PARSONS

INDUSTRY DAY 2024 – DAY 1

Giant Mine Remediation Project (GMRP)

Parsons' Main Construction Manager (MCM) Team
November 19, 2024

TRADITIONAL TERRITORY ACKNOWLEDGEMENT

Parsons acknowledges that the Giant Mine is located in Chief Drygeese Territory. From time immemorial, it has been and is the traditional land of the Yellowknives Dene First Nation. The Giant Mine Site is also within Mǫwhì Gogha Dè Nıı̨tłèè (boundary from the Tłı̨chǫ Agreement) of the Tłı̨chǫ government and on the traditional homelands of the Indigenous Métis of the North Slave Métis Alliance.

PURPOSE OF INDUSTRY DAY

Parsons, as the Main Construction Manager (MCM) for the Giant Mine Remediation Project (GMRP), is acting as the Prime Contractor and Mine Manager.

Parsons is committed to ensuring procurement is conducted in a fair, open, and transparent manner while addressing Comprehensive Land Claim Agreement (CLCA) obligations and the Government of Canada's procurement objectives regarding Indigenous opportunities.

Parsons will be providing an opportunity for potential bidders to learn about upcoming solicitations and to explain how things happen on site.

AGENDA

Day 1 – November 19, 2024

- Introduction to Parsons
- CIRNAC Site Updates
- Highly Arsenic Contaminated Soil Washing and Chamber 15 Backfill
- Health and Safety Program
- Water Treatment Plant Operations
- Coarse Grain Borrow
- Overview of Upcoming Packages
- Wrap up and next day preview

INTRODUCTION TO PARSONS

PARSONS

Parsons is the Main Construction Manager (MCM) and Mine Manager

1. **Crown-Indigenous Relations and Northern Affairs Canada (CIRNAC)**, as the site owner, has the mandate to meet the Government of Canada's obligations and commitments to First Nations, Inuit, and Métis and for fulfilling the federal government's constitutional responsibilities in the North.

2. **Public Services and Procurement Canada (PSPC),** is the contracting authority for Parsons and associated government contracts supporting the GMRP (design). They have the goal to contribute to the government's social and economic objectives, including increasing the participation of businesses from Indigenous groups in the procurement system and increasing their capacity.

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3 **Parsons** will complete the project in accordance with the approved remediation plan and any associated authorizations and ongoing responsibility for overall site control, including overall health and safety at the site.

4 **Parsons** will work with Indigenous, northern, and local businesses to facilitate teaming with larger companies to pursue the work on Giant Mine where possible or feasible.

5 **Parsons** is the Mine Manager, as defined by the Northwest Territories Mine Health and Safety Act (MHSA). We will protect the health and safety of employees and other persons at the mine and conduct care and maintenance and environmental monitoring activities to ensure the site remains in regulatory compliance during remediation.

Giant Mine
Remediation Project

Crown-Indigenous Relations and Northern Affairs Canada (CIRNAC) Project Update

Government of Northwest Territories / Gouvernement des Territoires du Nord-Ouest

Canada

Site Updates

Underground Stabilization

- Constructed paste backfill barricades
- Installed underground power and remote monitoring cameras
- Underground stabilization work completed in 2024
- Parsons submitted a formal letter to WSCC on Oct 15 with plans to exit underground by Nov 18

Water Treatment Plant

- Civil works completed in 2024:
  - Mine Water Intake Wells
  - In-Water Work (Outfall)
  - Contaminated Soils Removal
  - Blasting and Crushing
  - Piles for WTP and Biomass building foundations
- Biomass building slab, structural steel, and roof/wall panels are complete.
- WTP below grade tanks and building slab are complete, and structural steel is ongoing. Building will be enclosed by January 2025.

Outfall

- In-water work to construct the WTP outfall is complete
- Blasting has been completed and the outfall corridor road base is fully constructed.

Dams

Dam 2 decant decommissioning work complete as of Oct 7. Annual Geotechnical inspections completed mid-August. Ongoing and newly recommended maintenance issues are being completed by Surface C&M contractor.

Revegetation Test Plot

- Work finished as of Oct 15
- Watering system is completed
- Fencing is in place

General Site Updates

- **Dust Control and Suppression:** application of SoilTac has been completed for the season. Re-installation of HDPE piping around the NW Pond for dust suppression has been completed.
- **Radio Frequency Identification (RFID):** Installation of new system for access by all users of the site.
- **Fire Smarting:** brush clearing around the site and ahead of Power Line Installation Preparation has been mainly completed for the year. Mulching of this brush has been completed for the season.
- **Legacy Debris Pile:** approximately 95% of debris piles from site have been completely removed and shipped off site. Lots of machinery has been de-mobilized from site as well.
- **Other:** Resurfacing of Old Ingraham Trail for use as haul road underway. Road resurfacing from UBC Bridge to B3 Pit for use as temp haul route complete as of Oct 15. Maintenance was conducted on UBC Bridge to replace some surface boards. Intention is to replace all surface timber over upcoming winter season when activities are minimal.

Capacity Building

2024 Capacity Building Highlights

GMRP and its subcontractors issued a **total of 7 scholarships** and **supported 1 apprentice** in 2024. Total funding allocated to scholarships by GMRP and its subcontractors in 2024 was $25,000.

- Five scholarships issued by Parsons for $3,000 each
- GMRP issued funding to YKDFN and NSMA, $5,000 each, for scholarships

Provided funding of $3.04M, via Contribution Agreements, in the 2023-2024 fiscal year to YKDFN, NSMA, Tłı̨chǫ Government, City of Yellowknife, and Alternatives North. Funding was initiatives such as training programs, economic and business development, salary for positions, supporting professional development, engagement activities, etc.

HIGHLY ARSENIC CONTAMINATED (HAC) SOIL WASHING AND CHAMBER 15 BACKFILL

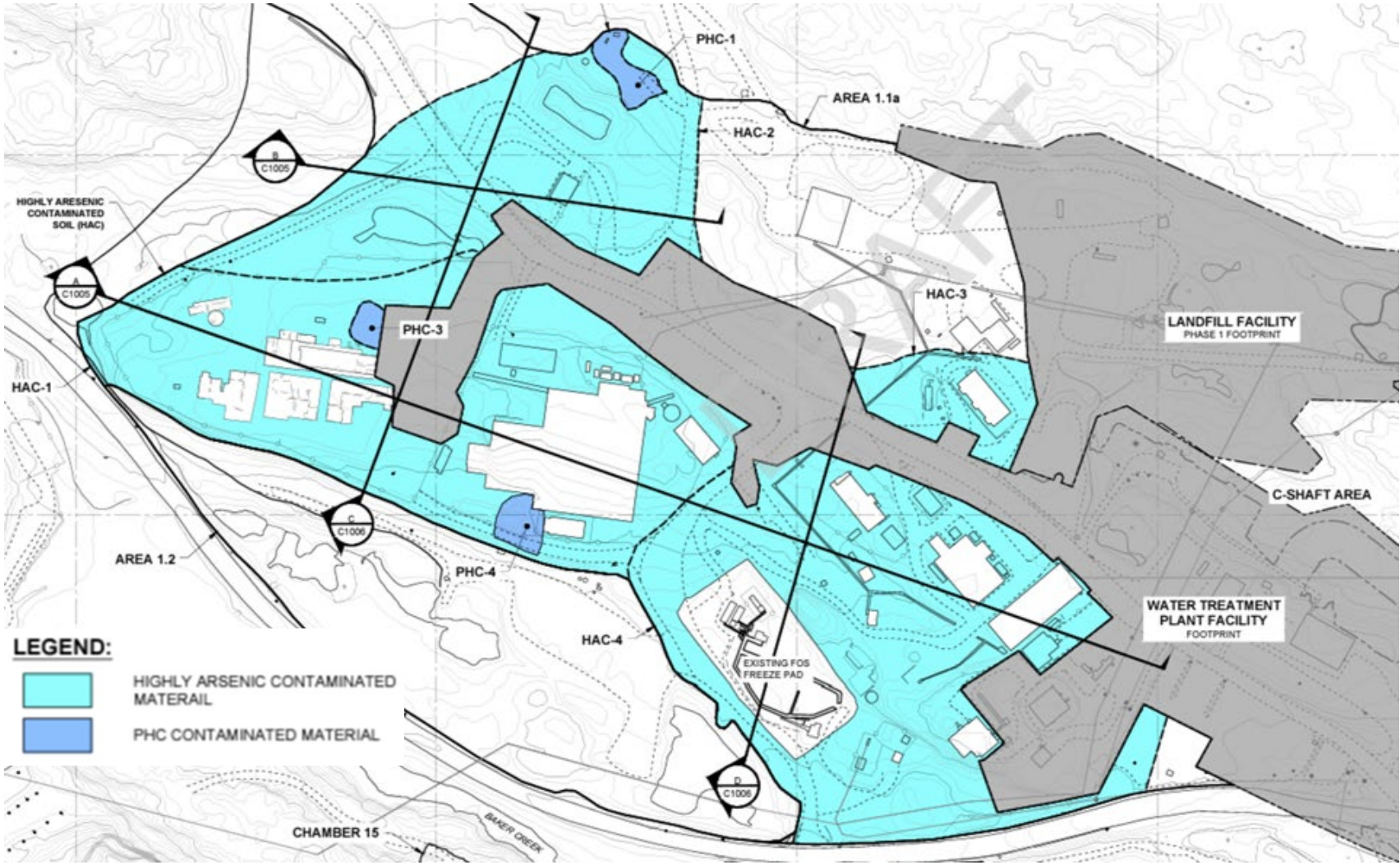
HAC SOIL WASHING AND CHAMBER 15 BACKFILL

1. A contaminated soil management construction work package (CWP).
2. The management of the HAC soil (>4,500 mg/kg) will include controlled surficial remedial excavation, soil washing (wet screening) to segregate fine-grain soils from the coarse-grain material, and disposal of these two soil washing outputs.
3. Outputs include HAC concentrated fine-grain material (filter cake) and lesser contaminated coarse material (processed material). Filter cake will be batched into lightly cemented contaminated backfill (LCCB) and disposed of in Chamber 15. Processed material will be placed in the Central Pond.
4. PHC and arsenic co-contaminated soils will not be washed, but segregated and stockpiled.

HAC SOIL WASHING AND CHAMBER 15 BACKFILL

The HAC soil area is around the former Roaster building and extends all the way south to the C-Dry building, also referred to as the Core Industrial Area (CIA).

The arsenic-impacted soil has an average thickness of 0.5 m with a total estimated volume of 52,000 m^3. Approximately 15,600 m^3 of the total volume is expected to be fine-grain material (filter cake) to be batched into LCCB.



HAC SOIL WASHING AND CHAMBER 15 BACKFILL

Highlights of Scope

Implementation of the CWP will include the following:

1. Design, install, demonstrate the operation, commissioning, and final decommissioning of soil washing plant(s) and backfill plant(s) as well as installation of any temporary roads and access required to complete Chamber 15 backfill and soil washing work.
2. Prepare a staging area in the South Pond or CIA for soil washing and the LCCB batch plants.
3. Excavation and soil washing of all excavated and previously stockpiled HAC material in the CIA and the South Pond.
4. Transport, place, and compact Subcontractor-supplied backfill material to the area as required for erosion control, surface water management, and safe access for roads and walkways that need to be maintained/reestablished within the work area limits.
5. Combine HAC filter cake with cement to form LCCB and place into Chamber 15.
    a. LCCB backfill boreholes into Chamber 15 have already been completed.
    b. Chamber 15 to be backfilled within 0.5 m of the back to provide support to crown pillar and prevent damage to future thermosyphons.
    c. Decommission LCCB boreholes.
6. Haul and stockpile of processed material in Central Pond or other area as designated by Parsons.
7. Segregate, haul, and stockpile petroleum hydrocarbon (PHC) impacted soil in the North Pond.
8. PHC impacted soil will not be washed.
9. Subcontractor will be required to have a certified industrial hygienist (CIH) on staff.

HAC SOIL WASHING AND CHAMBER 15 BACKFILL

Procurement

This CWP is designated to be a design-build procurement primarily due to the soil washing and cement stabilization process required for the Chamber 15 backfill.

A prequalification process will precede the tender process.

HAC SOIL WASHING

Schedule

	Start	End
Prequalification of bidders	February 2025	August 2025
Request for proposal	August 2025	October 2025
Construction Season 1	Q2 2026	Q3 2026
Construction Season 2	Q2 2027	Q3 2027

Construction Season 1:

- Washing previously stockpiled HAC soils from the South Pond
- Backfilling Chamber 15

Construction Season 2:

- Excavating soil in the CIA
- Stockpiling excavated PHC contaminated soils
- Washing excavated HAC soil from the CIA
- Washing previously stockpiled HAC from the CIA
- Backfilling Chamber 15

HAC SOIL WASHING AND CHAMBER 15 BACKFILL

Forecast CWP Interactions and Schedule Considerations

Preceding/concurrent work:

This CWP's work is sequenced to follow demolition and debris removal of most of the buildings and infrastructure in the CIA. Some buildings will remain and will need to be worked around. There will be some work area overlap in Q2 of 2026 in the CIA with the demolition and debris CWP.

Subsequent/concurrent work:

AR1 freeze installation beginning late 2027 and includes freezing of backfilled Chamber 15. There may be some work area overlap at the AR1 freeze pad.

Earthworks remediation beginning in Q2 2027, includes further excavating of contaminated soils within the footprint of HAC soil excavation. They will not be in the CIA until Q2 2028; therefore, no overlap in CWP footprints.

Schedule compliance will be necessary for the flow of work with other packages.

QUESTIONS?

LUNCH – BACK AT 1:00 P.M.

HEALTH AND SAFETY PROGRAM

SAFETY, HEALTH, AND ENVIRONMENT

PARSONS' ROLE

Parsons is the Mine Manager under the MHSA and as such is responsible for all health and safety at site.

Parsons has a Project Safety, Health, and Environmental Plan (PSHEP) and all subcontractors have a Subcontractor Safety, Health, and Environmental Plan (SSHEP) and their employees must follow both. As the MCM, Parsons is in partnership with all stakeholders to build a strong safety culture.

