11.0 CLOSURE AND RECLAMATION

11.1 OVERVIEW

The conceptual closure and reclamation plan for the Thor Lake Project is based on a "design for closure" approach. The closure and reclamation plan will be a living document that is updated throughout the life of the Project to adapt to and reflect any changes that may arise.

The closure and reclamation of all TLP site facilities will be conducted in accordance with the terms and conditions of the future MVLWB Land Use Permit and Water Licence and accepted mine reclamation practices in the NWT that are applicable (e.g., INAC 2007, 2002).

The objectives of the closure and reclamation plan are:

- To protect public health and safety
- To minimize the effects of mining on the environment
- To establish conditions that lead to acceptable long-term physical and chemical stability in reclaimed areas
- To establish conditions that are appropriate for the surrounding environment and identified end land uses
- To provide the public and government with a clear understanding of reclamation expectations

The following components will be incorporated into the overall mine design, where possible, and into the closure and reclamation plans for relevant components of both the Nechalacho Mine site and the Hydrometallurgical Plant site:

- Buildings and site infrastructure will be located, to the greatest extent possible, on previously disturbed land
- Organic and mineral soils collected from the Nechalacho Mine site (the Hydrometallurgical Plant site has no organics) will be salvaged and stored for future reapplication during reclamation of the site
- Post-closure monitoring will be limited to evaluating the success of the re-vegetation effort. Post-closure monitoring for re-vegetation success is envisioned to be conducted at Year 1 and Year 5 post-closure.
- Appropriate and approved seed mixes and plant material will form the basis of the re-vegetation strategy. Native species will be used where possible. All seed sources, whether native or agronomic will be certified weed-free.
- Following removal of surface facilities, the remaining fill embankments, borrow pits, access roads, and development footprint will be scarified and re-contoured as required

to ensure surface stability, blend with the surrounding landscape, and facilitate the re-establishment of native vegetation

- Test plots will be developed in different ecosystem types that will require restoration to evaluate the applicability and suitability of reclamation techniques

11.2 CLOSURE AND RECLAMATION PLAN – NECHALACHO MINE SITE

11.2.1 Underground Mine Workings

Access to the deposit will be through a ramp located west of Long Lake. Stope access will be through several underground access ramps connected to a centrally located ore pass. Two ventilation raises to surface will also be developed. Details of the underground mine workings are presented in Section 4.0.

Reclamation Strategy

The reclamation strategy for the underground workings involves salvaging underground equipment and infrastructure where possible, backfilling, and sealing all openings and access points.

Underground infrastructure such as the crushing and screening plant and equipment such as belts, conveyors, piping, and support sets will be salvaged to the extent possible. Underground workings such as stopes, shafts, drifts, and tunnels will be backfilled with suitable materials including, but not limited to, pastefill and waste rock. Additionally, any underground and surface equipment and infrastructure, inert waste, and scrap materials that are not salvageable will be disposed of underground.

Once the decline is cleared, rock material will be used to fill the underground entrance back to natural topographic levels.

11.2.2 Tailings Management Facility

The tailings management facility (TMF) is designed to store approximately 3.5 million tonnes of tailings and will provide permanent, secure, and total confinement of all tailings solids within an engineered facility. Where possible, free-draining liquids will be removed from the TMF during operations for recycling as process water. It is anticipated that up to 50% of the water required for processing will be recycled from the TMF.

Decant pipeworks have been included in the design of the TMF to transfer water from the supernatant pond to the polishing pond, and then from the polishing pond to Drizzle Lake. The pipeworks provide operational flexibility and aim to help maintain water volumes in each water body.

Tailings will be pumped from the process plant to the TMF via a tailings delivery pipeline. Tailings will be initially deposited into the southwest corner of the TMF via a single end-of-pipe discharge, which will help reduce icing concerns during the winter. Tailings discharge will be rotated between deposition locations to develop a relatively flat tailings beach that

will slope towards the north, maintaining a supernatant pond in the northern portion of Ring Lake.

During the first four years of operations, all of the tailings solids produced will be pumped to the TMF at a slurry consistency of 50% solids. Beginning in Year 5, tailings solids will be used for mine backfill. The remaining solids will be pumped to the TMF with a reduced slurry consistency of 31.5% solids. Additional design details are provided in Section 4.0 as well as in Knight Piésold (2011b).

Reclamation Strategy

The tailings management facility area will be returned to a more natural condition, to the greatest extent possible. Closure and reclamation strategies will focus on stabilizing and covering the exposed tailing surfaces and re-establishing surface flow patterns, while ensuring that acceptable downstream water quality is maintained. Specific reclamation activities will include the following:

- The downstream face of the embankments will be reclaimed as the final downstream slope is constructed. Progressive reclamation will be implemented to the greatest degree possible;
- The exposed tailings surface will be capped with overburden and stockpiled organics and re-vegetated;
- Surface runoff control channels and permanent spillways will be constructed as required to provide sustainable surface runoff conditions; and
- Infrastructure not required beyond Mine closure will be dismantled and disposed of underground, or removed from site.

Post-closure monitoring will include an annual inspection of the TMF for a prescribed period to confirm the completed closure measures are meeting expectations.

11.2.3 Water Management Infrastructure

Water management at the Nechalacho Mine site involves providing potable water to surface facilities, providing a reliable water supply to the Flotation Plant throughout the life of the Project, dewatering underground operations as required to maintain stability and facilitate mining, and capturing and managing waters and effluent reporting to the TMF.

Water management infrastructure incorporated into the TMF design forms a closed loop system in order to minimize potential effects to natural hydrologic flows. Water management components specific to the TMF include a tailings basin, polishing pond (if required) for water treatment, settling pond, and various water discharge lines to collect and direct water flow.

Reclamation Strategy

Water discharge lines will be reclaimed and either disposed of underground or removed from site. The fuel and lubricant tanks and associated piping will be drained, washed,

cleaned, and dismantled. All infrastructure will be removed from site. Catchment containment berms will be breached or re-contoured to encourage natural drainage.

11.2.4 Flotation Plant

The Flotation Plant is composed of several operations including rod mill/ball mill grinding, desliming, magnetic separation and regrinding to recover coarse non-magnetics, dewatering of flotation feed, rougher/cleaner flotation to recover a flotation concentrate for further processing through gravity separation including gravity tails regrind, thickening, and pressure filtration of the gravity concentrate.

The upgraded concentrate is to be shipped off-site for further processing at the Hydrometallurgical Plant. Tailings resulting from the process will be discharged to the TMF.

Reclamation Strategy

All buildings, surface structures, and equipment that can be salvaged and removed from site, will be following mine closure. Remaining infrastructure will be disposed of underground. Concrete pads and foundations will be demolished and the rubble will be disposed of underground.

The remaining areas will be assessed for potential contamination and any clean-up that is required will be completed. Clean fill material or stockpiled soil will be used to cover the infrastructure footprint and will be graded and contoured to suit the surrounding landscape. Areas will also be re-vegetated, as appropriate.

11.2.5 Power Supply

Diesel generation will be utilized for all power needs at the Nechalacho Mine site. The power plant will consist of eight modular diesel generators that will distribute power to the mill, administration, and employee facilities. Power will also be supplied to the grinding mills, underground mine, surface mine fans, mine air heater, and tailings pumps.

Standby diesel generators for the camp and critical equipment within the Flotation Plant will be installed in a separate power house.

Reclamation Strategy

Equipment will be salvaged and removed from site at mine closure. Concrete pads and foundations will be demolished and the rubble will be disposed of underground. Areas with compacted soils will be loosened and covered with stockpiled soil in preparation for re-vegetation.

11.2.6 Concentrate Storage and Loading

Concentrate will be stored at the Nechalacho Mine site in custom-designed, covered half-height intermodal containers. Containers will be stored through the winter months and transported to the storage facility at Great Slave Lake. The storage facility will be built on bedrock where possible.

Reclamation Strategy

Equipment will be salvaged and removed from site at mine closure. Concrete pads and foundations will be demolished and the rubble will be disposed of underground. Areas with compacted soils will be loosened and covered with stockpiled soil in preparation for re-vegetation.

