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# Virtual Site Visit

## RFP #: EZ897-212882/A

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### Permanent Water Treatment Plan Design Services – Faro Mine

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May 17, 2021

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[www.pspc-spac.gc.ca](http://www.pspc-spac.gc.ca)



# Procurement Schedule

For planning purposes, the current procurement milestones are:

<b>Milestones</b>	<b>Estimated completion</b>
RFP – Publication date	May 3, 2021
RFP – Closing date	June 4, 2021
Evaluation and Selection	June 2021
Anticipated contract award	July 2021
Commencement of work	Immediately after award
Delivery of detailed design	10 months after award

# Future Contract Timelines

Step	Estimates dates
Phase 1 - Detailed design	10 months after contract award
RFP process by MCM	Estimated to take 8 months
Phase 2 – Construction	2 or 3 construction seasons
Final completion	Following conclusion of warranty period

# 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**

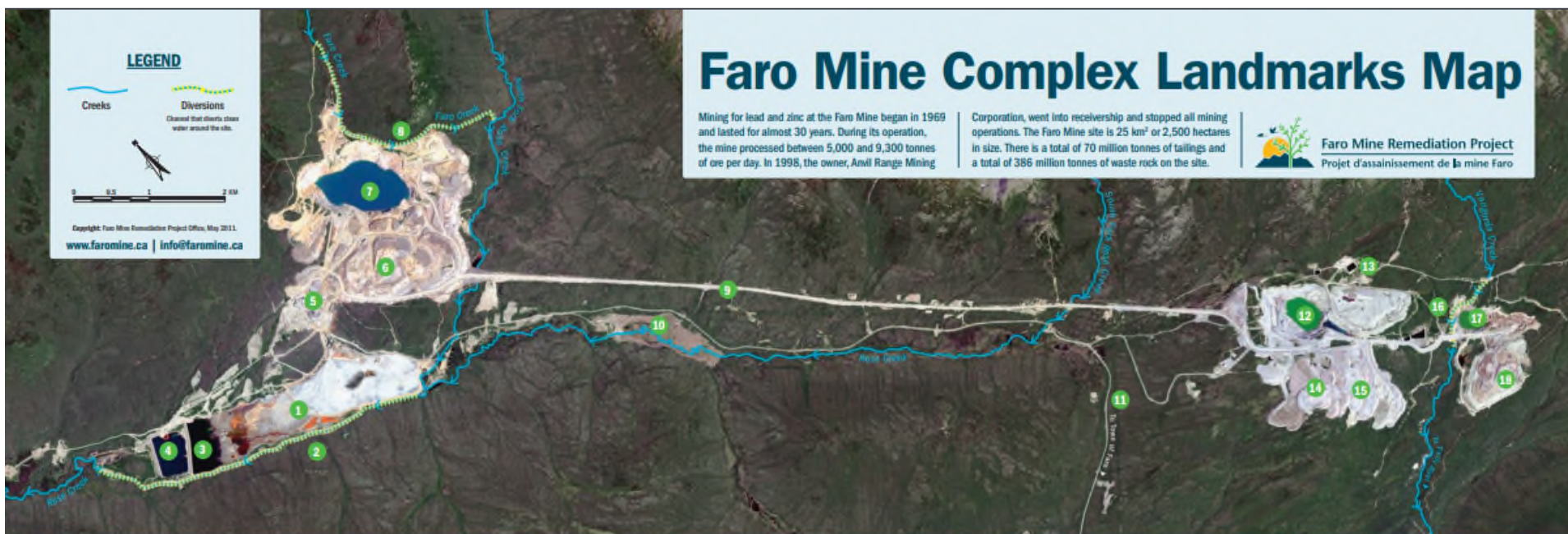
**Thirty years of mining**

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 Faro Mine Site



## 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 km<sup>2</sup> 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.



### 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 km<sup>2</sup> 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 km<sup>2</sup> 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 km<sup>2</sup> 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 km<sup>2</sup> 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 km<sup>2</sup> area was re-sloped 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 km<sup>2</sup> or 42 hectares.

### 18. Vangorda Waste Rock

Over 16 million tonnes of waste rock are in the Vangorda area covering approximately 0.4 km<sup>2</sup> or 40 hectares.

# Overall project scope

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- Advancement and completion of a detailed design of the new PWTP at the Faro Mine Site
- Detailed design will be based on the design basis developed as part of the 30% FMS remediation design
- Construction of the PWTP will be separately tendered by the Main Construction Manager (MCM)
- Engineering support required during the tender process
- Provide design quality assurance during construction and post-completion commissioning, initial operations and warranty period

# Indigenous Considerations

