



Master Municipal Construction Documents 2019 Edition

# **REQUEST FOR TENDER**

## **Ootischenia Landfill Septage Facility Upgrades**

Reference No. PRJ26014

Unit Price Contract

Issue Date: October 1, 2026

Issued By: Regional District of Central Kootenay

Owner: Regional District of Central Kootenay  
Contract: Ootischenia Landfill Septage Facility Upgrades  
Reference No. PRJ26014

- The Owner invites Tenders for:** Construction of upgrades at the Ootischenia Landfill Septage Facility (Site), which include the following tasks:
- Clear, grub, and prepare the Site for the Works
  - Excavate and Remove organic / septage residuals from existing ponds, haul and stockpile onsite
  - Excavate, Load, Haul, Place, Shape, and Compact Clean Fill to Design Contours (Clean Fill to be sourced on Site)
  - Construct septage ponds, effluent drainage ditching, and conveyance piping
  - Construct unarmoured surface water ditching
  - Supply and install 19 mm minus crushed gravel
  - Supply and install 25 to 75 mm crushed gravel
  - Supply and install high-strength woven geotextile
  - Remove existing fencing to the south
  - Supply and install new electrical fencing to the south
  - Supply and Install Concrete Barriers

**The Contract Documents are available online through the following platforms:**

BC Bid Tendering Website: <http://www.bcbid.gov.bc.ca/>

RDCK Website: <https://www.rdck.ca/corporate/bids-tenders/>

It is the Tenderer's sole responsibility to check for and obtain any addenda issued prior to the closure of the tender period.

**Tenders are scheduled to close as follows:**

Deadline for Questions: October 22, 2026

Tender Closing Time: 2:00 pm local time

Tender Closing Date: October 29, 2026

Submission Requirements: Email submission to [tenders@rdck.bc.ca](mailto:tenders@rdck.bc.ca) and  
CC: [aevenson@rdck.bc.ca](mailto:aevenson@rdck.bc.ca)

**Name of Owner's Representative:** Scott Garthwaite  
Sperling Hansen Associates (Contract Administrator)  
[sgarthwaite@sperlinghansen.com](mailto:sgarthwaite@sperlinghansen.com)  
604-803-7120

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TO BE READ WITH 'INSTRUCTIONS TO TENDERERS – PART II'  
CONTAINED IN THE EDITION OF THE PUBLICATION  
“MASTER MUNICIPAL CONSTRUCTION DOCUMENTS” SPECIFIED IN ARTICLE 2.2 BELOW

**Owner:** Regional District of Central Kootenay  
**Contract:** Ootischenia Landfill Septage Facility Upgrades  
**Reference No.** PRJ26014

- 1.0 Introduction**
- 1.1 These Instructions apply to and govern the preparation of tenders for this *Contract*. The *Contract* is generally for the following work:
- Clear, grub, and prepare the Site for the Works
  - Excavate and remove organic / septage residuals from existing ponds, haul and stockpile onsite
  - Excavate, Load, Haul, Place, Shape, and Compact Clean Fill to Design Contours (Clean Fill to be sourced on Site)
  - Construct septage ponds, effluent drainage ditching, and conveyance piping
  - Construct unarmoured surface water ditching
  - Supply and install 19 mm minus crushed gravel
  - Supply and install 25 to 75 mm crushed gravel
  - Supply and install high-strength woven geotextile
  - Remove existing fencing to the south
  - Supply and install new electrical fencing to the south
  - Supply and Install Concrete Barriers
- 1.2 Direct all inquiries regarding the Contract to:
- Sperling Hansen Associates**  
Scott Garthwaite  
[sgarthwaite@sperlinghansen.com](mailto:sgarthwaite@sperlinghansen.com)  
604-803-7120
- Regional District of Central Kootenay**  
AJ Evenson  
[aevenson@rdck.bc.ca](mailto:aevenson@rdck.bc.ca)
- 2.0 Tender Documents**
- 2.1 The tender documents which a tenderer should review to prepare a tender consist of all of the *Contract Documents* listed in Schedule 1 entitled “Schedule of Contract Documents”. Schedule 1 is attached to the Agreement which is included as part of the tender package. The *Contract Documents* include the drawings listed in Schedule 2 to the Agreement, entitled “List of *Contract Drawings*”.
- 2.2 A portion of the *Contract Documents* are included by reference. Copies of these documents have not been included with the tender package. These documents are the Instructions to Tenderers - Part II,

General Conditions, Specifications and Standard Detail Drawings. They are those contained in the publication entitled “Master Municipal Construction Documents - General Conditions, Specifications and Standard Detail Drawings”. Refer to Schedule 1 to the Agreement or, if not specified in Schedule 1, then the applicable edition shall be the most recent edition as of the date of the *Tender Closing Date*. All sections of this publication are by reference included in the *Contract Documents*.

- 2.3 Any additional information made available to tenderers prior to the *Tender Closing Time* by the *Owner* or representative of the *Owner*, such as geotechnical reports or as-built plans, which is not expressly included in Schedule 1 or Schedule 2 to the Agreement, is not included in the *Contract Documents*. Such additional information is made available only for the assistance of tenderers who must make their own judgment about its reliability, accuracy, completeness and relevance to the *Contract*, and neither the *Owner* nor any representative of the *Owner* gives any guarantee or representation that the additional information is reliable, accurate, complete or relevant.

**3.0 Submission  
of Tenders**

- 3.1 Tenders must be submitted by email to [tenders@rdck.bc.ca](mailto:tenders@rdck.bc.ca) (CC [aevenson@rdck.bc.ca](mailto:aevenson@rdck.bc.ca)). Submissions must be received by:

**Regional District of Central Kootenay**

on or before:

**Tender Closing Time:** 2:00 pm local time

**Tender Closing Date:** October 29, 2026

- 3.2 Late tender submissions will not be accepted or considered and will not be opened.
- 3.3 Failure by the tenderer to acknowledge all addenda may be cause for their tender to be rejected.
- 3.4 Questions will not be accepted or answered 48 hours prior to the Closing Date and Time.

**4.0 Additional  
Instructions  
to Tenderers**

**4.1 Pre-Tender Meeting**

An optional pre-tender site meeting will be held at the Project Site. Interested parties are asked to RSVP via email to [aevenson@rdck.bc.ca](mailto:aevenson@rdck.bc.ca). Attendees must wear appropriate personal protective equipment, including steel-toed footwear and high visibility clothing.

**Project Site:** Ootischenia Landfill - 616 Columbia Rd, Castlegar, BC

**Meeting Date & Time:** October 15, 2026 @ 10:30 am local time

- 4.2 Tenderers are highly encouraged to prepare the Schedule of Quantities and Prices in close consultation with “Technical Specification 01 20 00 - Measurement and Payment”, as this chapter provides details on the exact scope of work included with each item.

**Owner:** Regional District of Central Kootenay  
**Contract:** Ootischenia Landfill Septage Facility Upgrades  
**Reference No.** PRJ26014

**To Owner:**

**1.0 WE, THE  
UNDERSIGNED:**

1.1 Have received and carefully reviewed all of the Contract Documents, including the Instructions to Tenderers, the specified edition of the “Master Municipal Construction Documents – General Conditions, Specifications and Standard Detail Drawings”, and the following Addenda:

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**2.0 ACCORDINGLY  
WE HEREBY  
OFFER:**

1.2 Have full knowledge of the *Place of Work*, and the *Work* required; and

1.3 Have complied with the Instructions to Tenderers; and

2.1 To perform and complete all of the *Work* and to provide all the labour, equipment, and material all as set out in the *Contract Documents*, in strict compliance with the *Contract Documents*; and

2.2 To achieve Substantial Performance of the Work on or before June 30, 2027; and

2.3 To do the *Work* for the price, which is the sum of the products of the actual quantities incorporated into the *Work* and the appropriate unit prices set out in Appendix 1, the “*Schedule of Quantities and Prices*”, plus any lump sums or specific prices and adjustment amounts as provided by the *Contract Documents*. For the purposes of tender comparison, our offer is to complete the *Work* for the “*Tender Price*” as set out on Appendix 1 of this Form of Tender. Our *Tender Price* is based on the estimated quantities listed in the *Schedule of Quantities and Prices*, and excludes GST.

**3.0 WE CONFIRM:**

3.1 that we understand and agree that the quantities as listed in the *Schedule of Quantities and Prices* are estimated, and that the actual quantities will vary.

**4.0 WE CONFIRM:**

4.1 that the following appendices are attached to and form a part of this tender:

4.1.1 the appendices as required by paragraph 5.3 of the Instructions to Tenderers – Part II; and

4.1.2 the *Bid Security* as required by paragraph 5.2 of the Instructions to Tenderers – Part II.

**5.0 WE AGREE:**

5.1 That this tender will be irrevocable and open for acceptance by the *Owner* for a period of 60 calendar days from the day following the *Tender Closing Date and Time*, even if the tender of another tenderer is accepted by the *Owner*. If within this period the *Owner* delivers a written notice (“*Notice of Award*”) by which the *Owner* accepts our tender we will:

5.1.1 Within 15 *Days* of receipt of the written *Notice of Award* deliver to the *Owner*:

- .1 a Performance Bond and a Labour and Material Payment Bond, each in the amount of 50% of the Contract Price, covering the performance of the Work including the Contractor’s obligations during the Maintenance Period, issued by a surety licensed to carry on the business of suretyship in the province of British Columbia, and in a form acceptable to the *Owner*;
- .2 a Baseline Construction Schedule, as provided by GC 4.6.1;
- .3 a “clearance letter” indicating that the tenderer is in Worksafe BC compliance; and
- .4 a copy of the insurance policies as specified in GC 24 indicating that all such insurance coverage is in place and;

5.1.2 within 2 *Days* of receipt of written “*Notice to Proceed*”, or such longer time as may be otherwise specified in the *Notice to Proceed*, commence the *Work*; and

5.1.3 sign the Contract Documents as required by GC 2.1.2.

**6.0 WE AGREE:**

6.1 That, if we receive written *Notice of Award* of this *Contract* and, contrary to paragraph 5 of this Form of Tender, we:

6.1.1 Fail or refuse to commence the *Work* as required by the *Notice to Proceed*,

Then such failure or refusal will be deemed to be a refusal by us to enter into the *Contract* and the *Owner* may, on written notice to us, award the *Contract* to another party. We further agree that, as full compensation on account of damages suffered by the *Owner* because of such failure or refusal, the *Bid Security* shall be forfeited to the *Owner*, in an amount equal to the lesser of:

6.1.2 The face value of the *Bid Security*; and

6.1.3 The amount by which our *Tender Price* is less than the amount for which the *Owner* contracts with another party to perform the *Work*.

**7.0 OUR ADDRESS IS  
AS FOLLOWS:**

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Phone: \_\_\_\_\_  
Email: \_\_\_\_\_  
Attention: \_\_\_\_\_

This Tender is executed this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_

*Contractor:*

\_\_\_\_\_  
(FULL LEGAL NAME OF CORPORATION, PARTNERSHIP, OR INDIVIDUAL)

\_\_\_\_\_  
(AUTHORIZED SIGNATORY)

\_\_\_\_\_  
(AUTHORIZED SIGNATORY)

**BETWEEN OWNER AND CONTRACTOR**

This agreement made in duplicate this  
\_\_\_\_\_ day of \_\_\_\_\_, 20\_\_.

**Contract:** Ootischenia Landfill Septage Facility Upgrades

**Reference No.** PRJ26014

BETWEEN:

Regional District of Central Kootenay

\_\_\_\_\_  
(the "Owner")

AND:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
(NAME AND ADDRESS OF CONTRACTOR)

(the "Contractor")

**The Owner and the Contractor agree as follows:**

**Article 1    The Work  
Start/  
Completion  
Dates**

- 1.1    The *Contractor* will perform all *Work* and provide all labour, equipment and material and do all things strictly as required by the *Contract Documents*.
- 1.2    The *Contractor* will commence the *Work* in accordance with the *Notice to Proceed*. The *Contractor* will proceed with the *Work* diligently, will perform the *Work* generally in accordance with the construction schedules as required by the *Contract Documents* and will achieve *Substantial Performance* of the *Work* on or before June 30, 2026 subject to the provisions of the *Contract Documents* for adjustments to the *Contract Time*.
- 1.3    Time shall be of the essence of the *Contract*.

**Article 2    Contract  
Documents**

- 2.1    The "*Contract Documents*" consist of the documents listed or referred to in Schedule 1, entitled "Schedule of *Contract*

*Documents*”, which is attached and forms a part of this Agreement, and includes any and all additional and amending documents issued in accordance with the provisions of the *Contract Documents*. All of the *Contract Documents* shall constitute the entire Contract between the Owner and the Contractor.

2.2 The *Contract* supersedes all prior negotiations, representations or agreements, whether written or oral, and the *Contract* may be amended only in strict accordance with the provisions of the *Contract Documents*.

**Article 3    Contract Price**

3.1 The price for the Work (“*Contract Price*”) shall be the sum in Canadian dollars of the following:

3.1.1 The product of the actual quantities of the items of *Work* listed in the *Schedule of Quantities and Prices* which are incorporated into or made necessary by the *Work* and the unit prices listed in the *Schedule of Quantities and Prices*; plus

3.1.2 All lump sums, if any, as listed in the *Schedule of Quantities and Prices*, for items relating to or incorporated into the *Work*; plus

3.1.3 Any adjustments, including any payments owing on account of *Changes* and agreed to *Extra Work*, approved in accordance with the provisions of the *Contract Documents*.

3.2 The *Contract Price* shall be the entire compensation owing to the *Contractor* for the *Work* and this compensation shall cover and include all profit and all costs of supervision, labour, material, equipment, overhead, financing, and all other costs and expenses whatsoever incurred in performing the *Work*.

**Article 4    Payment**

4.1 Subject to applicable legislation and the provisions of the *Contract Documents*, the *Owner* shall make payments to the *Contractor*.

4.2 If the *Owner* fails to make payments to the *Contractor* as they become due in accordance with the terms of the *Contract Documents* then interest calculated at 2% per annum over the prime commercial lending rate of the Royal Bank of Canada on such unpaid amounts shall also become due and payable until payment. Such interest shall be calculated and added to any unpaid amounts monthly.

**Article 5    Rights and Remedies**

5.1 The duties and obligations imposed by the *Contract Documents* and the rights and remedies available thereunder shall be in addition to and not a limitation of any duties, obligations, rights and remedies otherwise imposed or available by law.

