



Decommissioning Plan Report

Grimsby Anaerobic Digestion Site

Escarpment Renewables

July 29, 2024

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Printed date	2024-07-29 11:32:00 AM
Last saved date	July 29, 2024
File name	11226032-RPT-12-Decommissioning Plan Report.docx
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Client name	Escarpment Renewables
Project name	ESCARPMENT-Grimsby AD Permitting
Document title	Decommissioning Plan Report Grimsby Anaerobic Digestion Site
Revision version	Rev [00]
Project number	11226032

Document status

Status Code	Revision	Author	Reviewer		Approved for issue		
			Name	Signature	Name	Signature	Date
S4	00	Jason Wilson	Michael Gallahue		Victoria Shortreed		Jan. 24, 2022
S4	01	Jason Wilson	Michael Gallahue	<i>M.G. Gallahue</i>	Victoria Shortreed	<i>V. Shortreed</i>	July 29, 2024

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Executive summary

This Decommissioning Plan Report has been prepared in accordance with Table 1 of Ontario Regulation 359/09. A summary of where information is contained in this report as it relates to these requirements is provided below.

Table E.1 Item-3 Ontario Regulation 359/09 Compliance Summary

Requirements	Location in Report
Set out a description of plans for the decommissioning of the renewable energy generation facility, including the following:	
1. Procedures for dismantling or demolishing the facility.	Section 2
2. Activities related to the restoration of any land and water negatively affected by the facility.	Section 3
3. Procedures for managing excess materials and waste.	Section 4

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1. Introduction

1.1 Purpose

This Decommissioning Plan Report is prepared to fulfill the Renewable Energy Approval (REA) requirements as set out in Ontario Regulation 359/09. The Anaerobic Digestion (AD) facility currently operates under Renewable Energy Approval (REA) No. 8541-9HSGG3, as amended. The project has received a Feed-In Tarrif (FIT) Contract No. F-000610-BIG-130-302.

The Decommissioning Plan Report lays out the owner's plan to restore the project site to a clean and safe condition, suitable for the likely future use of the land on which it is located.

1.2 Project Location

The project construction will occur on lands owned by Escarpment Renewables at 424 Soby Road in the Town of Grimsby, Ontario (Site). The project will be located on the northwestern approximately 6 hectares (ha) of a 10.5 ha property located on the south side of Soby Road approximately 300 metres (m) east of Park Road South. The legal description of the property is part of Lots 1 and 2, Concession 6, Former Township of North Grimsby being Part 1 on Plan 30R-13677.

The Site Location is shown on Figure 1.

1.3 The Project

The project will include expansion to the existing Site. The AD facility processes source-separated organics (SSO) and industrial, commercial, institutional (ICI) organic materials. The AD facility is currently operating at a maximum of 23,000 tonnes per year of incoming organic waste and will be upgraded to accommodate a capacity of 159,000 tonnes per year. A new organics pre-processing building will be constructed with the necessary equipment to receive, temporarily store, and process solid organic material for digestion by removing inert contaminants such as plastic packaging. New digesters will be added to the existing AD facility and thereby a significant increase of biogas production is anticipated. Escarpment Renewables is proposing to build a new renewable natural gas (RNG) upgrading system on Site to produce RNG from the additional biogas generated. The RNG will be compressed and temporarily stored in tube trailers adjacent to the RNG upgrading system for off Site transportation. The proposed Site expansion is shown on Figures 2 and 3.

1.4 Project Timing

Construction is anticipated to commence in Q1 2025 with the procurement of equipment. Construction of the civil works and building is anticipated to begin in Q2 2025 and will last approximately 6-months. The equipment installation is then anticipated to begin in Q1 2026 and is expected to be completed with 6-months. Start up and commissioning is expected to begin in Q2 2026 take an additional 3-months.

