



This site plan was prepared by

Signature _____

Date _____

<i>Drawing by :</i>	<i>Jessica Sheppard</i>
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Revisions by:

Revisions by:

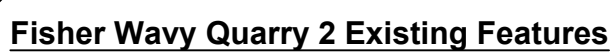
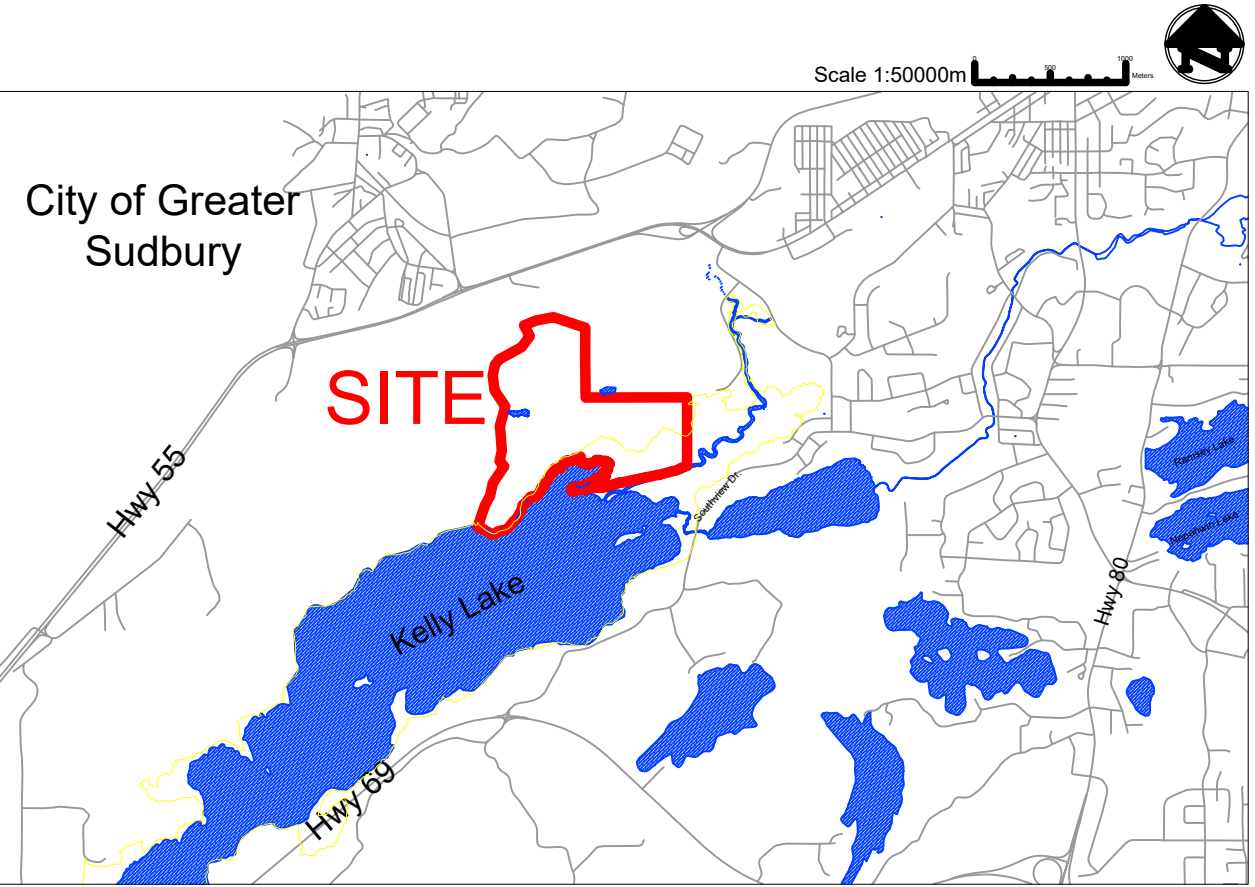
Revisions by:

Checked by:

Vanessa Felix

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The total area of licence: 97.7 ha
The total area to be extracted: 86.9 ha
The total area to be rehabilitated: 86.9 ha

1. This site plan was developed using the following references:
 - Geowarehouse
 - Bing Maps
 - MNRF Maps
 - Pioneer Drone flight *****
2. The established groundwater table is estimated at **
3. There is a wetland located to the east of the site as shown on site plans. A 30m excavation setback has been established as shown. To the south of the site is Kelly Lake and the Junction Creek Delta Wetland, from which a 120m excavation setback has also been established as shown.
4. No other significant man-made features are on or within 120m of site as shown.
5. No existing buildings on site or within 120m of site.
6. No existing water drainage or drainage facilities on or within 120m of site.
7. This site has not been previously excavated.