5.2 Except as specifically set out in the *Contract Documents*, no action or failure to act by the *Owner*, *Contract Administrator* or *Contractor* shall constitute a waiver of any of the parties' rights or duties afforded under the *Contract*, nor shall any such action or failure to act constitute an approval of or acquiescence in any breach under the *Contract*.

**Article 6 Notices**

6.1 Communications among the *Owner*, the *Contract Administrator* and the *Contractor*, including all written notices required by the *Contract Documents*, may be delivered by hand, or by email, or by pre-paid registered mail to the addresses as set out below:

**The Owner:**

Regional District of Central Kootenay

202 Lakeside Dr, Nelson, BC V1L 6B9

Attention: AJ Evenson

Email: [aevenson@rdck.bc.ca](mailto:aevenson@rdck.bc.ca)

**The Contractor:**

Attention:

Email:

**The Contract Administrator:**

Sperling Hansen Associates

1332 McGill R, Kamloops, BC V2C 6N6

Attention: Scott Garthwaite

Email: [sgarthwaite@sperlinghansen.com](mailto:sgarthwaite@sperlinghansen.com)

6.2 A communication or notice that is addressed as above shall be considered to have been received

6.2.1 Immediately upon delivery, if delivered by hand; or

6.2.2 Immediately upon delivery if sent by email; or

6.2.3 After 5 Days from date of posting if sent by registered mail.

6.3 The *Owner* or the *Contractor* may, at any time, change its address for notice by giving written notice to the other at the address then applicable. Similarly if the *Contract Administrator* changes its address for notice then the *Owner* will give or cause to be given written notice to the *Contractor*.

6.4 The sender of a notice by email assumes all risk that the email is received by the recipient.

**Article 7 General**

7.1 This *Contract* shall be construed according to the laws of British Columbia.

7.2 The *Contractor* shall not, without the express written consent of the *Owner*, assign this *Contract*, or any portion of this *Contract*.

7.3 The headings included in the *Contract Documents* are for convenience only and do not form part of this Contract and will not be used to interpret, define or limit the scope or intent of this *Contract* or any of the provisions of the *Contract Documents*.

7.4 A word in the *Contract Documents* in the singular includes the plural and, in each case, the singular.

7.5 This agreement shall ensure to the benefit of and be binding upon the parties and their successors, executors, administrators, and assigns.

IN WITNESS WHEREOF the parties hereto have executed this Agreement the day and year first written above.

*Contractor:*

\_\_\_\_\_  
(FULL LEGAL NAME OF CORPORATION, PARTNERSHIP, OR INDIVIDUAL)

\_\_\_\_\_  
(AUTHORIZED SIGNATORY)

\_\_\_\_\_  
(AUTHORIZED SIGNATORY)

*Owner:*

Regional District of Central Kootenay

\_\_\_\_\_  
(FULL LEGAL NAME OF CORPORATION, PARTNERSHIP, OR INDIVIDUAL)

\_\_\_\_\_  
(AUTHORIZED SIGNATORY)

\_\_\_\_\_  
(AUTHORIZED SIGNATORY)

**Schedule 1**   **Schedule of  
Contract  
Documents**

The following is an exact and complete list of the *Contract Documents*, as referred to in Article 2.1 of the Agreement.

**NOTE:** The documents noted with “\*” are contained in the “Master Municipal Construction Documents – General Conditions, Specifications and Standard Detail Drawings”, edition dated 2019. All sections of this publication are included in the *Contract Documents*.

1.1 Agreement, including all Schedules;

Schedule 1: Schedule of Contract Documents

Schedule 2: List of Contract Drawings

1.2 Supplementary General Conditions, as attached;

1.3 General Conditions\*;

1.4 Supplementary Specification, as attached;

1.5 Specifications\*;

1.6 Supplementary Standard Detail;

1.7 Standard Detail Drawings\*;

1.8 Executed Form of Tender, including all Appendices

1.9 *Contract Documents* listed in *Schedule 2 to the Agreement – “List of Contract Drawings”*;

1.10 Instructions to Tenderers – Part I;

1.11 Instructions to Tenderers – Part II\*;

1.12 The following Addenda:

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(ADDENDA, IF ANY)

**Schedule 2      List of Contract  
Drawings**

| TITLE                                                 | DRAWING NO. | REV |
|-------------------------------------------------------|-------------|-----|
| COVER SHEET AND LIST OF DRAWINGS                      | 26057-000   | B   |
| EXISTING TOPOGRAPHY AND SITE FEATURES                 | 26057-001   | B   |
| ORGANIC REMOVAL DESIGN CONTOURS                       | 26057-100   | B   |
| ORGANIC REMOVAL DESIGN EARTHWORKS                     | 26057-101   | B   |
| ORGANIC REMOVAL BACKFILL DESIGN CONTOURS              | 26057-102   | B   |
| ORGANIC REMOVAL BACKFILL DESIGN EARTHWORKS & CUT-FILL | 26057-103   | B   |
| SEPTAGE FACILITY DESIGN SUBGRADE                      | 26057-104   | B   |
| SEPTAGE FACILITY DESIGN SUBGRADE EARTHWORKS           | 26057-105   | B   |
| SEPTAGE AND SURFACE WATER MANAGEMENT PLAN             | 26057-200   | B   |
| DETAILS                                               | 26057-201   | B   |

| Ootischenia Landfill Septage Facility Upgrades - Schedule of Quantities and Prices |                                                                                                                                                  |          |                |            |        |
|------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|----------|----------------|------------|--------|
| Item                                                                               | Description                                                                                                                                      | Quantity | Unit           | Unit Price | Amount |
| 1                                                                                  | General Requirements                                                                                                                             |          |                |            |        |
| 1.01                                                                               | Mobilization & Demobilization                                                                                                                    | 1        | LS             |            | \$ -   |
| 1.02                                                                               | Performance, Labour, and Materials Bonds                                                                                                         | 1        | LS             |            | \$ -   |
| 1.03                                                                               | Insurance                                                                                                                                        | 1        | LS             |            | \$ -   |
| 1.04                                                                               | Health and Safety                                                                                                                                | 1        | LS             |            | \$ -   |
| 1.05                                                                               | Survey, Materials Testing, Submittals, and Record Drawings                                                                                       | 1        | LS             |            | \$ -   |
|                                                                                    | Subtotal                                                                                                                                         |          |                |            | \$ -   |
| 2                                                                                  | Earthworks and Septage/Surface Water Management                                                                                                  |          |                |            |        |
| 2.01                                                                               | Clearing and Grubbing and Vegetation Removal                                                                                                     | 3,000    | m <sup>2</sup> |            | \$ -   |
| 2.02                                                                               | Organics Removal - Excavate Existing Organics in Place                                                                                           | 4,000    | m <sup>3</sup> |            | \$ -   |
| 2.03                                                                               | Organics Removal Backfill - Excavate, Load, Haul, Place, Shape and Compact Clean Fill to Design Contours (Clean Fill sourced on site)            | 8,000    | m <sup>3</sup> |            | \$ -   |
| 2.04                                                                               | Septage Facility Subgrade Earthworks - Excavate, Load, Haul, Place, Shape and Compact Clean Fill to Design Subgrade (Clean Fill sourced on site) | 3,000    | m <sup>3</sup> |            | \$ -   |
| 2.05                                                                               | Supply and Install 300 mm dia. HDPE DR17 Solid Septage Conveyance Pipe                                                                           | 24       | m              |            | \$ -   |
| 2.06                                                                               | Construct Surface Water Run-On Ditching Along Southern Slope and North Side of Septage Facility                                                  | 370      | m              |            | \$ -   |
|                                                                                    | Subtotal                                                                                                                                         |          |                |            | \$ -   |
| 3                                                                                  | Roads and Site Improvements                                                                                                                      |          |                |            |        |
| 3.01                                                                               | Perimeter Gravel Road Construction                                                                                                               |          |                |            |        |
|                                                                                    | a) Supply and Install 19 mm Minus Crushed Gravel (100 mm thickness)                                                                              | 3,275    | m <sup>2</sup> |            |        |
|                                                                                    | b) Supply and Install 25 to 75 mm Crushed Gravel (300 mm thickness)                                                                              | 3,275    | m <sup>2</sup> |            | \$ -   |
|                                                                                    | c) Supply and Install High-Strength Woven Geotextile Liner                                                                                       | 3,275    | m <sup>2</sup> |            | \$ -   |
| 3.02                                                                               | Remove and Dispose of Existing Fence to the South (may be disposed in the Ootschenia Landfill)                                                   | 220      | m              |            | \$ -   |
| 3.03                                                                               | Install New Electric Fence to the South (incl. all wires, posts, staples, insulators, testing, etc.)                                             | 220      | m              |            | \$ -   |
|                                                                                    | Subtotal                                                                                                                                         |          |                |            | \$ -   |
| 4                                                                                  | Concrete                                                                                                                                         |          |                |            |        |
| 4.01                                                                               | Supply and Install Concrete Barriers at Septage Receiving Area                                                                                   |          |                |            |        |
|                                                                                    | a) No Post Barriers                                                                                                                              | 8        | Each           |            | \$ -   |
|                                                                                    | b) Lock Block Barriers (1500 mm x 750 mm x 750 mm) - Space 1500 mm apart                                                                         | 23       | Each           |            | \$ -   |
|                                                                                    | c) Supply and Install SS Chain Connections Between No Post Barriers                                                                              | 4        | Each           |            | \$ -   |
|                                                                                    | Subtotal                                                                                                                                         |          |                |            | \$ -   |
|                                                                                    | Grand Total (excl. GST)                                                                                                                          |          |                |            | \$ -   |



**Contract:** Ootischenia Landfill Septage Facility Upgrades

See paragraph 5.3.3 of the Instructions to Tenderers – Part II.

*Superintendent Name:* \_\_\_\_\_

*Superintendent Experience:*

**Project Name:** \_\_\_\_\_

Dates: \_\_\_\_\_

Responsibility: \_\_\_\_\_

Reference: \_\_\_\_\_

Phone/Email: \_\_\_\_\_

**Project Name:** \_\_\_\_\_

Dates: \_\_\_\_\_

Responsibility: \_\_\_\_\_

Reference: \_\_\_\_\_

Phone/Email: \_\_\_\_\_

**Project Name:** \_\_\_\_\_

Dates: \_\_\_\_\_

Responsibility: \_\_\_\_\_

Reference: \_\_\_\_\_

Phone/Email: \_\_\_\_\_

**APPENDIX 4**  
**COMPARABLE WORK EXPERIENCE**

**Contract:** Ootischenia Landfill Septage Facility Upgrades

See paragraph 5.3.4 of the Instructions to Tenderers – Part II.

|                                                                    |                             |
|--------------------------------------------------------------------|-----------------------------|
| <b>Project:</b>                                                    | <b>Value: \$</b>            |
| <b>Contact:</b><br><br>Name: _____<br>Phone: _____<br>Email: _____ | <b>Description of Work:</b> |
| <b>Project:</b>                                                    | <b>Value: \$</b>            |
| <b>Contact:</b><br><br>Name: _____<br>Phone: _____<br>Email: _____ | <b>Description of Work:</b> |
| <b>Project:</b>                                                    | <b>Value: \$</b>            |
| <b>Contact:</b><br><br>Name: _____<br>Phone: _____<br>Email: _____ | <b>Description of Work:</b> |
| <b>Project:</b>                                                    | <b>Value: \$</b>            |
| <b>Contact:</b><br><br>Name: _____<br>Phone: _____<br>Email: _____ | <b>Description of Work:</b> |

**APPENDIX 5**  
**SUBCONTRACTORS**

**Contract:** Ootischenia Landfill Septage Facility Upgrades

See paragraph 5.3.5 of the Instructions to Tenderers – Part II.

| TENDER ITEM | TRADE | COMPANY NAME | CONTACT                                     |
|-------------|-------|--------------|---------------------------------------------|
|             |       |              | Name: _____<br>Email: _____<br>Phone: _____ |
|             |       |              | Name: _____<br>Email: _____<br>Phone: _____ |
|             |       |              | Name: _____<br>Email: _____<br>Phone: _____ |
|             |       |              | Name: _____<br>Email: _____<br>Phone: _____ |

## SUPPLEMENTARY GENERAL CONDITIONS

The General Conditions for this project are contained in the Master Municipal Construction Documents (MMCD) 2019 Edition, except as specified in the following Supplementary General Conditions and MMCD Supplemental Updates (as specified in Schedule 1 of the Form of Agreement). These Supplementary Conditions take precedence over the applicable MMCD General Conditions.

**Owner:** Regional District of Central Kootenay

**Contract:** Ootischenia Landfill Septage Facility Upgrades

**Reference No:** PRJ26014

### SGC 27.0 MEASUREMENT AND PAYMENT

#### 27.1 VARIANCE THRESHOLD PERCENTAGE

- 1) GC 1.76.1 is amended to be as follows: "Variance Threshold Percentage means **a variance of 25%** between the quantity of a unit price item actually constructed or provided by the time of Total Performance and the quantity shown on the tendered Schedule of Quantities and Prices for that item."

### SGC 28.0 MATERIALS TESTING

#### 28.1 MATERIALS TESTING

- 1) The Contractor shall hire a third-party materials tester at their own cost to perform all materials testing, inspections, and approvals of the Work necessary for Quality Assurance and Quality Control to ensure materials, products, and workmanship are in strict conformance with the Contract Documents. The Contractor shall provide the results of such tests, inspections, and approvals to the Contract Administrator upon request.
- 2) GC 4.12.6 – Add the following paragraph: "In all cases, the Contractor is responsible to facilitate and provide access to all Works for the purpose of inspection and testing."

### SGC 29.0 DELAYS

#### 29.1 LIQUIDATED DAMAGES FOR LATE COMPLETION

- 1) GC 13.9.1(1) is amended to be as follows: "as a genuine pre-estimate of the Owner's increased costs for the Contract Administrator and the Owner's own staff caused by such delay an amount of **\$1,000.00 per day** or pro rata portion for each Day that actual Substantial Performance is achieved after the Substantial Performance Milestone Date; plus".

### SGC 30.0 PAYMENT

#### 30.1 HOLDBACKS

- 1) GC 18.4.2 – Add the following paragraph: “The Contractor will repair any defects or deficiencies within 10 working days after the date of written notification by the Contract Administrator. If the defects or deficiencies, or any part thereof, are not repaired within 10 working days of written notification from the Owner, the Owner may draw funds from the deficiency holdback and the Owner may complete the work at the expense of the Contractor. All costs pertaining to the repair, including the Owner’s administration costs, shall be deducted from the deficiency holdback. It is understood and agreed that the Owner may do such work either by itself, or by contractors employed by the Owner.”