2. Decommissioning Requirements and Process

Six months prior to the beginning of the final decommissioning of the Site, the facilities owner will be required to prepare and submit a comprehensive decommissioning plan outlining the owner's plan to restore the project Site to a clean and safe condition, suitable for the likely future use of the land on which it is located. This plan will be more detailed than this report and will lay out all anticipated decommissioning and sequencing activities.

2.1 Preparation, Cleaning, and Disconnecting

Prior to decommissioning, the receipt of feedstock material will be halted. Truck traffic carrying incoming material will be suspended during the decommissioning period. The tip floor will be emptied. All material in the liquid receiving tanks and tip floor will be sent to the digesters. The tip floor, pasteurization system, and the insides of the liquid receiving tanks will be pressure washed. The wash water will be pumped into the secondary digester. The heat to all tanks and pasteurization system will be turned off.

Once the retention time in the digesters has been achieved, and the digestate is pumped to the storage tanks, the interior of the digesters can be pressure washed and the wash water added to the storage tanks. The heat to digesters will also be turned off and the engine can be shut down to cease heat production. All biogas collected will be flared. There are no hazardous substances on Site and the remaining digestate can be sold or given to nearby farms to be field applied. Outgoing trucks carrying digestate will be halted once the Site has completed processing.

All infrastructure to be decommissioned will be adequately prepared, cleaned to a demolition standard and removed of any contaminants.

All electrical and mechanical cables, piping and instrumentation connected to the infrastructure to be decommissioned will be locked out, disconnected, and adequately terminated.

Any utilities required to feed adjacent buildings, not being decommissioned, will be re-routed and reconnect as required.

2.2 Equipment Dismantling and Removal

Any equipment with residual value can be sold and or relocated off Site for reuse. Other custom built equipment containing parts and materials that can be reused will be salvaged. All other components will be disposed of. Piping, ducting, electrical cabling, and similar materials will be recycled where possible. Any equipment which cannot be reused, recycled, or repurposed will be disposed using the appropriate disposal method at the time of decommissioning. Prior to dismantlement and removal of equipment from Site all equipment and process piping will be required to be drained and purged of all process fluids, lubrication oils and hydraulic fluids by a qualified contractor.

Removal of equipment from Site for disposal or recycling will be achieved via trucks with secure and watertight boxes and/or roll-off bins. Truck traffic on Site during the decommissioning period will consist of vehicles collecting material for recycling, reuse, and disposal. This will be intermittent throughout the decommissioning period. However, this should not cause disruptive traffic on the local roads.

2.3 Above Ground Infrastructure

Metal buildings will be removed and recycled, any cladding will be recycled, and the insulation removed and disposed of. Once the equipment from all buildings have been stripped, the building can be demolished. Concrete will be demolished, crushed and all clean concrete will be reused or recycled to the extent possible. Any building material that can be recycled or reused will be.

Prior to the demolition of any building or above ground infrastructure, a qualified contractor will conduct a chemical sweep and collect any chemicals, paints or other hazardous products and prepare them for packaging and removal from Site. In addition, the removal, collection, and handling of universal waste will be carried out by a qualified contractor before the decommissioning work begins. Batteries in safety lights, emergency exit signs and smoke detectors (radioactive) will be recycled. Light bulbs, lamps and light fixtures as well as ballasts will be recovered and arranged according to applicable regulations. Ozone-depleting substances will be removed from any refrigeration equipment prior to disposal (if applicable). Any compressed gas cylinders (if present) will be returned to their supplier. Mercury-containing equipment (i.e., lamps, fixtures and/or thermostats), if present, will also be recovered.

Once the chemical sweep and universal waste removals have been completed industrial cleaning will commence. As part of the decommissioning work any sumps, pits, and any stained concrete slabs will need to be cleaned to a demolition standard. In addition, all process tanks and piping will have to be purged, rinsed, and cleaned prior to removal. This industrial cleaning work will remove and recover solid residues, such as oils, products and other liquids that could be emitted during decommissioning work and transportation for disposal and/or recycling. No liquid will be left in the equipment or the piping that is to be demolished.