SAFETY, HEALTH, AND ENVIRONMENT

1. **Joint Health and Safety Committee (JHSC)** meetings, Over the last year all subcontractors are involved in the JHSC on the third Thursday of every month. Multiple recommendations are being submitted to the Mine Manager and completed actions from the committee. This is a more open way for employees to address concerns and feel empowered when things are changed on site. All subcontractors have a worker representative and supervision representative. The greatest effect comes from the workers having a voice to raise concerns. This year the committee is adding a community representative that can be connected/engaged to support what the GMRP is changing and how that effects Yellowknife.
2. **Safety culture** has improved with better reporting on incidents/near misses/hazard identifications. Parsons is driving a culture of transparency between the MCM and all subcontractors that work at the Giant Mine site. Having an open door to work with everyone and the community environment.
3. **Risk assessments** are key to addressing hazards that come up on site to make sure there is a joint effort/collaboration with everyone that comes through the gates at the Giant Mine site. Risk assessments may include Parsons, subcontractors, PSPC, CIRNAC, and others specific to what needs to be addressed.

SAFETY, HEALTH, AND ENVIRONMENT

Medical monitoring program. An industrial hygienist has been added to the Parsons' health and safety team. They are focused on adding more training/detailed reporting and more engagement with all subcontractors on exposure to arsenic and how to keep all workers' health and safety as a top priority. All potential exposures at the Giant Mine site have been addressed through the expertise of the new hygienist.

Through the combined efforts at the Giant Mine site with everyone contributing to keep workers safe from arsenic trioxide, these efforts are reflected in these numbers. There is more to be done as we aim for zero exceedances and continuous improvement.

- Trend analysis and statistics, data-driven decisions
- Coaching for investigations, root cause analysis
- Sharing expertise and lessons learned across projects and subcontractors
- Risk assessments led by subcontractors, reviewed by Parsons
- Improved understanding of diet-exposure against work-exposure
- New orientation to better reflect site realities

Annual performance review. Ongoing reduction in numbers when compared to previous years.

Year	Year 2024 (to date)	Year 2023	Year 2022
Exceedances	0.7%	1.3%	4.5%
Warnings	3.3%	5.7%	12.7%
Creatinine issues	7.6%	9.9%	NA
Total number of tests	2105	2951	2493

SAFETY, HEALTH, AND ENVIRONMENT

Permit to Work (PTW)

Hazardous and other identified nonroutine work requires a permit authorization from the Parsons' CWP manager or designate to confirm that all prework planning and documentation has been completed. Permitted activities include, but are not limited to, the following:

- Confined space – work and access
- Live line break
- Hot work – welding, cutting, and brazing
- Ground disturbance
- Working on/near equipment with stored energy, e.g., electric or hydraulic equipment
- Lockout/tag-out (LOTO)
- Blasting – surface and underground
- Cranes, hoists, and lifts – cranes and rigging
- Hoisting with equipment – zoom booms, excavators, etc.
- Working at heights
- Other nonroutine work

SAFETY, HEALTH, AND ENVIRONMENT

Permit to Work (PTW) (continued)

1. **Hazard Identification**
   a. All hazards will be identified, and the risk assessed, for the proposed scope of work, including conflicting activity hazards, workplace environmental monitoring (e.g., confined space, hot work, etc.), and control measures for work that will last longer than one shift.
2. **Control Measures Implemented**
   a. All necessary control measures for the safe completion of work are completed and documented on the associated standard operating procedure (SOP) related supporting documentation: job hazard analysis (JHA)/job safety analysis (JSA) field level risk assessment (FLRA), and the PTW.
   b. Permit receiver confirms or verifies that all control measures are implemented before work starts.
3. **Simultaneous Activities**
   a. Activities inside and adjacent to the work zone are identified, e.g., interface between work parties, work areas, etc.
   b. Identified activities are managed or mitigated to eliminate conflict.
4. **Communication**
   a. Permit receivers will communicate the requirements of the permit and associated supporting documents to the workers conducting the work.
   b. Work will not proceed until all workers on the job confirm they understand the PTW requirements by signing the permit.
   c. The original permit and supporting documents (e.g., JHA/JSA, SOP related documents, etc.) will be posted at the worksite or Parsons' agreed to central location.

SAFETY, HEALTH, AND ENVIRONMENT

Permit to Work (PTW) (continued)

5. **Validation**
   a. Once the permit receiver has confirmed that all hazards have been identified and supporting documentation completed, the PTW is presented to the permit issuer for verification and authorization.
   b. Permit issuer reviews the documentation and verifies that all controls, e.g., LOTO, ground disturbance checklist, etc., are in place.
   c. Permit receiver signs the PTW to confirm all controls are in place; permit issuer signs the PTW to confirm that the work is authorized to start.
   d. Permit receiver reviews the PTW and supporting documentation with the workers conducting the work and then they sign the permit to acknowledge they have reviewed the documents and understand the conditions.
6. **Duration**
   a. The PTW is valid for one shift unless otherwise approved by Parsons' permit issuer and Parsons' safety, health, and environmental (SH&E).
   b. If the work continues for longer than one shift, the PTW will be revalidated by the original permit issuer or a new PTW issued.
   c. PTWs that are planned to last longer than one shift will have a formal risk assessment performed to identify risks and controls associated with the duration of the work.

SAFETY, HEALTH, AND ENVIRONMENT

Permit to Work (PTW) (continued)

7. **Management of Change**
   a. When the work scope or circumstances change, e.g., new hazards, change in work activity, change in environment, the work will stop immediately and the PTW will be returned to the permit issuer.
   b. Work may restart once the changes have been identified, mitigated, or eliminated and the permit issuer and permit receiver resign the PTW.
   c. Workers must be made aware of the changes and any new procedures implemented.
8. **Emergency Situations**
   a. In the event of an incident or emergency, all work will be made safe and work stopped. The PTW will be invalid until the permit issuer revalidates or reissues the PTW.
9. **Closeout**
   a. When work is complete or there is a requirement to close the PTW, the permit issuer will ensure that the worksite is left in a clean and safe state and that any remaining work is identified with a process implemented to manage the work and return the PTW and supporting documentation to the permit issuer who confirms that the work area is safe and clean and both parties sign the PTW to close the permit.

SAFETY, HEALTH, AND ENVIRONMENT

Permit to Work (PTW) (continued)

10. Documentation and Reporting

a. Completed PTW and supporting documentation must be returned to Parsons' SH&E and retained electronically for a period of one year; email a copy of completed permits to GiantMineSafety.Parsons@parsons.com.

b. Parsons' location for electronic files with be SharePoint, Environmental Health and Safety > Permit to Work Authorizations.

If a reportable incident/dangerous occurrence takes place under a permit, the original permit and supporting documentation will accompany the investigation and a copy filed for the project record.

SAFETY, HEALTH, AND ENVIRONMENT

1. Blasting and explosives are an integral part of mining. Blasting will be conducted to level areas for new facilities and to create access to on-site materials for road maintenance. In 2024, blasting started to prepare for the WTP. This will continue for the next season.
2. As the volume of work, personnel, and equipment on site increases, Parsons will continue to use our Traffic Management Plan. Not only to keep people safe, but to improve efficiencies to workflow. This has been very effective in 2024 to maintain a controlled flow of traffic and minimize incidents. There has been more engagement as a night-shift traffic supervisor and flaggers were added in 2024.
3. Site security is maintained by having controlled access to the gated access points and security patrols to ensure the safety of personnel on site. More site-specific training; stench gas release, fire water pump. Any emergency response goes through site security and they maintain controls as directed by Parsons. Radio frequency identification (RFID) became fully functional in September 2024. This only allows personnel that have an electronic card key access to enter and exit gates at Giant Mine. This gives Parsons a quick response to an emergency by having instant access to the head count on site. Faster response eliminates potential risk to personnel.

BREAK

WATER TREATMENT PLANT OPERATION

WATER TREATMENT PLANT OPERATION

CWP Overview

Operation and maintenance of the new Water Treatment Plant (WTP) currently being constructed on site.

WTP operation will run 24/7, year round, and will need to be staffed accordingly.

This package will also include operation and maintenance/property management of the following:

- Biomass building, heating the WTP
- Mine wells, drawing from the mine pool for treatment
- Raw water and outfall pipelines
- Sludge management

WATER TREATMENT PLANT OPERATION

CWP Overview

The primary goal of the WTP is to manage the water level of the underground mine pool below arsenic trioxide storage areas. The WTP will be operational until the arsenic trioxide contamination has been fully remediated.

The WTP has been classified as a **Class III WTP.**

It will operate under the Water Licence MV2007L8-0031.

The new WTP will replace the existing Effluent Treatment Plant (ETP), though the ETP will remain on site for the first year of WTP operation.

WATER TREATMENT PLANT OPERATION

Highlights of Scope – Flow and Water Quality

The WTP was designed for an average flow of 20 L/s, with a minimum of 10 L/s and peak of 30 L/s.

Influent water will be pumped up from two wells located in the Giant Mine complex. The expected influent and treated effluent concentrations are:

Parameter	Unit	Influent		Effluent	
		Avg.	95%	Avg.	Grab
Arsenic	mg/L	28	100	0.01	0.02
Antimony	mg/L	0.6	1.1	0.2	0.3

WTP effluent must meet several effluent quality criteria (EQC) outlined in the Water Licence. Of note, the arsenic must meet Guidelines for Canadian Drinking Water Quality (GCDWQ).

WATER TREATMENT PLANT OPERATION

Highlights of Scope – Chemical Use

The WTP will use the following chemicals for treatment:

- Hypochlorite
- Ferric sulphate
- Hydrated lime
- Polymer
- Carbonic acid
- Sodium bisulphate

Supply of the chemicals will be the responsibility of the WTP operator.

WATER TREATMENT PLANT OPERATION

Highlights of Scope – Sludge Management

Waste sludge is produced during coagulation/flocculation. Sludge collected from the bottom of the clarifier is combined with a lime slurry and recirculated to the reaction tanks. Excess sludge is directed to a filter press for dewatering.

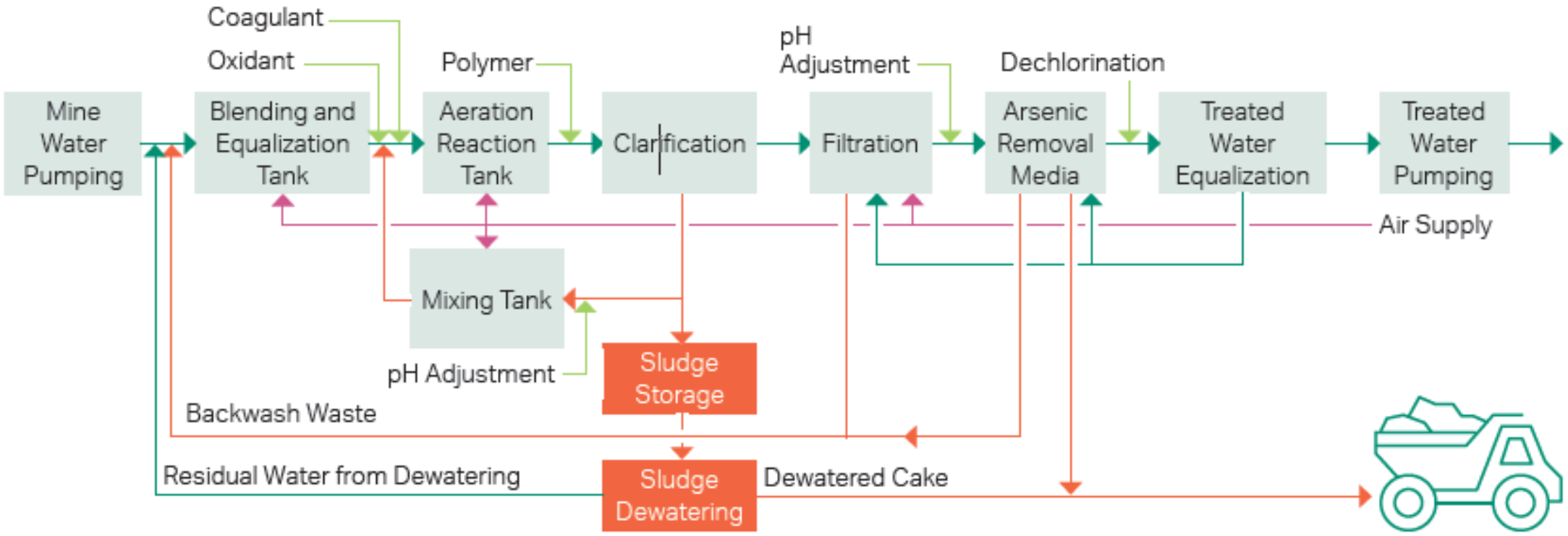
Arsenic media that is spent is added to the dewatered clarifier sludge and hauled to the Non-Hazardous Waste Landfill (NHWL) on site.

The WTP operator will be responsible for trucking and placement of sludge from the WTP into the sludge cell of the NHWL.

WATER TREATMENT PLANT OPERATION

Highlights of Scope – Process Flow

Process Flow Diagram:



WATER TREATMENT PLANT OPERATION

	Start	End
Request for proposal	Q3 2025	Q4 2025
Start of operations	Q1 2026	TBD

QUESTIONS?

COARSE GRAIN BORROW

COARSE GRAIN BORROW

A design-bid-build package: Development of on-site quarry, production of aggregate of different gradations as per agreement, and stockpiling and supplying within the stipulated time frame.