### 30.2 PAYMENT

- 1) GC 18.5.1 – Delete the words “15th Day” and replace with the words “30th Day”.
- 2) The Contractor shall be responsible to accurately record, and prove, by use of accepted survey records and measurements, that all claimed quantities have been complete, and conform with all contractual requirements.
- 3) With every monthly application for payment, the Contractor shall submit all relevant survey records for the current Progress Claim and a master survey record summary for all completed Work, in a form acceptable to the Contract Administrator. Failing to provide such records could invalidate the Progress Claim and payment may not be considered.

### 30.3 SUBSTANTIAL PERFORMANCE

- 1) GC 18.6.1 – Delete the words “written application” and replace with the words “written application, in accordance with the provision of GC 18.6.3”.
- 2) GC 18.6.4 is amended to be as follows: “The Contract Administrator shall include the date of Substantial Performance in the Certificate of Substantial Performance. The date for Total Performance shall be **10 calendar days** after the date of Substantial Performance unless otherwise agreed by the Contract Administrator.”
- 3) GC 18.6.5 – Add the following paragraph: “The Contract Administrator shall prepare a Payment Certificate for the release of the lien holdback and the amount shall be due and payable in accordance with GC 18.5.1.”

### 30.4 TOTAL PERFORMANCE

- 1) GC 18.7.4 – Add the following paragraph: “If Total Performance is not achieved on the date as outlined in GC 18.6.4, upon written notification, the Owner may complete or cause to be completed any and all outstanding deficiencies. All resulting costs incurred by the Owner in completing the Work, including administration and inspection costs, will be deducted from the amounts owing by the Owner to the Contractor.”

### 30.5 QUANTITY VARIATIONS

- 1) The unit rates set out in the Schedule of Quantities and Prices shall be considered fixed unless the "Variance Threshold Percentage" is exceeded.

### 30.6 BUDGET CONSTRAINTS

- 1) The Owner has a capital budget for this project and intends to remain within the budget. As such, the Owner reserves the right to reduce or extend the scope of work as required at the unit rates tendered and without penalty. The Owner in its sole discretion will decide on additions or deletions to the Scope of Work.

## SGC 31.0 BONDING AND INSURANCE REQUIREMENTS

### 31.1 BONDING

- 1) The Contractor may provide, in lieu of the specified Performance and Labour and Materials Bonds, security for performance of the Contract in the form of a certified cheque or bank draft for 10% of the Contract Price and:
  - (a) The certified cheque or bank draft shall be in favour of the Regional District of Central Kootenay;
  - (b) The certified cheque or bank draft will be deposited and the monies will not be returned to the Contractor, in whole or in part, until satisfactory performance of all of the Contractor's obligations under the Contract; and
  - (c) Provided the Contractor has satisfactorily fulfilled all of its obligations under the Contract, the Owner will return to the Contractor 75% of the monies provided as Contract Security without interest, no later than 30 days after Substantial Performance of the Work. The remaining 25% will be returned to the Contractor one year after Substantial Performance of the Work subject to no deficiencies being identified at the One Year Warranty Inspection.
- 2) OR The Contractor may provide, in lieu of the specified Bonds or the specified certified cheque or bank draft, security for the performance of the Contract in the form of an irrevocable bank letter of credit for 10% of the Contract Price; and:
  - (a) The letter of credit shall be in favour of the Regional District of Central Kootenay;
  - (b) The letter of credit shall have an expiry date no earlier than 24 months from the date of the tender close;
  - (c) The letter of credit will not be returned to the Contractor until satisfactory performance of all of the Contractor's obligations under the Contract; and
  - (d) Provided the Contractor has satisfactorily fulfilled all of its obligations under the Contract, the Owner will return the letter of credit to the Contractor one year after Substantial Performance of the Work subject to no deficiencies being identified at the One Year Warranty Inspection.

### 31.2 REQUIRED INSURANCE

Remove GC 24.1 INSURANCE and replace entirely:

- 1) Without restricting the generality of the indemnification provisions of this Agreement, insurance and coverage will be arranged and paid for as under-noted:
- 2) The Contractor must take out and maintain the insurance coverages detailed in this section 31 and shall provide the Owner evidence of coverage upon execution of this Agreement in the following format:
  - (a) an ICBC form APV 47; and
  - (b) the Owner's Standard Certificate of Insurance form completed by the Contractor's broker.

| COVERAGE TYPE                                                                                   | MINIMUM AMOUNT                                                                                     | MINIMUM AGGREGATE | DEDUCTIBLE MAXIMUM |
|-------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------|-------------------|--------------------|
| <b>Automobile Liability (third party) Insurance</b> for vehicles used to complete the Services. | \$5,000,000 per occurrence                                                                         | N/A               | N/A                |
| <b>Commercial General Liability</b>                                                             | \$5,000,000 per occurrence                                                                         | N/A               | \$5,000            |
| <b>Course of Construction/Builder's Risk</b>                                                    | Not less than the sum of 1.1 times the Maximum Contract Price                                      | N/A               | N/A                |
| <b>Contractor's Equipment Coverage</b>                                                          | Equivalent to the replacement cost of all owned, rented and/or leased equipment of the contractor. | N/A               | N/A                |

- 3) The Contractor shall maintain **Commercial General Liability** coverage for the Term of this Agreement and a minimum of one (1) year after the completion of the Services with Products and Completed Operations coverage extended for an additional year (2 years in total). To achieve the desired limit, umbrella or excess liability insurance may be used. Such insurance will include but is not limited to the following:
  - (a) Broad Form bodily injury, death, property damage, and personal injury coverage, on an occurrence basis;
  - (b) Non-Owned Automobile Liability with a limit not less than \$2,000,000 per occurrence (including contractual non-owned automobile liability endorsement SEF 96);
  - (c) Blanket Contractual Liability;
  - (d) Liability and/or Severability of Interests;
  - (e) A Waiver of Subrogation in favour of the Regional District of Central Kootenay;

- (f) Name “Regional District of Central Kootenay, its elected officials, officers, employees, servants, and agents”, as an Additional Insureds;
  - (g) Name the RDCK’s Consultant, “Sperling Hansen Associates, its officers, employees, servants, and agents”, as an Additional Insureds;
  - (h) Require the insurer to provide the Owner with 30 days written notice of any material change or cancellation;
  - (i) Premises and Operations;
  - (j) Products and Completed Operations;
  - (k) Attached Machinery;
  - (l) Coverage that is Primary and Non-Contributory to any other sources of insurance available to the Contractor or the Owner.
- 4) The Contractor shall maintain Course of Construction coverage from the date of commencement of the Services until 60 days after the RDCK has certified or verified the Substantial Completion.
- 5) The Contractor shall maintain Contractor’s Equipment coverage for the Term of this Agreement, which shall cover, on a replacement cost basis, all property, of every description, to be used in the construction of the Work, against “All Risks” of physical loss or damage, including earthquake and flood, while such property is being transported to the site, and thereafter throughout erection, installation and testing.

### 31.3 ADDITIONAL INSURANCE TERMS AND CONDITIONS

- 1) Subject to satisfactory proof of financial capability by the Contractor, the Owner may agree to increase the deductible amounts.
- 2) The Contractor is solely responsible for determining what additional insurance coverage, if any, is necessary or advisable for the protection of the Contractor or that is required by the Contractor to fulfill its obligations under this Agreement, with such additional insurance maintained and provided at the sole expense of the Contractor and with the Contractor being responsible for obtaining whatever additional insurance it deems necessary.
- 3) The Contractor shall pay the deductible amounts in the event of a claim which the above policies are required to pay.
- 4) The Contractor shall ensure that all insurance required to be maintained by the Contractor under this Agreement is underwritten by a responsible insurance company or companies licensed to do business in the province of British Columbia.
- 5) As may be applicable, the Contractor must cause all subcontractors to comply with the insurance requirements outlined in section 31 of this Agreement.

- 6) The Owner may, at its discretion, notify the Contractor that the terms, amounts and types of insurance required to be obtained by the Contractor hereunder be changed. The Contractor shall, upon request, obtain a written quote from its insurer for the incremental cost of such additional or amended coverage and submit that quote to the Owner for review. The Owner may, in its sole discretion, approve or decline the proposed increase. Where the Owner approves the increase in writing, the Owner will pay the approved incremental cost increase, and the parties shall record the change and payment terms in an Agreement Amendment. The Contractor shall not bind or purchase the increased or amended coverage until Owner's written approval is provided.
- 7) If the Contractor's insurance policies expire prior to the coverage periods identified in section 31 of this Agreement, the Contractor shall renew its insurance policies prior to the expiry date and provide the Owner with an updated evidence of insurance in the format identified in section 31.2, confirming such renewal to the Owner within 14 days of its current policy's expiry.
- 8) In the event the Contractor shall fail to take out and maintain such insurance at all times during the coverage periods identified in section 31 the Owner shall be entitled to take out and maintain equivalent insurance at the cost of the Contractor and the Contractor will pay to the Owner, on demand, the Owner's cost of so doing, or at the option of the Owner, the Owner shall be entitled to terminate this Agreement.

## **SGC 32.0 CONTRACTOR RESPONSIBILITIES**

### **32.1 DISPOSAL SITES**

- 1) The Contractor may dispose of any waste encountered onsite as follows:
  - (a) Clearing and grubbing vegetation and invasive blackberries can be stockpiled onsite for grinding or composting.
  - (b) All septage or wood chip solids can be mixed or blended and applied to the landfill slopes or composted on the waste footprint.
  - (c) Any other waste encountered may be disposed of onsite with consultation with the RDCK and Waste Management contractor. This shall include any waste encountered during the Works.
- 2) Existing fencing to the south of the Site may be disposed of in the Ootischenia Landfill after removal.

### **32.2 SUPERINTENDENT**

- 1) GC 4.7.3 is amended as follows: If the competence or performance of the Superintendent is not satisfactory to the Contract Administrator, then on written request from the Owner, the Contractor shall provide a satisfactory replacement. The Contractor shall not change the Superintendent without the consent of the **Contract Administrator**.

### 32.3 AS-BUILT DRAWINGS

- 1) The Contractor shall provide to the Owner and Contract Administrator, at the lump sum bid, all information in electronic format complete with Red Line mark-up drawings that is necessary for the Contract Administrator to produce as-constructed drawings. This information shall be provided within 30 days after construction is complete. It is the Contractor's responsibility to contact the Contract Administrator to determine which electronic format shall be used when submitting such information. This information shall include, but is not limited to:
  - (a) location of all system components, such as maintenance hatches, cleanouts, PVC bends, inspection chambers and valves;
  - (b) inverts of pipes at PVC bends, manholes, cleanouts and tie ins;
  - (c) depth of inspection chambers; and
  - (d) rim elevations for manholes, cleanouts, catch basins, curb stops and valves.

## SGC 33.0 MAINTENANCE PERIOD

### 33.1 CORRECTION OF DEFECTS

- 1) Delete GC 25.1.1 and replace with the following: "The Contractor shall, at the Contractor's own expense, promptly correct defects or deficiencies in the Work that appear prior to and during the period of **eighteen (18) months** from the date of Substantial Performance, or such longer periods as may be specified in the Contract Documents for certain products or Work (the "Maintenance Period").
- 2) The Contractor shall schedule with the Contractor Administrator a final maintenance inspection prior to the expiry date of the Maintenance Period to inspect the works and determine what defects and deficiencies exist.
- 3) The Contractor agrees that if the required repairs, or any part thereof, are not completed in accordance with the provisions of the Contract Documents, the Owner may complete the repairs at the expense of the Contractor. It is understood and agreed that the Owner may do such work either by itself, or by other contractors engaged by the Owner.
- 4) Notwithstanding the above, the Owner reserves the right to not complete the repairs and may, after 20 working days of written notification impose liquidated damages of up to \$1,000.00 per day until such time as the repairs have been completed.
- 5) Any costs incurred by the Owner to complete the repairs, including administration costs, or any damages in accordance with the Contract Documents, shall be deducted from the security held by the Owner. The balance of the security will be returned to the Contractor within 10 days of the date of expiration of the Maintenance Period. If there is insufficient money in the security to cover the costs incurred by the Owner, then the Contractor will pay such deficiency to the Owner immediately upon receipt of an invoice from the Owner.

## **SGC 34.0 EARLY USE OF THE WORK**

### **34.1 EFFECT ON MAINTENANCE PERIOD**

- 1) Delete GC 26.3.1 and replace with the following: "There will be no effect on the Maintenance Period if the Owner takes over and begins to use a portion of the Work before Substantial Performance is achieved. The Maintenance Period for all Work shall commence from the date of Substantial Performance of the Contract."

OOTISCHENIA LANDFILL SEPTAGE FACILITY UPGRADES

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**SUPPLEMENTARY SPECIFICATIONS**

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REFERENCE NO. PRJ26014

*Contract:*                *Ootischenia Landfill Septage Facility Upgrades*  
*Reference No.*        *PRJ26014*

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**1 MEASUREMENT AND PAYMENT**

- 1.1 This section includes all measured quantities and conditions of the related payments for the elements of Work as listed in the Schedule of Quantities and Prices.
- 1.2 Measurement for payment will be performed by the Contractor according to standard measurement procedures and based on actual units of work performed or installed. The method of measurement is described under each bid item.
- 1.3 The Contractor shall make all interim measurements including all preparation work required for measurement purposes and determine all interim quantities and amounts of complete Work done under the Contract. At the time measurements are made for quantity determinations the Contract Administrator or their representative will be present to verify such measurements.
- 1.4 The Contractor shall provide a minimum of 48 hours advance notice from the date and time of measurements and allow the Contract Administrator the opportunity to observe measurements and/or conduct independent measurements for establishing quantities for progress payments.
- 1.5 DESCRIPTION OF METHODS FOR MEASUREMENT OF QUANTITIES
- 1.5.1 For items specified to be measured by a length unit (e.g., lineal or vertical metre), pay length will be measured along the center line of the item involved as actually placed and accepted.
- 1.5.2 When items are specified to be measured by an area unit (e.g., square metre, hectare, etc.), the Contract Administrator will use one of the following methods for measurement:
- (a) For those items to be measured by the in-place area, measurement shall be determined by verified and accepted topographic survey methods or by the most practical means as otherwise determined by the Contract Administrator.
- (b) For those items measured by the in-place area with a neat line measurement for width, the area will be determined by the in-place horizontal measure for length multiplied by the fixed plan dimension for width as shown on the Contract Documents. (i.e., Roads).
- 1.5.3 For items specified to be measured by a volume unit (e.g., cubic metres), the Contract Administrator will use one of the following methods for measurement:
- (a) For those items to be measured by the in-place volume, measurement shall be determined by verified and accepted topographic survey methods. The quantity for payment shall be calculated as a difference between the original ground surface (prior to construction) and the final ground surface (after construction is completed). The volume shall be calculated by a cut and fill analysis using AutoCAD Civil 3D software. For volumes of excavation

or embankment which are small or otherwise, impractical to measure quantities by a cut and fill analysis, an average-end-area method shall be used as specified by the Contract Administrator.