Cleaning techniques may include high-pressure, low-volume, steam-powered, grease-free soap or detergent, and other methods. Wash waters from the cleaning operations will be collected in watertight containers and sampled to confirm the appropriate management mode or transported directly to a vacuum truck and disposed of at an authorized location

Removal of buildings and infrastructure will likely occur through the use of heavy construction machinery equipped with demolition attachments such as grapples, shears, hydraulic hammers and demolition buckets. Smaller equipment such as skid steers, bobcats and loaders will be used to sort and load demolition debris.

The Site security fence will be removed and reused. Note that silt fencing installed prior to decommissioning should not be removed. Any other Site features such as landscaping and horticulture that are required to be removed in order to complete the decommissioning will be restored following construction.

3. Site Restoration

Once the infrastructure and equipment on Site has been removed, the Site will be graded back to its original grade. As no materials are needed to be removed from the Site for construction, all of the native material will remain available for regrading. Once construction is complete the Site will be regraded, landscaped and restored.

No impact on ground or surface water is anticipated.

4. Managing Excess Materials and Waste

Any demolition debris resulting from the decommissioning works will be segregated by type and any debris that can be recycled or has residual value will be recovered for reuse. Any debris that cannot be reused or recycled will be disposed of in the appropriate manner consistent with the requirements in place at the time. As part of the technical specifications that will be prepared prior to demolition, the demolition contractor will be required to prepare a waste management plan that meets the regulatory requirements in place at that time. Waste will be required to be transported to licensed facilities authorized to receive the waste and proof of final disposal at such facilities would be required.

There are no known hazardous materials or other wastes on the Site requiring hazardous waste management. Materials will be removed from Site by truck.

5. Emergency Response and Communications Plan

Before demolition begins, the contractor must provide a Communications and Emergency Response Plan that will include the following:

1. Identification of potential hazards on Site that may be encountered during demolition
2. Emergency telephone numbers including police, fire, and medical response services
3. Emergency procedures for spills, fire, or personal injury including the contact information for the Spills Action Centre
4. Identification of the primary person responsible for responding to an emergency

6. Health and Safety

The works shall be conducted in accordance with the Occupational Health and Safety Regulations in affect at the time of demolition. The demolition contractor will be expected to provide all measures required by regulations and local bylaws to ensure the safety of the premises, and for workers, Site operations staff and the general public. In addition, prior to being permitted to commence decommissioning works the contractor would be required to submit a detailed Decommissioning Plan, prepared by a professional engineer licensed to practice in the Province of Ontario, complete with sealed drawings, safe work practices, and decommissioning means and methods proposed to complete the works.