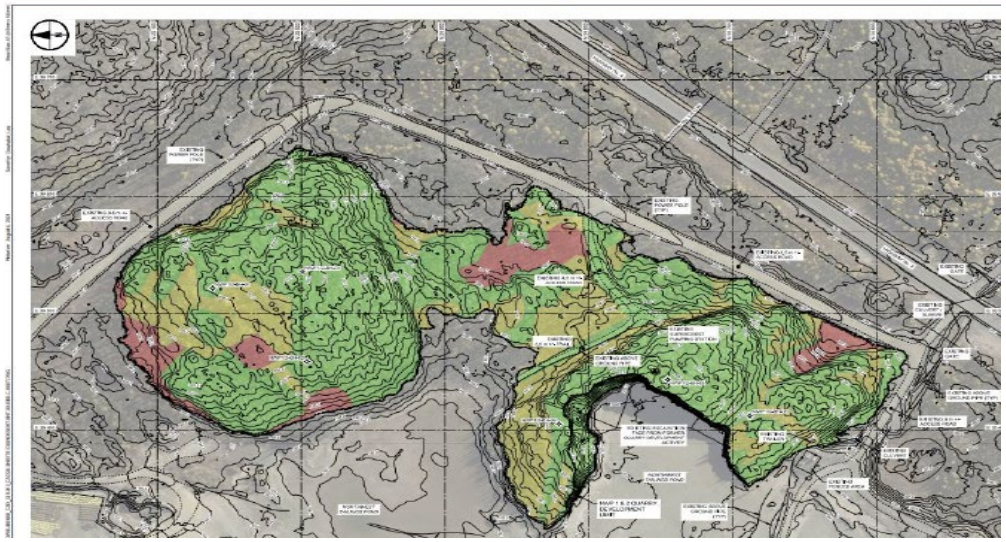
Potential on-site quarries for development:

- Northwest Pond 1 and 2
- North Pond
- North Pond Spillway
- Northwest Pond 3
- Brock

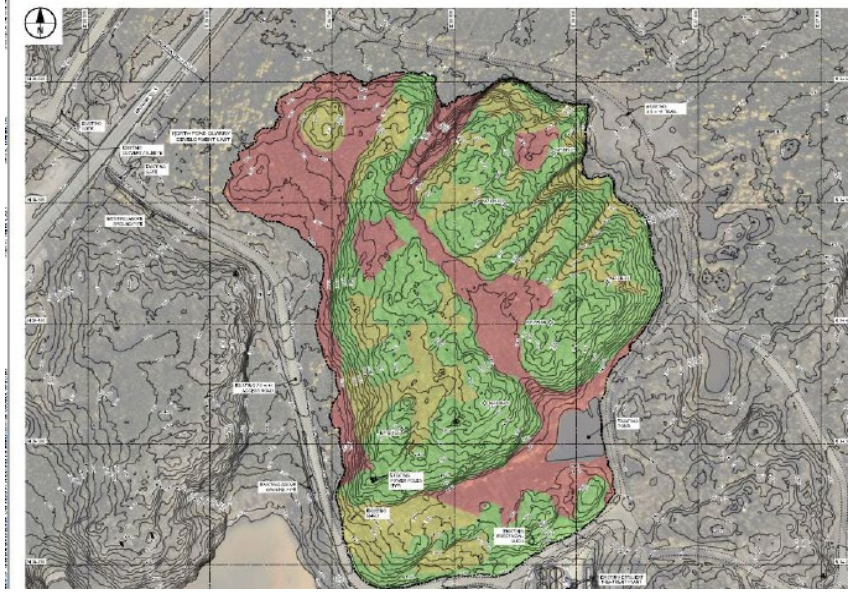
The aggregate produced from on-site quarries will be used to meet other project requirements, e.g., tailings cover, pit cover, backfill, and other uses.

Aggregate used in areas is subject to surface runoff criteria, e.g., engineered covers on pits and TCAs addressed as **specialized construction use** whereas the aggregate used for site-wide remediation applications including, but not limited to, freeze and drill pads, laydown areas, roads, berms, and dam maintenance addressed as **general construction use**.

NWP1&2 Quarry – Existing Conditions



North Pond Quarry – Existing Conditions

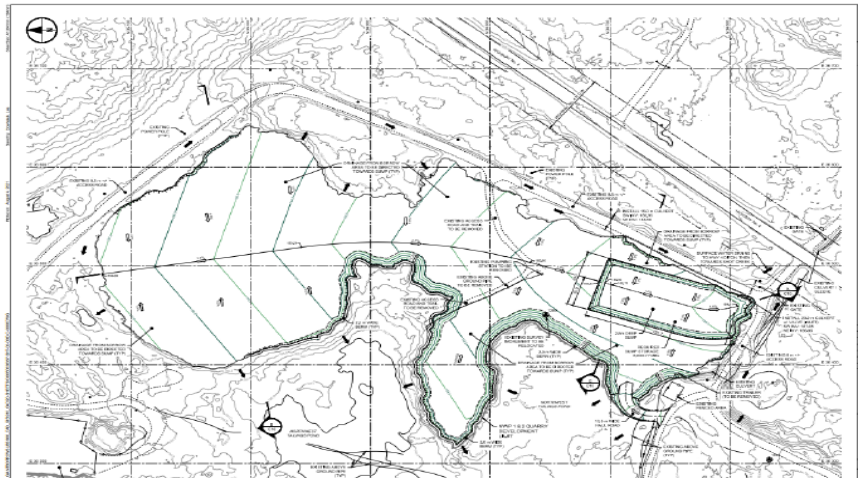


COARSE GRAIN BORROW

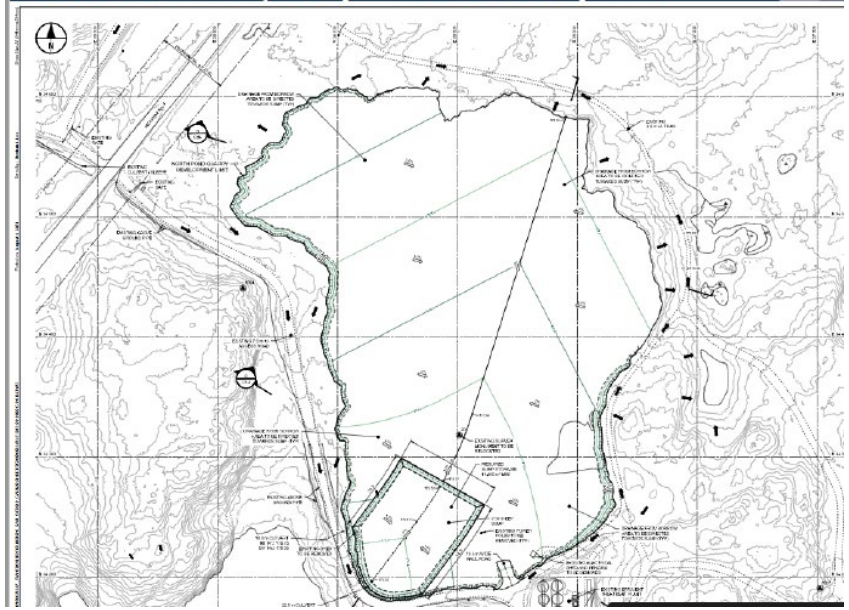
Highlights of Scope

1. Removal of vegetation, overburden, and contaminated soil.
2. Removal of existing infrastructures and debris within quarry development area.
3. Reduction of visual effect during development.
4. Implementation of suitable measures to minimize the effect of noise and dust outside the quarry.
5. Awareness of nearest water body and take necessary water runoff control measures.
6. Tapping off overhead power source and establish power network from portable transformer (Owner supplied) to power bank which will be installed by the subcontractor.
7. Development of surface water collection system during quarry development.

NP1&2 Quarry – General Layout



North Pond Quarry – General Layout



COARSE GRAIN BORROW

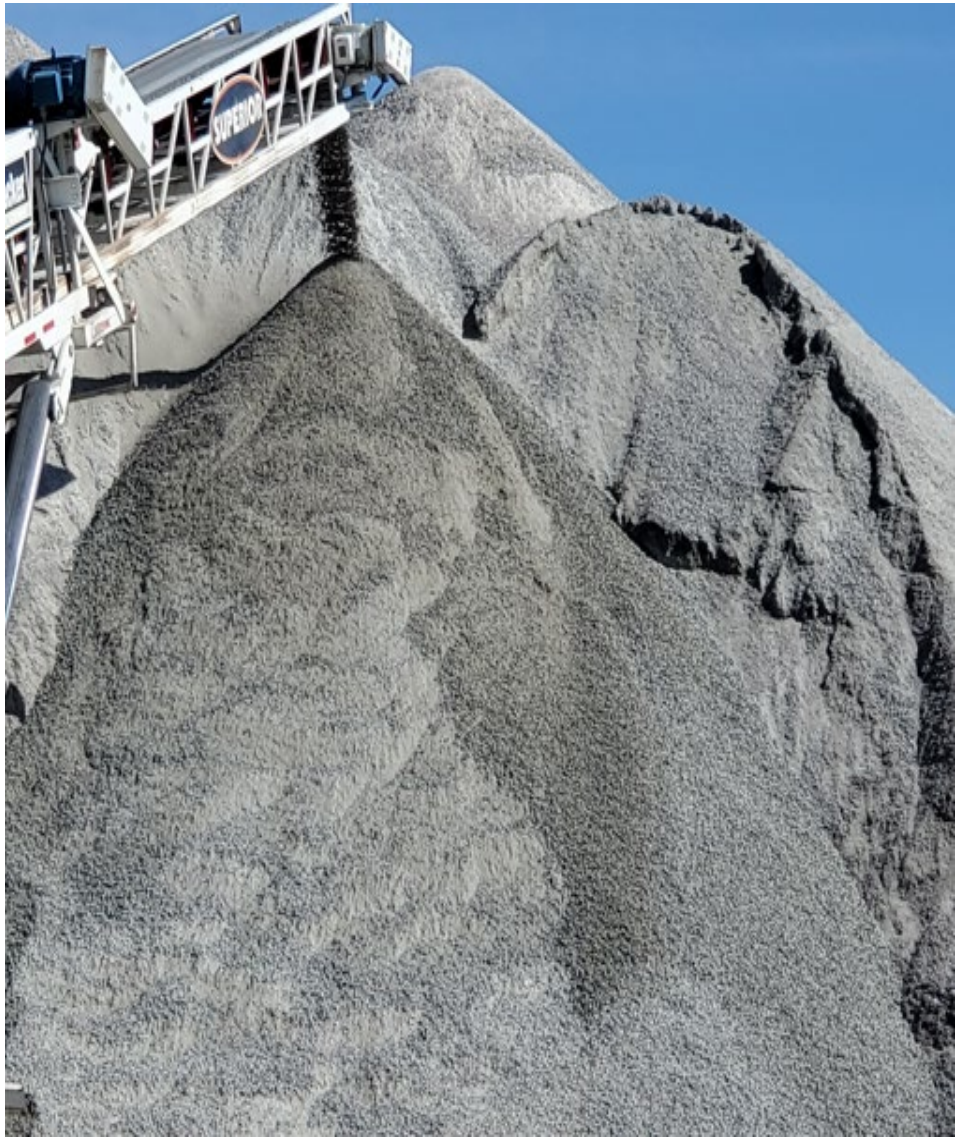
Highlights of Scope

1. Establishing blasting sequence and potential blasting patterns to keep up necessary production.
2. Maintaining access roads within the battery limit for the movement of equipment and aggregate.
3. Aggregate processing facility arrangement .and installation of necessary equipment and infrastructures.
4. Placement of weighing scale and monitor production.
5. Stockpiling aggregate products by gradation and material classification and surveying stockpiles to control inventory..
6. Regrading final borrow ground surface and stockpiling locations to prevent ponding water.

COARSE GRAIN BORROW

Estimated annual production requirements, which includes different gradations and quantity of production.

Year	Estimated Demand (Cubic Metres)
2026	150,000
2027	300,000
2028	300,000
2029	300,000
2030	600,000
2031	600,000
2032	600,000
2033	600,000
2034	450,000
2035	450,000
Total	4.35 Million



COARSE GRAIN BORROW

Special Considerations

1. Stockpiling different gradations of aggregate at different locations and operating as supply centers for other packages.
2. Establishing a dynamic stockpile management and inventory control so that demand versus production can be closely monitored.
3. Variation of demand time to time based on the progress of other activities.
4. Producing and storing of aggregates used much later in the project may lead to space management challenges.
5. Aggregate processing areas have already been identified to accept and process blast rock material from rock quarries and produce aggregate, stockpile, and manage as required.
6. Testing of products to validate geochemical requirements.

COARSE GRAIN BORROW

Strategy

Estimated gradations and volumes:

- 300 mm aggregate: 1.5 million m^3
- 80 mm aggregate: 400,000 m^3
- 25 mm aggregate: 750,000 m^3

COARSE GRAIN BORROW

	Start	End
Request for proposal	Q2 2025	Q3 2025
Construction	Q2 2026	Q1 2037

QUESTIONS?

SUMMARY AND FUTURE CWPS

OVERVIEW 2025

2025 CWPs

- Highly Arsenic Contaminated Soil Washing and Chamber 15 Backfill
  - Prequalification February 2025
  - RFP August 2025
- Coarse Grain Borrow
  - RFP Q2 2025
- WTP Operation
  - RFP Q3 2025
- Earthworks Remediation
  - Prequalification July 2025
  - RFP December 2025

Note: All dates and scopes of work subject to change.

2026 AND BEYOND OPPORTUNITIES

- Northwest Pond Tailings Area Rehab and Northwest Pond Spillway
  - Prequalification February 2026
  - RFP October 2026
- Baker Creek (Reach 4, Reach 5, and Reach 6) and Dam B2 Raise
  - Prequalification February 2026
  - RFP October 2026
- Demo and Debris – All Other Areas
  - Prequalification February 2026
  - RFP October 2026
- B1 Pit Backfill
  - Prequalification February 2026
  - RFP October 2026
- Northwest Pond Tailings B4 Pit
  - Prequalification February 2026
  - RFP August 2026
  - 10-year CWP
- Communication and Cell Towers
  - Prequalification February 2027
  - RFP October 2027

Note: All dates and scopes of work subject to change.