- (b) For those items measured by the in-place area with a neat line measurement for depth, the volume will be determined by the in-place horizontal measure for area multiplied by the fixed plan dimension for depth as shown on the Contract Documents.
  - (c) For supply only items, the volume will be determined as the minimum quantity needed to complete the corresponding installation item (where applicable). No additional allowances or payments will be made for installation, transportation, stockpiling, or any loss.
  - (d) For those items measured by load counts of the hauling vehicle, the volume will be determined by the dimensions of each hauling vehicle. Each hauling vehicle will be measured by the Contractor to the Contract Administrator's satisfaction to establish the number of cubic metres carried by that vehicle when full. All hauling vehicles shall be numbered or otherwise uniquely marked for identification purposes.
  - (e) For each load delivered to the Site, the Contractor shall provide to the Contract Administrator at the time of delivery, a ticket indicating the vehicle number or other identification, material type, date, time of delivery, reference to source location, and intended use of material such as subgrade, embankment, backfill, top soil, select fill, cover soil, drainage aggregate, drain rock, and embedment.
  - (f) In addition to vehicle tickets, the Contractor shall provide the Contract Administrator daily with a summary of vehicle loads delivered that day listing the number of loads, type of material carried by each vehicle, source of material, and intended use of each type of material.
  - (g) Subsequent loads can be randomly checked as instructed by the Contract Administrator, and adjustments will be made for partial loads. Where a discrepancy in the initial vehicle capacity is encountered, the Contract Administrator may elect to adjust all previous load records received to date.
- 1.5.4 For items specified to be measured by weight, the Contract Administrator will use the following methods for measurement:
- (a) Weight will be determined using commercially available truck scales or as otherwise, approved by the Contract Administrator.
  - (b) Scales must meet the requirements of the Weights and Measures Act.
- 1.5.5 Where lump sum is the specified pay unit, the payment will be made without further measurement for complete and accepted Work as described in the Contract Documents.

1.6 FORMAL PAYMENT APPROVAL

- 1.6.1 No payment unless formally approved by the Contract Administrator will be made for:
- (a) Work performed or materials placed outside of limits indicated in the Drawings or established by the Contract Administrator. Includes all overlapping materials that should have been complementary to each other such as topsoil and road materials; and 8oz geotextile and ditch riprap.
  - (b) Materials wasted, used, or disposed of in a manner not called for under the Contract.
  - (c) Rejected materials, including material rejected after it has been placed, if the rejection is due to the Contractor's failure to comply with the provisions of the Contract. When defects or non-compliance are discovered, the work shall be rejected regardless of any prior approval or payment. The Contractor shall be fully responsible for all repairs and remediations needed to complete the work as originally intended or to the satisfaction of the Contract Administrator.
  - (d) Hauling and placement of materials from, or to, interim stockpiles. Stockpiles are to be located in designated locations as approved by the Owner as best suited to the Owner's needs, and the Contractor will not be entitled to any additional compensation regardless of the stockpile locations or changes to such locations during the contract.
  - (e) Hauling and disposing of rejected materials. Unless otherwise specified, the Contractor shall include such costs into the most appropriate pay item.
  - (f) Material on hand after completion of Work.
  - (g) Any other Work or material when payment is contrary to any provision of the Contract.
  - (h) Work that has been buried and/or concealed without inspection and approval immediately prior to, and during burying and/or concealment from the Contract Administrator.
  - (i) Work that has not received the required documentation and approval required through the submittal process.
  - (j) Work that has only been done partially, is not functioning as intended, and without being surveyed, inspected, tested, commissioned, or documented for as-built records.
  - (k) All schedule delays, costs and all other impacts related to repairs and replacements requested by the Contract Administrator, due to damage to the existing infrastructure caused by the Contractor. The Contract

Administrator is emphasizing to the Contractor that caution must be taken to avoid damaging all anticipated infrastructure, regardless of the actual location, which may vary due in part to the nature of settlement within the landfill, the questionable accuracy of the as-built drawings, and the imprecise instructions of the Contract Administrator or Owners Representative. It is required that a non-mechanized form of excavation be used when working within 1.0 metre of existing infrastructure.

#### 1.7 INSTRUCTIONS REGARDING SCHEDULE OF QUANTITIES AND PRICES

- 1.7.1 Work completed under this Contract will be paid for at the unit prices set out in the Schedule of Quantities and Prices.
- 1.7.2 The Contractor shall include all costs associated with finding, procuring, and supplying all materials and performing all Work specified in the prices set out in the Schedule of Quantities and Prices, accounting for the Contractor's overhead and profit except for Optional Items which shall be priced according to the Contract Documents.
- 1.7.3 Any claim by the Contractor for extra payment on the grounds that Work performed or materials supplied in accordance with the Drawings and/or Specifications could not be properly charged to items listed in the Schedule of Quantities and Prices will not be considered by the Contract Administrator.
- 1.7.4 If the Schedule of Quantities and Prices does not include an item that is referenced in the Drawings and/or Specifications by either direct mention and/or implication, the Contractor shall include all costs associated with such item in the most appropriate pay item.
- 1.7.5 Prorate costs of a general nature that do not pertain to any one item among all items except for Optional or Provisional Items.
- 1.7.6 Payment will only be made for actual quantities supplied and installed during the Contract.

#### 1.8 PROGRESS PAYMENTS

- 1.8.1 The Contractor shall apply for payment monthly in accordance with the General Conditions of the Contract and in a format acceptable to the Contract Administrator.

#### 1.9 FORCE ACCOUNT WORK

- 1.9.1 Force Account Work may be required, which is not Work covered by the Contract.
- 1.9.2 All Force Account Work shall be carried out in accordance with the General Conditions of the Contract.

1.10 DESCRIPTION OF PAYMENT ITEMS

**1.10.1 Division 01 – General Requirements**

(a) Item 1.01 — Mobilization and Demobilization

Measurement: Lump Sum

Payment: Mobilization / demobilization is limited to 10% of the project cost and will be paid by lump sum for all equipment and personnel necessary to complete the work, as follows:

- 50% of the lump sum price shall be paid with the first Progress Payment;
- 25% of the lump sum price shall be paid upon Substantial Performance; and
- 25% of the lump sum price shall be upon Total Performance.

Includes: All activities and associated costs for transportation of the Contractor's personnel, equipment and operating supplies to and from the Site, establishing and maintaining of offices, buildings, and other necessary general facilities for the Contractor's operations at the Site.

(b) Item 1.02 — Performance, Labour, and Material Bonds

Measurement: Lump Sum

Payment: Bonding will be paid as a lump sum with the first Progress Payment, after the Contract is signed and the Bonds are submitted to the Owner.

Includes: All activities and associated costs to obtain all required bonding for Work associated with this Contract. The Bonding shall cover the entire duration of the Contract.

(c) Item 1.03 — Insurance

Measurement: Lump Sum

Payment: Insurance will be paid by lump sum with the first Progress Payment, after the Contract is signed and proof of insurance meeting the insurance requirements of the Contract is submitted to the Owner.

Includes: All activities and associated costs to obtain all required insurance for Work associated with this Contract. The Insurance shall cover the entire duration of the Contract.

(d) Item 1.04 — Health and Safety

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|              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|--------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Measurement: | Lump Sum                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Payment:     | Will be made at the lump sum price quoted in the Schedule of Quantities and Prices. Fifty percent (50%) of the value will be paid after the Health and Safety Plan is received and reviewed by the Contract Administrator and Owner and implemented by the Contractor. The 50% balance will be prorated for the duration of the Contract as per the Contract Administrator's estimate.                                                                                                                                                                               |
| Includes:    | All activities and associated costs for labour, equipment and materials required to prepare and implement the health and safety requirements including the on-site safety officer (as required) and safety equipment for the duration of the Work for all areas that it applies to. The pay item also includes the costs associated with the Prime Contractor (including traffic management) responsibilities for the Work Site area, which involves coordination of safety issues with all applicable parties conducting on-Site Works per WorkSafeBC requirements. |

(e) Item 1.05 — Survey, Materials Testing, Submittals and Record Drawings

|              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|--------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Measurement: | Lump Sum                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Payment:     | Payment will be made as a lump sum value. Seventy percent (70%) will be prorated for the duration of the Contract as per the Contract Administrator's estimate. The remaining thirty percent (30%) will be paid at the completion of the Contract after all records and as-built information have been received and accepted by the Contract Administrator.                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Includes:    | <p>All activities and associated costs to complete all surveys, measurements, and computations required by the Contract. Verification of survey control points prior to starting Work is required.</p> <p>The Contractor shall:</p> <ul style="list-style-type: none"><li>• Provide field engineering services and close out procedures</li><li>• Establish locations, elevations, lines, grades and levels necessary for construction of structures and systems, including up to three (3) different layouts and revisions for each construction item as deemed necessary by the Contract Administrator</li><li>• Locate and mark (stake) in the field all existing utilities</li><li>• Periodically verify layouts</li><li>• All deep utilities must be recorded in three (3)</li></ul> |

dimensions as work progresses for Record Drawing purposes, and the data shall be submitted to the Contract Administrator on a monthly basis.

- The construction survey records shall be available at all times during the progress of the Work for examination and use by the Contract Administrator. Complete survey records and supporting data for progress payments shall be submitted to the Contract Administrator with each Payment Certificate. This item shall also include preparation and submission of record drawings as per the Contract Documents.

All material testing (laboratory and field), density and compaction confirmation. All records need to be submitted to Contract Administrator prior to payment and for records management.

All permits associated with the work including hauling, transportation, and material import, etc.

#### **1.10.2 Division 02 – Earthworks and Septage/Surface Water Management**

##### **(a) Item 2.01 — Clearing and Grubbing and Vegetation Removal**

**Measurement:** Calculated quantities on a square metre basis based on the surveyed area of organic material and low brush from the south slope adjacent to the septage receiving area. The area will be determined through topographic survey means.

**Payment:** Per Square Metre (m<sup>2</sup>)

**Includes:** All labour, material, and equipment required to clear, grub and removal vegetation and debris from the work area, including loading, hauling and stockpiling onsite, as directed by the Contract Administrator.

Any material removed from beyond the design lines is considered Unauthorized Work and the Contractor will not be entitled to any additional compensation.

##### **(b) Item 2.02 — Organics Removal - Excavate Existing Organics in Place**

**Measurement:** Calculated quantities on a cubic metre basis based on the surveyed volume of organic material excavated to design contours. The volume will be determined through volumetric analysis of survey data before and after excavation.

**Payment:** Per Cubic Metre (m<sup>3</sup>)

Includes: All labour, material, and equipment required to excavate existing organic material to design contours and load, haul and stockpile excavated material in a location identified by the Contract Administrator, onsite.

Any material excavated or placed beyond the design lines is considered Unauthorized Work and the Contractor will not be entitled to any additional compensation.

(c) Item 2.03 — Organics Removal Backfill - Excavate, Load, Haul, Place, Shape and Compact Clean Fill to Design Contours (Clean Fill sourced on site)

Measurement: Calculated quantities on a cubic metre basis based on the surveyed volume of material placed to design contours. The volume will be determined through volumetric analysis of survey data before and after excavation.

Payment: Per Cubic Metre (m<sup>3</sup>)

Includes: All labour, material, and equipment required to excavate, load, haul, place and compact Owner-Supplied Clean Fill material to design contours and compaction specification of min 95% standard proctor density.

Any material placed beyond the design lines is considered Unauthorized Work and the Contractor will not be entitled to any additional compensation.

(d) Item 2.04 — Septage Facility Subgrade Earthworks - Excavate, Load, Haul, Place, Shape and Compact Clean Fill to Design Subgrade (Clean Fill sourced on site)

Measurement: Calculated quantities on a cubic metre basis based on the surveyed volume of material excavated/placed to design subgrade. The volume will be determined through volumetric analysis of survey data before and after excavation.

Payment: Per Cubic Metre (m<sup>3</sup>)

Includes: All labour, material, and equipment required to excavate, place, and compact Owner-Supplied Clean Fill material to design subgrade. Also includes any excavation, loading, hauling and placing surplus Owner-Supplied Clean Fill material from onsite borrow area.

Any material excavated or placed beyond the design lines is considered Unauthorized Work and the Contractor will not be entitled to any additional compensation.

(e) Item 2.05 — Supply and Install 300 mm dia. HDPE DR17 Solid Septage Conveyance Pipe

Measurement: Calculated quantities based on topographic survey of the length of the completed work, conducted by the Contractor and verified by the Contract Administrator.

Payment: Per Linear Metre (m)

Includes: All labour, equipment, materials, and incidental work necessary to supply and install (excavate and backfill) the 300 mm diameter HDPE DR17 solid septage conveyance piping to design elevations. Encompasses all required testing, fittings, and any other materials specified in the Contract Documents.

(f) Item 2.06 — Construct Surface Water Run-On Ditching Along Southern Slope and North Side of Septage Facility

Measurement: Calculated quantities based on topographic survey of the length of the completed work, conducted by the Contractor and verified by the Contract Administrator.

Payment: Per Linear Metre (m)

Includes: All labour, equipment, materials, and incidental work necessary to construct surface water ditching to contract specifications.

**1.10.3 Division 03 – Roads and Site Improvements**

(a) Item 3.01 — Perimeter Gravel Road Construction

Measurement: Calculated quantities based on topographic survey of the area of the completed work, conducted by the Contractor and verified by the Contract Administrator.

Payment: Per Square Metre (m<sup>2</sup>)

Includes: All labour, equipment, materials, and incidental work necessary to construct perimeter gravel roads according to the Contract Documents. Includes supply and installation of 19 mm minus crushed gravel, 25 to 75 mm crushed gravel, and high-strength woven geotextile liner. Encompasses all required testing and submittals to the Contract Administrator.

(b) Item 3.02 — Remove and Dispose of Existing Fence to the South (may be disposed in the Ootschenia Landfill)

Measurement: Per count of completion.

Payment: Per Linear Metre (m)

Includes: All labour, equipment, materials, and incidental work necessary to remove existing fencing to the south of the Septage Facility for disposal to the Ootischenia Landfill.

