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Bidders' Conference – RFP for Environmental Monitoring Services Faro Mine Remediation Project EZ897-220593/A

Faro Mine Remediation Project
PSPC Pacific Region
December 14, 2021

www.pspc-spac.gc.ca



Public Services and
Procurement Canada

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Meeting instructions

- Please turn audio “off”
- Questions?
 - Please use the Chat function during conference
 - After conference, please email questions to Daphne.yu@pwgsc-tpsgc.gc.ca



Agenda

1. Introduction
2. Opening Remarks from Ross River Dena Council
3. Overview of the RFP
4. Required Services
5. Overview of the Faro Mine Site
6. Questions and Answers





Ross River Kaska Dena








Faro Mine Complex and Changed Lives

Agenda

- Opening prayer – Chief Caesar
- Opening comments - Chief Caesar
- Faro Mine, what it means to Ross River Kaska Dena – Chief Caesar/Stanley Noel
- Faro and Reconciliation
- Other

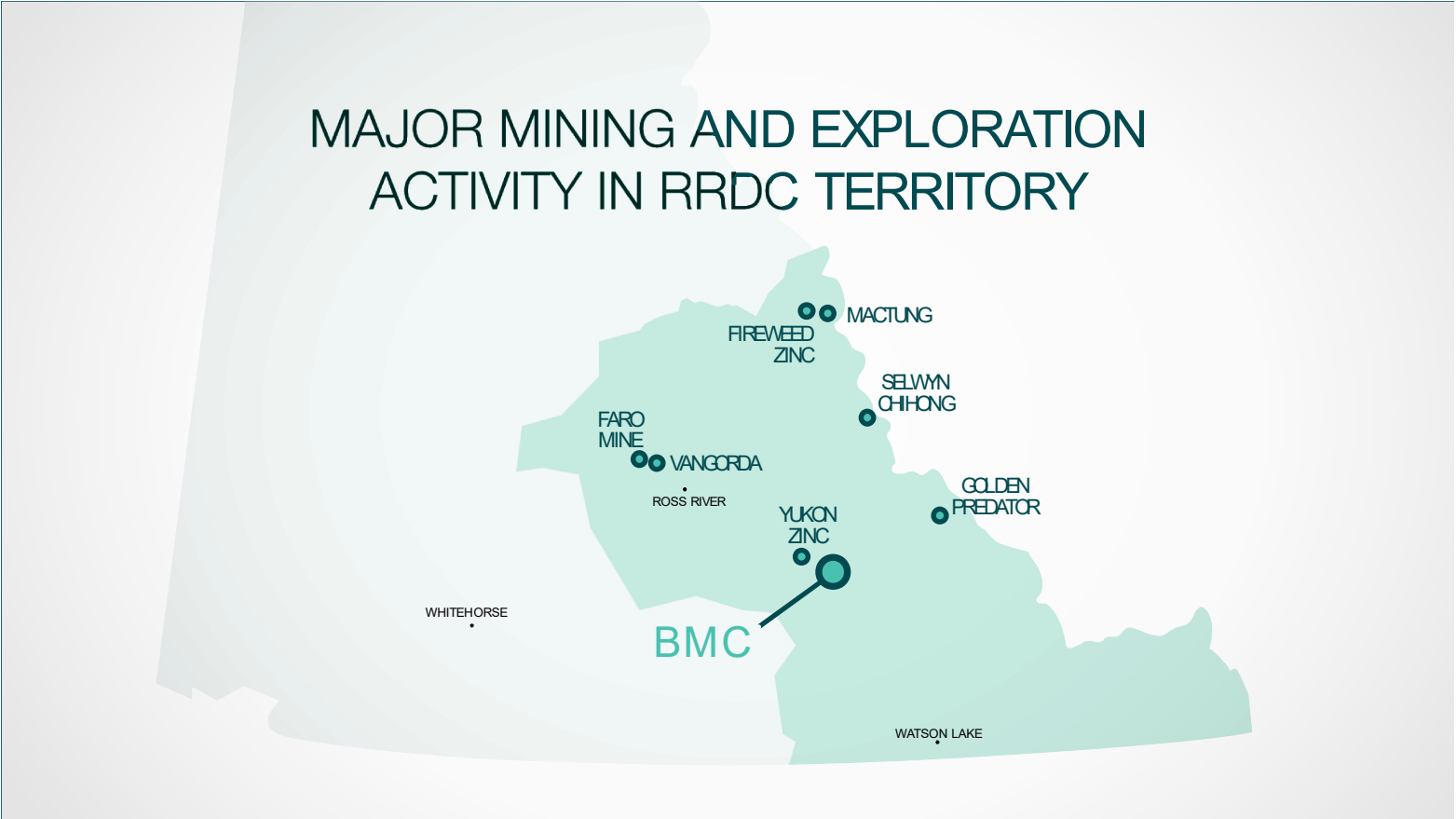
Ross River / Faro Mine

Legend

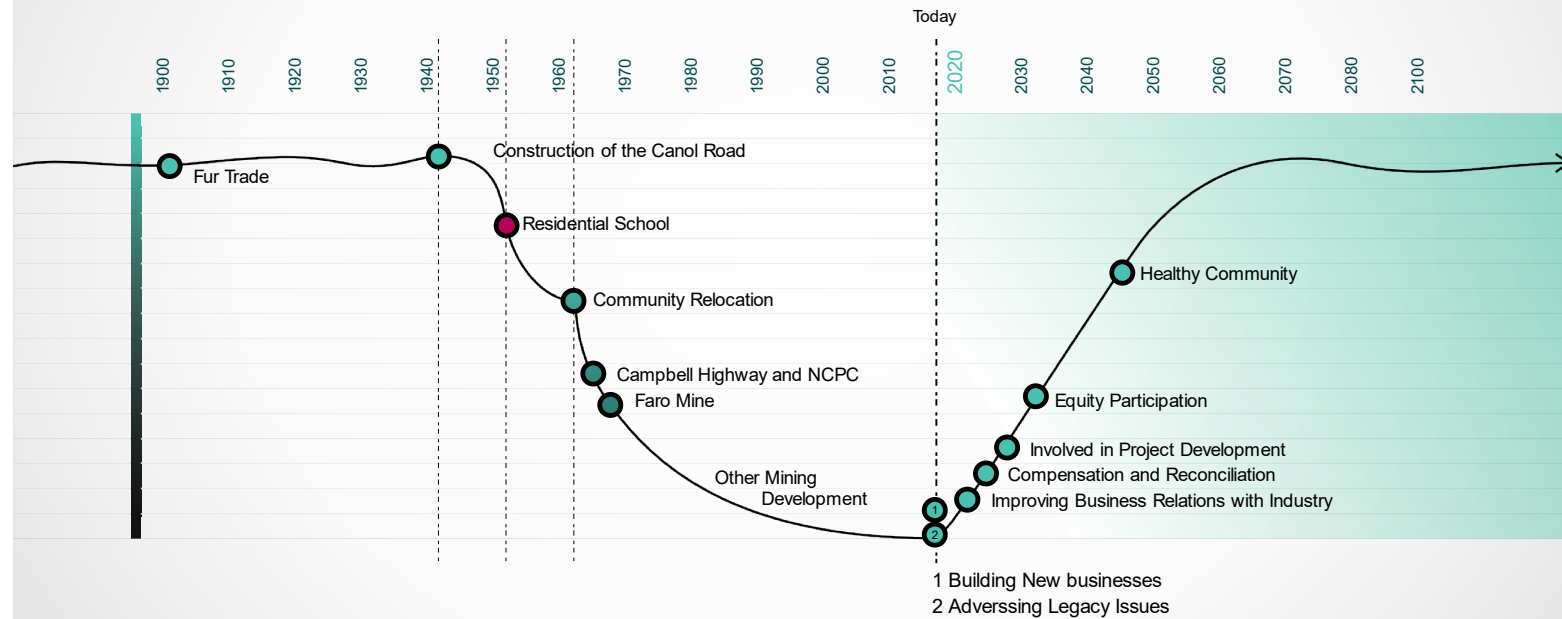
-  Airport
-  CBDBT
-  Faro
-  Feature 1
-  Health Centre
-  Mount Mye
-  Ross River Waterdome



MAJOR MINING AND EXPLORATION ACTIVITY IN RRDC TERRITORY



ROSS RIVER DENA COUNCIL BACKGROUND





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Phased Bid Compliance Process

Phase 1: Required Financial Bid

Phase 2: Assessment of Compliance with Eligible Mandatory Requirements

For the purposes of this RFP, the Eligible Mandatory Requirements are M1, M3, and M4

Phase 3: Completion of the Evaluation Process

Required Services

Environmental Monitoring

Services

12

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Anticipated Procurement Schedule

For planning purposes, the current procurement milestones are:

Milestones	Estimated completion
Request for Proposals	November 2021 – January 2022 45 days
Evaluation process	February 2022
Commencement of Work	March 2022

Overall purpose of the future EMS Contract

The Government of Canada intends to engage the services of an Environmental Monitoring Services contractor team to provide environmental monitoring and related services for the Faro Mine Remediation Project (FMRP) and for the Vangorda / Grum Mine Remediation Project.

Overview of services required

The EMS Contractor is required to continue the current monitoring program, as well as provide additional services.