11.2.7 Temporary Waste and Ore Stockpiles

Approximately 400,000 tonnes of waste, plus low grade and ore grade material will be generated during development of the decline ramp. This material will be hauled to the surface and separated, depending on ore grade, in a temporary storage area. Over 375,000 tonnes of waste rock will be used for surface construction activities, particularly for construction of the dams for the TMF, extension of the existing airstrip, and road upgrading. Unused waste will be diverted to stopes for use as fill.

The small amount of ore produced will be temporarily stockpiled for use in the flotation plant feed during start-up operations. Following the start-up period, no additional ore will be stockpiled on surface. Ore will instead be stockpiled underground in a 500 tonne ore bin prior to crushing.

Reclamation Strategy

The temporary waste and ore stockpile area will be progressively reclaimed by loosening exposed, compacted soils, and applying a cover of overburden or stockpiled organics in preparation for re-vegetation. This activity is expected to be completed within the first year of operations.

11.2.8 Site, Solid, Sewage, and Hazardous Waste

Garbage will be collected daily and incinerated consistent with current industry good management practices. Recyclable materials will be collected separately and shipped out annually for processing. A waste management site will be established on-site for the temporary storage of waste materials prior to removal. Waste oil will be used in oil heaters throughout the facility.

Generated solid wastes will be managed in accordance with NWT regulations and issued licenses or permits similar to Avalon's current management of site solids and wastes. Hazardous materials waste will be disposed of in accordance with current GNWT hazardous waste management guidelines using standard best management practices. Waste will be disposed of either on-site or be shipped to an approved off-site facility designed to handle hazardous wastes.

Sewage and greywater waste from the operation will be processed through a packaged sewage treatment plant (Rotating Biological Contactor). Treated sewage effluent will report to a tailings sump that will be mixed into the tailings slurry. The slurry will report to the tailings management facility.

Reclamation Strategy

All buildings, surface structures, and equipment that can be salvaged and removed from site, will be following mine closure. Remaining infrastructure will be disposed of underground. Concrete pads and foundations will be demolished and the rubble will be disposed of underground.

The remaining areas will be assessed for potential contamination and any clean-up that is required will be completed. Clean fill material will be used to cover the infrastructure footprint and will be graded and contoured to suit the surrounding landscape. Areas will also be re-vegetated, as appropriate.

11.2.9 Roads and Airstrip

All roads that will not be required for access post-closure (e.g., during monitoring activities) will be reclaimed. Similarly, a portion of the airstrip will be reclaimed as well, as the entire extent of this structure will not be required for any post-closure activities.

Reclamation Strategy

Reclamation of roads and the airstrip will likely involve some form of surface amelioration prior to re-vegetation. Preparation of the surface may involve loosening compacted areas, re-establishing natural drainage patterns, and re-contouring slopes that may be unstable or prone to erosion. Culverts and fill material will also be removed. Priority areas for treatment will include those that are potentially hazardous to wildlife and could result in increased sedimentation into adjacent watercourses, altering both water quality and fish habitat.

11.2.10 Buildings and Infrastructure

Buildings and infrastructure requiring reclamation following mine closure include administration buildings, camp facilities, explosives and fuel storage areas.

During construction, explosives will be stored on the surface and in accordance with federal guidelines. Following the construction of underground magazines, all ANFO explosives and detonators will be stored in separate, approved explosives magazines, which will be locked underground.

The main fuel storage facility will be located on the west side of the Flotation Plant. It will contain four 4.5 M litre capacity tanks contained within a bermed area. The area will also include a fuel loadout for tankers and a dispensing station for vehicles. All mobile equipment, including personnel vehicles, will be fuelled with diesel.

Reclamation Strategy

All temporary and permanent surface structures will be dismantled and either disposed of underground or removed from site at the completion of mining and processing. Shallow foundations will be demolished and the rubble disposed of underground. Remaining

foundations will be buried and where appropriate, will be covered with stockpiled organics and re-vegetated to the extent possible.

Waste oils will be shipped off site or consumed in the on site incinerator or used oil heaters. Unused explosives will be shipped off site or burned or destroyed on site and unused chemicals as well as any other hazardous waste material will be either treated on site or shipped off-site for disposal. All non-combustible, non-hazardous waste will be disposed of in the permanent non-hazardous solid waste disposal facilities located in Hay River. Peripheral equipment like lighting and signposting will be removed.

Fuel and lubricant tanks, if not sold or reused, will be washed and the wash water captured and the tanks hauled off site to an appropriate disposal facility either in Hay River or Edmonton.

11.2.11 Seasonal Dock Facility

A seasonal dock facility composed of a single low keel barge connected to shore for the open water period and an adjacent yard will be used for concentrate storage and shipment to the Hydrometallurgical Plant site. It will also be used to receive and handle the annual resupply of Project consumables including fuel. During the life of operations, barge loading activities will occur over a 60 day period during the summer allowing for an additional 60 days for any delays due to weather or mechanical issues.

A marshalling yard will be developed upland of the dock to handle materials and transfer containers between the Nechalacho Mine site and the dock. Yard components will include a removable ramp to access the barge deck during loading and unloading, a lined, bermed fuel storage area, an area for container storage, a parking area for intermodal freight and trucks, a small administration office, and a small power generation station.

Fuel at the dock facility will be stored in two 1.5 M litre storage tanks. The tanks will be within a lined and bermed area designed to meet the CCME environmental codes of practice for fuel storage tanks.

Reclamation Strategy

All temporary and permanent surface structures will be dismantled and removed from site. Shallow foundations will be demolished and the rubble either disposed of underground or hauled away with other site waste. Remaining foundations will be buried and where appropriate, will be covered with stockpiled soil in preparation for re-vegetation, to the extent possible.

Fuel and lubricant tanks, if not sold or reused, will be washed and the wash water captured and the tanks hauled off site to an appropriate disposal facility either in Hay River or Edmonton.

11.2.12 Reclamation Strategy Summary

The anticipated appearance of the Nechalacho Mine site during all phases of the Project (e.g., pre-construction to closure and decommissioning) is shown schematically in Figures 11.2-1 to 11.2-4. Pre-development conditions are presented in Views 1 and 2 (Figure 11.2-1); in all of the representations, trees have been exaggerated for display purposes.

View 3 (Figure 11.2-2) provides a representation of what the mine footprint will look like once fully built, and during the 20 year operating life. The main infrastructure components include the tailings facility, flotation plant, and road network. The road network in particular has been developed on existing roads and trails wherever possible.

At mine closure, site infrastructure will be dismantled and disposed of underground or removed from site (View 4, Figure 11.2-3). Any water remaining in the tailings facility and polishing pond will be drained as part of reclamation. Exposed tailings surfaces will be stabilized and capped with available overburden and previously stockpiled organic materials before being re-vegetated. Site preparation will also be carried out in a manner that facilitates the natural encroachment and establishment of vegetation from adjacent areas. The road and trail network will also be reclaimed during this time (View 5, Figure 11.2-3).

Figure 11.2-4 presents the mine site and tailings area five (5) and 15 years after closure, observed in View 6 and View 7, respectively. Both images are similar in that all infrastructure such as the tailings facility, flotation plant, and road networks have been removed. Re-vegetation is evident in both images however is much further developed after 15 years (View 7).

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VIEW 1: Mine Site and Tailings Area: Existing Condition (Natural)

VIEW 2: Mine Site and Tailings Area: Representation of Existing Condition (Natural)

LEGEND

Waterbody

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NOTES
Base data source: Imagery provided by Avalon (October 2010).

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Schematic Representations of the Nechalacho Mine Site

PROJECTION	DATUM
UTM Zone 12	NAD83

EBA Engineering Consultants Ltd.