2026 AND BEYOND OPPORTUNITIES

- NS/FS New Boat Launch
  - Prequalification February 2028
  - RFP October 2028
- C1 Pit Backfill and Baker Creek Reach 3
  - Prequalification July 2029
  - RFP February 2030
- Baker Creek (Reach 0, Reach 1, Reach 2)
  - Prequalification February 2031
  - RFP October 2031
- AR2/AR3/AR4 Freeze Installation
  - RFP January 2031
- Nonhazardous Waste Landfill Closure
  - Prequalifcation February 2031
  - RFP October 2031
- Permanent Bridge Construction
  - Prequalification January 2031
  - RFP September 2031
- Final Roads and Bridge Demo
  - Prequalification February 2033
  - RFP October 2033
- Permanent Fencing and Signage
  - RFP October 2035

Note: All dates and scopes of work subject to change.

OUR PARTNERS ON SITE

Thank you

THANK YOU
MAHSI CHO

Wrap up Day 1

Day 2 includes:

- Health and Safety Program
- Environmental Management and Monitoring Program
- Indigenous Opportunities Considerations

INDUSTRY DAY 2024 – DAY 2

Giant Mine Remediation Project

Parsons' Main Construction Manager (MCM) Team
November 20, 2024

AGENDA

Day 2 – November 20, 2024

- Welcome
- Earthworks Remediation
- Environmental Management and Monitoring Program
- Indigenous Opportunities Considerations
- Question and Answer Period

EARTHWORKS REMEDIATION

EARTHWORKS REMEDIATION

CWP Overview

1. A civil earthworks remediation CWP.
2. The work is the integration of contaminated soil remediation across the Giant Mine, backfilling of designated open pits, and rehabilitation of the original Tailings Containment Area (TCA).
    a. It is the primary contaminated soil remediation CWP for Giant Mine.
    b. Backfilling of A1, A2, B2, and B3 open pits.
    c. Rehabilitation of the original TCA (South Pond, Central Pond, and North Pond).

    Note: The backfilling of B1, C1, and B4 pits, the Northwest TCA, and the nearshore/foreshore tailings work will be completed under separate contracts.
3. The work will require construction and maintenance of haulage routes.

EARTHWORKS REMEDIATION

Basis for Different Scopes of Work

1. Integration of contaminated materials disposal strategy.
   a. Contaminated soil excavation, placement as backfill for open pits, and backfill for TCAs.
2. Contaminated material at Giant Mine is primarily contaminated granular fill as 75 percent of total volume.
3. Tailings, calcine, and contaminated fine-grain soil account for 17 percent of total volume.
4. PHC contaminated soil, contaminated sediment, and buried waste represent the smallest volumes.
5. Two disposal location areas have been identified for contaminated soils and sediment: open pits and TCAs.
   a. The A1, A2, and B2 pits were identified as suitable locations for disposal of contaminated granular fill.
   b. Contaminated fine-grain soil and a portion of the contaminated granular fill will be disposed of in the TCAs. In addition, excavated tailings and contaminated sediment will be disposed in the TCAs. PHC contaminated soil, calcine, and contaminated materials from the Mill Pond will be disposed in a dedicated cell within the North TCA

EARTHWORKS REMEDIATION

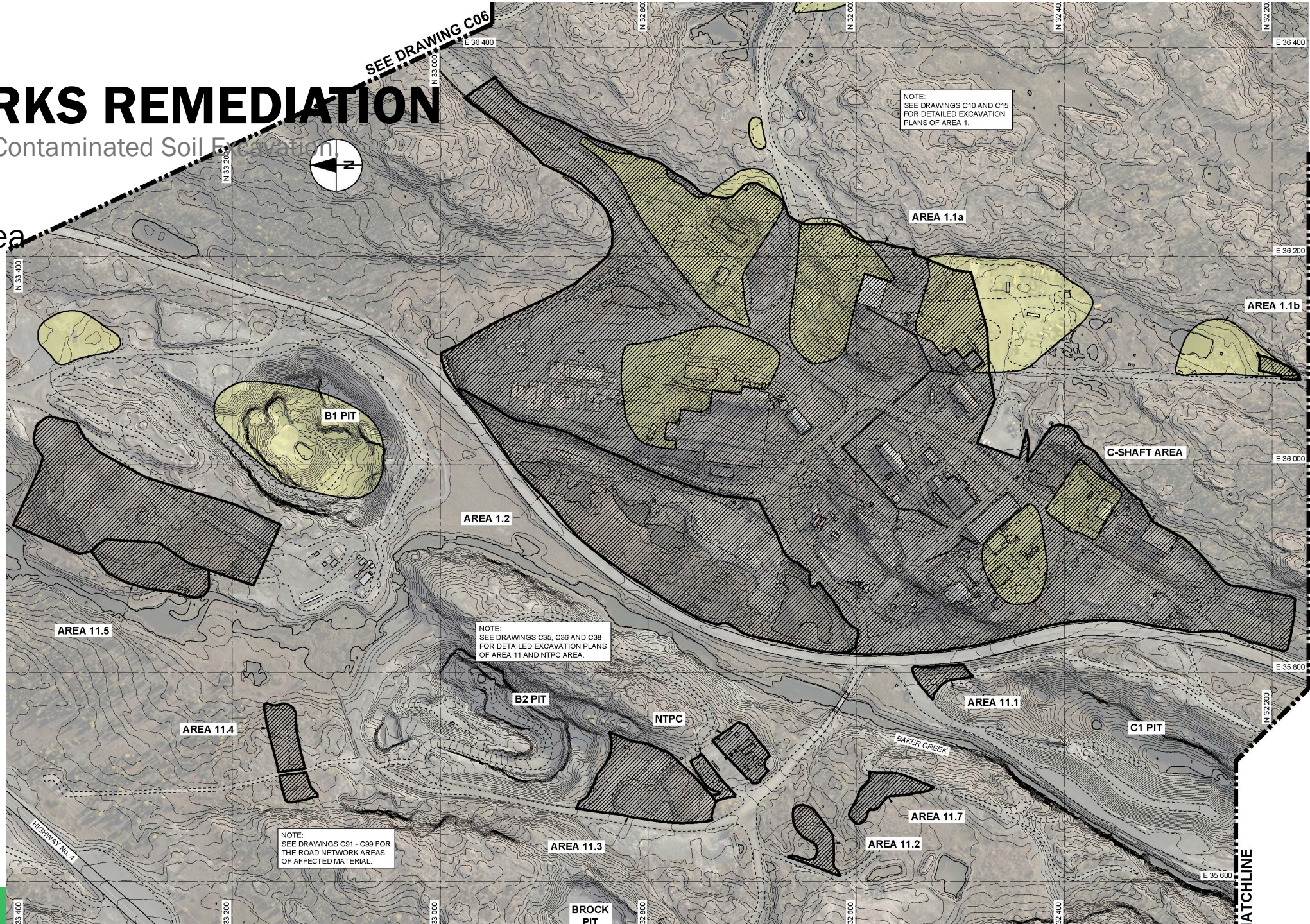
Highlights of Scope – Contaminated Soil Excavation, Overview

The CWP is the remediation of more than 1,000,000 m^3 of contaminated soil across 100 ha of the site, including excavation of approximately 100,000 m^3 of impacted soil over difficult bedrock, forest, and wetland terrain.

EARTHWORKS REMEDIATION

Highlights of Scope – Contaminated Soil Excavation
Example Work Area

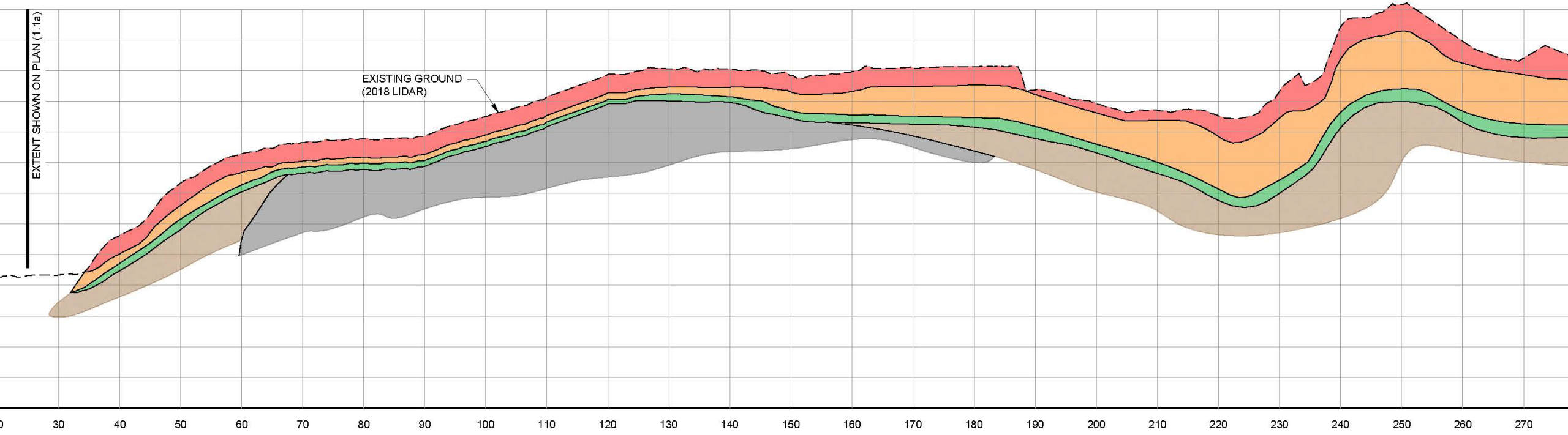
Core Industrial Area



EARTHWORKS REMEDIATION

Highlights of Scope – Contaminated Soil Excavation, Example Work Area

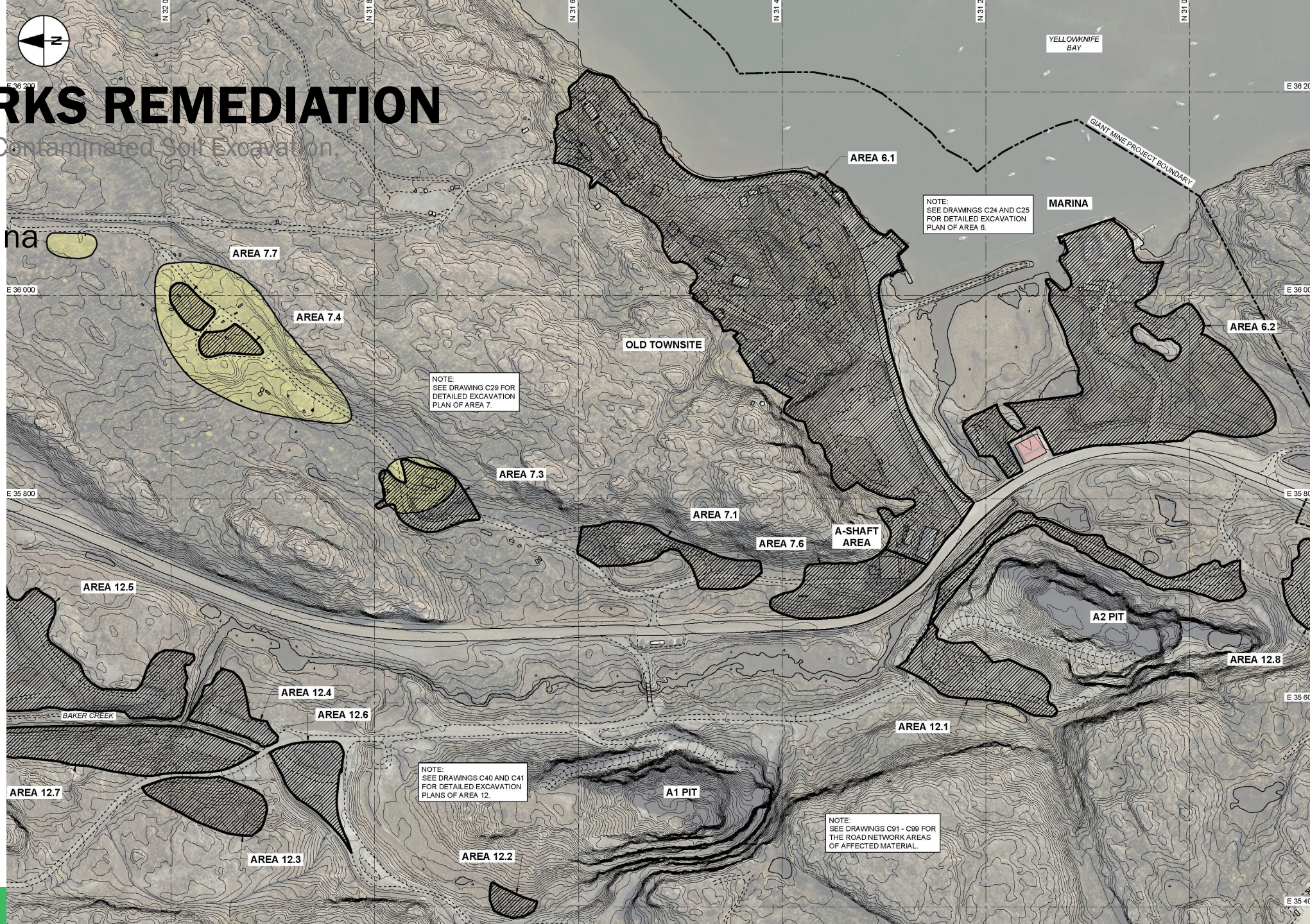
Core Industrial Area



EARTHWORKS REMEDIATION

Highlights of Scope – Contaminated Soil Excavation, Example Work Area

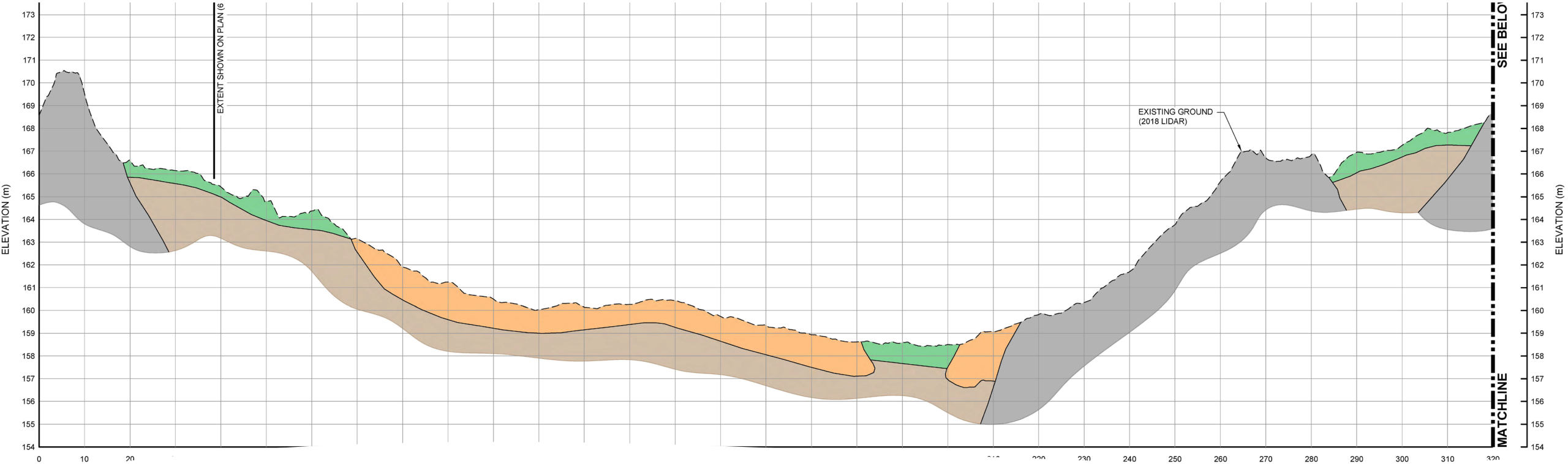
Townsite and Marina



EARTHWORKS REMEDIATION

Highlights of Scope – Contaminated Soil Excavation, Example Work Area

Townsite and Marina



EARTHWORKS REMEDIATION

Highlights of Scope – Contaminated Soil Excavation, Implementation

Implementation of the CWP will include the following:

1. Remedial excavation of contaminated soils, hauling to designated receiving areas in the pits and original TCA, and coordinating placement of contaminated soils with the construction of the pits and TCA.
2. Construction of new Mill Pond and drainage pipe to sump.
3. Transport, place, and compact Owner-supplied coarse-grain borrow to construct the AR2 Freeze Pad and AR3 Freeze Pad.
4. Screening and confirmatory testing by the subcontractor will be a major component of the soil remediation.
5. Material tracking (by type and area) and implementation of a manifest tracking system will be key components of soil movement.

EARTHWORKS REMEDIATION

Highlights of Scope – Pit Backfill, Overview

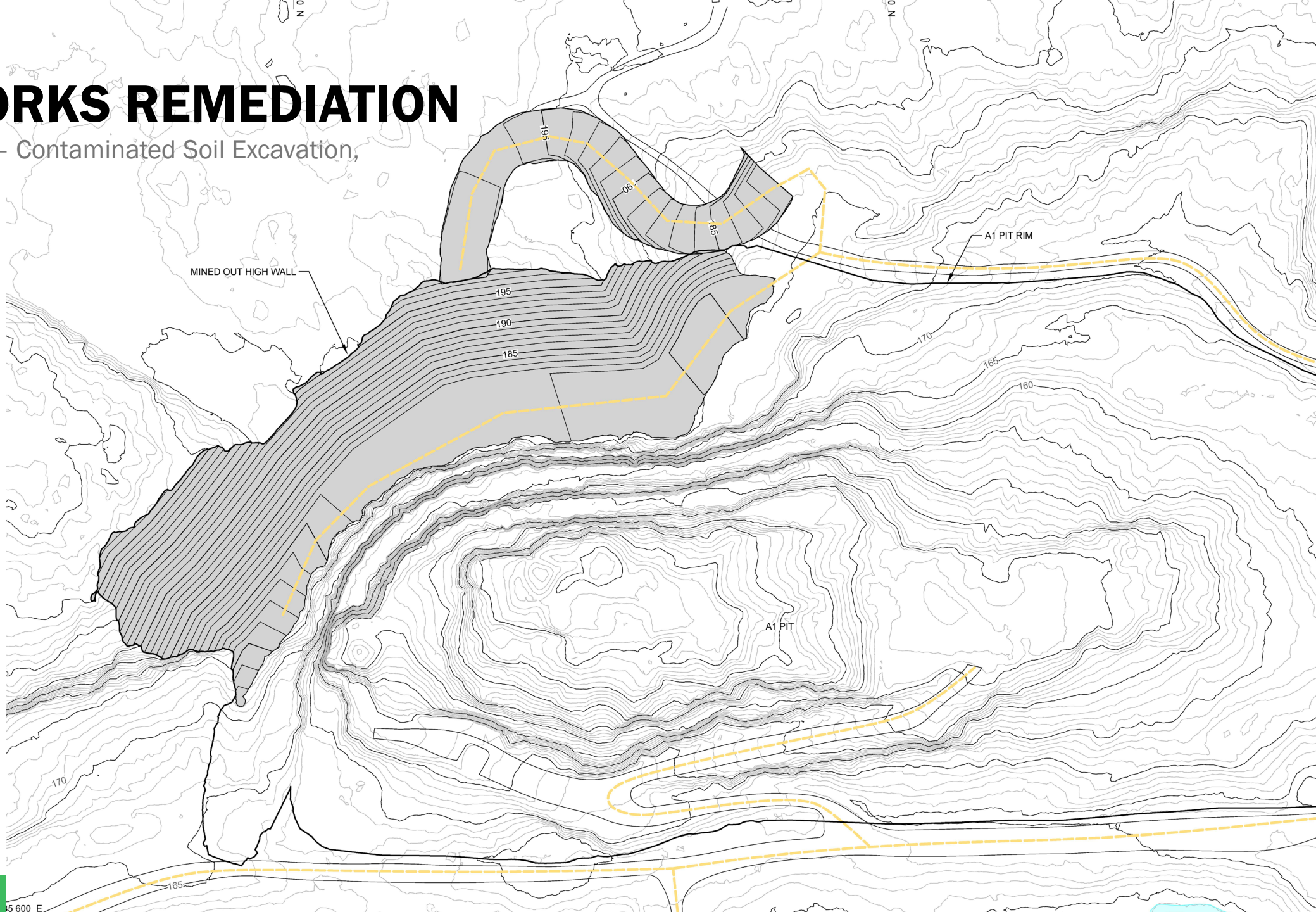
Backfilling of the pits will include placement of approximately 600,000 m^3 of contaminated soil from the remediation work, backfilling of more than 1,100,000 m^3 of Owner-supplied clean borrow, and construction of bituminous geomembrane (BGM) covers.

- Closing 14 mine openings within the pit
- Blasting of 140,000 m^3 of A1 high wall

EARTHWORKS REMEDIATION

Highlights of Scope – Contaminated Soil Excavation, Example Work Area

A1 Pit



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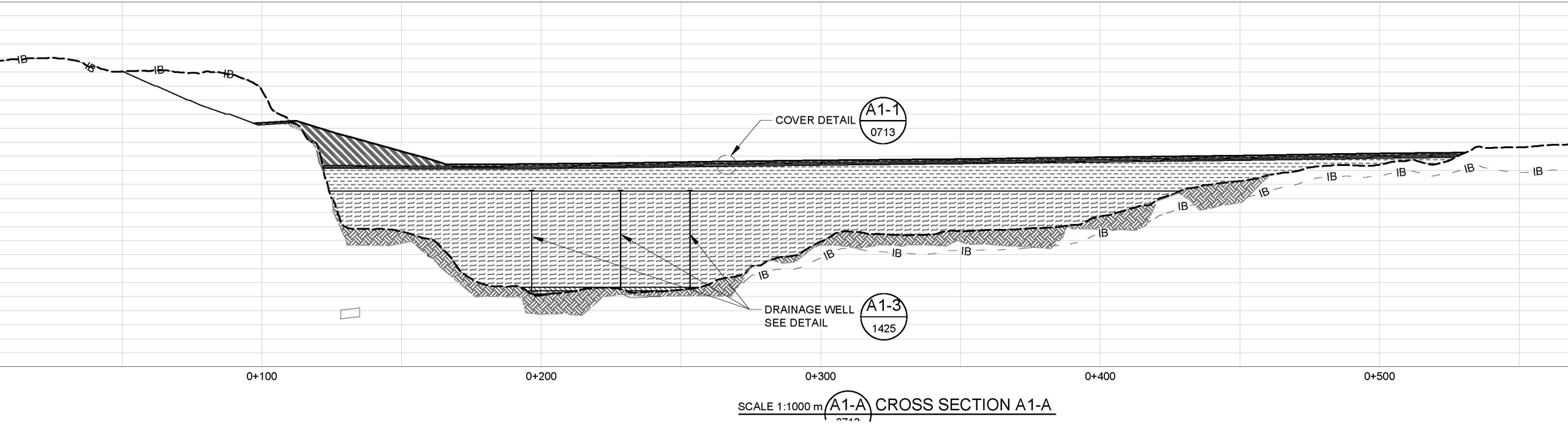
EARTHWORKS REMEDIATION

Highlights of Scope – Contaminated Soil Excavation, Example Work Area

A1 Pit



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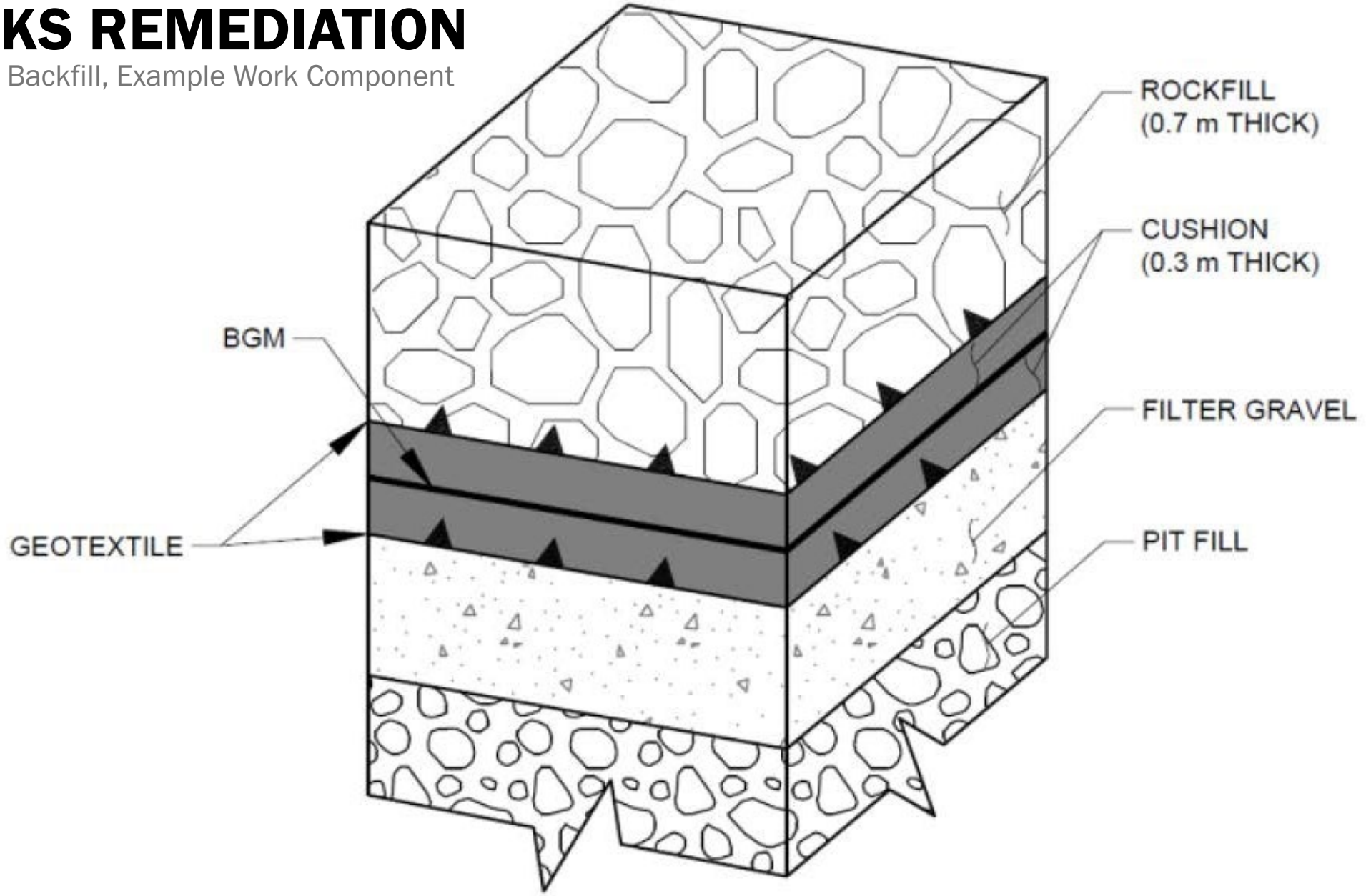
EARTHWORKS REMEDIATION