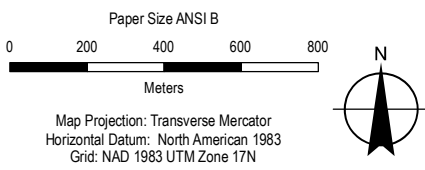
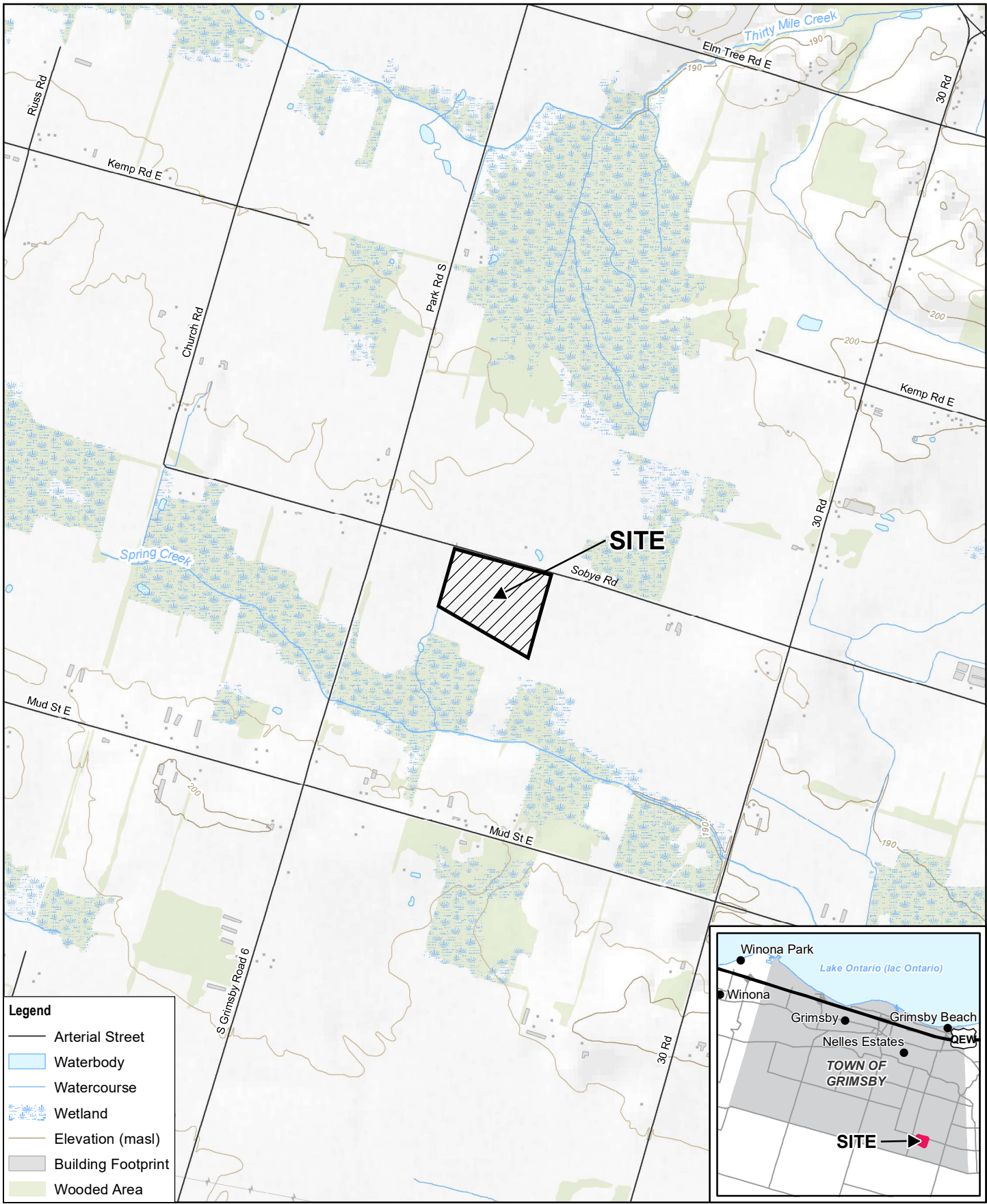
7. Decommissioning Notification

The contractor must acquire a demolition permit from the Municipality and notify the Ministry of the Environment, Conservation and Parks (MECP) of its plans. Notification of the decommissioning will be provided by the owners of the facility to the municipality. Notification will be provided to the local MECP District Office and the Director of the Environmental Approvals Branch.

8. Other Approvals

No other approvals are required for the above noted decommissioning at the Site.