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V15101007_DAR_Map051_NechView1-2.mxd

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EBA-VANC	April 21, 2011

Figure 11.2-1

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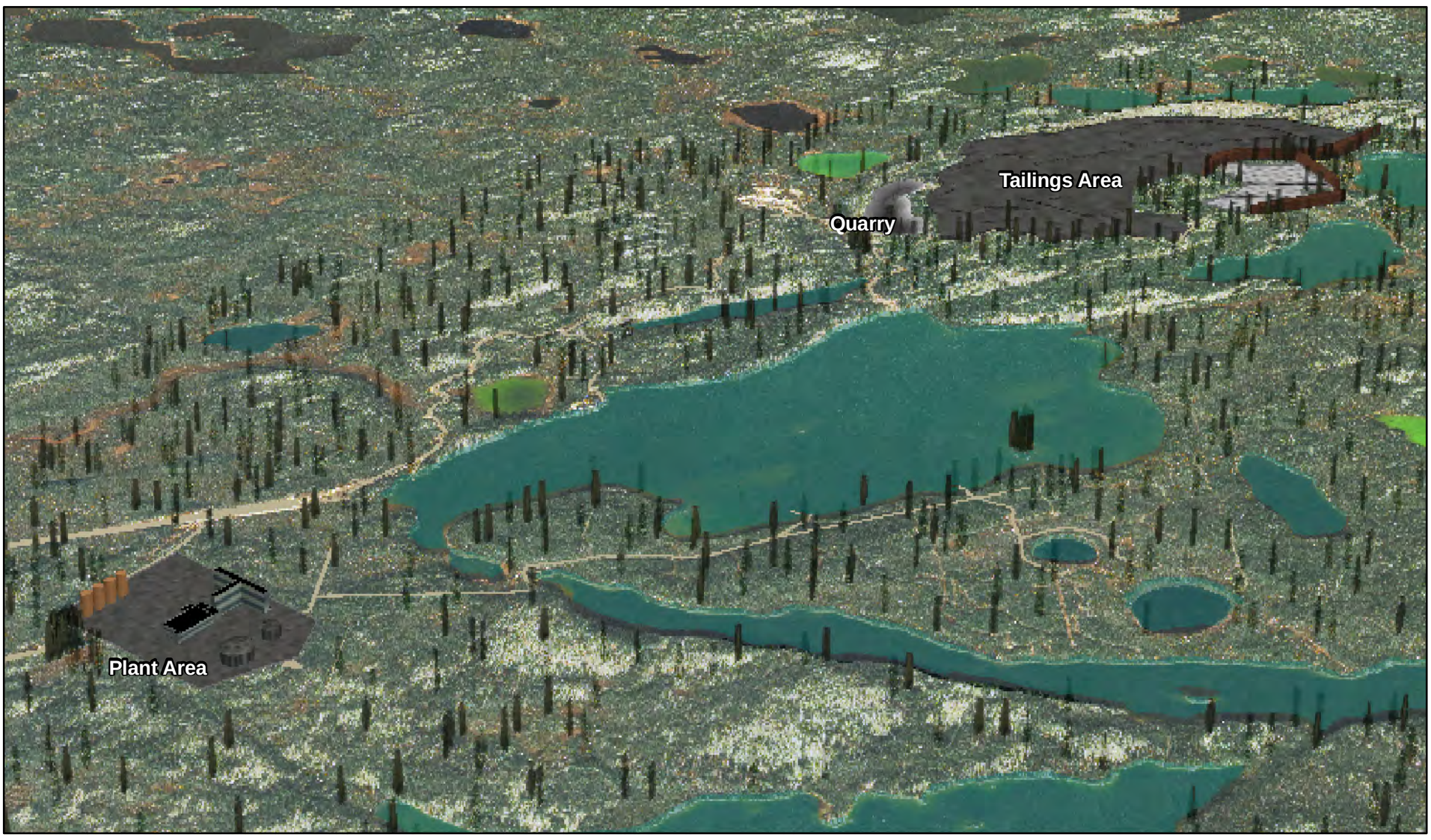
VIEW 2: Mine Site and Tailings Area: Representation of Existing Condition (Natural)



VIEW 3: Representation of Existing Condition and Mine Footprint at Full Build-out Following 20 Years of Operation

LEGEND

Waterbody

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NOTES
Base data source: Imagery provided by Avalon (October 2010).

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Schematic Representations of the Nechalacho Mine Site

PROJECTION	DATUM
UTM Zone 12	NAD83

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PROJECT NO.	DWN	CKD	REV
V15101007.006	KMW	RH	0

OFFICE	DATE
EBA-VANC	April 21, 2011

Figure 11.2-2

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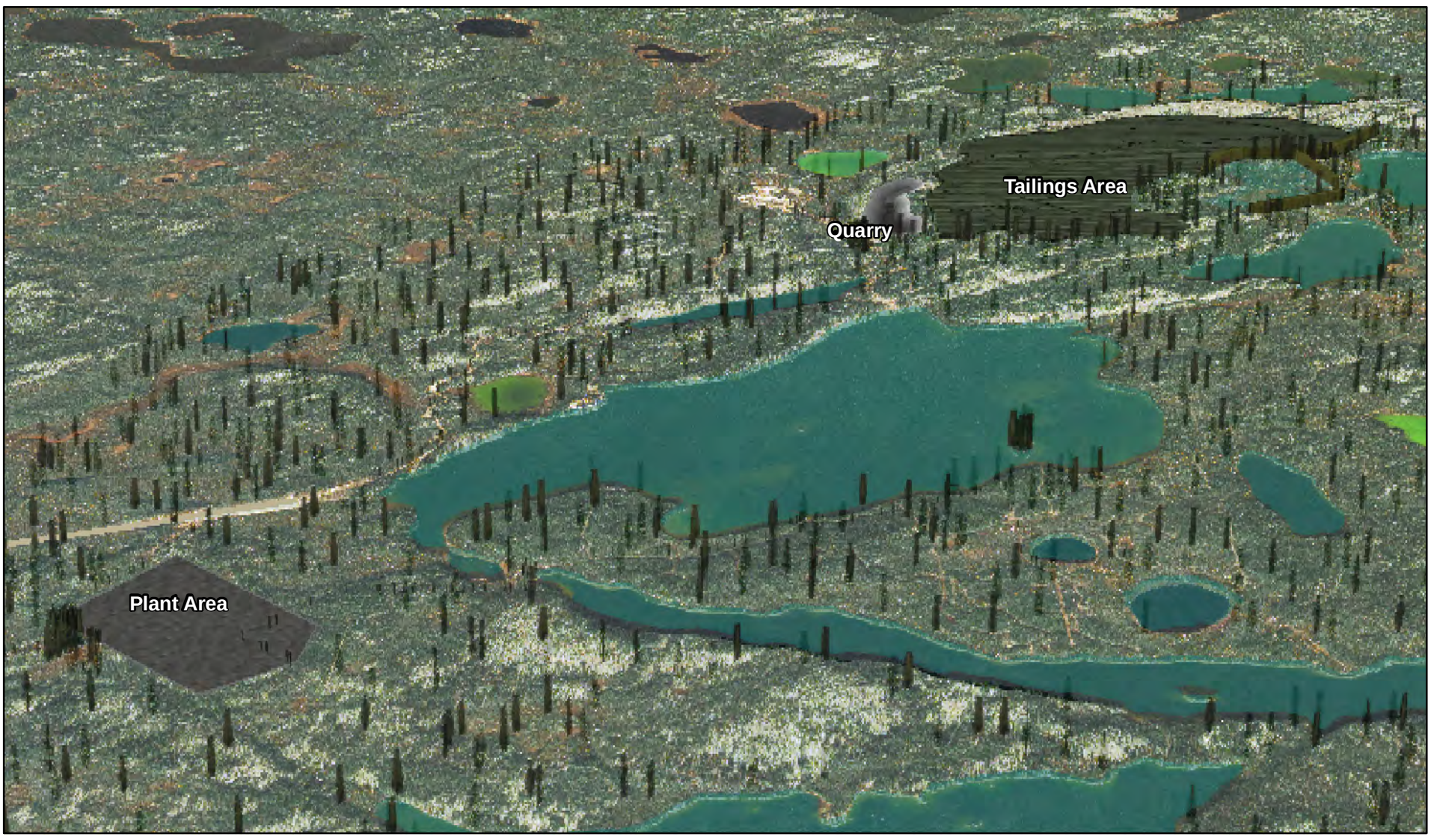
VIEW 4: Mine Site and Tailings Area: Representation of Existing Condition Following Closure



VIEW 5: Representation One Year Later

LEGEND

Waterbody

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NOTES
Base data source: Imagery provided by Avalon (October 2010).

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Schematic Representations of the Nechalacho Mine Site

PROJECTION	DATUM
UTM Zone 12	NAD83

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Figure 11.2-3

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VIEW 6: Mine Site and Tailings Area: Representation Five Years Later

VIEW 7: Representation 15 Years Later

LEGEND

Waterbody

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NOTES
Base data source: Imagery provided by Avalon (October 2010).