Highlights of Scope – Pit Backfill, Example Work Component

Pit Covers



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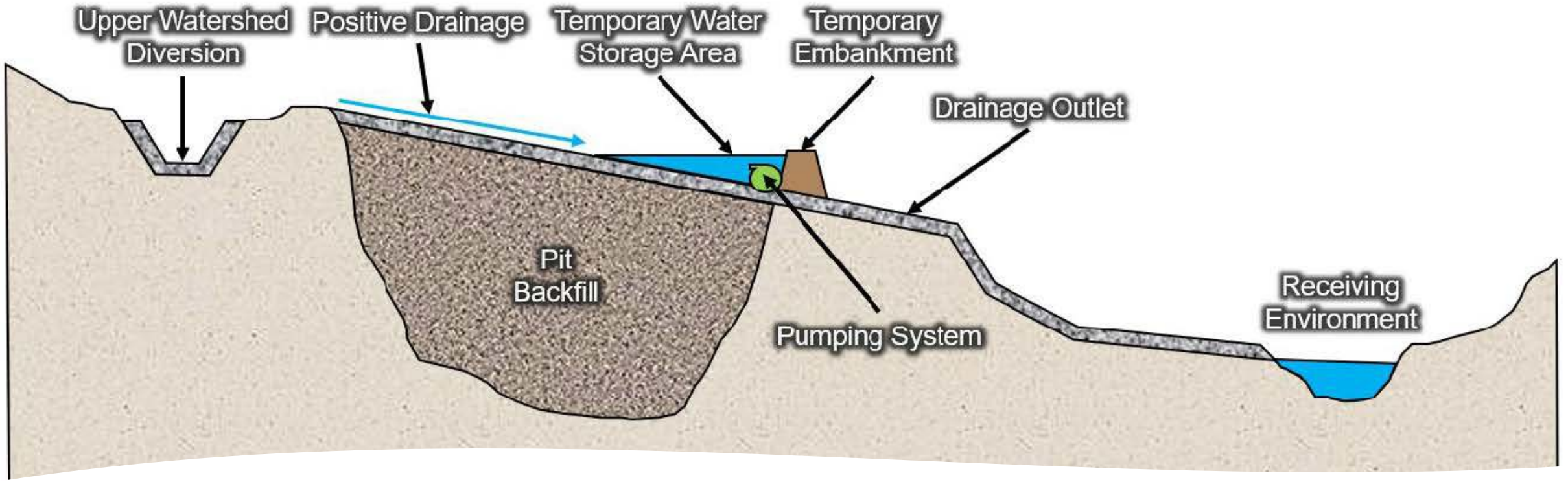
EARTHWORKS REMEDIATION

Highlights of Scope – Pit Backfill, Example Work Component

A1 Pit



*Drawings not to scale

EARTHWORKS REMEDIATION

Highlights of Scope – Pit Backfill, Implementation

Implementation of the CWP will include the following:

1. Preparing the pits for backfill:
    a. Stabilize pit high walls for safely working in the pits.
    b. Development of a new access ramp.
    c. Removal of fine-grain material inside the pit.
2. Backfilling the pits with contaminated soil from the remedial excavations.
3. Compaction of pit fill layers.
4. Drilling of drainage holes within pit fill.
5. Close underground openings within the pits.
6. Backfilling the pits with Owner-supplied and stockpiled coarse-grain borrow.
7. Construct the water shedding cover for the pits.
8. Construct the surface drainage network adjacent to the pit covers.

EARTHWORKS REMEDIATION

Highlights of Scope – Rehabilitation of South Pond TCA, Backfill of North and Central Pond TCA, Overview

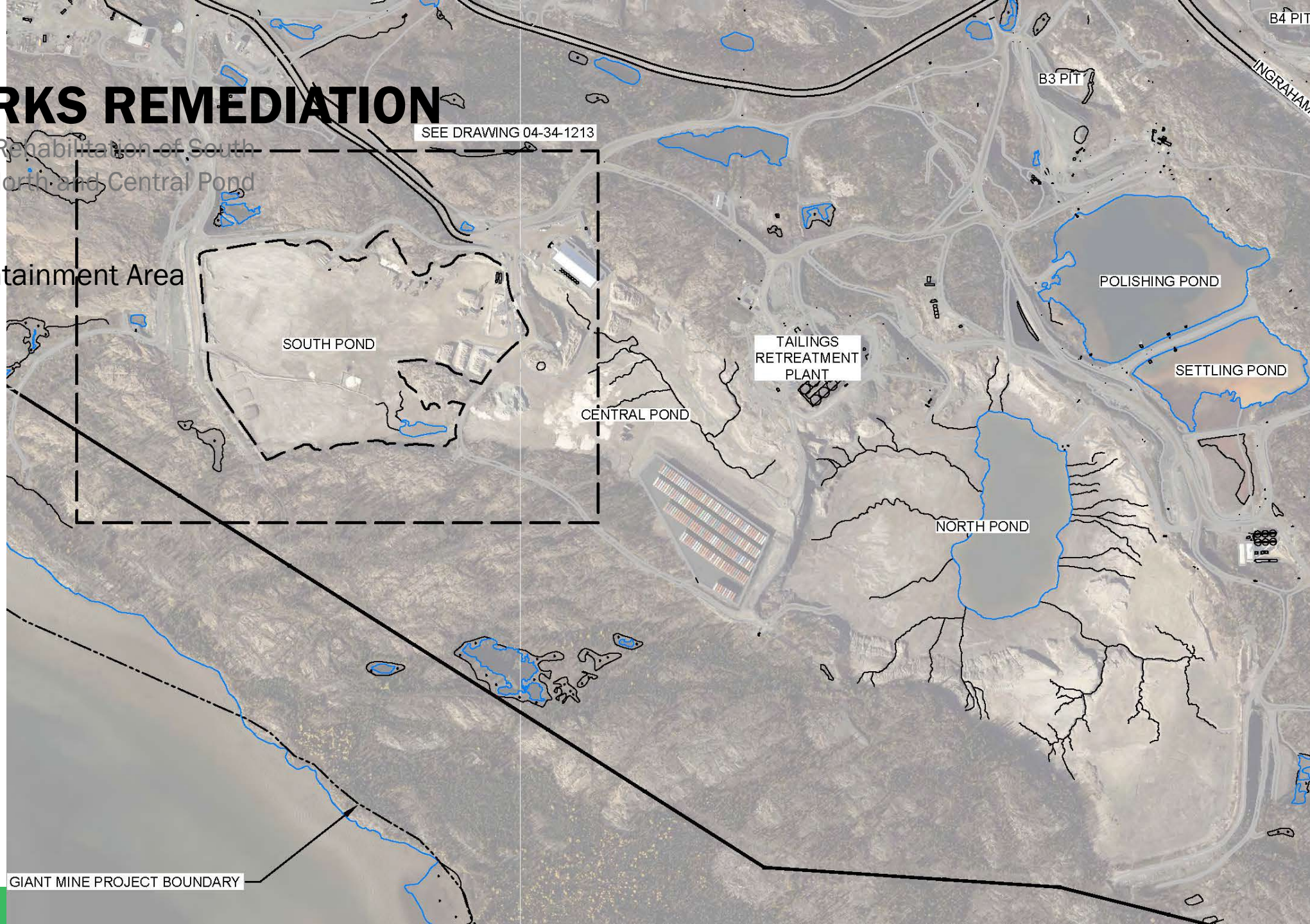
Rehabilitation of the original TCA will include placement of more than 400,000 m^3 of contaminated soil from the remediation work, the excavation and relocation of more than 1,000,000 m^3 of the South Pond tailings and dams to Central/North Pond, backfilling of more than 1,200,000 m^3 of Owner-supplied clean borrow, and construction of a greater than 67 ha BGM cover.

- Including installation of a dewatering system for the South Pond

EARTHWORKS REMEDIATION

Highlights of Scope – Rehabilitation of South Pond TCA, Backfill of North and Central Pond TCA, Work Areas

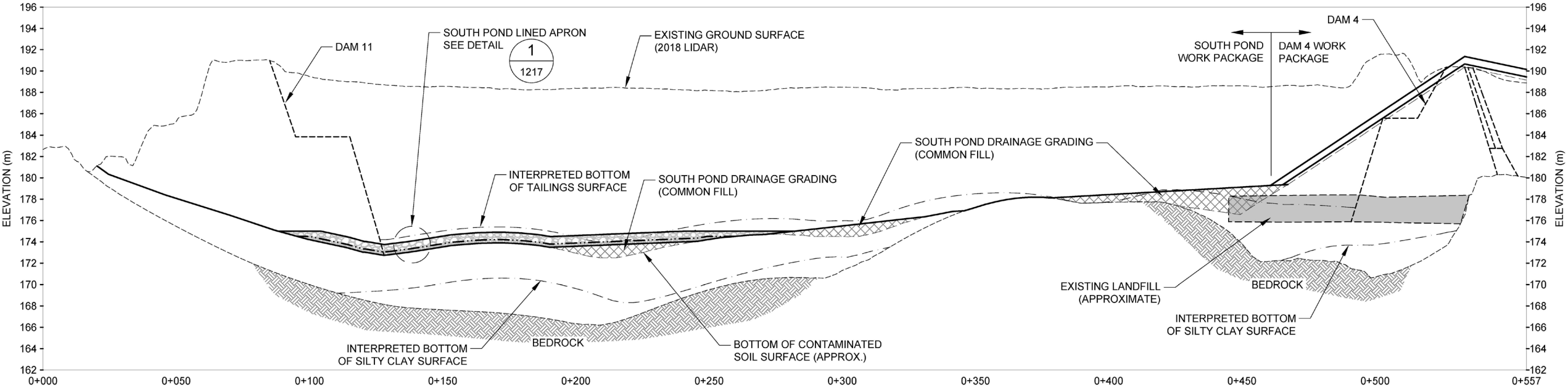
Original Tailings Containment Area



EARTHWORKS REMEDIATION

Highlights of Scope – Rehabilitation of South Pond TCA, Backfill of North and Central Pond TCA, Example Work Area

South Pond

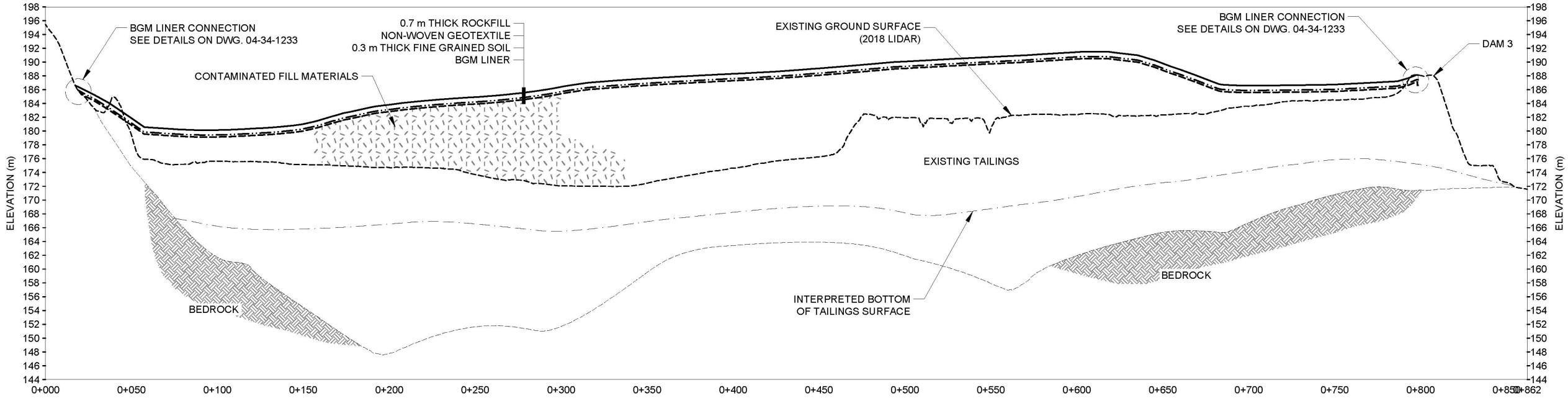


H. SCALE 1:1000 A CROSS SECTION A - SOUTH POND

EARTHWORKS REMEDIATION

Highlights of Scope – Rehabilitation of South Pond TCA, Backfill of North and Central Pond TCA, Example Work Area

North Pond



E CROSS SECTION E - NORTH POND

EARTHWORKS REMEDIATION

Highlights of Scope – Rehabilitation of South Pond TCA, Backfill of North and Central Pond TCA, Implementation

Implementation of the CWP will include the following:

1. Construction and operation of a BGM-lined dedicated cell in the North Pond to receive designated waste.
2. South Pond tailings relocation.
    1. Including supply, install, operate, and maintain a South Pond dewatering system.
    2. Dams 11 and 12 removals.
    3. Dam 7 rehabilitation.
3. Rehabilitation of Dams 2, 3, 4, and 5.
4. Placement and compaction of site-generated contaminated soils, relocated South Pond tailings and sediments delivered to the original TCA.
    1. Condition as required.
    2. This wet to saturated material will need to be spread out to dry or conditioned by blending with dry material in order to meet the settlement criteria called for in the specifications.
5. Management of water runoff for the duration of work will be a key component of the planning.

EARTHWORKS REMEDIATION

Summary of General Construction Quantities

1. Remediation of more than 1,000,000 m^3 of contaminated soil across 100 ha of the site.
2. Placement of approximately 600,000 m^3 of the contaminated soil from the remediation work into the open pits.
3. Placement of more than 400,000 m^3 of the contaminated soil from the remediation work into the TCA.
4. Blasting of 140,000 m3 of A1 high wall.
5. Excavation and relocation of more than 1,000,000 m^3 of South Pond tailings to Central/North Pond TCA.
6. Backfilling of more than 1,100,000 m^3 of Owner-supplied clean borrow for the open pits.
7. Backfilling of more than 1,200,000 m^3 of Owner-supplied clean borrow for the TCA.
8. Construction of >67 ha of BGM covers over the open pits and TCA.

EARTHWORKS REMEDIATION

Key Considerations for Bidders

Required key personnel/technical experience.

1. Geotechnical and mining qualified persons will be required by the subcontractor to plan and monitor safe work in the open pits (access and backfill).
2. Experience in handling and movement of wet tailings (e.g., excavate, haul, and place approximately 1,000,000 m^3 of South Pond tailings to North/Central Pond).
3. Experience in short- and long-term environmental control of contaminated soils excavation areas; professionals to review the contaminated soil results and summarize the data into electronic tables and drawings weekly and monthly to clearly show progress, including soil exceedances; Tracking of contaminated soil volumes, disposal locations, and aggregate requirements, including forecasting weekly, monthly, yearly and for the entire project requirements for volumes to be excavated and backfilled.
4. Experience in short- and long-term water management.
5. Quality control team, professionals who understand quality management, inspection test plans, checklists, document closure requirements, industry standards; dedicated quality manager, quality control leads that will be onsite during construction and management of quality records and documents,
6. Health and Safety team, qualified safety professionals, dedicated professional health and safety manager, safety personal that will be onsite during construction.
7. Scheduler that will manage the delivery timeline for the project, including monthly updates for the status of the different aspects of the work packages to closure.