Summary of the current environmental monitoring program:

- Monthly surface water quality program (approx. 70 locations)
- Quarterly groundwater quality program (approx. 211 wells)
- Semi-annual seep water quality program (approx. 112 locations)
- Monthly water quantity (hydrology) program (approx. 50 locations)
- Daily water level sampling (pits and ponds) at 10 locations
- Monthly site wide toxicity testing
- Aquatic Effects Monitoring program (every 3rd year)
- Geotechnical Monitoring
- Meteorological Monitoring
- Ambient air quality monitoring
- Wildlife and terrestrial monitoring

Overview of services required cont'd

Additional services:

- Adaptive Management Plan
 - Quarterly and annual reporting and investigations as required
- Laboratory Services
 - Maintain and operate the site's analytical laboratory and maintain a LIMS
 - Conduct analysis of samples collected by the MCM related to the monitoring of water treatment systems (max 24 hr turnaround)
- Data Management Services
 - QA / QC all monitoring data
 - Maintain the tablet-based field data collection system
 - Upload to environmental database and cloud based EQiS database
 - Provide database administration services for the cloud based EQiS database

Overview of services required cont'd

- Reporting Services
 - Table 2 in Annex A
- Environmental Auditing Services
 - Annual audit plan
 - Up to 24 limited scope audits

FARO MINE REMEDIATION

PROJECT

What is Faro Mine?

Faro Mine was once the largest open pit lead-zinc mine in the world. Today it is one of the most complex abandoned mine clean-up projects in Canada.

The Faro Mine site is 25 sq. km – the same size as the City of Victoria, B.C.

It is located outside of the Town of Faro in Yukon, on the asserted traditional territory of the Kaska Nation and upstream from Selkirk First Nation.



70 million tonnes of tailings

320 million tonnes of waste rock

1969-1998

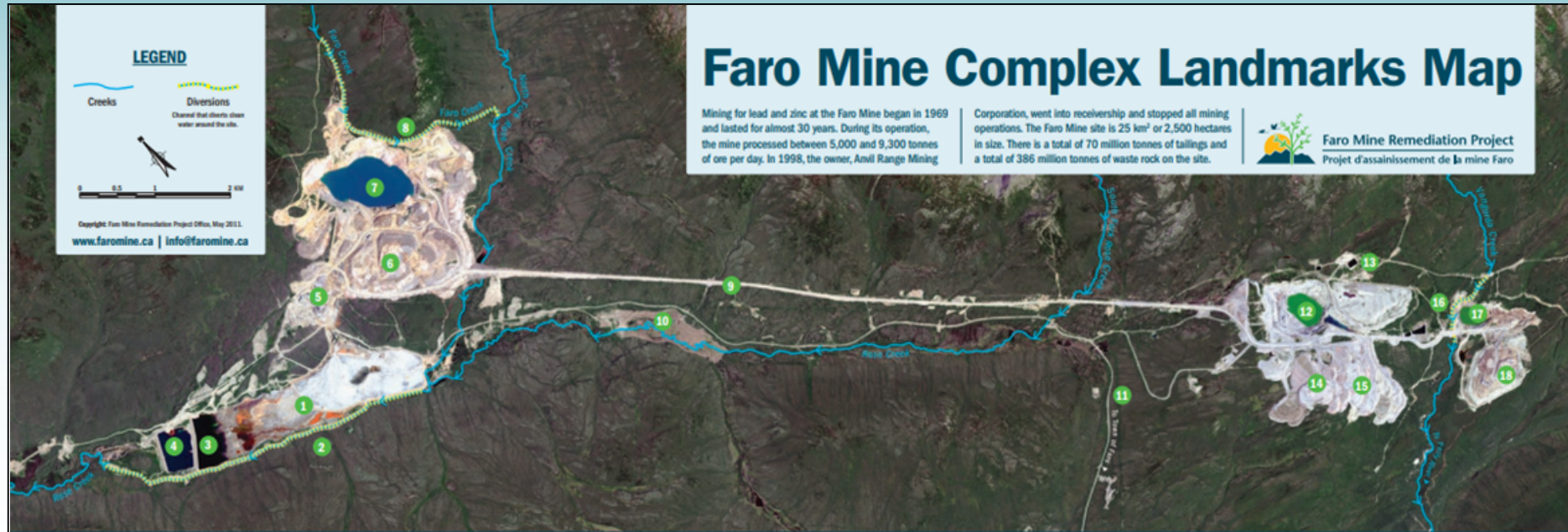
Thirty years of mining

Processing the minerals left behind waste rock and finely crushed particles (known as tailings) which have the potential to leach heavy metals and acid into the land and water.

That's enough mining waste to cover

26,179
FOOTBALL
FIELDS,
1 METER DEEP

Overview of the Mine Sites



Faro Mine Complex Landmarks Map

Mining for lead and zinc at the Faro Mine began in 1969 and lasted for almost 30 years. During its operation, the mine processed between 5,000 and 9,300 tonnes of ore per day. In 1998, the owner, Amal Range Mining

Corporation, went into receivership and stopped all mining operations. The Faro Mine site is 25 km² or 2,500 hectares in size. There is a total of 70 million tonnes of tailings and a total of 386 million tonnes of waste rock on the site.