- (c) Item 3.03 — Install New Electric Fence to the South (incl. all wires, posts, staples, insulators, testing, etc.)

Measurement: Per count of completion.

Payment: Per Linear Metre (m)

Includes: All labour, equipment, materials, and incidental work necessary to install new electric fencing to the south of the Septage Facility in alignment with the Contract Documents. Includes all wires, posts, staples, insulators, and testing.

#### **1.10.1 Division 04 – Concrete**

- (a) Item 4.01 — Supply and Install Concrete Barriers at Septage Receiving Area

Measurement: Per count of completion.

Payment: Per Each unit installed.

Includes: All labour, equipment, materials, and incidental work necessary to install No Post Barriers, Lock Block Barriers, and SS chain connections between No Post Barriers in alignment with the Contract Documents.

**\*\* END OF SECTION \*\***

## **2 HEALTH AND SAFETY**

### **2.1 GENERAL SAFETY PROVISIONS**

- 2.1.1 The Contractor shall exercise caution during all work below the ground surface. In particular, asbestos, landfill gas, and large-sized waste may be encountered in some excavation areas and must be dealt with safely by the Contractor. Large-sized waste must be excavated carefully by the Contractor so that nearby utilities are not disturbed. The Contractor shall be responsible for damage caused to utilities during the excavation process.
- 2.1.2 The Contractor shall be solely and completely responsible for conditions of the jobsite, including safety of all persons (including employees) and property during the performance of the Work. This requirement shall apply continuously and not be limited to normal working hours. Safety provisions shall conform to Provincial Standards, and all other applicable federal, provincial, and local laws, ordinances, codes, and regulations. Where any of these are in conflict, the more stringent shall be followed. The Contractor's failure to thoroughly familiarize himself/herself with the aforementioned safety provisions shall not relieve him/her from compliance with the obligations and penalties set forth therein.
- 2.1.3 The Contractor shall develop and maintain for the duration of this Contract, a safety program that will effectively incorporate and implement all required safety provisions. The Contractor shall appoint an employee who is qualified and authorized to supervise and enforce compliance with the safety program.
- 2.1.4 The duty of the Owner does not include review or approval of the adequacy of the Contractor's safety program, safety supervisor, or any safety measures taken in, on, or near the Project Site.
- 2.1.5 The Contractor, as part of their safety program, shall maintain at their office or other well-known place at the Project site, safety equipment and instruments applicable to the work as prescribed by the aforementioned authorities, all articles necessary for giving first aid to the injured, and shall establish the procedure for the immediate removal to a hospital or a doctor's care of persons (including employees) who may be injured on the Project site.
- 2.1.6 If death or serious injuries or serious damages are caused, the accident shall be reported immediately by telephone or messenger to both the Contract Administrator and the Owner. In addition, the Contractor must promptly report in writing to the Owner all accidents whatsoever arising out of, or in connection with, the performance of the Work whether on, or adjacent to, the Project Site, giving full details and statements of witnesses.
- 2.1.7 If a claim is made by anyone against the Contractor or any subcontractor on account of any accident, the Contractor shall promptly report the facts in writing to the Contract Administrator and the Owner, giving full details of such claim.

- 2.1.8 The Contractor shall make provisions for other contractors to safely transit through the designated work area for this contract on an as needed basis. The Contractor for this contract will be designated prime contractor on site.

**2.2 SITE-SPECIFIC HEALTH AND SAFETY PLAN**

- 2.2.1 The Contractor shall develop and maintain for the duration of this Contract, a Site-Specific Health and Safety Plan that will effectively incorporate and implement all required Municipal, Provincial (Workers' Compensation Board Occupational Health and Safety Regulation), and Federal safety provisions. The Contractor shall provide a written Site-Specific Health and Safety Plan for the construction within 7 days of Notice to Proceed and maintain at least one copy at the work site at all times.
- 2.2.2 Preparation of the Site-Specific Health and Safety Plan is solely the Contractor's responsibility and no statement made in these provisions shall relieve Contractor of sole responsibility for information included and implementation of the Site-Specific Health and Safety Plan.
- 2.2.3 Submission of the Site-Specific Health and Safety Plan is solely for evidence of compliance with the Contract Documents, and for reference and general information. Submission and subsequent review by Contract Administrator or Owner shall not relieve Contractor from sole responsibility as to the adequacy of its Site-Specific Health and Safety Plan.
- 2.2.4 The Contract Administrator's or Owner's review of the Contractor's performance is not intended to include a review or approval of the adequacy of the Contractor's safety supervisor, safety program or any safety measures taken in, on, or near the Site.
- 2.2.5 The Contractor's Site-Specific Health and Safety Plan should include, but not be limited to, the following:
- (a) A list of chemical and physical hazards (such as exposure to methane (and landfill gas) and/or, asbestos contaminated material, electrical shock, etc.), allowable exposure levels, threshold limit values, other regulatory exposure levels, fall hazard, and the management/emergency response should an exposure or injury occur.
  - (b) A procedure to deal on-site with medical emergencies requiring first aid initially, including: identifying Contractor personnel with formal first aid training and certification, Owner operational personnel with similar training, on-Site facilities and the availability of supplies and equipment, if needed.
  - (c) An emergency evacuation plan for immediate removal to a hospital or a doctor's care any person who may be injured on the job site including an evacuation plan route to medical treatment, and emergency telephone numbers including hospital, ambulance, fire, sheriff and/or police, poison control, the Owner, and others as deemed necessary.

- (d) Procedures to ensure substance abuse is not an issue by preventing the use of substances that impair a worker's judgement (e.g. alcohol, medical drugs, marijuana, etc.) in moving around the Site carrying out their responsibilities and especially when operating heavy equipment.
- (e) Communication protocols for reporting to the Contract Administrator and WorkSafe BC Site safety issues or concerns, first aid incidents, emergencies, damage claims, and the like.
- (f) Identification of each subcontractor's safety officer.
- (g) A system or process to ensure effective Site orientation and hazards communication with all persons entering the Site. The Contractor shall maintain at the Site office a list of personnel on-Site at the start of each working day and a contact person in the event of a Site evacuation.
- (h) A list of safety equipment and monitoring instruments at the job site and locations where equipment and instruments are stored or expected to be maintained, as applicable.
- (i) Monitoring instrument action levels, frequency of testing, and recommended responses, as applicable.
- (j) A procedure to carry out inspections, pre-job and Site safety meetings, the assembly of a toolbox safety committee, incident review, and other related meetings.
- (k) Documentation of the initial Site safety meeting, safety committee meetings, reviews of subcontractors' safety systems, inspection and incident investigations, first aid records, orientation and training.
- (l) Communication protocols for reporting to the Contract Administrator documentation of monthly first aid, medical aid, and lost time statistics, Site formal inspections, incident reports, safety meeting minutes, confined space entry permits, and hot work permits.
- (m) Procedures for entering confined spaces, as applicable.

- 2.2.6 The Contractor shall inform all workers and the public visiting the site of the potential for the presence of methane and other landfill gases emanating from the natural decomposition of refuse buried at or near the Project Site, and the importance of safety precautions to ensure the safety of all workers and the public. The Contractor shall also instruct all workers and maintain strict control of construction activity to protect and maintain the integrity of the landfill. The Contractor, as a part of his/her safety program, shall maintain at the job site, safety equipment applicable to the work as prescribed by the governing safety authorities and all articles necessary for giving first aid to the injured.

- 2.2.7 The Contractor shall inform all workers and the public visiting the area of work of the potential for exposure to asbestos contaminated material from drill cuttings, excavations, and trenches and the importance of safety precautions to ensure the safety of all workers and the public.
- 2.2.8 The Contractor shall submit one (1) digital copy of the Site-Specific Health and Safety Plan to the Owner. Failure on the part of the Contractor to follow the plan or to continue any work in an unsafe manner may result in suspension of the work by the Owner. The Contractor shall not be entitled to extra compensation for health and safety related suspensions, nor shall the contract completion date be extended.
- 2.2.9 The Contractor shall perform whatever work is necessary for safety and be solely and completely responsible for conditions of the Project Site, including safety of all persons (including employees of the District, Contract Administrator, any Site visitors, and Contractor) and property during the Contract period. This requirement applies continuously and is not limited to normal working hours.
- 2.2.10 No Work can commence on Site until the Contractor has submitted their Site-Specific Health and Safety Plan to the Contract Administrator and the Owner and received written confirmation of receipt.

## 2.3 SITE HEALTH AND SAFETY OFFICER

- 2.3.1 The Contractor shall assign an individual serving as a Site Health and Safety Officer at the job site at all times during work. The Site Health and Safety Officer shall be responsible and authorized to supervise and enforce compliance with the Site-Specific Health and Safety Plan.
- 2.3.2 The Site Safety and Health Officer will act as the Qualified Coordinator as defined by Workers' Compensation Board.
- 2.3.3 The Site Health and Safety Officer shall be thoroughly trained in rescue procedures, and the use of safety equipment and monitoring instruments. This person shall be present at all times during working hours and shall implement the safety plan and shall conduct monitoring.
- 2.3.4 The Site Health and Safety Officer shall have the delegated authority to order any person or worker on the project site to follow the safety plan. Failure to observe the safety plan shall be sufficient cause for removal of the person or worker(s) from this Project or from the project site.
- 2.3.5 The Site Health and Safety Officer shall be responsible for determining the extent to which any safety equipment and instruments must be utilized, depending upon conditions encountered at the Site.

## 2.4 SAFETY PROVISIONS RELATED TO OPERATIONS AT WASTE FACILITIES

- 2.4.1 The Contractor shall be responsible for informing their employees and subcontractors and their employees of the potential danger in working on and near landfills and other waste facilities.
- 2.4.2 It is recommended the Contractor is familiar with the document A Compilation of Landfill Gas Field Practices and Procedures, Health and Safety Section, prepared by the SWANA Landfill Gas Division Health and Safety Task Force August 1991 (revised August 2010). Copies may be obtained from the Solid Waste Association of North America (SWANA).
- 2.4.3 The Contractor is advised that some areas of construction for this project are potentially being performed in and adjacent to buried wastes and refuse. During construction activity, the potential exists to puncture containers that could become explosive, release pockets of landfill gas under pressure, release fluids that could be contaminated, create surface subsidence by shifting refuse, and other types of hazards. Exposure to decaying wastes is possible during this work. Exposure may also include possible contact with leachate, asbestos, inhalation of landfill gas, explosion, pathogenic bacteria, and others.
- 2.4.4 As buried materials decompose, they may generate gas, which typically consists of carbon dioxide, methane, and trace amounts of other gases, including but not limited to, hydrogen sulfide, dependent upon the composition of the buried materials. These gases normally vent to the atmosphere through the cover soils but can migrate laterally to adjacent areas depending on site and weather conditions.
- 2.4.5 Landfill gases have the potential to create hazardous conditions if not controlled or recognized. Some of the hazards include:
  - (a) Fires which may start spontaneously from exposed and/or decomposing refuse.
  - (b) Fires and explosions which may occur from the presence of methane gas.
  - (c) Landfill gases which may cause an oxygen deficiency in underground trenches, manholes/catch basins, and other structures.
  - (d) Hydrogen sulfide, a highly toxic and flammable gas, which may be present.
  - (e) Possible caving of trenches and excavations when working over or in refuse fills.
  - (f) Possible exposure to asbestos contaminated material brought to the surface of the landfill as a result of drilling for landfill gas extraction wells and similar processes.
- 2.4.6 At the end of each workday, any exposed waste shall be covered with a minimum of 150 mm of inert fill and in no case shall waste be left uncovered overnight.

## 2.5 ADDITIONAL SAFETY REQUIREMENTS

- 2.5.1 In addition to conforming to the safety rules and regulations of Governmental authorities having jurisdiction, the Contractor shall conform to the following precautionary measures:
- (a) Smoking is not permitted at the site. The Contractor is responsible to ensure that the Contractor's workers and subcontractor's workers do not smoke at the site.
  - (b) Any refuse exposed during the construction shall be covered as soon as possible after exposure with at least a 300 mm layer of earth. In no event shall refuse remain exposed overnight.
  - (c) No arc or gas welding shall be permitted in trenches, enclosed areas, or over refuse unless performed in specially ventilated and secured areas of the site tested and approved by the Site Health and Safety Officer.
  - (d) Construction equipment used in excavating activities and/or refuse removal operations shall be equipped with vertical exhaust and spark arrestors.
  - (e) Electric motors utilized in excavation areas and below ground shall be explosion proof.
  - (f) Worksafe BC Regulations shall be strictly followed including guidance of meeting and fall protection.

## 2.6 SITE ACCESS AND DELINEATION OF WORK AREAS

- 2.6.1 The Site operational hours are between 8:30 am to 5:30 pm from April 1 to October 31, and 8:30 am to 4:00 pm from November 1 to March 31. The site is closed on Sundays and all statutory holidays.
- 2.6.2 During operational hours, the Contractor shall maintain safe public access to the Site and provide traffic control as required to ensure continued use of the Owner's facilities with minimum disruption.
- 2.6.3 The Contractor shall delineate all construction areas by erecting signage, fencing, and/or visible cones, maintaining a minimum buffer distance of 10 metres from active work zones and adjacent operational areas. Delineation shall clearly indicate the limits of the Work and prevent unauthorized entry by the public or other site users.

**\*\* END OF SECTION \*\***

### **3 SUBMITTAL PROCEDURES**

#### **3.1 SUBMITTAL PROCEDURES**

- 3.1.1 Each submittal shall be provided with a cover page showing all required information for identification and tracking, including but not limited to the project name, subcontractor/supplier, date submitted, submittal number, version, and name of submittal. The Contractor may request a template for this purpose from the Contract Administrator.
- 3.1.2 Submittals shall be numbered sequentially, beginning at 1 and ascending by 1 each time a new submittal is provided. Resubmittals shall use the original submittal number and an alphabetic suffix.
- 3.1.3 Variations from specifications and products or system limitations must be identified in each submittal and approved by the Contract Administrator.
- 3.1.4 Submittals shall clearly show drawings, sketches, product sheets, technical specifications, or other required information which demonstrates compliance with the specific requirements of the Contract Documents.
- 3.1.5 Submittals shall be scheduled to expedite the project, with submittals made far enough in advance of scheduled installation to provide adequate time for review and approval. The Contractor shall allow at least ten (10) working days for review by the Contract Administrator following receipt.