EARTHWORKS REMEDIATION

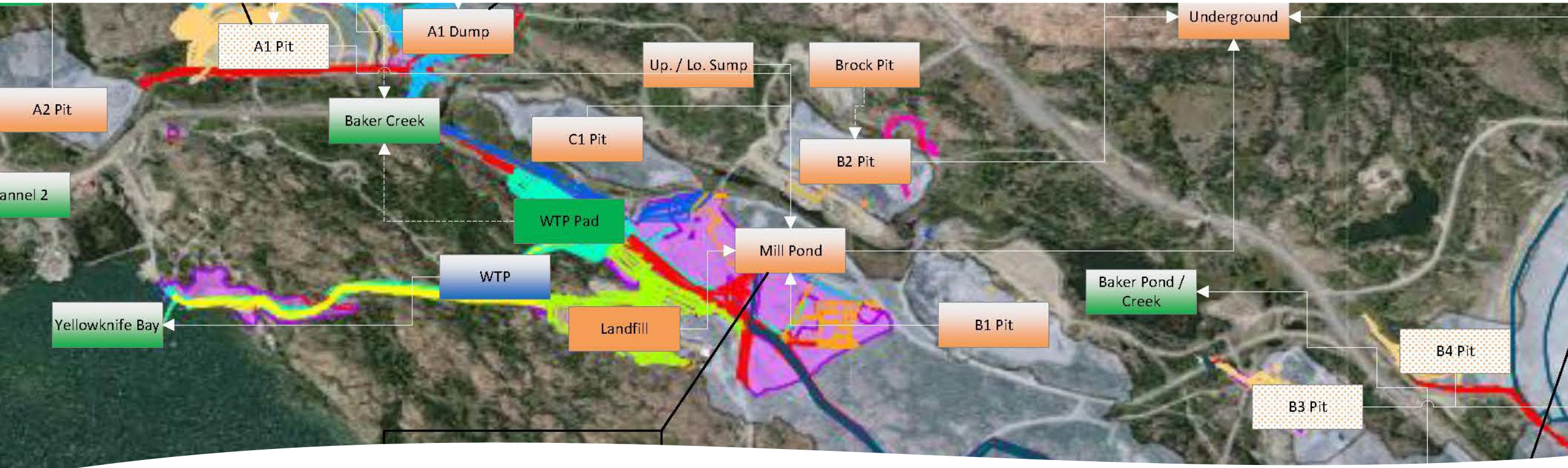
Key Considerations for Bidders

Experience in handling and movement of wet tailings

EARTHWORKS REMEDIATION

Key Considerations for Bidders

Experience in short- and long-term water management

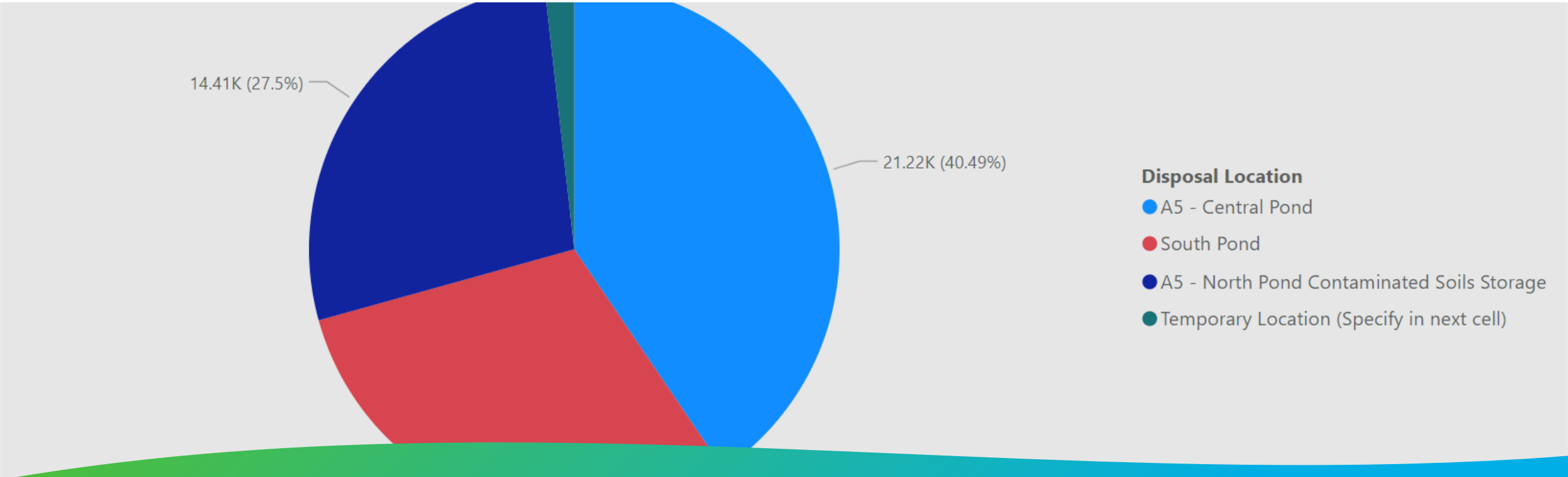


EARTHWORKS REMEDIATION

Key Considerations for Bidders

Experience in short- and long-term environmental control of contaminated soils excavation areas.

1. Detailed daily material manifest and tracking systems will be required for the project, e.g., tracking for each load of contaminated soil (source location, contaminated soil type, disposal location).



EARTHWORKS REMEDIATION

Key Considerations for Bidders

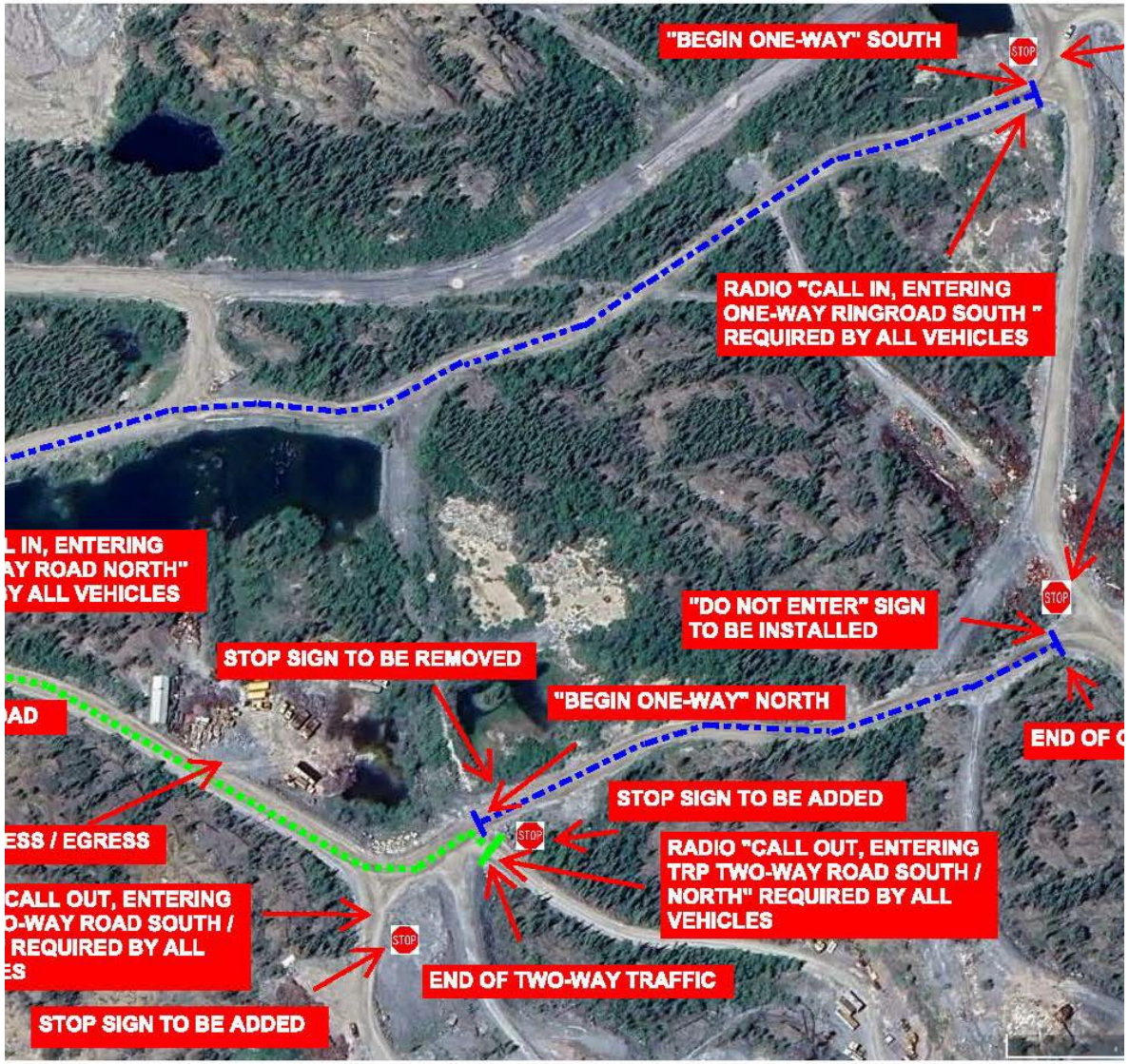
Work constraints:

1. Limited physical workspace at the Giant Mine site will require detailed planning; e.g., limited laydown areas, limited (and regulated) space allowed for stockpiling.
2. Limited construction traffic routes.
    a. One-way road access in parts of site.
    b. One-way bridge traffic across key areas of site.
    c. Restricted highway access.
3. Integration with other CWPs.
    a. Coarse-grain borrow
    b. B1 Pit excavation and backfill
    c. Baker Creek remediation

EARTHWORKS REMEDIATION

Key Considerations for Bidders

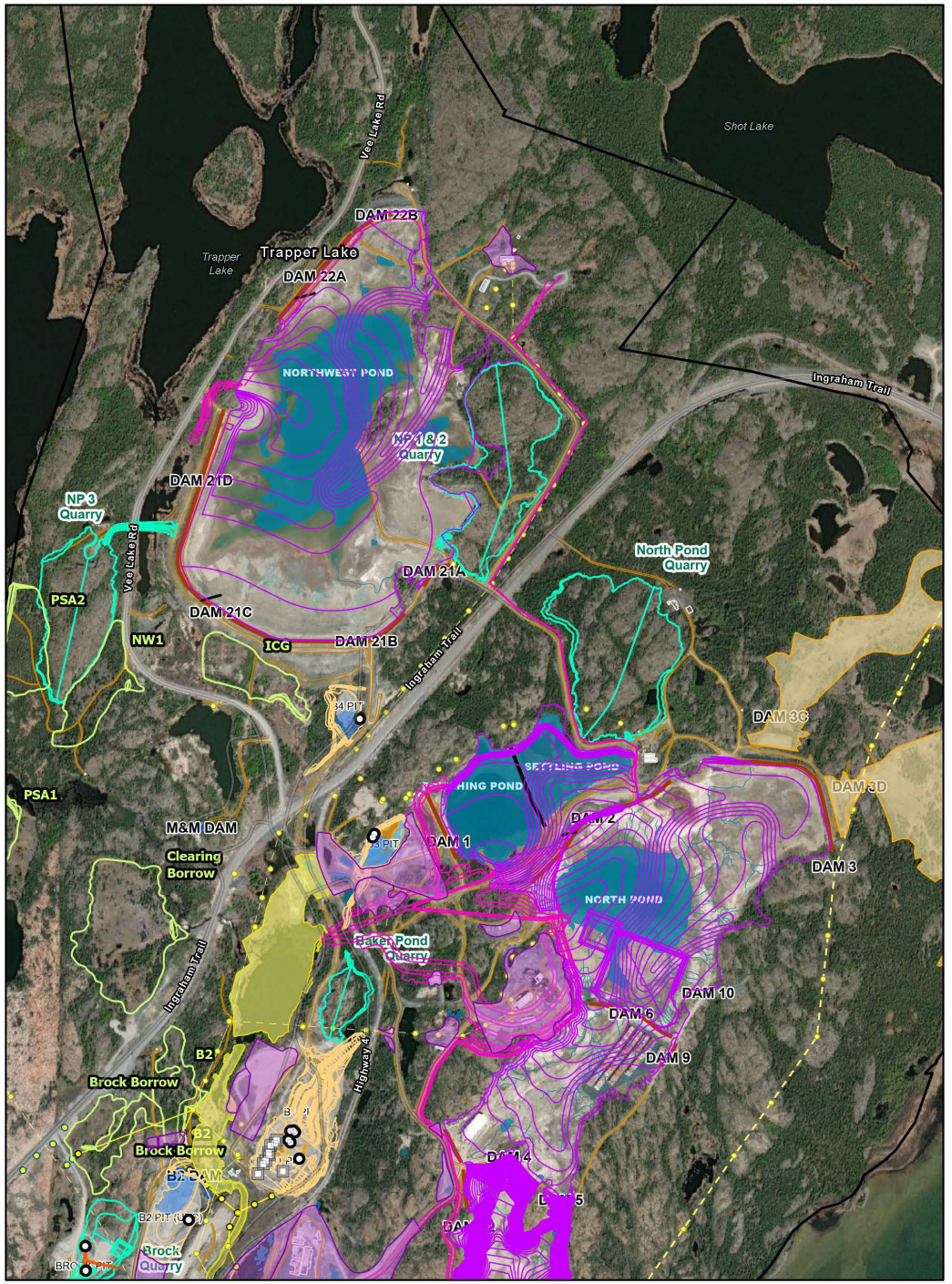
Traffic



EARTHWORKS REMEDIATION

Key Considerations for Bidders

Integration with other GMRP works



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EARTHWORKS REMEDIATION

1. This CWP is designated to be a design-bid-build procurement.
2. A prequalification process will precede the tender process.
3. The work is sequenced to follow:
   a. Demolition and debris removal of the buildings and infrastructure in the CIA.
   b. HAC soil removal.
   c. Commissioning of the new Water Treatment Plant.