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Schematic Representations of the Nechalacho Mine Site

PROJECTION	DATUM
UTM Zone 12	NAD83

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EBA-VANC	April 21, 2011

Figure 11.2-4

11.3 CLOSURE AND RECLAMATION PLAN – HYDROMETALLURGICAL PLANT SITE

11.3.1 Hydrometallurgical Plant

The proposed Hydrometallurgical Plant will further process the concentrates from the Nechalacho Mine site. The process will include a thaw shed and dump system, sulphuric acid plant, acid baking, water washing, filtration, bulk concentrate loadout, neutralization, product drying and mixed light rare earth packaging facilities to produce direct ship products to Avalon's separation plant. The Hydrometallurgical Plant site will be situated largely on brownfields areas that were previously disturbed by the former Pine Point Mine.

Reclamation Strategy

Given the extensive disturbance in the area, much of the reclamation activities will be associated with the dismantling and removal of surface infrastructure and the stabilization of surface material. Re-vegetation may be considered as an option, however, given the lack of suitable growing media available for salvage and stockpiling, it is unlikely this will be extensively applied.

11.3.2 Tailings Facility

The proposed Hydrometallurgical Plant tailings facility will be an engineered facility located 2.5 kilometres south of the proposed plant in an existing historic open pit (L-37) which remains from the historic Pine Point Mine. Use of this location presents significant environmental and operational benefits for the overall Project. Any water decanted from the tailings facility will be discharged in compliance with MVLWB Water License discharge criteria into an adjacent existing historic open pit (N-42) which is located 1.5 kilometres southwest of the L-37 pit.

Reclamation Strategy

The main objective for closure and reclamation activities for the Hydrometallurgical Plant tailings management facility will be to transform the historic L-37 open pit into a more natural condition to the greatest degree possible. Reclamation strategies will focus on utilizing nearby waste and overburden material to stabilize and cover exposed tailings. Re-vegetation options may be considered, provided site conditions are suitable.

11.3.3 Water Supply

Potable and process water will be obtained from an existing nearby open pit lake known as T-37N. Water will be treated on-site as necessary for its intended uses.

Reclamation Strategy

Water discharge lines will be removed and shipped off site. The fuel and lubricant tanks and associated piping will be drained, washed, cleaned, and dismantled. All infrastructure will be removed from site.

11.3.4 Power Supply

Avalon will employ hydroelectric line power for the majority of its power requirements at the Hydrometallurgical Plant. A small diesel generation plant will be used for primary safety and back-up in the event of power failures or scheduled maintenance on the Taltson Dam.

Reclamation Strategy

All temporary and permanent surface structures will be dismantled and removed from site at the completion of mining and processing. Shallow foundations will be demolished and the rubble removed. Remaining foundations will be buried. Re-vegetation options may be considered, provided site conditions are suitable.

11.3.5 Concentrate Storage and Loading

Upon arrival at the Hydrometallurgical Plant, the concentrate storage containers will be unloaded from the trucks and placed into a secure storage area. As required, the containers will be moved into a heated thaw shed. Once in the thaw shed, the concentrate will be removed from the containers. The containers will be cleaned prior to shipment back to the Nechalacho Mine.

Reclamation Strategy

All temporary and permanent surface structures will be dismantled and removed from site at the completion of mining and processing. Shallow foundations will be demolished and the rubble disposed of underground. The remaining foundations will be buried and where appropriate, may be considered for re-vegetation as is feasible given the site conditions.

11.3.6 Limestone Storage

The limestone used to neutralize the waste stream from the Hydrometallurgical Plant prior to discharge to the tailings management facility will be obtained from local supply sources and stockpiled in a designated area that is in close proximity to the Hydrometallurgical Plant. Because the limestone is a neutralizing product, no special stockpile considerations will be necessary.

Reclamation Strategy

The limestone storage pad will be reclaimed by grading and re-contouring the area so it blends with the surrounding landscape. Re-vegetation options may be considered, provided site conditions are suitable.

11.3.7 Haul Road

The existing access road remaining from historical mine activities will be upgraded to safely transport the concentrate offloaded from barges on the south shore of Great Slave Lake to the Hydrometallurgical Plant located at the former Pine Point Mine site. The haul road will be approximately 8.6 km long. It will be aligned directly north-south along an existing drainage ditch for approximately 4.9 km prior to connecting to an existing haul road from a former mine pit located north of the main Pine Point Mine area.

Reclamation Strategy

There are no plans to reclaim the haul road following closure of the Hydrometallurgical Plant as this road is currently used by other third parties to access Great Slave Lake for fishing and recreational pursuits.

11.3.8 Seasonal Dock Facility

A seasonal dock facility consisting of two low keel barges connected together to create a temporary floating dock and a marshalling yard will be installed on the south shore of Great Slave Lake approximately 8.6 km from the Hydrometallurgical Plant. The seasonal dock facility will permit the berthing and offloading of concentrates from the Nechalacho Mine site onto flatbed trucks for transportation to the Hydrometallurgical Plant.

Reclamation Strategy

All temporary and permanent surface structures will be dismantled and removed from site. Shallow foundations will be demolished and the rubble will be hauled away with other site waste. Remaining foundations will be buried. Re-vegetation options may be considered, provided site conditions are suitable.

11.3.9 Reclamation Strategy Summary

The anticipated appearance of the Hydrometallurgical Plant site during all phases of the Project (e.g., pre-construction to closure and decommissioning) is shown schematically in Figures 11.3-1 to 11.3-4. Pre-development conditions are presented in Views 1 and 2 (Figure 11.3-1); in all of the representations, trees have been exaggerated for display purposes.

The proposed Hydrometallurgical Plant site is situated on a brownfield site with extensive past disturbance. Efforts have been made to locate site infrastructure on previously disturbed ground, thus limiting the amount of new disturbance required (View 3, Figure 11.3-2). The hydrometallurgical plant will occupy an existing pad, tailings will be deposited into an existing open pit, and the road network will utilize existing roads.

At closure, much of the reclamation activities will be associated with the dismantling and removal of surface infrastructure and stabilization of surface materials, including exposed tailings (View 4, Figure 11.3-3). The tailings facility also contains no open water. While the re-vegetation of some surfaces might be an option, it is unlikely to be extensively applied due to a lack of suitable growing media.

Figure 11.3-4 provides a representation of the Hydrometallurgical Plant site five (5) and 15 years after closure, observed in View 6 and View 7, respectively. In both instances, all infrastructure has been removed and stabilized and vegetation encroachment is starting to occur, particularly on the tailings after 15 years (View 7).