LEGEND

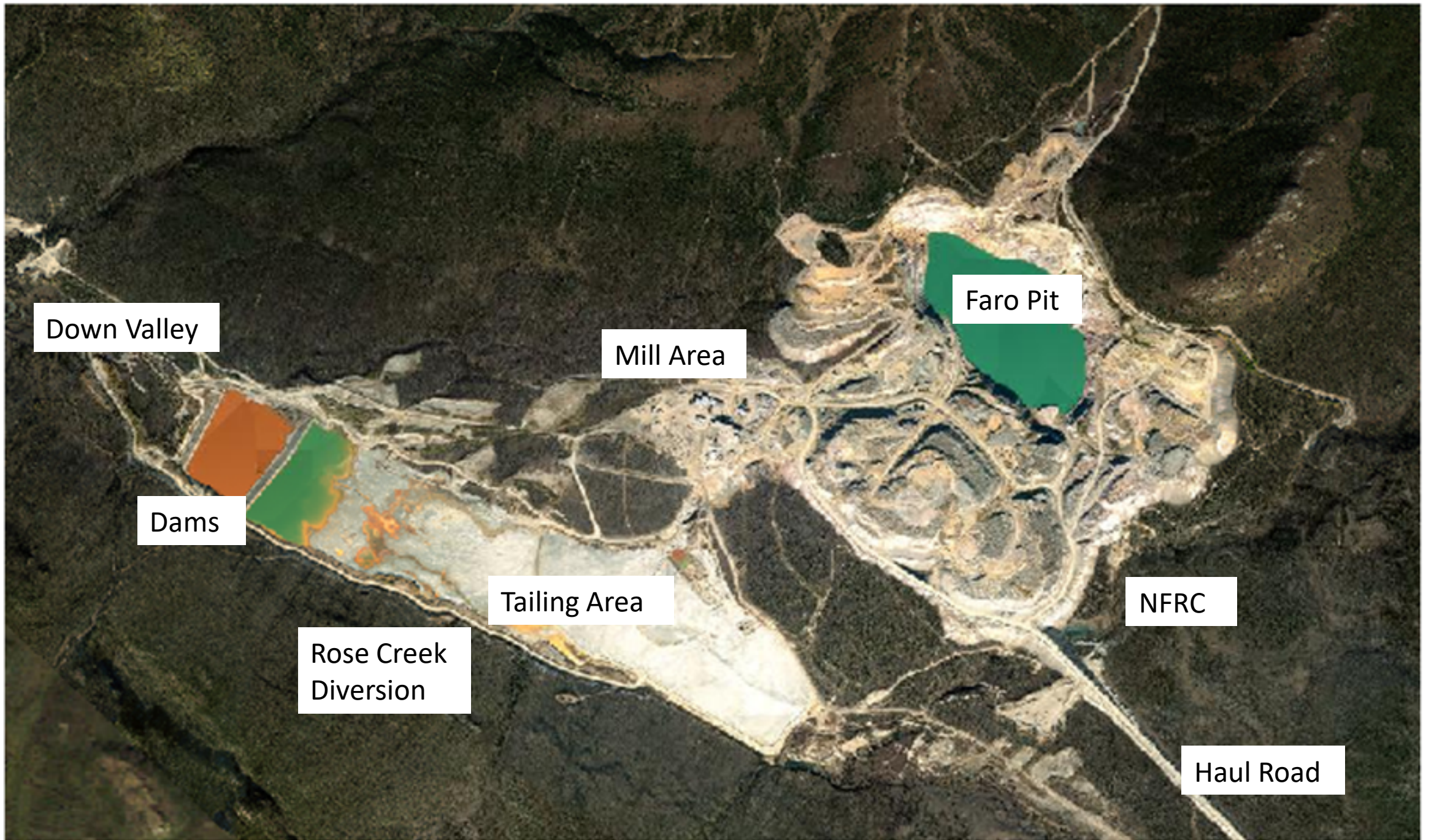
Creeks

Diversions
Channel that diverts clean water around the site.

0 0.5 1 2 KM

Copyright: Faro Mine Remediation Project Office, May 2011.
www.faromine.ca | info@faromine.ca