Figures

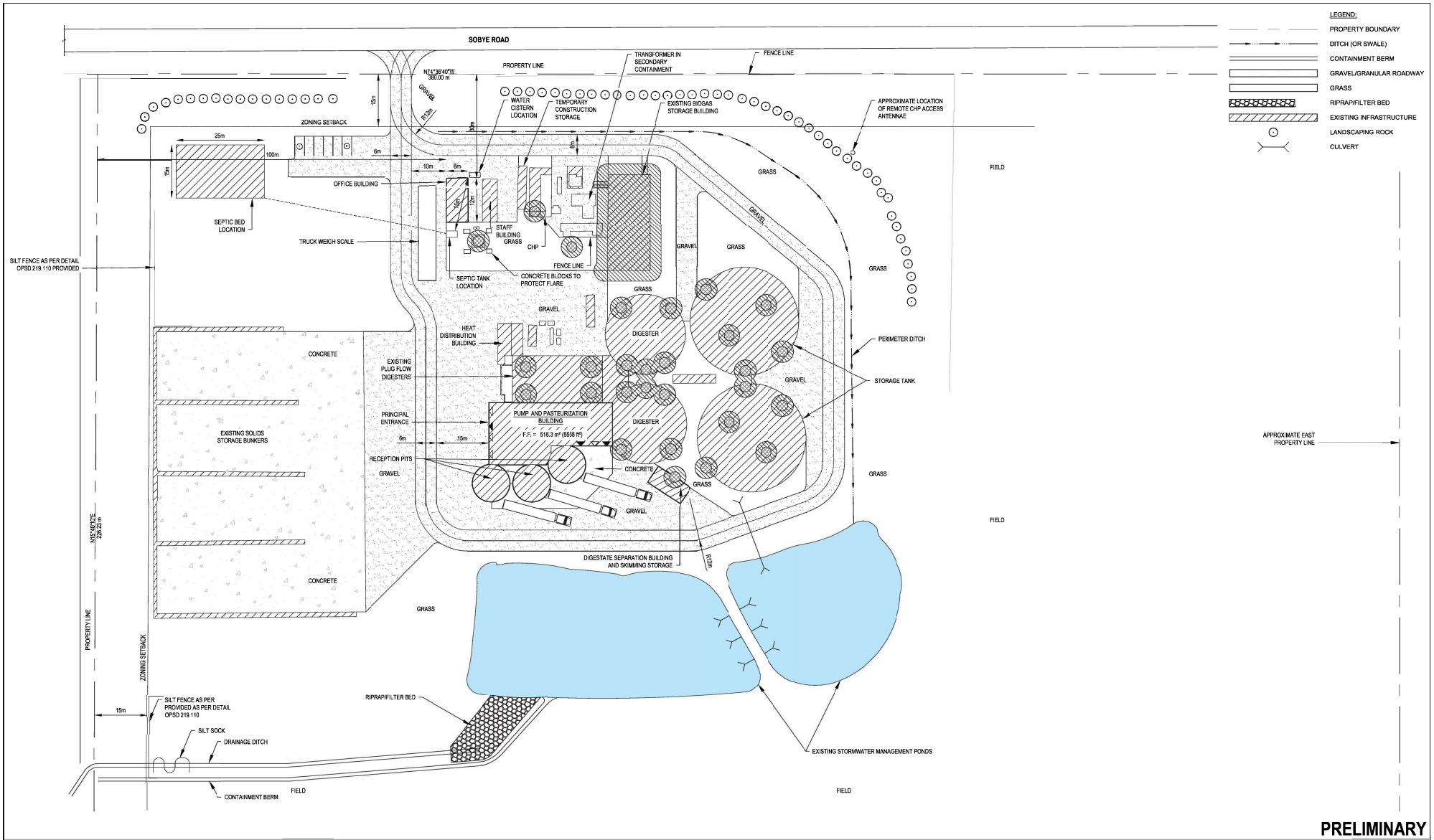


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Project No. 11226032
Date Jun 9, 2021

SITE LOCATION MAP

FIGURE 1



PRELIMINARY

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Client	ESCARPMENT RENEWABLES
Project	ESCARPMENT RENEWABLE ENERGY APPROVAL AMENDMENT
Project No.	11226032
Date	2022-01-17
Scale	1:500

Title	EXISTING CONDITIONS
Sheet No.	FIGURE 2