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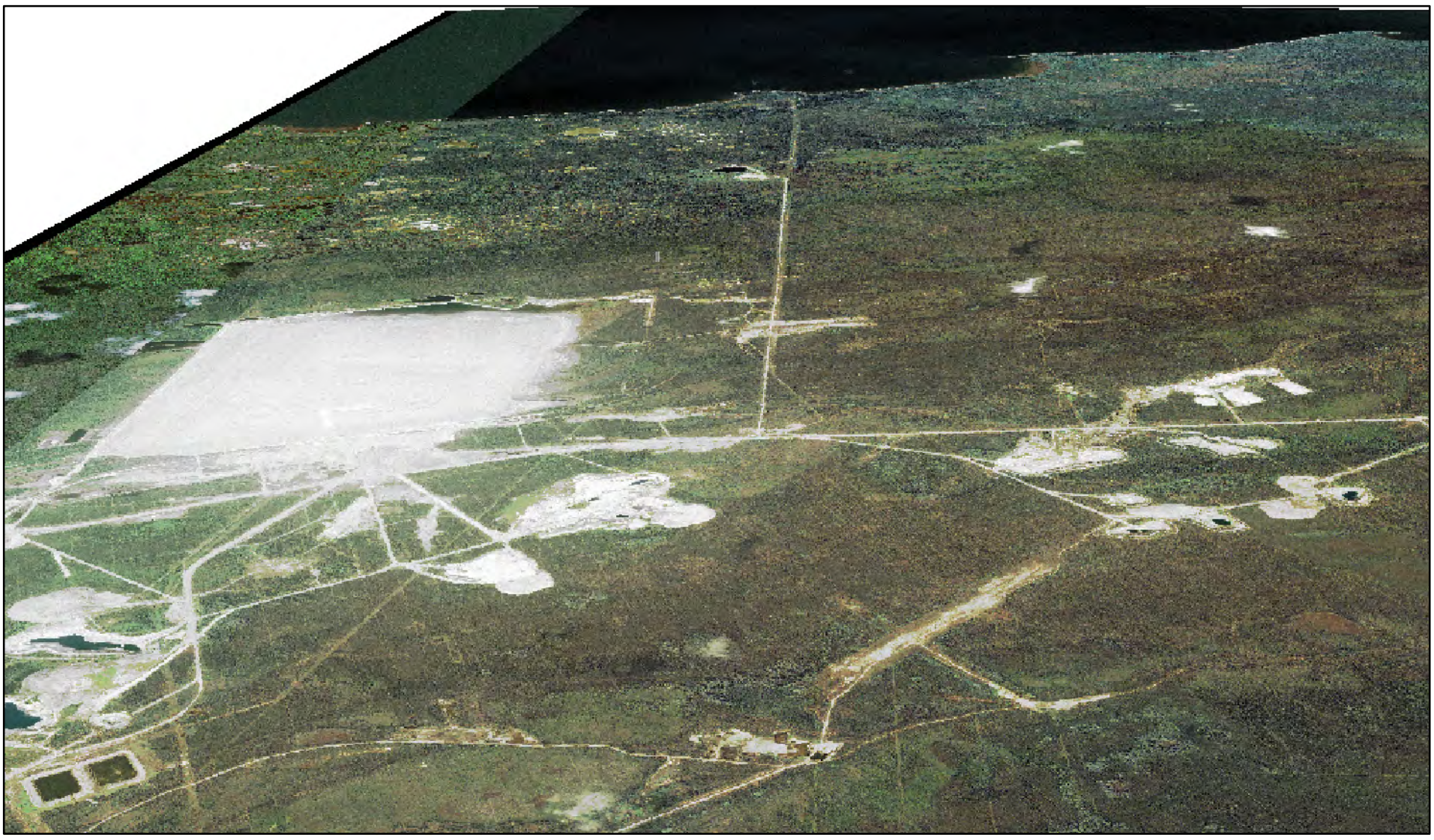
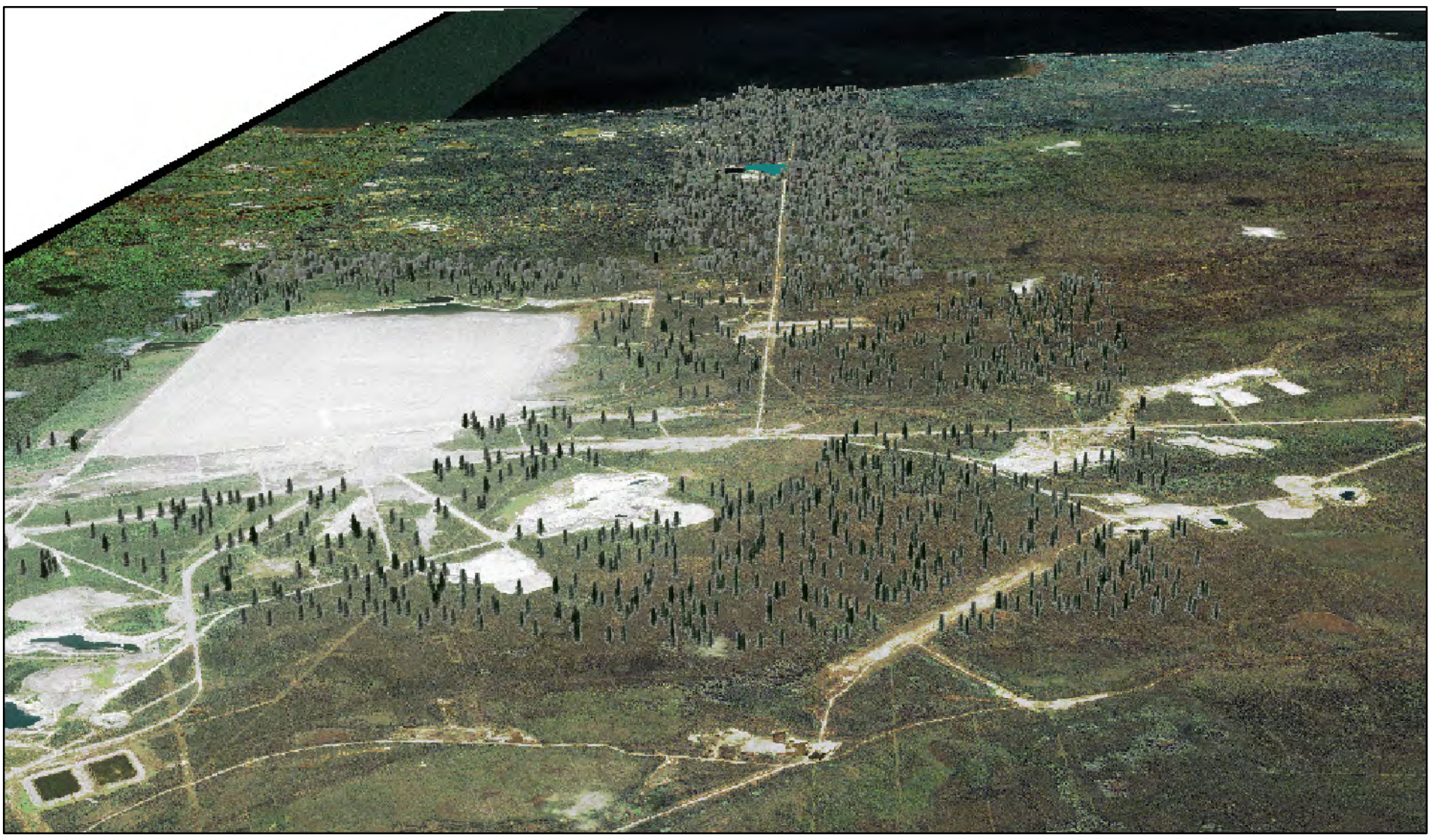


VIEW 1: Existing Condition (Natural)



VIEW 2: Representation of Existing Condition (Natural)

LEGEND

Waterbody

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NOTES
Base data source: Imagery provided by Avalon (October 2010).

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THOR LAKE PROJECT

Schematic Representations of the Hydrometallurgical Plant Site

PROJECTION	DATUM
UTM Zone 11	NAD83

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FILE NO.
V15101007_DAR_Map055_HydrometView1-2.mxd