- 1. Rose Creek Tailings Area**
This area is 4 km long and up to 1 km wide and located at the base of Rose Creek Valley. It holds over 55 million tonnes of tailings. Three dams (original, secondary and intermediate) hold the tailings in place. A fourth dam, the Cross Valley Pond, holds treated water.
- 2. Rose Creek Diversion**
The 4 km long channel diverts the Rose Creek around the tailings impoundment area.
- 3. Intermediate Pond & Dam**
Pond where contaminated water is collected and pumped to the Faro Water Treatment Plant.
- 4. Cross Valley Pond & Dam**
Pond where treated water is stored and tested. Water meeting acceptable standards is discharged into Rose Creek.
- 5. Mill Area – Faro Water Treatment Plant**
The original mill structure was modified and is now used as a water treatment plant. Contaminated water from the Faro Pit is collected and treated at this plant.
- 6. Faro Waste Rock**
Over 260 million tonnes of waste rock (divided into 30 separate dumps) are in the Faro area covering approximately 3.35 km² or 335 hectares.
- 7. Faro Pit**
The pit is approximately 1,675 m long, 975 m wide and 335 m deep. It covers an area approximately 1.6 km² or 106 hectares.
- 8. Faro Creek Diversion**
The 3.35 km long channel diverts the Faro Creek around the Faro Pit. Faro Creek then joins the North Fork of Rose Creek.
- 9. Haul Road**
The 10 km road connects the Faro area to the Grum/ Vangorda areas and was used to haul ore from the Grum/ Vangorda areas to the mill for processing.
- 10. Fresh Water Supply Dam & Reservoir**
The reservoir was used to provide a constant source of water to the mill for processing ore. When mining operations ceased, the reservoir was no longer required and the dam was breached.
- 11. Access Road**
The 22 km road connects the Town of Faro to the Faro Mine Complex.
- 12. Grum Pit**
The pit is approximately 1,100 m long, 700 m wide and 200 m deep. It covers an area approximately 0.77 km² or 77 hectares. A bio-treatment program occurs in the pit to treat the water.
- 13. Vangorda Water Treatment Plant**
Contaminated water from the Vangorda Pit is collected and treated at this plant. Water meeting acceptable standards is discharged into Vangorda Creek.
- 14. Grum Waste Rock**
Over 110 million tonnes of waste rock are in the Grum area covering approximately 1.48 km² or 148 hectares.
- 15. Grum Sulphide Cell Cover Project**
The Grum Sulphide Cell is a portion of Grum Waste Rock which contains a higher quantity of sulphidic material prone to generating acid. The 0.275 km² area was resloped and covered with a liner and soil to control the generation of acid rock drainage.
- 16. Vangorda Creek Diversion**
The 1.2 km long channel diverts the Vangorda Creek around the Vangorda Pit.
- 17. Vangorda Pit**
The pit is approximately 1,150 m long, 350 m wide and 150 m deep. It covers an area approximately 0.42 km² or 42 hectares.
- 18. Vangorda Waste Rock**
Over 16 million tonnes of waste rock are in the Vangorda area covering approximately 0.4 km² or 40 hectares.