**\*\* END OF SECTION \*\***

#### **4 EXCAVATING, TRENCHING, AND BACKFILLING**

##### **4.1 EXCAVATION**

- 4.1.1 The Contractor must identify all disposal sites to the Contract Administrator prior to disposal of surplus excavated soil to the identified disposal sites.
- 4.1.2 Historic waste may have been disposed of in the construction area, and the Contractor shall manage this risk within their Site-Specific Health and Safety Program. Excavated waste shall be placed at the active face, and the Contractor shall coordinate in advance with Ootischenia Landfill operations staff for this aspect of the work.
- 4.1.3 Records of all loads taken to the active face shall be kept by the Contractor and provided to the Contract Administrator. The Contractor shall confirm with the Contract Administrator if weighing of loads is required prior to disposal at the active face.
- 4.1.4 Section 31 23 01, Subsection 3.5.4 – Delete the words “place backfill” and replace with the words “place backfill, or approved native backfill”.

##### **4.2 BACKFILLING**

- 4.2.1 It is intended to use native materials for backfill wherever suitable. Only materials deemed unsuitable in the opinion of the Contract Administrator will be approved for disposal off-site and replaced with imported granulars. Native material approved for reuse must be handled, stockpiled and suitably compacted and all costs incidental thereto are deemed to be included in the unit rates tendered.

**\*\* END OF SECTION \*\***

## **5 GRANULAR MATERIALS**

### **5.1 GENERAL**

- 5.1.1 Sieve and proctor tests must be completed for all aggregate materials used in the construction. These should be provided to the Contract Administrator for review and approval prior to start of installation.
- 5.1.2 Clean structural fill shall be a well graded aggregate material, approved for use by the Contract Administrator. Material should include fractured faces to provide interlocking structural capacity; round rock will not be permitted.
- 5.1.3 All granular materials shall be supplied by the Contractor.

### **5.2 MATERIALS**

- 5.2.1 25 to 75 mm Crushed Gravel aggregate particles shall be uniform in quality and free from excess of flat and elongated particles. The particles shall have a gradation falling within the limits specified below.

**25 to 75 mm Crushed Gravel**

| <b>Sieve Size<br/>Opening (mm)</b> | <b>Percent Passing<br/>(by weight)</b> |
|------------------------------------|----------------------------------------|
| 100 mm                             | 100                                    |
| 75 mm                              | 80-100                                 |
| 50 mm                              | 40-80                                  |
| 40 mm                              | 20-50                                  |
| 25 mm                              | 0 – 20                                 |
| 20 mm                              | 0 – 10                                 |

- 5.2.2 The aggregates shall be composed of inert, clean, tough and durable particles capable of withstanding the deleterious effects of exposure to water, freeze-thaw, handling and spreading.

### **5.3 EXECUTION**

- 5.3.1 Handle and transport material to avoid segregation, contamination and degradation.
- 5.3.2 Stockpile material on Site in locations identified by the Contract Administrator.
- 5.3.3 Stockpile material in sufficient quantities to meet project schedules.
- 5.3.4 Except where stockpiled on acceptably stabilized areas, provide compacted sand base not less than 300 mm in depth to prevent contamination of material. Alternatively, the Contractor can stockpile material on ground but do not incorporate bottom 300 mm of pile into Work.

- 5.3.5 Do not use intermixed or contaminated materials. Remove and dispose of rejected materials as directed by Contract Administrator within 48 hours of rejection.
- 5.3.6 Care should be taken not to damage or creep the Geotextile layer. Damage to the Geotextile, as a result of placement of the drainage layer, shall be replaced or repaired, at the discretion of the Contract Administrator, at the Contractor's expense.
- 5.3.7 Leave material stockpile in tidy, well-drained condition, free of standing surface water.
- 5.3.8 Leave any unused material in neat compact stockpiles as directed by the Contract Administrator.

**\*\* END OF SECTION \*\***

## **6 HIGH-STRENGTH WOVEN GEOTEXTILE**

### **6.1 GENERAL**

- 6.1.1 Technical data sheets demonstrating that the proposed material meets the specifications outlined within the Contract Documents shall be submitted to the Contract Administrator for review and approval prior to installation.
- 6.1.2 Any request to substitute an alternate geotextile shall be submitted to the Contract Administrator in writing as part of the tender documents and shall include complete product specifications addressing all Specifications outlined within this section.
- 6.1.3 Contractor to provide product details for each material including:
- (a) Name, address and contact information of manufacturer and distributor
  - (b) Product type including technical specifications and grade
  - (c) Lot number
  - (d) Physical roll dimensions (length and width)

### **6.2 MATERIAL**

- 6.2.1 High-strength woven geotextile shall be provided under the subgrade before road base aggregates are placed. This geotextile shall meet or exceed the following specifications:

| <b>Property</b>         | <b>Required Value</b> | <b>Test Method</b> |
|-------------------------|-----------------------|--------------------|
| Grab Tensile Strength   | 1,000 N               | ASTM D4632         |
| Grab Tensile Elongation | 12%                   | ASTM D4632         |
| Puncture                | 450 N                 | ASTM D4833         |
| Trapezoid Tear Strength | 400 N                 | ASTM D4533         |
| Apparent Opening Size   | 425 µm                | ASTM D4751         |

- 6.2.1 The geotextile shall be free of holes, tears, defects, and patch repairs of defects.
- 6.2.2 Each roll shall be clearly tagged with the following information:
- (a) Name of manufacturer
  - (b) Product type
  - (c) Product grade

(d) Lot number

(e) Physical dimensions (length and width)

6.2.3 The delivery of any rolls not labeled or packaged in the specified manner shall be reason for rejection of those rolls.

6.2.4 The geotextile shall be delivered to the Site in undamaged condition.

### 6.3 EXECUTION

6.3.1 The surface base shall be approved by the Contract Administrator prior to geotextile placement. Soil surfaces on which the geotextile is to be placed shall be graded and compacted to a smooth surface free of debris or obstructions that may damage the geotextile. All rocks, sticks and other solid particles larger than 50 mm in diameter that protrude from the smooth surface shall be removed unless approved otherwise by the Contract Administrator.

6.3.2 During installation, the Geotextile may be held in place with sandbags or tires. Staples, rods, nails or other penetrating devices shall not be permitted.

**\*\* END OF SECTION \*\***

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## **7 FENCING**

### **7.1 GENERAL**

- 7.1.1 Technical data sheets demonstrating that the proposed material meets the specifications outlined within the Contract Documents shall be submitted to the Contract Administrator for review and approval prior to installation.

### **7.2 MATERIAL**

- 7.2.1 The Contractor shall provide and install the necessary materials for an 8-strand, graded spacing high tensile electric fence consisting of alternating energized (“hot”) and ground-return wires. The system shall be compatible with wildlife-exclusion and landfill security applications.
- 7.2.2 Fence controllers must be CSA-approved.

### **7.3 EXECUTION**

- 7.3.1 Fencing shall be carried out at the locations and as shown on the Drawings with the materials to the height, spacing and with accessories all in accordance with the details indicated in the Contract Documents or to the direction of the Contract Administrator.
- 7.3.2 All material shall be supplied by the Contractor. Construction shall be carried out with all labour, tools, equipment and incidentals supplied by the Contractor, as necessary, to complete all fencing work in accordance with good work practice.
- 7.3.3 Prior to commencing fencing work, both sides of the fence line must be free of all clearing and grubbing debris.
- 7.3.4 The groundline for the fence should be smooth and continuous for a minimum of 1 m on both sides of the fence. Minor ground undulations shall be corrected to obtain a smooth uniform grade, but appreciable grade depressions may be backfilled only with the permission of the Ministry Representative.
- 7.3.5 All fences must be constructed within the guidelines of municipal, regional, provincial and federal regulations.
- 7.3.6 Unless specified otherwise in the Contract Documents, line posts shall be spaced 5 m apart measured horizontally. It will be permissible to move a post up to 0.3 m ahead or back along the fence line to avoid an obstruction preventing advancement of the post hole, provided that the average spacing does not exceed 5 m.
- 7.3.7 Energizers and various components of the system must be installed and used as per the manufacturer’s instructions.

- 7.3.8 The bottom wire of the fencing system should not be a ground wire.
- 7.3.9 Tension each strand to 150–200 lb using ratchet strainers.
- 7.3.10 Ensure uniform tension along the entire fence line.
- 7.3.11 Do not over-tighten to allow for thermal expansion.
- 7.3.12 Maintain 3 m horizontal clearance from public walkways unless otherwise approved by the Owner or Contract Administrator.
- 7.3.13 After installation is complete, the Contractor shall provide the following information to the Owner and Contract Administrator:
  - (a) Energizer model and output rating
  - (b) Ground rod installation record
  - (c) Voltage testing results
  - (d) As-built wire heights and post spacing
- 7.3.14 The Contract Administrator may require any fencing materials that do not meet the Contract Documents to be removed and replaced at the Contractor's expense.
- 7.3.15 The Contract Administrator may require any constructed fencing that does not meet the Contract Documents to be removed and replaced at the Contractor's expense.

**\*\* END OF SECTION \*\***

# OOTISCHENIA LANDFILL SEPTAGE FACILITY UPGRADE



| DRAWING LIST                                      |           |      |                                                       |
|---------------------------------------------------|-----------|------|-------------------------------------------------------|
| SHEET No.                                         | DWG. No.  | REV. | TITLE                                                 |
| 000                                               | 26057-000 | B    | COVER SHEET AND LIST OF DRAWINGS                      |
| 001                                               | 26057-001 | B    | EXISTING TOPOGRAPHY AND SITE FEATURES                 |
| 100 SERIES - EARTHWORKS                           |           |      |                                                       |
| 100                                               | 26057-100 | B    | ORGANIC REMOVAL DESIGN CONTOURS                       |
| 101                                               | 26057-101 | B    | ORGANIC REMOVAL DESIGN EARTHWORKS                     |
| 102                                               | 26057-102 | B    | ORGANIC REMOVAL BACKFILL DESIGN CONTOURS              |
| 103                                               | 26057-103 | B    | ORGANIC REMOVAL BACKFILL DESIGN EARTHWORKS & CUT-FILL |
| 104                                               | 26057-104 | B    | SEPTAGE FACILITY DESIGN SUBGRADE                      |
| 105                                               | 26057-105 | B    | SEPTAGE FACILITY DESIGN SUBGRADE EARTHWORKS           |
| 200 SERIES - SURFACE WATER AND SEPTAGE MANAGEMENT |           |      |                                                       |
| 200                                               | 26057-200 | B    | SEPTAGE AND SURFACE WATER MANAGEMENT PLAN             |
| 201                                               | 26057-201 | B    | DETAILS                                               |

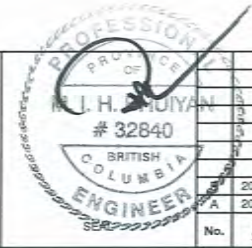
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**SPIERLING  
HANSEN  
ASSOCIATES**

- Landfill Siting
- Design & Operations Plans
- Landfill Closure
- Environmental Monitoring

#8 - 1225 Keith Road East  
North Vancouver, B.C. V7J 1J3  
Phone: (604) 986-7723



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| No.       | DATE<br>yymmdd |                       |  |      |      |
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|           | 2025/09/07     | ISSUED FOR 50% REVIEW |  | AT   | SG   |

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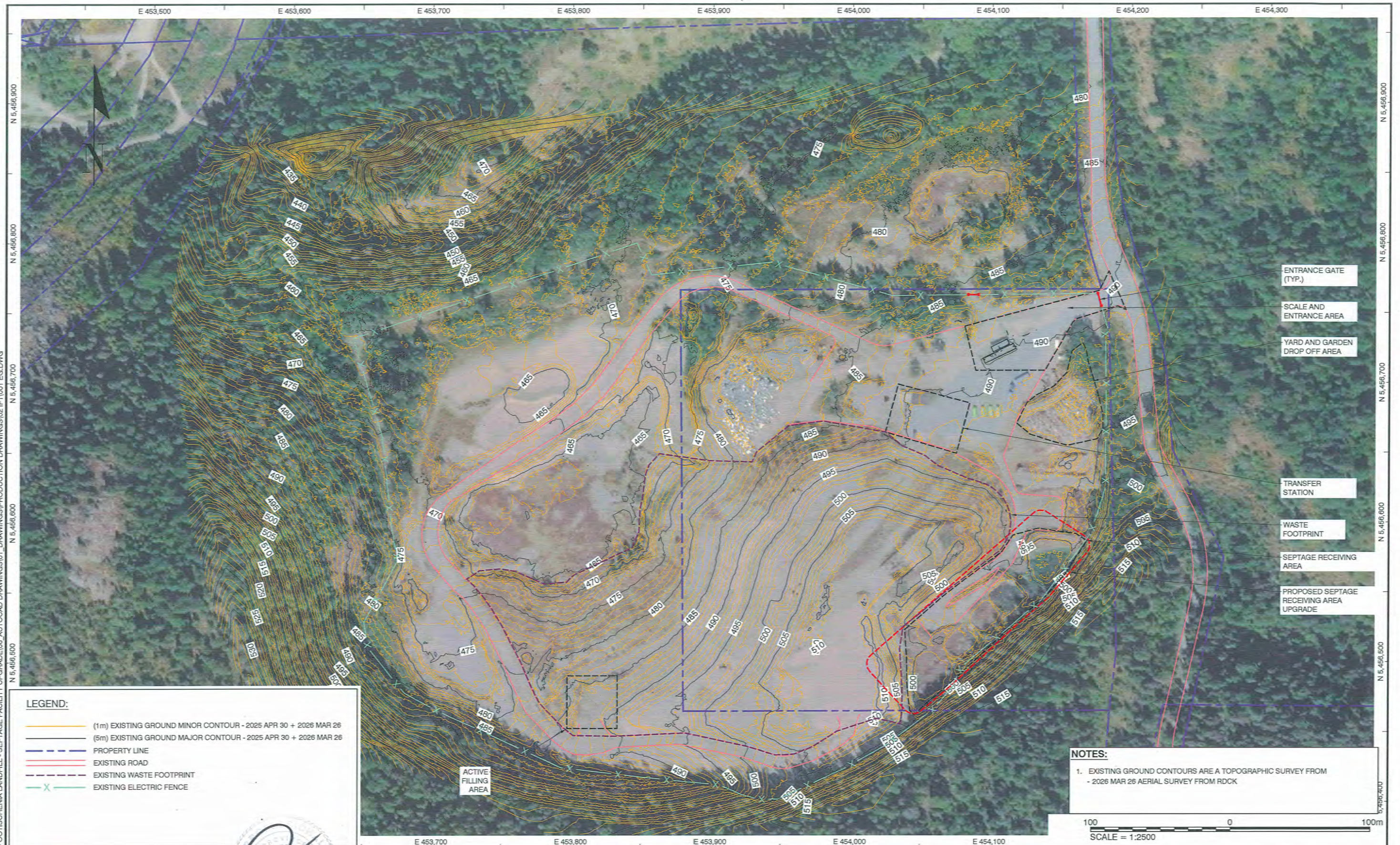
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| DRAWN BY:                          | AT    | DATE CREATED:     | 2026/09/24 |
| CHECKED BY:                        | SG    | HORIZONTAL SCALE: | NA         |
| APPROVED BY:                       | IB    | VERTICAL SCALE:   | NA         |
| ADJUST SCALE 50% FOR 34"x22" SHEET |       |                   |            |