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EBA-VANC	April 25, 2011

Figure 11.3-1

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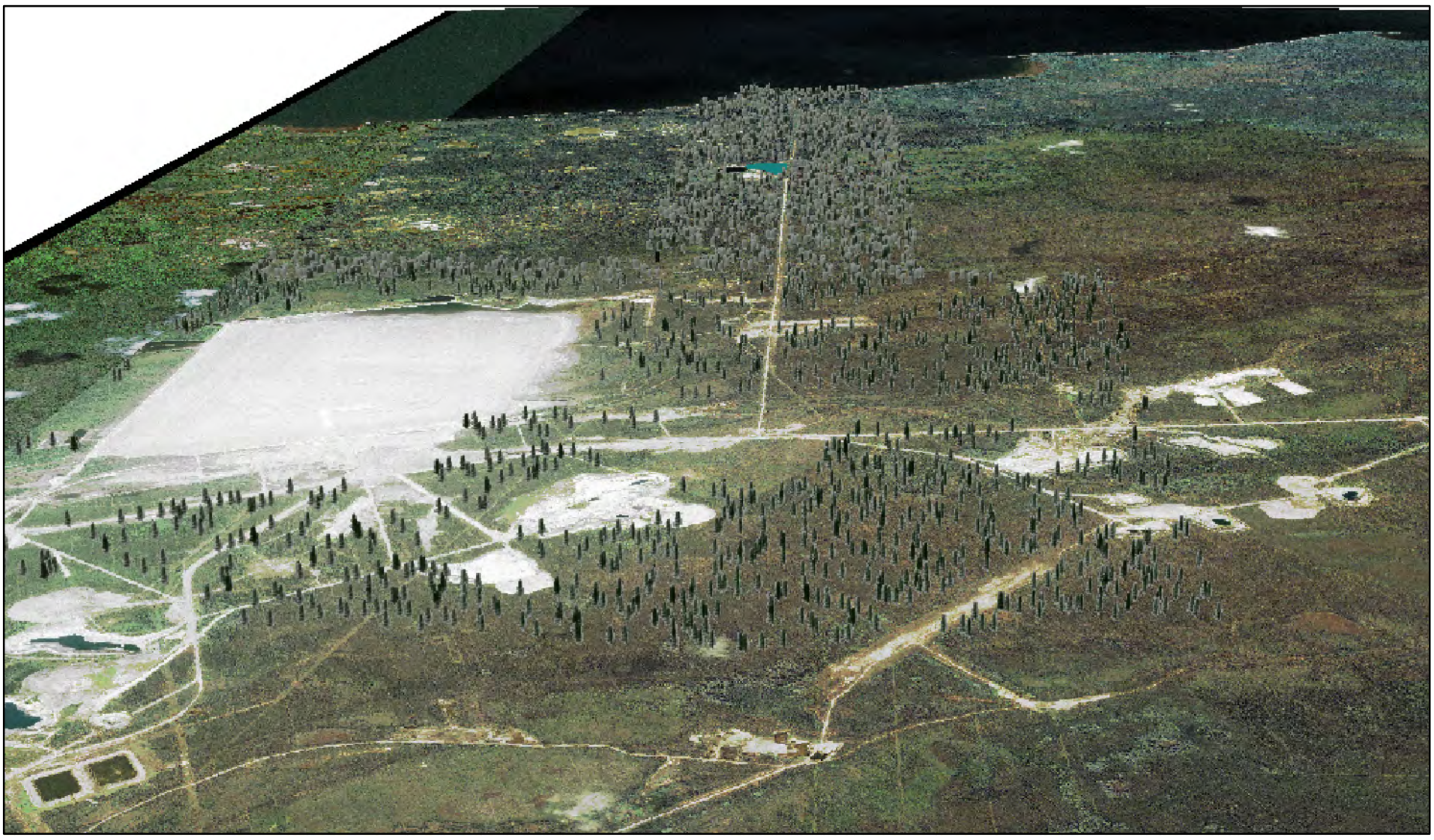
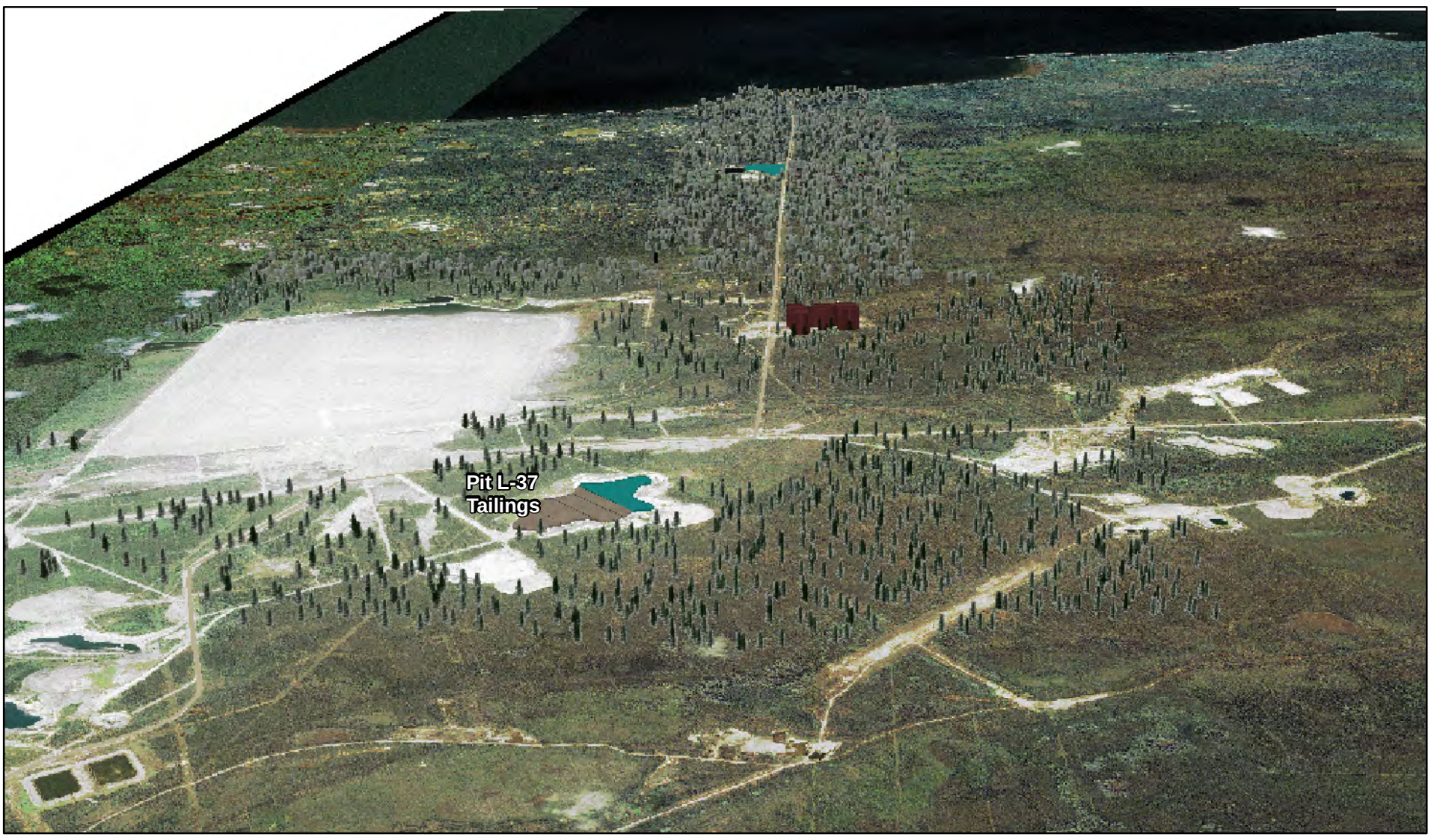


VIEW 2: Representation of Existing Condition (Natural)



VIEW 3: Representation of Existing Condition and Mine Footprint at Full Build-out Following 20 Years of Operation

LEGEND

Waterbody

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NOTES
Base data source: Imagery provided by Avalon (October 2010).

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Schematic Representations of the Hydrometallurgical Plant Site

PROJECTION	DATUM
UTM Zone 11	NAD83

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FILE NO.
V15101007_DAR_Map056_HydrometView2-3.mxd