Down Valley

Dams

Rose Creek
Diversion

Tailing Area

Mill Area

Faro Pit

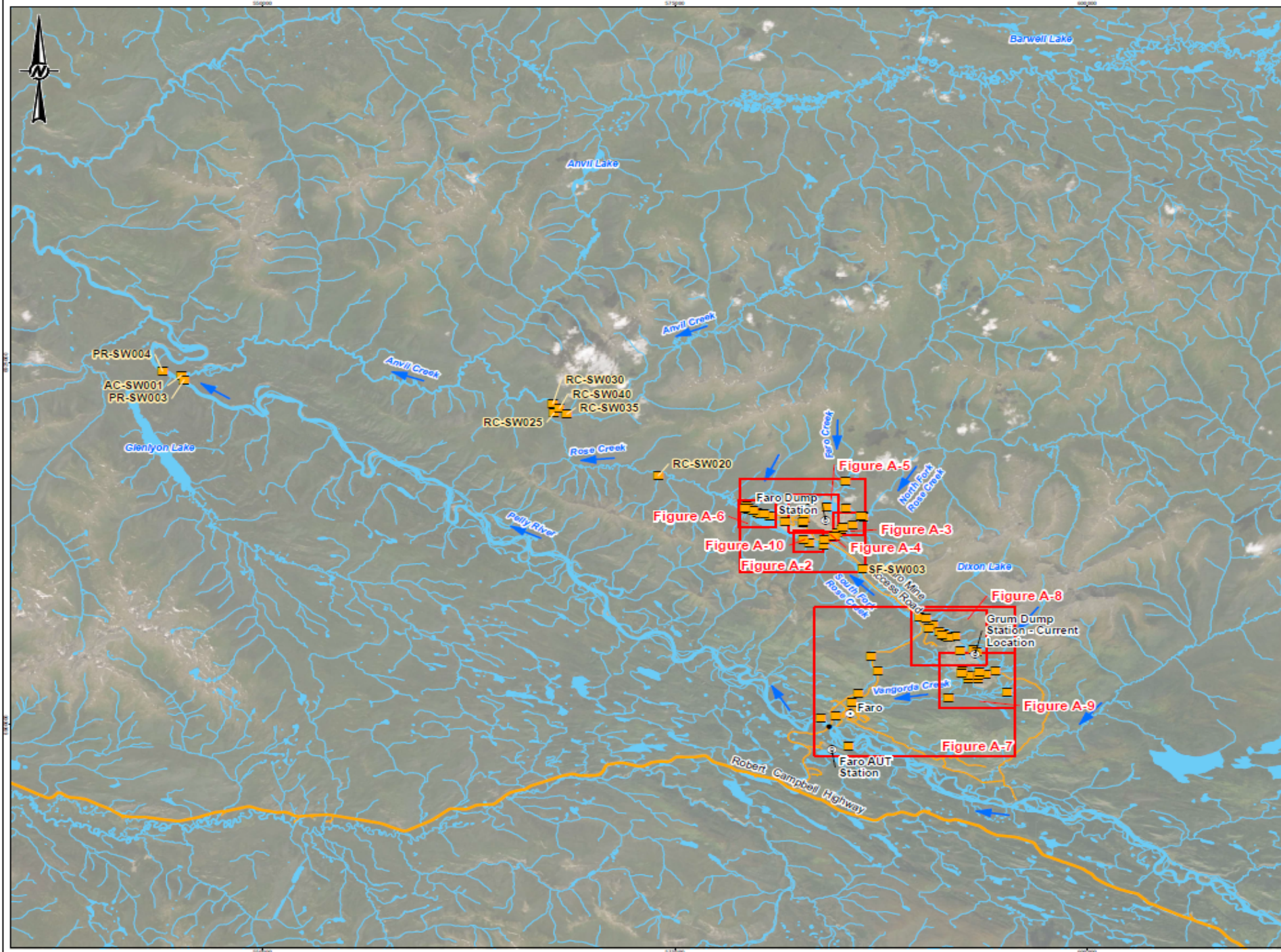
NFRC

Haul Road



An aerial photograph of a winding river flowing through a dense, lush green forest. The river is dark and meanders through the landscape, creating a complex pattern of curves and loops. The surrounding vegetation is vibrant green, with some areas appearing slightly darker, possibly due to shadows or different types of trees. The overall scene is a natural, undisturbed environment.

Overview of Monitoring Program



- LEGEND**
- HYDROMETRIC
 - ⊙ METEOROLOGICAL STATION
 - SURFACE WATER
 - TOWN
 - ➔ DIRECTION OF FLOW
 - HIGHWAY
 - ROAD
 - WATERCOURSE
 - ▭ ADDITIONAL FIGURE
 - WATERBODY



NOTE(S)
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REFERENCE(S)
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CLIENT
 CROWN-INDIGENOUS RELATIONS AND
 NORTHERN AFFAIRS CANADA

PROJECT
 FARO MINE REMEDIATION PROJECT -
 2020 ANNUAL WATER MONITORING REPORT

 Faro Mine Remediation Project
 Projet d'assainissement de la mine Faro

TITLE
SAMPLING AREA OVERVIEW

CONSULTANT	YYYY-MM-DD	2021-03-31
	DESIGNED	JA
	PREPARED	LH
	REVIEWED	HM
	APPROVED	HM

FILE: \\f10001\work\GIS\Map\Projects\2020\AnnualWaterMonitoringReport\2020_AW_Monitoring_Aerial_2021_03_31.mxd
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 USER: jhughes

IF THE MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM A4(11)



- LEGEND**
- FARO MINE COMPLEX SAMPLING AREA
 - ROAD
 - ➔ DIRECTION OF FLOW
 - NORTH FORK ROSE CREEK REALIGNMENT
 - WATERCOURSE
 - WATERBODY
 - MONITORING STATION**
 - HYDROMETRIC
 - SURFACE WATER
 - ▲ SEEP
 - GROUNDWATER
 - GROUNDWATER (NESTED)



NOTE(S)

1. * INDICATES MULTILEVEL WELLS WHERE MULTIPLE PORTS ARE SAMPLED.
2. * NESTED OR PAIRED WELLS. TWO OR MORE WELLS SCREENED AT DIFFERENT DEPTHS AT ONE LOCATION.
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REFERENCE(S)

1. AERIAL PHOTOGRAPHY COLLECTED BY PEREGRINE AERIAL SURVEYORS INC. IN SEPTEMBER 2018 AND PROCESSED BY HATFIELD CONSULTANTS.
2. NORTH FORK ROSE CREEK REALIGNMENT OBTAINED FROM BGC 2020/11/0 (100-301-302-CP-CNST-01.DXF). DATUM: NAD83 CSRS. PROJECTION: UTM ZONE 8.