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| OOTISCHENIA LANDFILL SEPTAGE FACILITY UPGRADE |     |       |
| COVER SHEET AND LIST OF DRAWINGS              |     |       |
| DRAWING NO:                                   | REV | SHEET |
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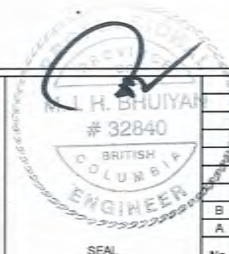
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| B         | 2025/09/24 | AT    | 2025/09/24 | SG   | 2025/09/24 | IB   | 2025/09/24 |
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| DESIGN BY:   | SG/AP | SHA PROJECT #     | PRJ26057   |
| DRAWN BY:    | AT    | DATE CREATED:     | 2025/09/24 |
| CHECKED BY:  | SG    | HORIZONTAL SCALE: | 1:2500     |
| APPROVED BY: | IB    | VERTICAL SCALE:   | 1:2500     |

ADJUST SCALE 50% FOR 34"x22" SHEET

| EXISTING TOPOGRAPHY AND SITE FEATURES |     |       |
|---------------------------------------|-----|-------|
| DRAWING NO.                           | REV | SHEET |
| 26057-001                             | B   | 001   |

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X:\PRJ\PRJ26057 - OOTISCHENIA LANDFILL - SEPTAGE FACILITY UPGRADE\06 AUTOCAD DRAWINGS\01 DRAWINGS\PRODUCTION DRAWINGS\02 IFT100 ORGANIC REMOVAL.DWG



**LEGEND:**

- (1m) EXISTING GROUND MINOR CONTOUR - 2026 MAR 26
- (5m) EXISTING GROUND MAJOR CONTOUR - 2026 MAR 26
- PROPERTY LINE
- EXISTING ROAD
- EXISTING WASTE FOOTPRINT
- EXISTING ELECTRIC FENCE
- (1m) DESIGN MINOR CONTOUR - ORGANIC REMOVAL
- (5m) DESIGN MAJOR CONTOUR - ORGANIC REMOVAL
- ORGANIC REMOVAL BOUNDARY

**NOTES:**

- EXISTING GROUND CONTOURS ARE A TOPOGRAPHIC SURVEY FROM  
- 2026 MAR 26 AERIAL SURVEY FROM RDCK

5 0 5 10 15 20 25 30m  
SCALE = 1:750



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|-----|----------------|-----------------------|-------|------|------|
| B   | 2026/09/24     | ISSUED FOR TENDER     | AT    | SG   | IB   |
| A   | 2026/07/28     | ISSUED FOR 50% REVIEW | AT    | SG   | IB   |

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| DRAWN BY: AT                       | DATE CREATED: 2026/09/24 | <b>ORGANIC REMOVAL DESIGN<br/>CONTOURS</b>       |     |       |
| CHECKED BY: SG                     | HORIZONTAL SCALE: 1:750  | DRAWING NO:                                      | REV | SHEET |
| APPROVED BY: IB                    | VERTICAL SCALE: 1:750    | 26057-100                                        | B   | 100   |
| ADJUST SCALE 50% FOR 34"x22" SHEET |                          |                                                  |     |       |

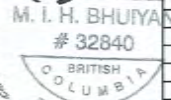
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| DRAWN BY:                          | AT    | DATE CREATED:     | 2026/09/24 |
| CHECKED BY:                        | SG    | HORIZONTAL SCALE: | 1:750      |
| APPROVED BY:                       | IB    | VERTICAL SCALE:   | 1:750      |
| ADJUST SCALE 50% FOR 34"x22" SHEET |       |                   |            |

|                                                  |     |       |
|--------------------------------------------------|-----|-------|
| OOTISCHENIA LANDFILL<br>SEPTAGE FACILITY UPGRADE |     |       |
| ORGANIC REMOVAL DESIGN<br>EARTHWORKS             |     |       |
| DRAWING NO:                                      | REV | SHEET |
| 26057-101                                        | B   | 101   |

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**LEGEND:**

- (1m) MINOR CONTOUR - 2026 MAR 26 EG + ORGANIC REMOVAL
- (5m) MAJOR CONTOUR - 2026 MAR 26 EG + ORGANIC REMOVAL
- PROPERTY LINE
- EXISTING ROAD
- EXISTING WASTE FOOTPRINT
- EXISTING ELECTRIC FENCE
- (1m) DESIGN MINOR CONTOUR - ORGANIC REMOVAL BACKFILL
- (5m) DESIGN MAJOR CONTOUR - ORGANIC REMOVAL BACKFILL
- ORGANIC REMOVAL BACKFILL BOUNDARY

**NOTES:**

1. EXISTING GROUND CONTOURS ARE A TOPOGRAPHIC SURVEY FROM  
- 2026 MAR 26 AERIAL SURVEY FROM RDCK



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**M. I. H. BHUIYAN**  
# 32840  
BRITISH COLUMBIA  
ENGINEER

SEAL

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| B         | 2026/09/24 | ISSUED FOR TENDER     |  | AT   | SG   |
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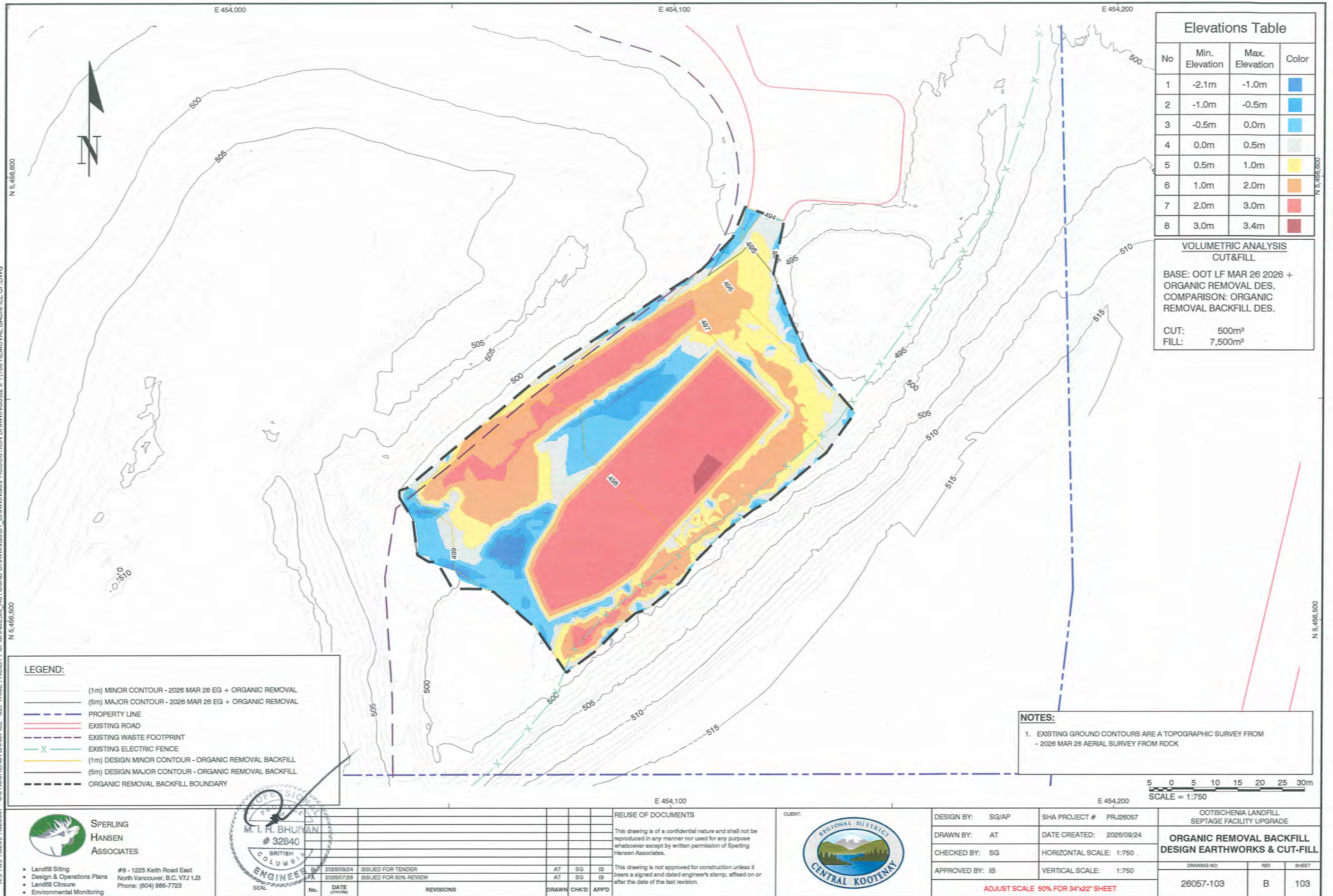
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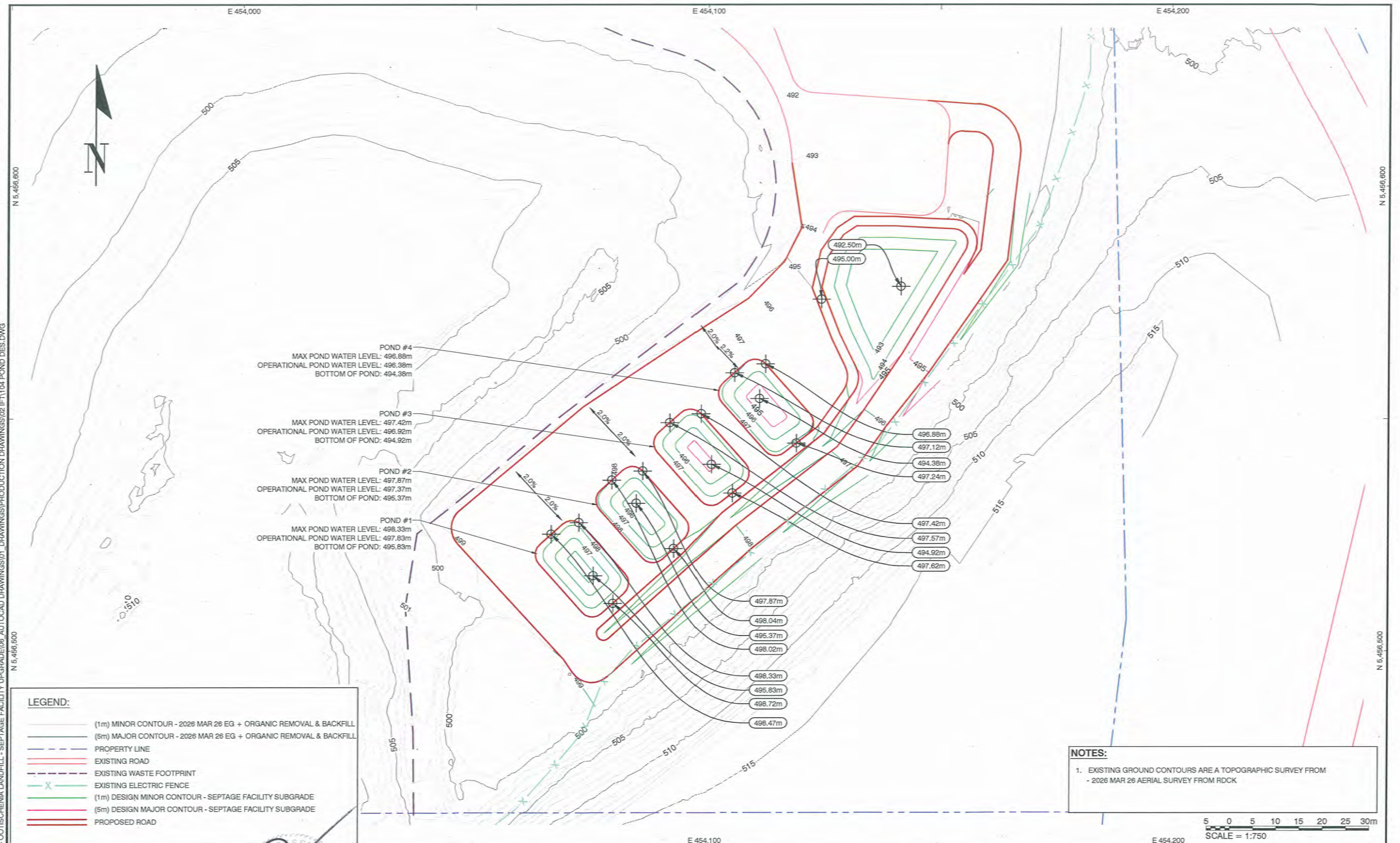


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| DESIGN BY:                         | SG/AP | SHA PROJECT #     | PRJ26057   |
| DRAWN BY:                          | AT    | DATE CREATED:     | 2026/09/24 |
| CHECKED BY:                        | SG    | HORIZONTAL SCALE: | 1:750      |
| APPROVED BY:                       | IB    | VERTICAL SCALE:   | 1:750      |
| ADJUST SCALE 50% FOR 34"x22" SHEET |       |                   |            |

|                                                     |     |       |
|-----------------------------------------------------|-----|-------|
| OOTISCHENIA LANDFILL<br>SEPTAGE FACILITY UPGRADE    |     |       |
| <b>ORGANIC REMOVAL BACKFILL<br/>DESIGN CONTOURS</b> |     |       |
| DRAWING NO:                                         | REV | SHEET |
| 26057-102                                           | B   | 102   |

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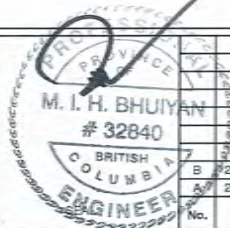