EARTHWORKS REMEDIATION

	Start	End
Prequalification of bidders	July 2025	December 2025
Request for proposal	March 2026	October 2026
Construction	November 2026	Q3 2037

QUESTIONS?

ENVIRONMENTAL MANAGEMENT AND MONITORING PROGRAM

ENVIRONMENTAL MANAGEMENT

Many components govern environmental management of site activities

1. The Site operates under a Type A Water Licence (WL) and a Type A Land Use Permit (LUP) issued by Mackenzie Valley Land and Water Board (MVLWB).

2. It is a requirement of the WL and LUP that Management and Monitoring Plans (MMPs) are prepared and adhered to.

3. Additional permits, authorizations, and approvals will be required for various remediation activities (e.g., Fisheries and Oceans Canada (DFO)).

4. Environmental compliance and conformance is managed through an Environmental Management System (EMS) conforming to ISO 14001.

5. Environmental Protection Plans (EPP) are required from subcontractors to address all environmental management requirements relating to a work activity.

MANAGEMENT AND MONITORING PLANS (MMP)

The Water Licence and Land Use Permit consist of regulatory requirements (Conditions) that must be adhered to for any project on-Site.

MMPs establish:

- best management practices or expectations to mitigate environmental risks during remediation activities
- regulatory requirements that must be met
- action levels for specific risks (dust, water quality and quantity)
- reporting, inspection, and monitoring requirements

MMPs exist for dust, waste, water, erosion and sediment, borrow and explosives, wildlife and wildlife habitat.

It is the responsibility of Parsons and its subcontractors to comply with the practices and procedures set out in the WL, LUP, and MMPs.

WATER MANAGEMENT

EROSION AND SEDIMENT CONTROL

WASTE MANAGEMENT

DUST MONITORING

WILDLIFE MONITORING

BORROW AND EXPLOSIVES MANAGEMENT

Examples of Requirements in MMPs:

- Water volumes/usage must be tracked
- Work may not proceed on or near water without approval from Parsons and approved erosion and sediment controls, TSS monitoring or Aquatic Life Management Plans must be in place for duration of work if required
- Every worker has the responsibility to report signs of erosion or sediment control failure
- All wastes recovered or generated must be characterized into waste categories presented in the Waste MMP and volumes must be tracked.
- Borrow materials usage, geochemical testing and stockpiles must be tracked and follow BEMMP.
- Every Subcontractor is responsible for reporting visible dust, even if it is not in their work area
- It is everyone’s obligation to protect wildlife and minimize disturbance to wildlife habitat at the Giant Mine site

ENVIRONMENTAL PROTECTION PLANS (EPP)

1. The purpose of the EPPs is to identify and develop work procedures and operational controls that will achieve compliance with the MMPs and other regulatory requirements.
2. Subcontractors must understand the parts of the MMPs that apply to their work to develop their EPP.
3. An EPP template is provided by Parsons.
4. Parsons will work with their subcontractors to interpret MMPs and other regulatory requirements required to develop the EPP.

It is the responsibility of Parsons and its subcontractors to commit to and sign off on the EPPs.

QUESTIONS?

INDIGENOUS OPPORTUNITIES CONSIDERATIONS (IOC)

SOCIOECONOMIC PICTURE

1. **CIRNAC's** mandate is to meet the Government of Canada's obligations and commitments to First Nations, Inuit, and Métis and for fulfilling the federal government's constitutional responsibilities in the North.

2. **CIRNAC,** as the Owner of Giant Mine, has a mandate to provide socioeconomic benefits to Indigenous and local communities through its Socioeconomic Strategy

3. To support the goals of the Socioeconomic Strategy, **Parsons** has developed a Socioeconomic Framework for the GMRP. This includes completing periodic labour capacity studies, engaging with local groups on upcoming work, and maintaining an office in Yellowknife.

SOCIOECONOMIC CONDITIONS

1. **Parsons** will also endeavor to package work – size, duration, complexity – to provide opportunities for Indigenous, northern, and local groups to carry out the work. (with support by Canada).

2. **Parsons** works with Indigenous, northern, and local businesses to facilitate teaming with larger companies to pursue the work on Giant Mine where possible or feasible.

3. **Parsons'** goal is to maximize economic opportunities for northerners and local Indigenous groups through employment and procurement and by addressing socioeconomic effects. Parsons will also assist CIRNAC with addressing socioeconomic effects.

INDIGENOUS OPPORTUNITIES CONSIDERATIONS (IOC)

1. IOC will be in every solicitation package.
2. Parsons will set a Minimum Eligibility Threshold (MET) for each category that Parsons feels is achievable.
3. A plan that outlines how a bidder will achieve their proposed commitments is required.
4. Once a bidder commits to a number on labour, training, subcontracting and suppliers, that commitment is carried forward for that agreement. The subcontractor does not have to go above the MET and can go below.
5. The subcontractor will be measured against those commitments and a bonus or penalty will be assessed at the close of the agreement.
6. Parsons is here to help along the way. If help is needed with labour or training, Parsons can connect you with people or training providers.
7. The overall goal is to support capacity building and provide opportunities.

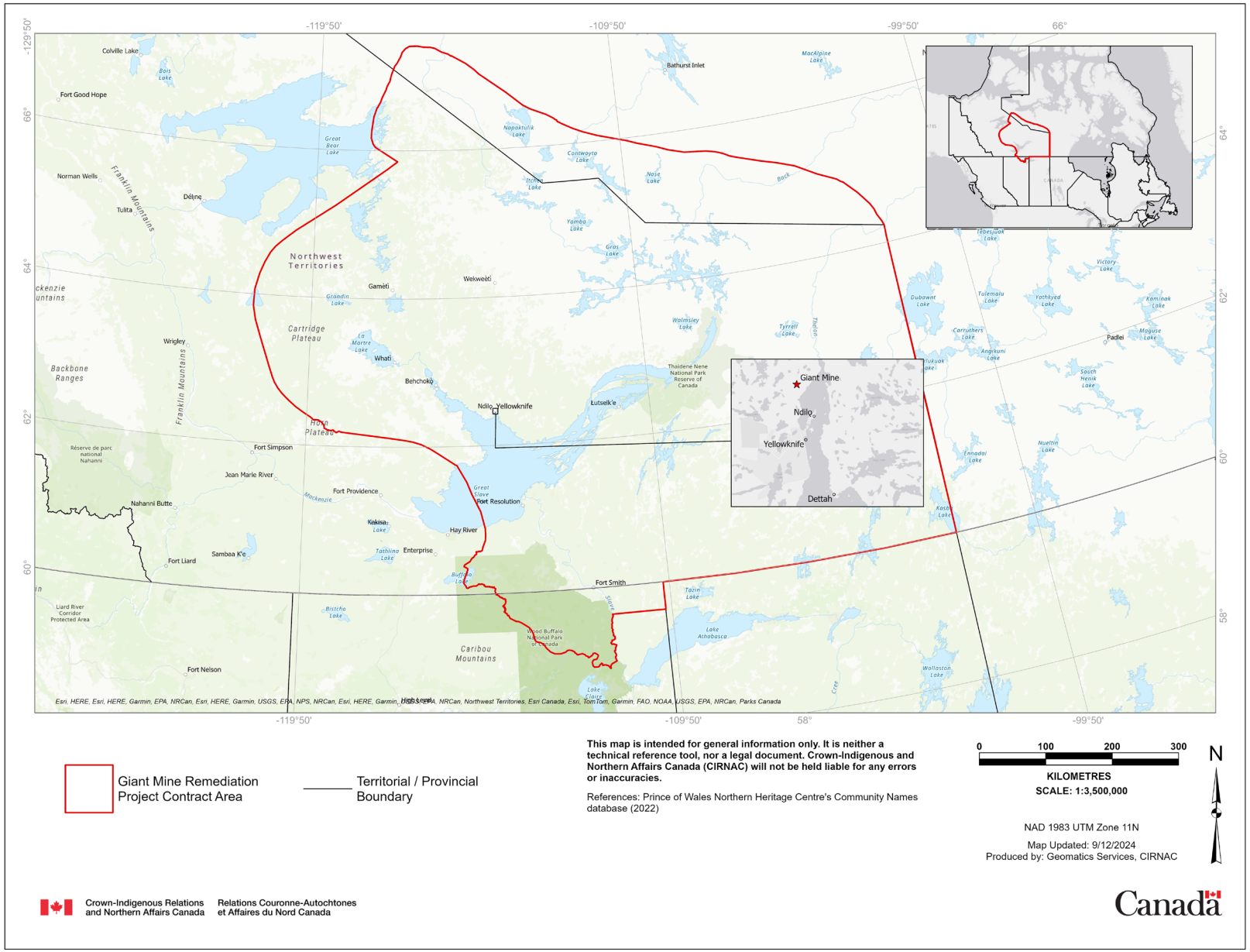
IOC COMMITMENTS

Bid Weighting	Bid Commitment	Points Received
Indigenous Training	Hours	Prorated to highest bid
Indigenous Labour	Percent of total labour hours	Sliding scale
Indigenous Subcontracting/ Suppliers	Percent of subcontract value	Sliding scale
Total		

Adjusted to local labour and contractor supply capacity

IOC bid weightings range from 15 to 35 percent

IOC – AREA OF THE CONTRACT



SUBCONTRACTOR REPORTING

TRAINING HOURS

Report all training delivered to your own staff and that of your subcontractors.

Total hours of training each labourer and apprentice receives.

Training Certificates

LABOUR HOURS

Report all labour hours (your own labour and that of your subcontractors), including labourers and apprentices,

Report employee name, title, and ID as well as Northwest Territories residential status and skill level.

PROCUREMENT VALUE

Report on all your supplier/vendor expenses and your own internal expenses, e.g., labour.

- Your internal expenses ($)
- Your subcontractors and suppliers and the value of your procurement ($)

Subcontractor's monthly invoice amount to Parsons will match the IOC monthly report submission.

CLOSEOUT

End of agreement closeout report and sign off.

- Project IOC reporting
- Document due diligence undertaken to achieve your IOC commitments
- Provide supporting documentation such as invoices, work logs, payroll receipts, etc.

Document your efforts to meet your IOC commitments

IOC MONTHLY REPORT TEMPLATE

Monthly Employment and Training Reports

Worksheet 1 - Employment and Training Record

Supplier Name

Employee Categorization					
Relationship to Supplier: Please specify "Supplier Internal Resource" or indicate the Subcontractor Name if applicable [4]	Employee ID [5]	Employee Gender [7]	Employee Category [8]	Skill Level [9]	NWT Residential Status [10]

Employment and Training Hours for Monthly - Apr 2020												
	Training											
	EHS Awareness	EHS Health and Safety								EHS Environmental		
Total Hours Worked by Employee for Current	Policy & Proc	HAZWOPR	WHMIS	First Aid	Wildlife safety	Water safety	Fire response	Other	Spills response	Other	General Training (Non-EHS)

Report on anyone in your company or your subcontractors who are working under the agreement.

Template will be provided by Parsons.

Reports will be submitted via SharePoint upload.

IOC monthly reporting must be accompanied with documentation to support the monthly reporting each month.

PROCUREMENT STRATEGY FOR INDIGENOUS BUSINESS

Eligibility

Eligibility for Procurement Strategy for Indigenous Business (PSIB)

A business must be at least 51 percent owned and controlled by Indigenous peoples. An Indigenous business can be:

- a band as defined by the Indian Act
- a sole proprietorship

or

- a limited company
- a cooperative
- a partnership
- a not-for-profit organization in which Indigenous persons have at least 51 percent ownership and control

or

- a joint venture consisting of two or more Indigenous businesses or an Indigenous business and a non-Indigenous business provided that the Indigenous business or businesses have at least 51 percent ownership and control of the joint venture

PROCUREMENT STRATEGY FOR INDIGENOUS BUSINESS (PSIB)

How PSIB is applied to solicitations

PSIB Regional Conditional

1. When it is impossible to determine Regional PSIB Indigenous Business capacity with at least **two** potential PSIB Regional Indigenous Businesses, then the solicitation may go PSIB Regional Conditional.
2. In the case of the PSIB Regional Conditional strategy being implemented, if two or more Indigenous Businesses from the Area of the Contract bid, the solicitation will be restricted to these Indigenous Businesses in the Area of the Contract.
3. If less than two Regional Indigenous Businesses bid, the solicitation will be open to any businesses in the Area of the Contract.

PROCUREMENT STRATEGY FOR INDIGENOUS BUSINESS (PSIB)

How PSIB is applied to solicitations

PSIB Regional

1. When there are two or more Regional PSIB Indigenous Businesses with confirmed affiliation with any Indigenous groups that demonstrate the capacity to perform the work, then the solicitation is PSIB Regional.
2. PSIB Regional bidders may be subject to prequalification prior to posting the solicitation on MERX. If there is only one prequalified local PSIB Indigenous Business, then the solicitation will be PSIB Regional Conditional.

QUESTIONS

OVERVIEW 2025

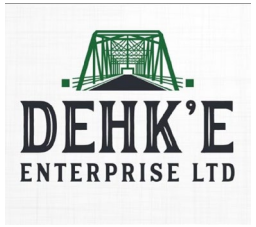
2025 CWPs

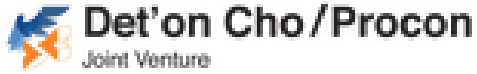
- Highly Arsenic Contaminated Soil Washing and Chamber 15 Backfill
  - Prequalification February 2025
  - RFP August 2025
- Coarse Grain Borrow
  - RFP Q2 2025
- WTP Operation
  - RFP Q3 2025
- Earthworks Remediation
  - Prequalification July 2025
  - RFP December 2025

Note: All dates and scopes of work subject to change.

OUR PARTNERS ON SITE

Thank you





THANK YOU
MAHSI CHO

Submit questions to:

Denise.Aspinall@parsons.com

no later than November 30, 2024.

Questions and answers will be posted to: www.giantminerp.ca by January 10, 2025.

Participants will be notified via email.