CLIENT
CROWN-INDIGENOUS RELATIONS AND NORTHERN AFFAIRS CANADA

PROJECT
FARO MINE REMEDIATION PROJECT - 2020 ANNUAL WATER MONITORING REPORT

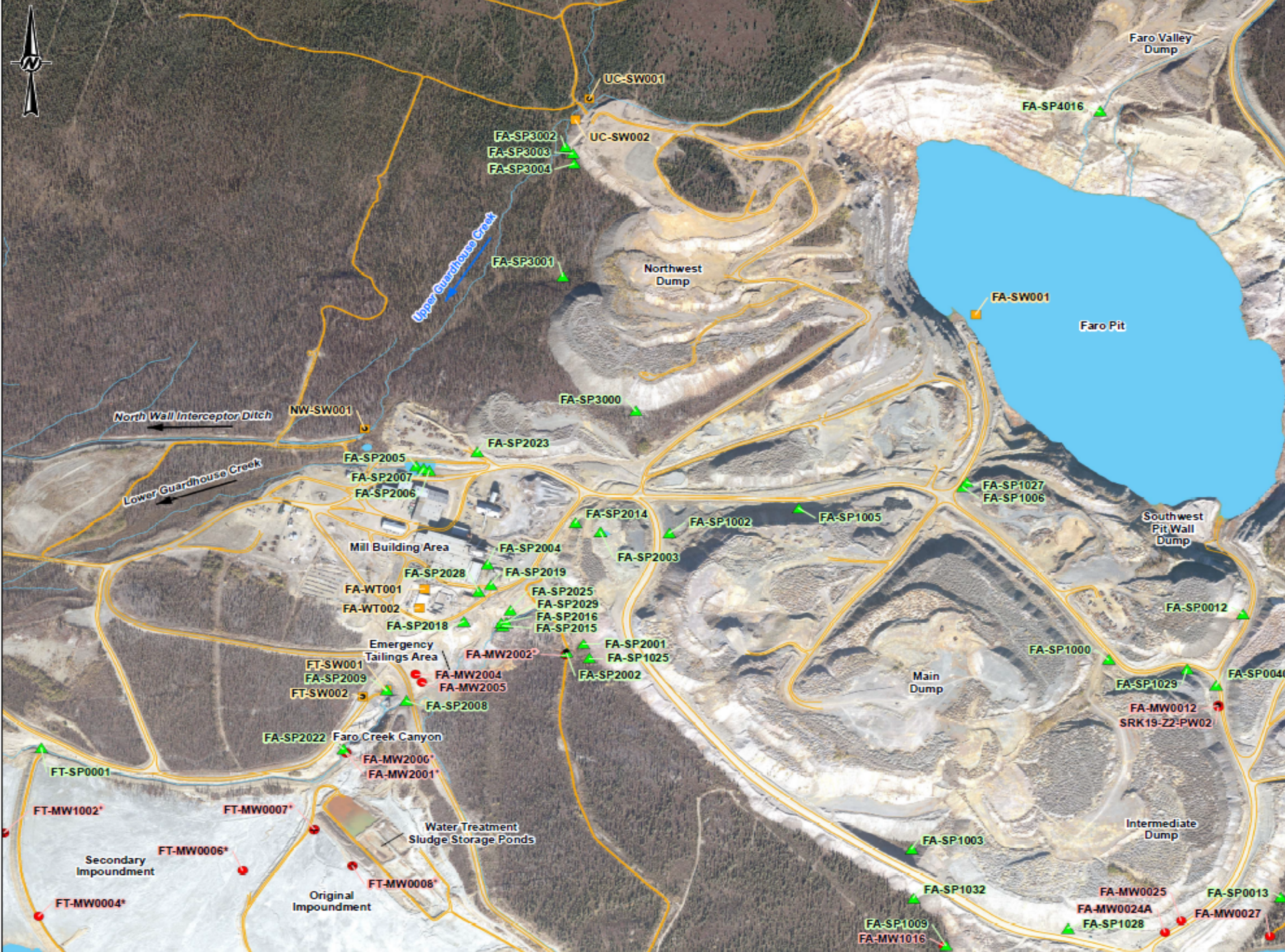
Faro Mine Remediation Project
Projet d'assainissement de la mine Faro

TITLE
MONITORING STATIONS IN THE ROSE CREEK DIVERSION AND DOWNSTREAM AREA

CONSULTANT	YYYY-MM-DD	2021-03-31
GOLDER	DESIGNED	JA
	PREPARED	LH
	REVIEWED	HM
	APPROVED	HM

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Note: If the measurement does not match what is shown on the sheet, the sheet has been modified from the original.



