closure plan the week of August 27th. The tentative date for this community session is August 30th.
- FNP will follow-up with list of people who will attend the site tour.

6. Environmental Effects Review *(addition to agenda by way of discussion during meeting)*

- Finalizations are currently under way, IAMGOLD should receive the report August 7th.
- Report will be provided to FNP by August 27th.
- UTM responses will be provided by IAMGOLD to the FNP prior to August 27th
- The Review schedule and Closure plan have been provided

Permitting Consultation Updates Meeting

Date / time August 17, 2018 | 9:30am | *Location* Various – teleconference

Invited

Attendees

IAMGOLD

- Steve Woolfenden
- David Brown
- Christian Naponse
- Stephan Theban (SLR)
- Zahir Jina (SLR)
- Krista Maydew (Wood)

Dave Brown - IAMGOLD
Christian Naponse - IAMGOLD
Krista Maydew – Wood
Stephan Theben – SLR
Don Carr – Wood
Rick Hendriks – Camerado Energy
Neil Hutchinson – Hutchinson Environmental
Caroline Burgess – Odonoterra

Mattagami FN/Flying Post FN

- Caroline Burgess
- Neil Hutchison
- Brent Parsons
- Rick Hendriks
- Chief Boissoneau
- Chief Ray
- Ken Petersen
- Tim Harvey

Agenda (provided via email by Rick Hendriks on August 13, 2018)

1. Closure Plan – initial observations to be discussed followed by written comments after meeting
2. TL Screening Report – requesting updated timeframe for provision of TL Screening Report
3. FN Consultation Approvals Summary – request for updated version, specifically on FN review and consultation periods, in order to prepare for community consultation meetings
4. Community Consultation – scheduled with MFN for August 30, 2018, tentatively scheduled with PPFN September 17, 2018

Meeting Notes

1. Closure Plan

- Initial comments from brief overview review of Closure Plan by FNP consultants include:
 - No evidence of closure plan objectives of First Nations
 - Concern over the 30 year time period for the pit to fill and acceptability of this timeframe by the First Nations

- Has the revegetation plan changed from the original EER details?
 - Will the TMF actually revegetate – has there been evidence of this with other projects?
 - Only 25% of the waste rock area to be revegetated with the expectation for remainder to revegetate naturally
- FNP request for reference sites of successful revegetation of TMF
- Rick Hendriks to confer with his team to determine if they can provide draft comments for IAMGOLD to prepare to answer questions/concerns on the Closure Plan at the community information session; Follow-up: FNP provided preliminary comments on August 21, 2018.
- Request from FNP for an executive summary of the Closure Plan and poster slides from previous community information session. IAMGOLD respectfully declined to provide an executive summary as the consultants have a duty to review the CP under the terms of the Funding Agreement and it was suggested that the consultants extract the Closure Conditions section of the CP as a smaller document to share with members of the communities if the CP in its entirety is considered too cumbersome for engaging with the communities
- Wood is currently compiling a summary of Closure Plan comments received to date and specific consultation activities that have taken place to date and included information about closure
- Request that information is provided in a suitable format. There was no confirmation that the community received the draft Closure Plan for review sent on July 23, 2018. IAMGOLD expressed concern that the draft Closure Plan had not been shared with the communities by FNP
- Follow-up: following the meeting IAMGOLD followed up with Tim Harvey and confirmed the draft Closure Plan was received. Tim indicated that he will print copies to be made available for the community at the MFN band office once he returns from a work shop.

2. Transmission Line Screening Report

- Received comment from MOECC that TL screening is not applicable for this Project
- Ministry of the Environment, Conservation and Parks confirmed that the transmission line is subject to a Class EA for Minor Transmission Facilities; IAMGOLD is moving to a full ESR with no objection from FNP
- Wood sending ESR to IMG for review on Aug 24, with aim to send to FNP by Sep 10
- Permitting schedule will be updated accordingly.

3. FN Consultation Approvals Summary

- SLR to provide updated schedule on Monday, August 20. Follow-up: IAMGOLD provided the updated schedule on August 21

4. Community Consultation

- FNP will be hosting a community information session on August 30th and requested IAMGOLD to participate and indicated that FNP thinks the community is looking for IAMGOLD to make a presentation
- The session will include an afternoon workshop with the Lands Committee and Chief and Council with targeted feedback and an open community information session in the evening to summarize the Closure Plan for the community

- FNP noted that the presentation materials from the May meetings had not yet been provided. Follow-up: FNP requested materials and IAMGold provided on August 21, 2018
- A site tour for the FNP and interested community members will occur on the morning of August 30. FNP to confirm number of participants
- FNP confirmed that session with Flying Post First Nation is not yet confirmed and request IAMGOLD's availability to participate. IAMGOLD (Dave Brown) confirmed he could be available whenever required for Flying Post meeting