

*Owner:* Resort Municipality of Whistler  
(NAME OF OWNER)

*Contract:* 2024 Sewer and Water Valve and Fitting Repairs  
(TITLE OF CONTRACT)

*Reference No.* E20508-E32006  
(OWNER'S CONTRACT REFERENCE NO.)

To All Tenderers:

Date: January 31, 2024

This addendum shall form part of the original documents for the above noted contract and all other segments of the contract shall remain in force except as noted below:

## 1. Add Environmental Management Plan (EMP)

### Reference Appendices

**ADD:**

Appendix F – Environmental Management Plan (Attachment #1)

### Reference Supplemental Contract Specifications – General Requirements

**DELETE:**

13.1S

**REPLACE WITH:**

13.1S

The Contractor is advised that he is responsible for all necessary measures required to prevent the transportation of any silt or other deleterious material from the site into any fish bearing watercourses or their tributaries. All requirements of the Ministry of Environment, Lands and Parks, Fish and Wildlife Branch and Fisheries & Oceans Canada, with respect to air, earth and water pollution, must be strictly adhered to.

**Refer to Section 01 57 01S Environmental Protection and Appendix F – Environmental Management Plan for further information. If there are any discrepancies between this section, Section 01 57 01S, and Appendix F – Environmental Management Plan, then the following governing hierarchy will be used:**

**(1) Environmental Management Plan;**

**(2) Section 01 57 01S;**

**(3) Section 01 54 00S Item 13.0.**

**ADD:**

29.0 Environmental Management Plan

A supplementary environmental management plan has been prepared for this project and included in Appendix F. The Contractor is responsible for ensuring they are familiar with the plan and that the work done by the Contractor will be consistent with the procedures stated in the plan.

All tenderers shall acknowledge receipt of **Addendum #1 (2 pages)** and **Addendum #1 – Attachment #1 – Environmental Management Plan (26 pages)** by signing in the space provided and submitting this signed addendum with the tender. Tenders submitted without acknowledgment of this addendum may be considered incomplete.

Receipt acknowledged and conditions agreed \_\_\_\_\_ day of \_\_\_\_\_, 2024

\_\_\_\_\_  
Tenderer

\_\_\_\_\_  
Signature

END ADDENDUM #1

*Appendix F*  
*Environmental*  
*Management*  
*Plan*



Resort Municipality of Whistler

Final Report

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Environmental Management Plan for the  
Fitzsimmons Creek Temporary Sanitary Crossing

January 2024





ISL Engineering and Land Services Ltd. Is an award-winning full-service consulting firm dedicated to working with all levels of government and the private sector to deliver planning and design solutions for transportation, water, and land projects.

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## 1.0 ENVIRONMENTAL MANAGEMENT PLAN PURPOSE

The enclosed Environmental Management Plan (EMP) has been prepared by ISL Engineering and Land Services Ltd. (ISL) for the Resort Municipality of Whistler (RMOW) for the Fitzsimmons Creek Temporary Sanitary Crossing (FCTSC), located in Whistler, BC. The project will involve the construction and removal of a temporary aerial pipeline crossing over Fitzsimmons Creek.

It will be necessary for the Contractor who will design and construct the crossing to abide strictly to environmental legislation, environmental regulatory authorizations, and the conditions set out in this EMP. The EMP cites applicable Best Management Practices (BMPs) for mitigation of potential environmental effects and environmental regulatory requirements that the Contractor must implement prior to, during and after construction. Fully implementing the BMP's set out in this EMP will help to avoid Stop Work Orders, and otherwise contravening the following environmental legislation:

- Federal *Fisheries Act*;
- Federal Migratory Bird Convention Act
- Provincial *Water Sustainability Act (WSA)*;
- Provincial *Wildlife Act*
- Provincial *Environmental Management Act (EMA)*

The provisions outlined in this EMP are Contractor's 'mandatories' and form part of contract documents for the project. Prospective Contractors are advised to carefully review this EMP prior to submitting responses to the Tender.

If the Contractor does not have the appropriate environmental effects mitigation measures on site and the Environmental Monitor (EM) indicates that the Contractor cannot protect and mitigate effects to the environment, including fish and fish habitat, wildlife, and avoid causing delays and shutdowns necessary to implement these controls, it may result in additional costs that are the Contractor's sole responsibility.

## 2.0 PROJECT BACKGROUND, LOCATION, AND CONTEXT

RMOW's existing sanitary sewer components are corroded at several locations along Spruce Grove Way. The sewer cannot be repaired while sewage is actively flowing through the pipes. A temporary bypass will be required to divert sewage away from the corroded areas so that the valves and fittings can be repaired. Without the temporary bypass and repairs, the sewer could corrode fully, leading to failure and loss of sewer functionality,

The temporary aerial bypass will span across Fitzsimmons Creek, east of Sea-to-Sky Highway 99, and directly west across the creek from the junction of Spruce Grove Way and Fitzsimmons Road. N (**Figure 1**).