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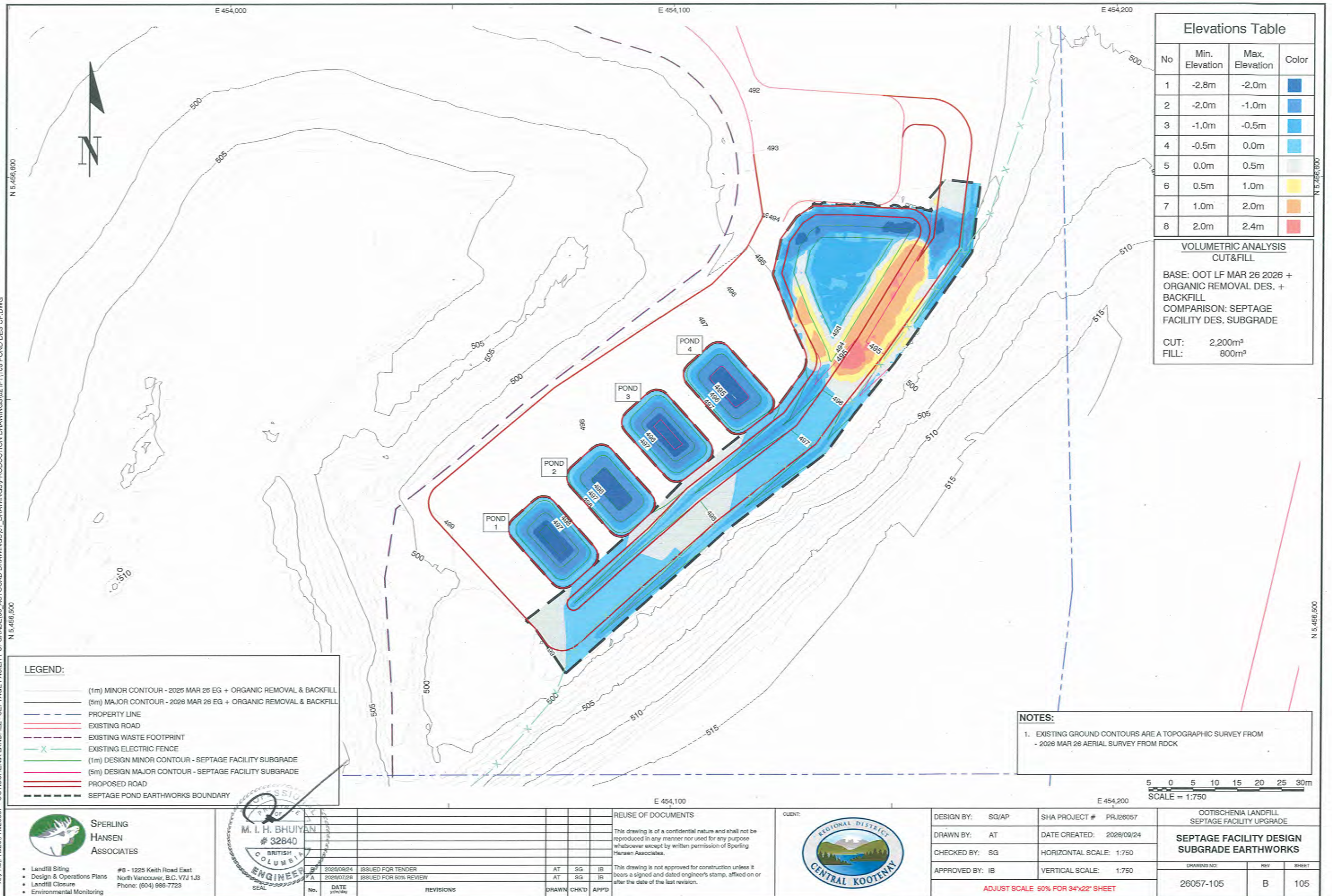
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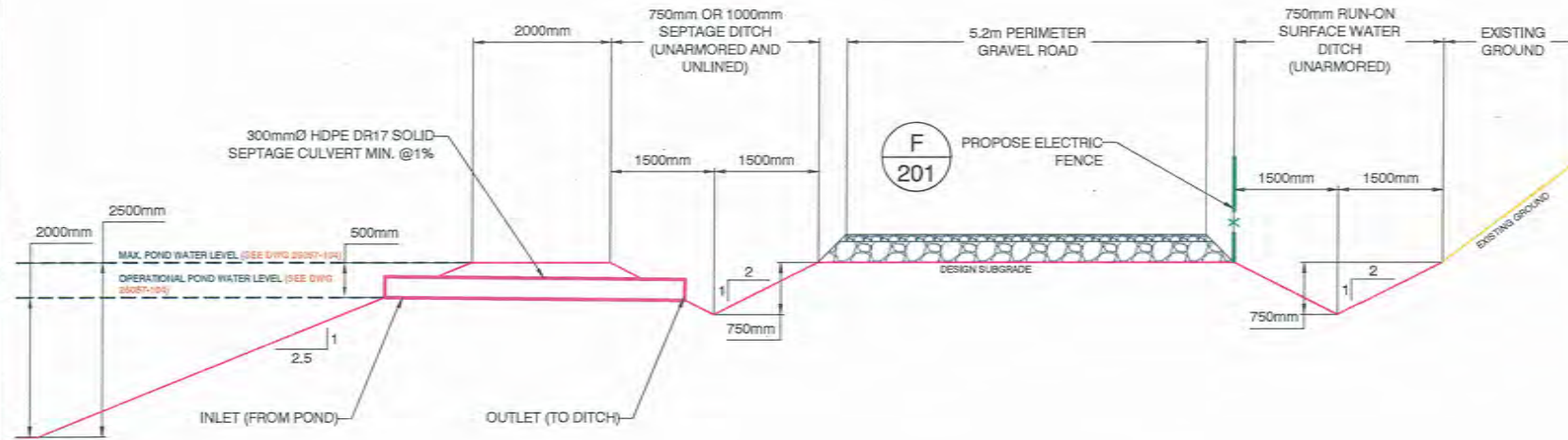
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| DESIGN BY: SG/AP                   | SHA PROJECT # PRJ26057   | OOTISCHENIA LANDFILL<br>SEPTAGE FACILITY UPGRADE |     |       |
| DRAWN BY: AT                       | DATE CREATED: 2026/09/24 | <b>SEPTAGE FACILITY DESIGN<br/>SUBGRADE</b>      |     |       |
| CHECKED BY: SG                     | HORIZONTAL SCALE: 1:750  |                                                  |     |       |
| APPROVED BY: IB                    | VERTICAL SCALE: 1:750    | DRAWING NO:                                      | REV | SHEET |
| ADJUST SCALE 50% FOR 34"x22" SHEET |                          | 26057-104                                        | B   | 104   |

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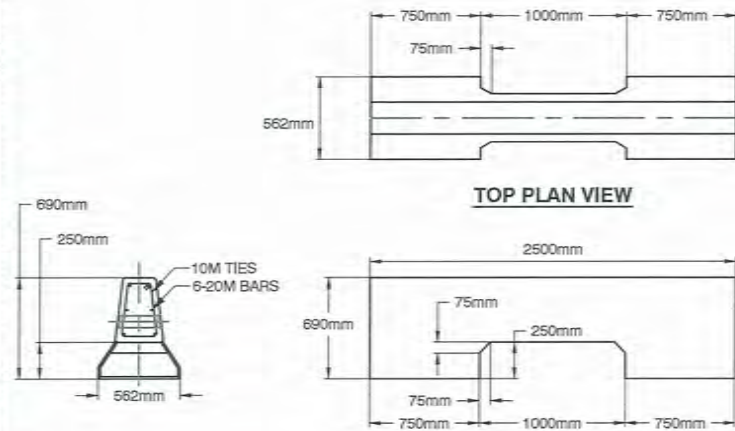




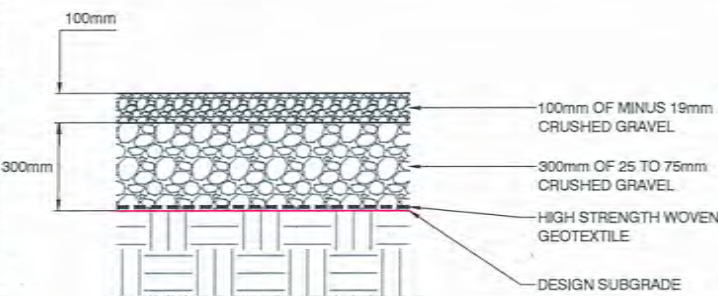
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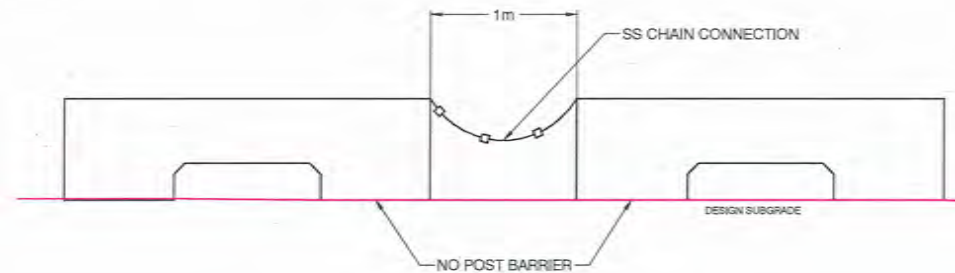
**A**  
200  
SEPTAGE POND CULVERT CROSSING SECTION  
SCALE 1:100



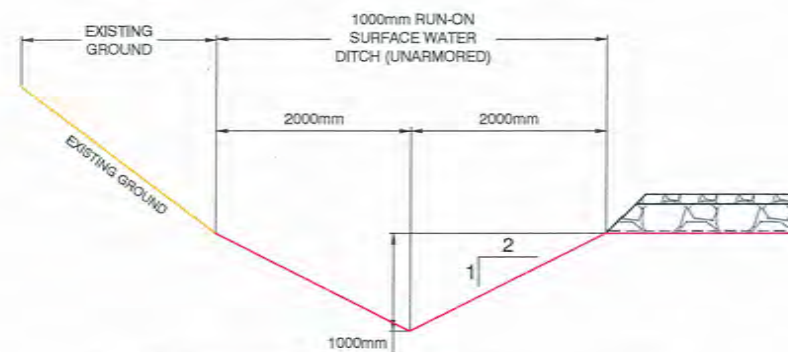
**C**  
200  
NO POST BARRIER DETAIL  
SCALE 1:50



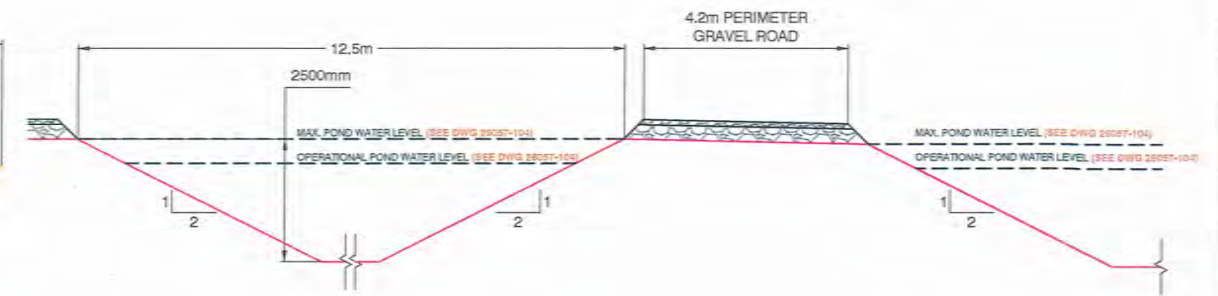
**D**  
200  
PERIMETER GRAVEL ROAD DETAIL  
SCALE 1:25



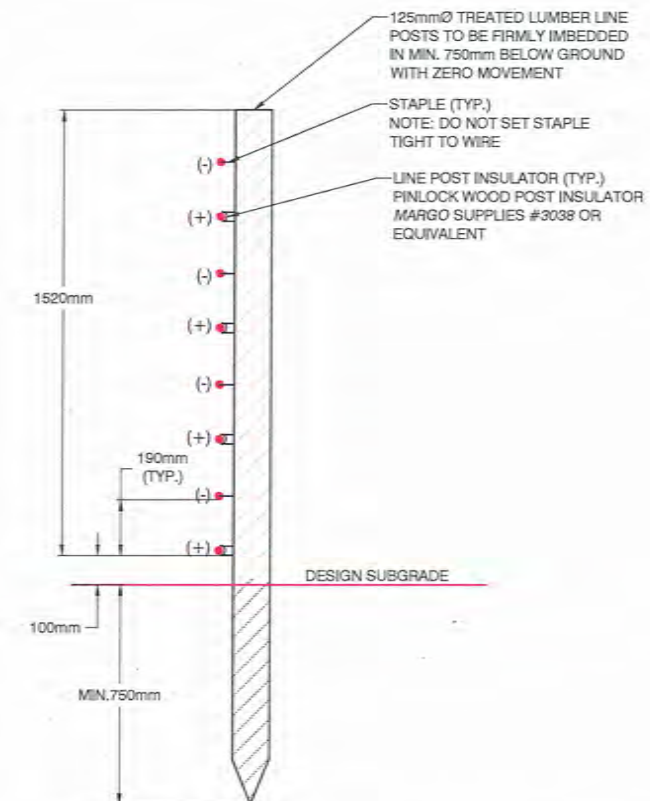
**E**  
200  
NO POST BARRIER CHAIN CONNECTION DETAIL  
SCALE 1:50



**G**  
200  
RUN ON SURFACE WATER DITCH DETAIL  
SCALE 1:75



**B**  
200  
SEPTAGE POND CULVERT SECTION  
SCALE 1:150



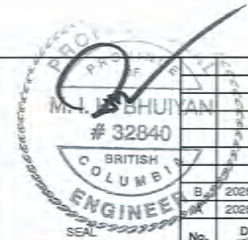
**F**  
200  
**F**  
201  
ELECTRICAL FENCE DETAILS  
SCALE 1:50



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| DESIGN BY: SG/AP                   | SHA PROJECT # PRJ26057   | OOTISCHENIA LANDFILL<br>SEPTAGE FACILITY UPGRADE |        |            |
| DRAWN BY: AT                       | DATE CREATED: 2026/09/24 | <b>DETAILS</b>                                   |        |            |
| CHECKED BY: SG                     | HORIZONTAL SCALE: 1:100  |                                                  |        |            |
| APPROVED BY: IB                    | VERTICAL SCALE: 1:100    | DRAWING NO: 26057-201                            | REV: B | SHEET: 201 |
| ADJUST SCALE 50% FOR 34"x22" SHEET |                          |                                                  |        |            |