Ministry of Natural Resources Approval

This site plan is prepared under the Aggregate Resources Act for a Class A Licence,
Pit and Quarry Below the Ground Water Table.

This site plan was prepared by

Applicant: Fisher Wavy Inc.

Signature _____

Date _____

[illegible]

Fisher Wavy Quarry 2 Existing Features

**Part of Lot 10 & 11, Con 1
and Part of Lot 11, Con 2
McKim Township
City of Greater Sudbury**

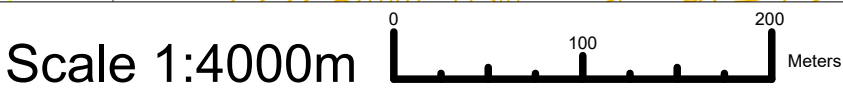
Permittee: Fisher Wavy Inc.
1 Ceasar Rd.
Sudbury, ON
P3E 5P3

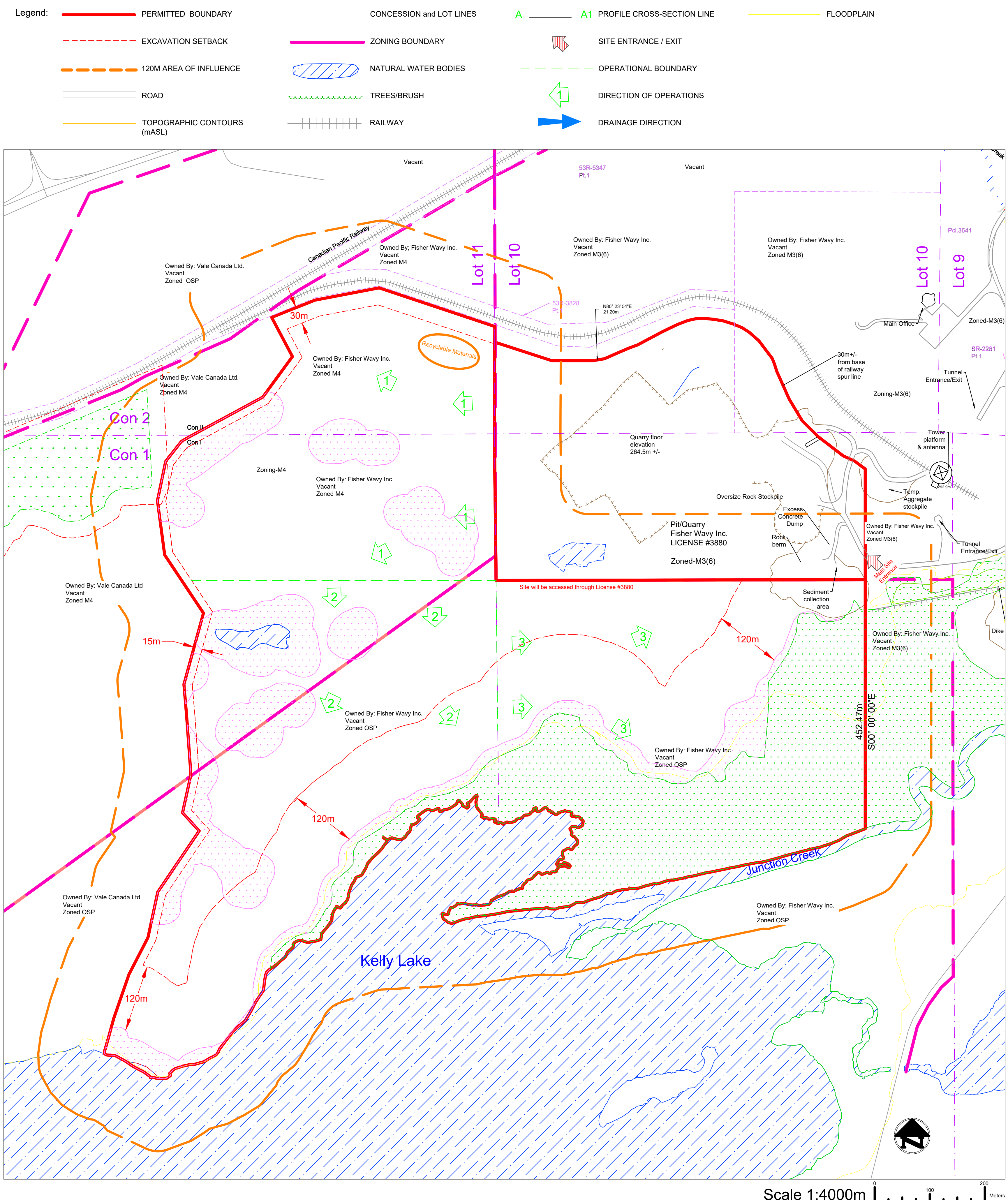
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2 of 4