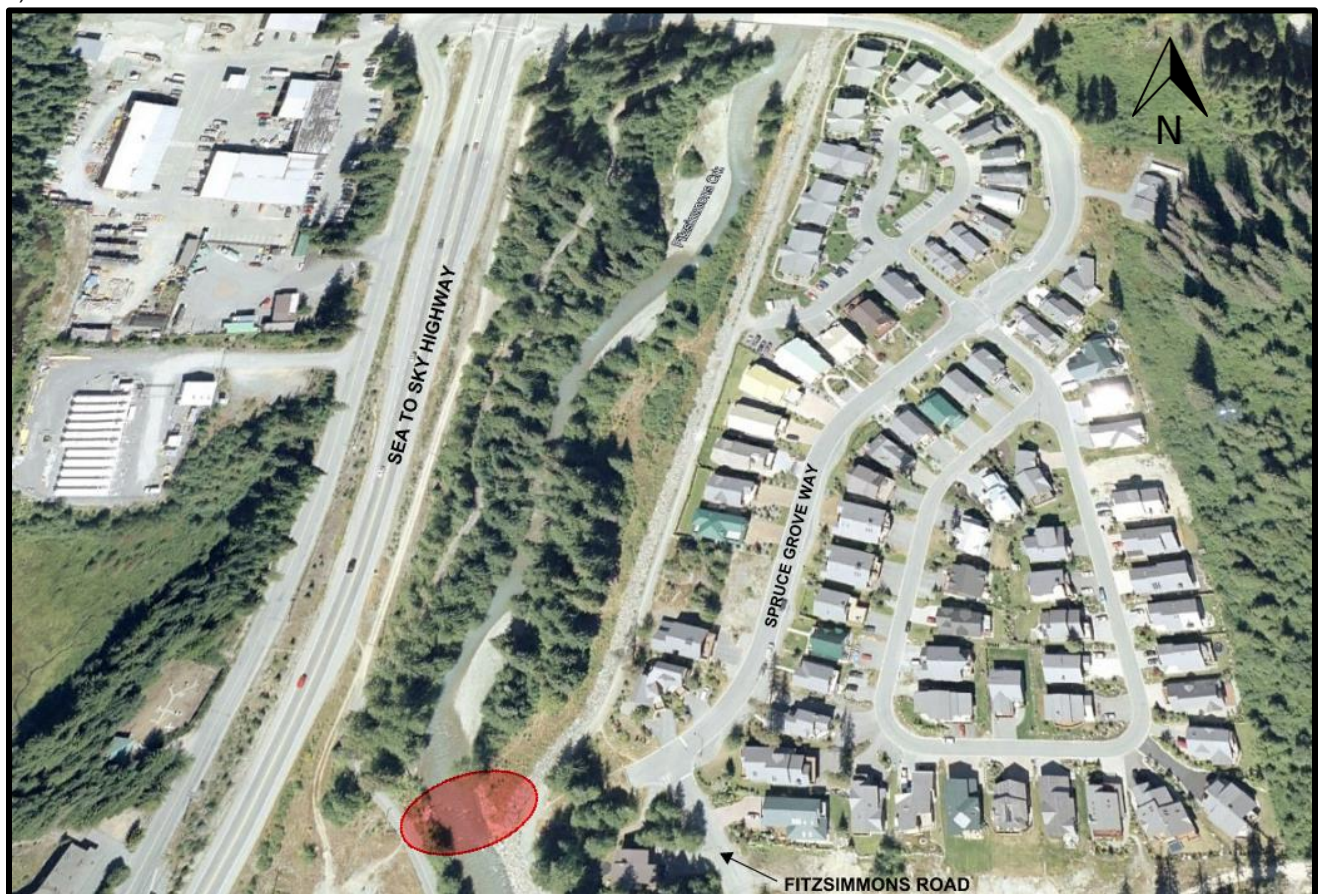


Figure 1. Key map of the project location.

### 2.1 Description of Project Activities

The work consists of installing abutments, a support structure, temporary aerial bypass pipes of the sanitary sewer forcemain and gravity main, and deconstruction of the temporary aerial crossing upon completion of the works. A concept engineering design drawing is provided in Schedule 1.

The work will occur above top-of-bank of Fitzsimmons Creek. There is no riverbank or in-stream work planned, nor is it anticipated.