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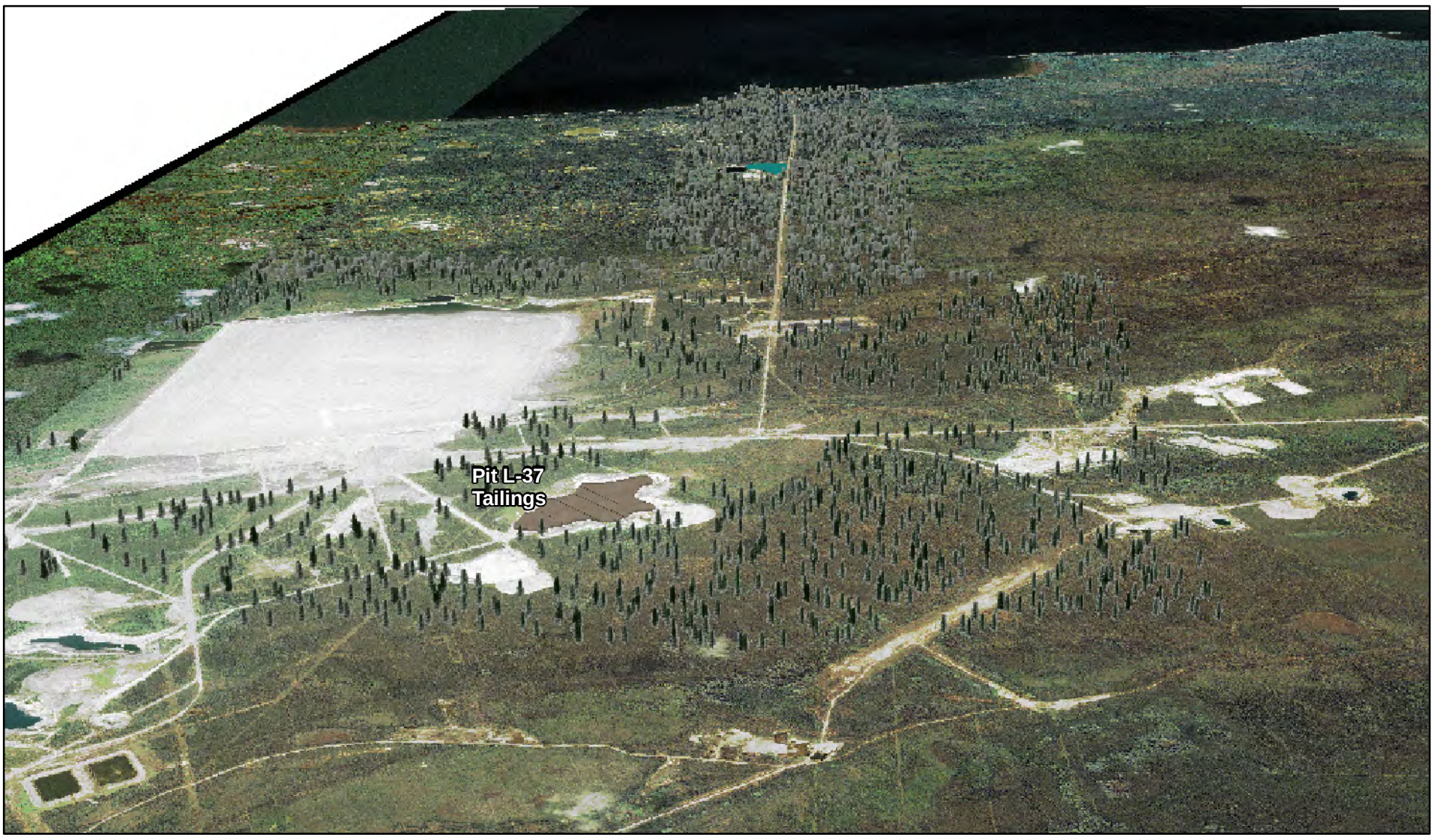
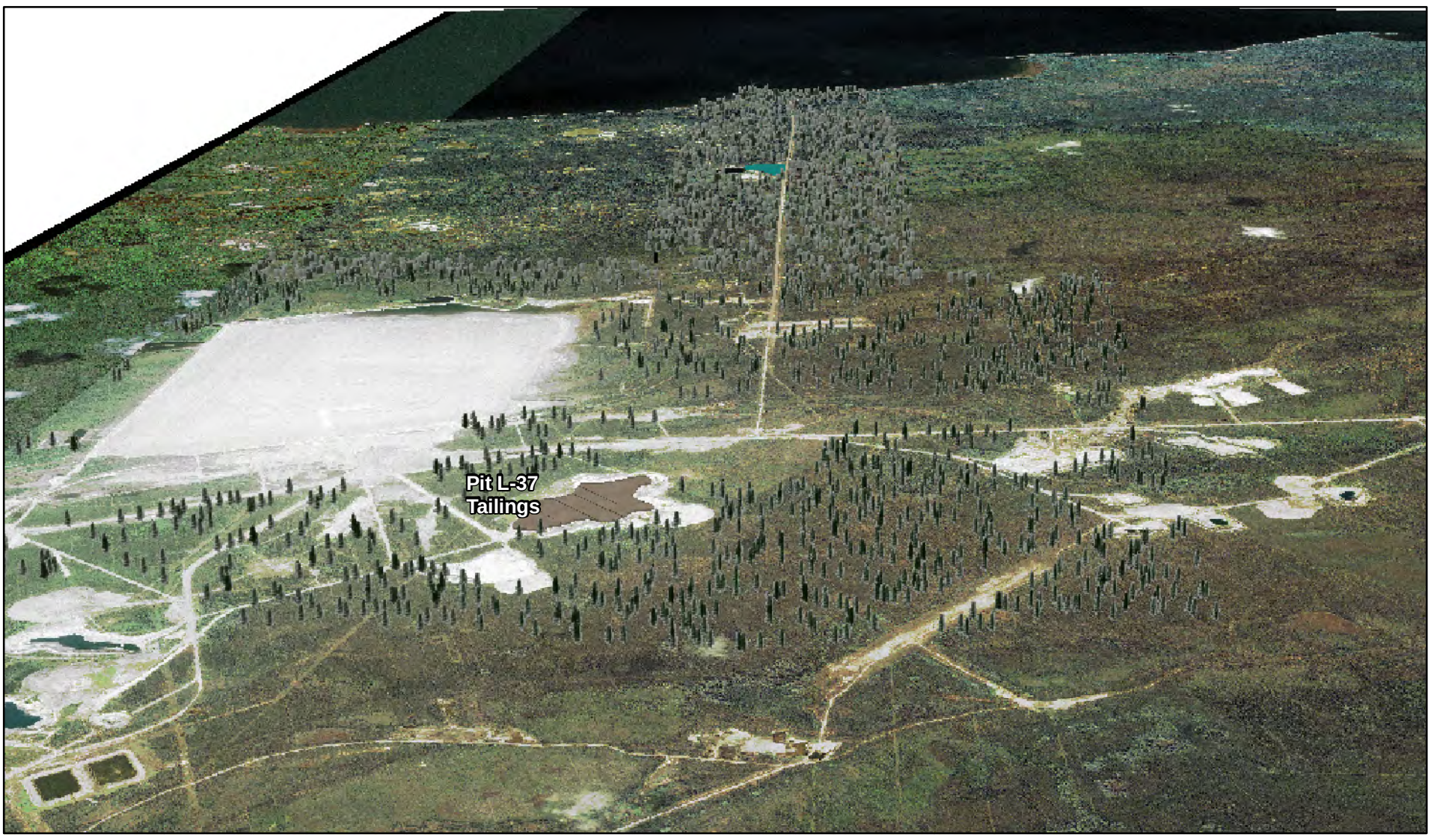
OFFICE	DATE
EBA-VANC	April 25, 2011

Figure 11.3-2

Q:\Vancouver\GIS\ENGINEERING\V151\V15101007_ThorLake\Maps\006_DAR\V15101007_DAR_Map057_HydrometView4-5.mxd



VIEW 4: Representation of Existing Condition Following Closure



VIEW 5: Representation One Year Later

LEGEND

Waterbody

N
W E
S

NOTES
Base data source: Imagery provided by Avalon (October 2010).

ISSUED FOR USE

THOR LAKE PROJECT

Schematic Representations of the Hydrometallurgical Plant Site

PROJECTION	DATUM
UTM Zone 11	NAD83

EBA Engineering Consultants Ltd. eba

AVALON RARE METALS INC.