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- Operational Features**
- Area to be Excavated: 86.9 ha
- No fencing proposed. Excavation setback boundaries will be identified by flagging or signage.
 - Temporary buildings or structures (ie. a scalehouse or plant) that are incidental to the operation of the site may be erected or moved to site at any point during its operation.
 - The scrap storage area is indicated on site plan.
 - All aggregate stockpiles will be temporary. Aggregate stockpiles will generally be located in close proximity to the working face on the pit floor. Stockpile areas will vary depending on the sequence of development and will be located close to the working face.
 - Internal haul roads are shown on site plans. Location of haul roads will vary as extraction proceeds.
 - Use of portable processing equipment may be used and located near the working face as required. Should a stationary plant be proposed in the future it will be located within Phase 1
 - Recycling of inert material asphalt and cured concrete will be permitted on this site. A defined location for where recycled aggregate will be stored and processed is identified on the site plan.

Recyclable asphalt materials will not be stockpiled within:

 - 30m of any water body or man-made pond; or
 - 2m of the surface of the established water table.

Any rebar and other structural metal must be removed from the recycled material during processing and placed in designated scrap pile on site which will be removed on an on-going basis. Removal of recycled aggregate is to be ongoing. Once the aggregate on site has been depleted there will be no further importation of recyclable materials permitted. Once final rehabilitation has been completed and approved in accordance with the site plan, all recycling operations must cease.
 - The pit/quarry will be developed in four phases.
 - Pit and Quarry Operations may proceed concurrently and independently of one another.
 - Phase 1 proceeds from the northeast licence boundary in a north-westerly and south-westerly direction towards the limits of extraction and first operational boundary.

Phase 2 proceeds from the operational limit indicated on the site plan in a south-westerly and south-easterly direction to the limits of extraction and the next operational limit indicated on the site plan.