- LEGEND**
- FARO MINE COMPLEX SAMPLING AREA
 - ROAD
 - DIRECTION OF FLOW
 - NORTH FORK ROSE CREEK REALIGNMENT
 - WATERCOURSE
 - WATERBODY
 - MONITORING STATION**
 - HYDROMETRIC
 - SURFACE WATER
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- NOTES**
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CLIENT
CROWN-INDIGENOUS RELATIONS AND
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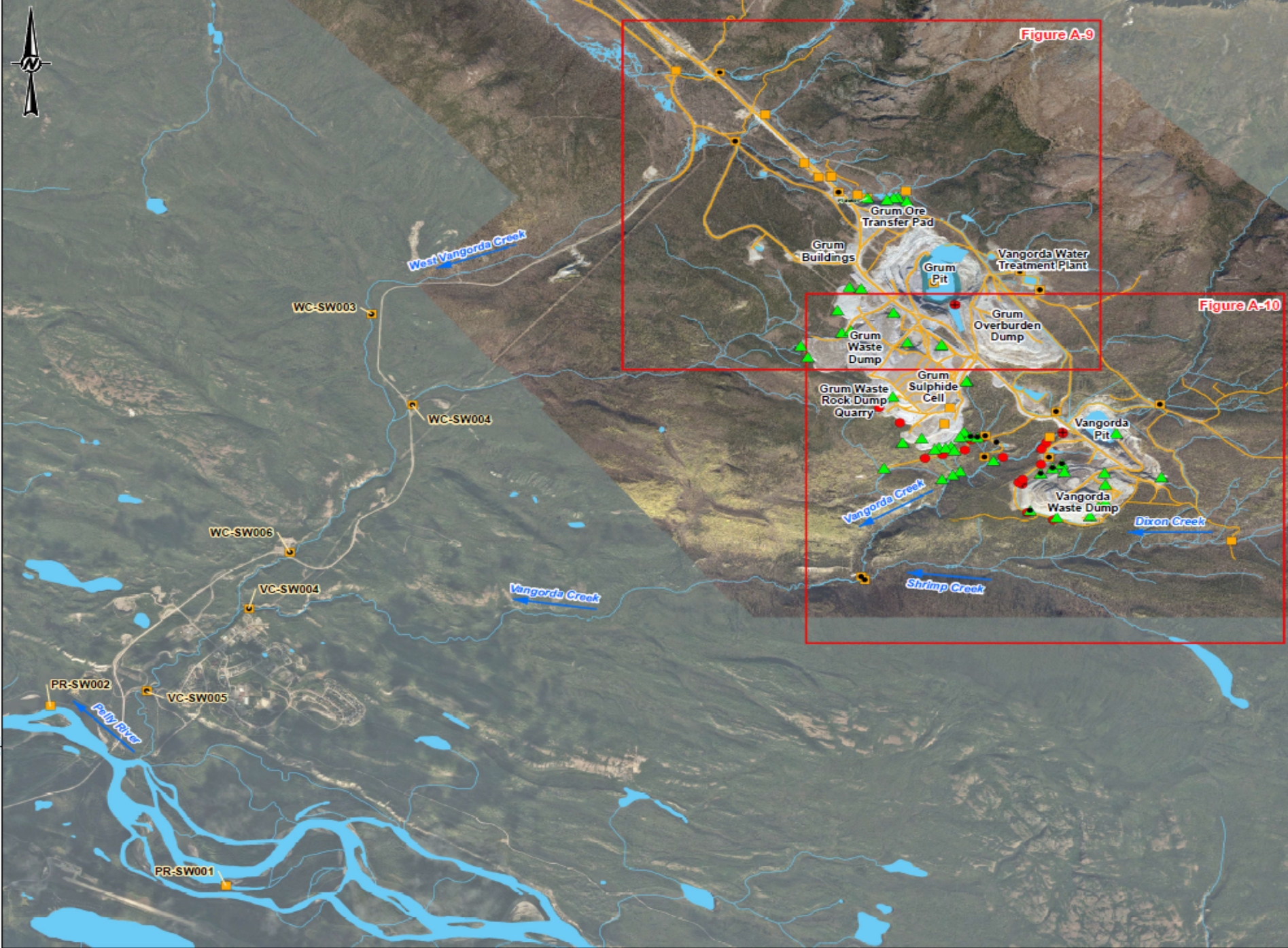
PROJECT
FARO MINE REMEDIATION PROJECT -
2020 ANNUAL WATER MONITORING REPORT

TITLE
MONITORING STATIONS IN THE EMERGENCY TAILINGS AREA

CONSULTANT		YYYY-MM-DD	2021-03-31
		DESIGNED	JA
		PREPARED	LH
		REVIEWED	HM
		APPROVED	HM
PROJECT NO.	CONTROL	REV.	FIGURE
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DATE: 17/03/2021 08:58:00 AM; PROJECT: FARO MINE REMEDIATION PROJECT; PROJECT NUMBER: 19133574; CONTROL: 7000/7200; REV: 0; FIGURE: A-6



LEGEND

- FARO MINE COMPLEX SAMPLING AREA
- ROAD
- ▶ DIRECTION OF FLOW
- NORTH FORK ROSE CREEK REALIGNMENT
- WATERCOURSE
- WATERBODY

MONITORING STATION

- HYDROMETRIC
- SURFACE WATER
- ▲ SEEP
- GROUNDWATER
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CROWN-INDIGENOUS RELATIONS AND NORTHERN AFFAIRS CANADA

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FARO MINE REMEDIATION PROJECT - 2020 ANNUAL WATER MONITORING REPORT

Logo: Faro Mine Remediation Project / Projet d'assainissement de la mine Faro

TITLE
MONITORING STATIONS IN VANGORDA/FARO OVERVIEW

CONSULTANT	YYYY-MM-DD	2021-03-31
GOLDER	DESIGNED	JA
	PREPARED	LH
	REVIEWED	HM
	APPROVED	HM

PROJECT NO. CONTROL REV. FIGURE

19133574 7000/7200 0 A-8



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PROJECT
FARO MINE REMEDIATION PROJECT - 2020 ANNUAL WATER MONITORING REPORT

CLIENT
CROWN-INDIGENOUS RELATIONS AND NORTHERN AFFAIRS CANADA

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MONITORING STATIONS IN THE GRUM AREA

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	REVIEWED	HM
	APPROVED	HM



LEGEND

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MONITORING STATION

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CONSULTANT		YYYY-MM-DD	2021-03-31
	DESIGNED	JA	
	PREPARED	LH	
	REVIEWED	HM	
	APPROVED	HM	

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On Site Laboratory









Thank you!