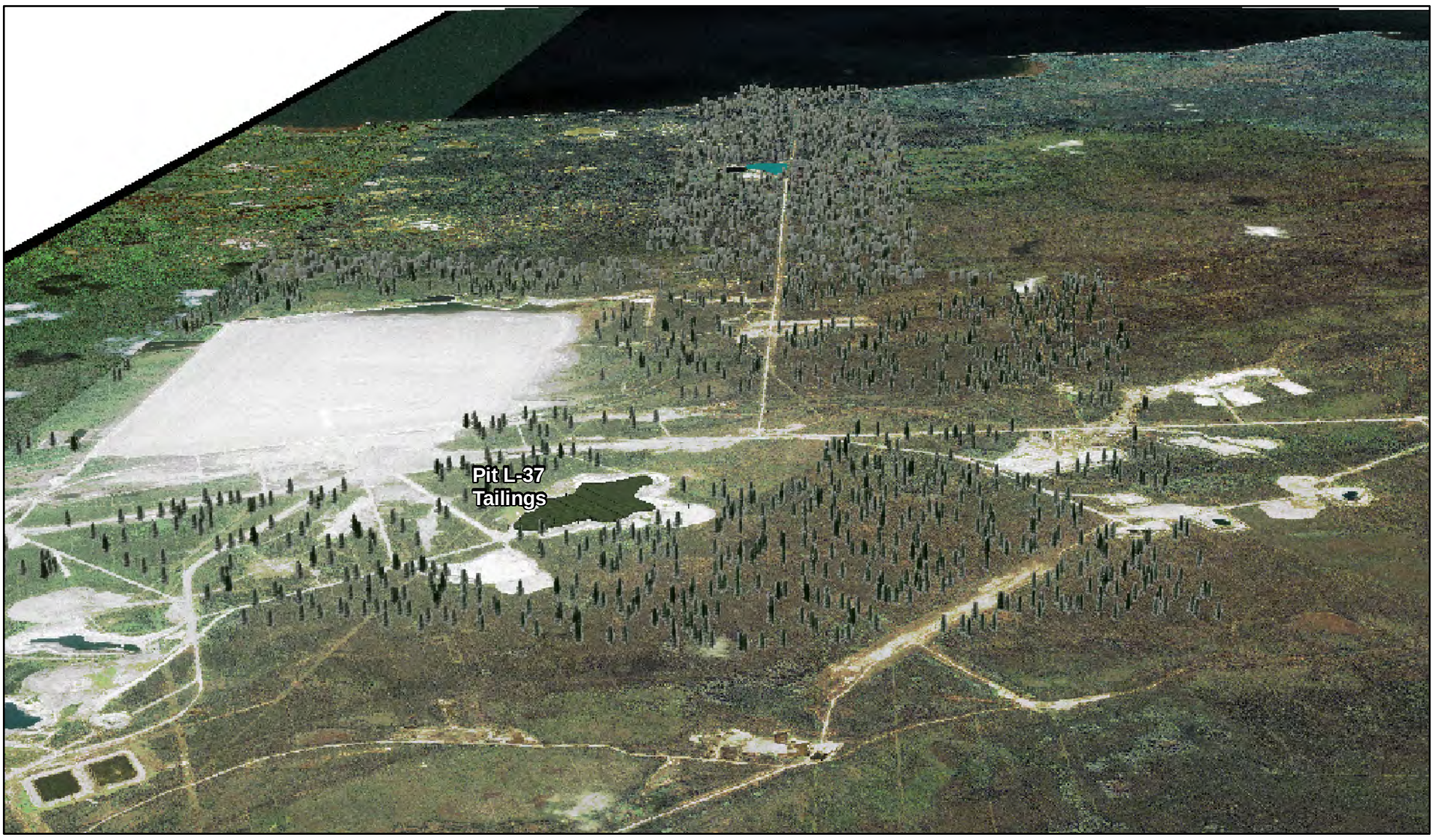
FILE NO.
V15101007_DAR_Map057_HydrometView4-5.mxd

PROJECT NO.	DWN	CKD	REV
V15101007.006	KMW	RH	0

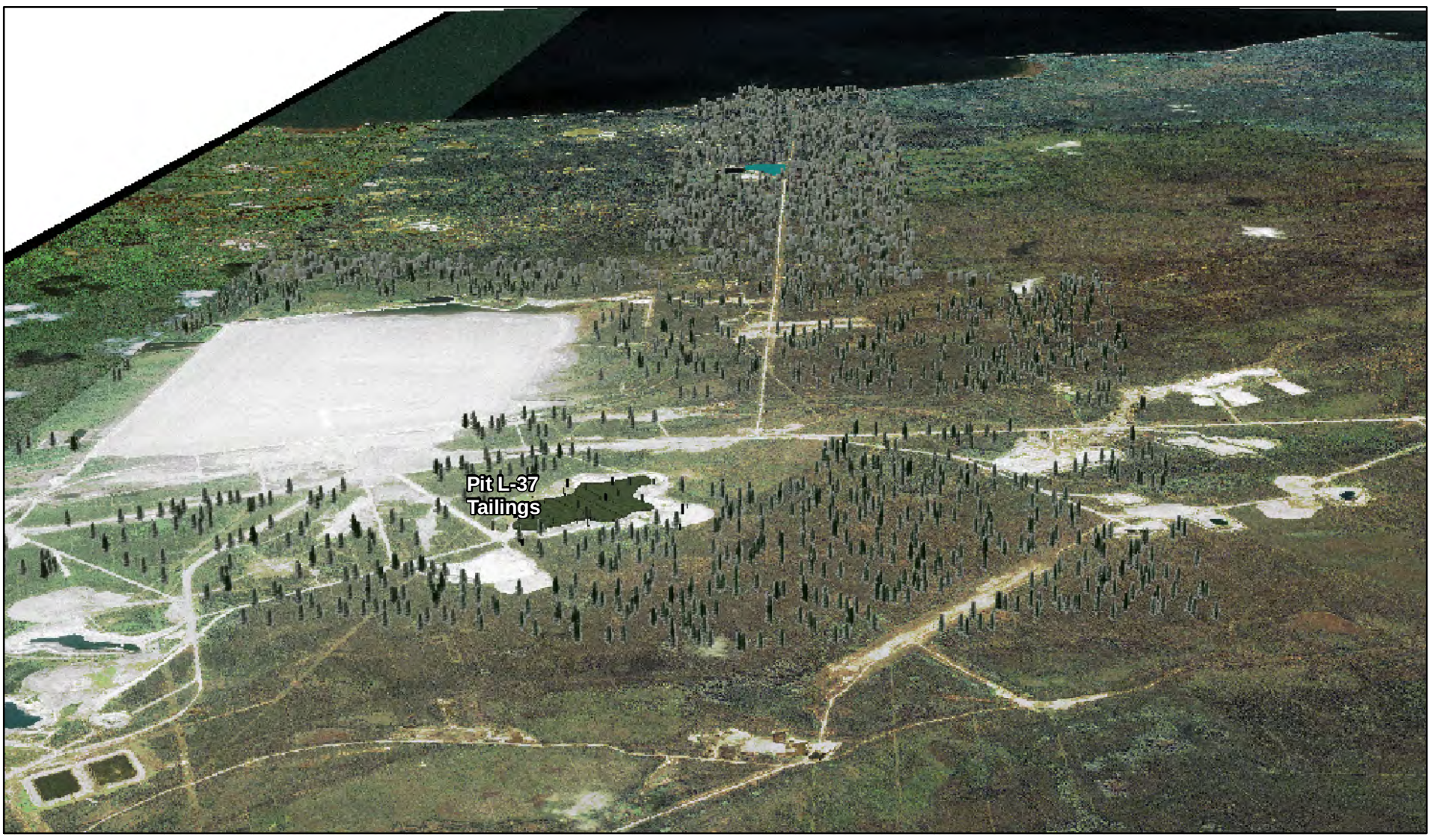
OFFICE	DATE
EBA-VANC	April 5, 2011

Figure 11.3-3

Q:\Vancouver\GIS\ENGINEERING\V151\V15101007_ThorLake\Maps\006_DAR\V15101007_DAR_Map058_HydrometView6-7.mxd



VIEW 6: Representation Five Years Later



VIEW 7: Representation 15 Years Later

LEGEND

Waterbody

N
W E
S

NOTES
Base data source: Imagery provided by Avalon (October 2010).

ISSUED FOR USE

THOR LAKE PROJECT

Schematic Representations of the Hydrometallurgical Plant Site

PROJECTION	DATUM
UTM Zone 11	NAD83

EBA Engineering Consultants Ltd. eba

AVALON RARE METALS INC.

FILE NO.
V15101007_DAR_Map058_HydrometView6-7.mxd

PROJECT NO.	DWN	CKD	REV
V15101007.006	KMW	RH	1

OFFICE	DATE
EBA-VANC	April 25, 2011

Figure 11.3-4

11.4 POST-CLOSURE MONITORING

It is understood that environmental monitoring will continue through the post-closure phase until such time as it can be established that licensed criteria have been met, based on discussions with the regulatory agencies. Once this has been achieved, Avalon would seek final clearance to permanently abandon the Project area.

The amount and frequency of post-closure monitoring required is expected to diminish as reclamation activities near completion and the results of monitoring indicate that environmental performance is meeting the established reclamation objectives. Monitoring will continue after reclamation is complete and will focus on re-vegetation efforts. Post-closure monitoring for re-vegetation success is envisioned to be conducted at Year 1 and Year 5 post-closure.