Phase 3 proceeds from the operational limit indicated on the site plan in a north-easterly and north-southerly direction to the limits of extraction.
 - Quarry operations will consist of drilling and blasting of rock in lifts of 20 meters each.
 - Pit operations will proceed in lifts that are not more than 8m.
 - Material may be blended from other locations in the pit or quarry to obtain the required specifications for material.
 - Topsoil, subsoil and/or overburden will be stockpiled within or near the setback area along the boundary. These stockpiles of topsoil and overburden will be used in final rehabilitation.
 - Stockpiles of topsoil and overburden will not be located; Within 90m from any part of the boundary of the site that abuts:
 - land in use for residential purposes as of the issue date of this license, or
 - land restricted to residential use by a zoning by-law as of the date this license was issued.
 - The maximum number of lifts will be 4. Height will vary based on equipment used.
 - Water will drain from the site naturally through pit/quarry floor infiltration.
 - No source water protection policies apply to this site as of the date of licence issuance.
 - The estimated groundwater table is approximately * masl
 - No fuel storage areas are proposed.
 - The final excavation elevation of the site is 248 masl.
 - No berms are proposed.
 - Operations will consist of normal pit extraction. Extraction will proceed in a benched manner. The pit will be developed from the existing excavation faces outward to the setback limits. Sequences of development may vary depending on quality of material extracted and market needs. Material may be blended from other locations in the pit or quarry to obtain the required specifications for material.
- Equipment to be used on the site will include, but not be limited to:
- Excavators, loaders, crushers, dozers and trucks, Stationary/Portable Plants - asphalt plant, redi-mix plant, aggregate processing plant, screening plant, stacker, conveyors, power plant, feed bins, brushing plant, tool trailer, and washing plants. Plants may move throughout the site in proximity to the extraction face.
- No tree screens proposed.
 - Hours of operation of the site may be 24 hours a day, 7 days a week.
 - Where applicable, trees removed from the site will be used as firewood or other applications if possible and stumps will be used in the final rehab of the site.
 - Variations from standards are as follows:
 - Fencing - No fencing will be erected because the site has geographically delineated boundaries. The boundary of the sight will be flagged.
 - Excavation Setback - The pit/quarry has a common boundary with one other license held by the licensee. The common boundary will be excavated to the same elevation and the pit will be rehabilitated to the same standard. The common boundary is shown on the site plan.
 - Topsoil - The topsoil, subsoil and other organic overburden is in inseparable layers and therefore will be stored together and saved for rehabilitation.
 - Gate - Access to and from the site is secured by a gate located on the property to the northeast, (PCL 3641) at Kelley Lake Road. A gate on the licensed quarry site is not proposed.
 - Excavation Height - It is proposed to quarry material to the boundary of the setback area along the railway. The height of the quarry face will exceed the height definition of Section 19. The height restrictions as outlined in the Health and Safety Act will still apply.
 - Quarry Slope - Due to the rehabilitation slope identified for the northerly section of the setback area, along the railway line, the slope will be steeper than two horizontal meters for every vertical meter and will vary from the regulations.
 - Annual Extraction Limit: 500,000 tonnes
 - Blasting will occur between 7:00am and 7:00pm, Monday to Saturday. The Licensee shall ensure that all blasts are monitored by a competent blasting consultant (who is a registered member of the Association of Professional Engineers of Ontario) to ensure all blasts are compliant with MOE noise & vibration regulations. Monitoring will occur at the nearest residence on Briewood Crescent in Sudbury, as well as 4 additional locations will be used during each blasting event to measure for ground vibrations and blast overpressure, and that following limits are not exceeded: a) ground vibrations: 12.5 mm/second, and b) blast overpressure: 128 db.
 - The licensee will notify the MNR District Manager and the MOE District Officer prior to each blasting event and shall submit a blasting report within 30 days of each blast, containing the vibration and overpressure waveforms produced.

City of Greater Sudbury

Scale 1:50000m

SITE

Ministry of Natural Resources Approval

This site plan is prepared under the Aggregate Resources Act for a Class A Licence, Pit and Quarry Below the Ground Water Table.

This site plan was prepared by _____

Applicant: Fisher Wavy Inc.

Signature _____

Signature _____

Date _____

NO.	DATE	AMENDMENT DESCRIPTION	APPROVED

Drawing by : **Jessica Sheppard**

Revisions by : _____

Revisions by : _____

Revisions by : _____

Checked by : **Vanessa Felix**

Fisher Wavy Quarry 2 Operational Features

Part of Lot 10 & 11, Con 1 and Part of Lot 11, Con 2 McKim Township City of Greater Sudbury

Permittee: Fisher Wavy Inc. 1 Ceasar Rd. Sudbury, ON P3E 5P3

Sheet **3** of **4**

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***Rehabilitation Plan to be revised after all studies completed.**

[illegible]

Fisher Wavy Quarry 2 Rehabilitated Features

**Part of Lot 10 & 11, Con 1
and Part of Lot 11, Con 2
McKim Township
City of Greater Sudbury**

Permittee: Fisher Wavy Inc.
1 Ceasar Rd.
Sudbury, ON
P3E 5P3

Sheet
4 of 4

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