The project is anticipated to take place between **May 1<sup>st</sup> to September 30<sup>th</sup>, 2024**. This is outside of the standard reduced risk instream window (August 1<sup>st</sup> to 15<sup>th</sup>), however, the project does not require any instream work activities and will take place above the top-of-bank of Fitzsimmons Creek. Once construction is complete, the Contractor will conduct post-construction riparian restoration.

### 3.0 ENVIRONMENTAL REGULATORY CONTEXT

The Contractor is responsible for reviewing all environmental regulatory documents associated with the project to understand the environmental protection and mitigation commitments undertaken by responding to the Tender. The Contractor is also responsible for following all BMPs described in this EMP. Should the Contractor need further clarification, they will contact ISL or the designated EM.

#### 3.1 Applicable Legislation

The following legislation applies to the project and should be understood by the Contractor:

Table 1. Environmental legislation applicable to the project.

Legislation	Description	Regulatory Consideration
<b>Federal Fisheries Act</b>	Fisheries and Oceans Canada (DFO) prohibits harmful alteration, disruption or destruction (HADD) to fish or fish habitat unless authorized by the Minister.	<ul style="list-style-type: none"> <li>Deposition of deleterious substances (such as raw-sewage, or hydrocarbons) into fish habitat is an offence under the Act.</li> <li>Carrying out work which results in the death of fish (unless authorized) is prohibited under the Act.</li> </ul>
<b>Federal Migratory Bird Convention Act (MBCA)</b>	Protects and conserves migratory birds at individual and population level, including nests. The Act provides habitat protection in the form of a prohibition about the taking of eggs or destruction of nests when occupied by a live bird or viable eggs.	<ul style="list-style-type: none"> <li>Nesting bird surveys are required for any vegetation removal during the nesting bird window (March 1 – August 15)</li> <li>The Migratory Bird Regulation (MBR) provides year-round nest protection, whether nests are occupied or not, for 18 bird species listed on Schedule 1 of the MBR.</li> </ul>
<b>Provincial Water Sustainability Regulation (WSR)</b>	The WSR regulates authorized changes in and about a stream.	<ul style="list-style-type: none"> <li>Notification of Authorized Changes are provincial regulatory submissions for regular works in and about a stream.</li> </ul>
<b>Provincial Environmental Management Act (EMA)</b>	The EMA supports and promotes the protection, enhancement, and wise use of the environment.	<ul style="list-style-type: none"> <li>Pollution (such as sewage, hazardous waste, or littering) into the environment is prohibited under the Act.</li> <li>Waste management must be in accordance with regulations set out in the EMA.</li> </ul>
<b>Provincial Wildlife Act</b>	The Wildlife Act protects vertebrate animals from direct harm, except as allowed by regulation (e.g., hunting or trapping).	<ul style="list-style-type: none"> <li>Section 34 of the act provides protection for active bird nests and eggs.</li> <li>Nests of eagles, peregrine falcon, gyrfalcon, osprey, heron, or burrowing owl are protected year-round, whether occupied or not.</li> </ul>

### 3.2 Applicable Best Management Practices

The following regulatory guidance and Best Management Practices (BMPs) documents are applicable to the project and must be reviewed and understood by the Contractor and Environmental Monitor (EM).

- *Measures to protect fish and fish habitat (Fisheries and Oceans Canada)*  
<https://www.dfo-mpo.gc.ca/pnw-ppe/measures-mesures-eng.html>
- Fisheries and Oceans Canada (DFO) Code of practice: Clear span bridges  
<https://www.dfo-mpo.gc.ca/pnw-ppe/codes/clear-span-bridges-ponts-portee-libre-eng.html>
- *A Users Guide to Changes In and About a Stream in British Columbia (2022)*  
[https://www2.gov.bc.ca/assets/gov/environment/air-land-water/water/working-around-water/wsa-cias-users\\_guide.pdf](https://www2.gov.bc.ca/assets/gov/environment/air-land-water/water/working-around-water/wsa-cias-users_guide.pdf)
- *Requirements and Best Management Practices for Making Changes In and About a Stream in British Columbia (2022)*  
<https://www2.gov.bc.ca/assets/gov/environment/air-land-water/water/working-around-water/wsa-cias-requirements-bmps.pdf>

### 3.3 Environmental Approvals and Permits

A Notification of Authorized Change under Section 39(1)(b) and (c)(ii) will be submitted to the Ministry of Water, Land and Resource Stewardship (MWLRS). It is anticipated that the province will accept the Notification within 45 days of submission. A copy of the Terms and Conditions will be provided to the Contractor upon acceptance. The Contractor must keep a hard copy of these documents on-site.

The Contractor shall complete the work within the specified schedule, following the terms and conditions set forth in the Notification. If works are not completed within the specified time frame the Contractor will be responsible for all costs associated with the permit extension unless otherwise agreed to by the Contract Administrator (CA)

**It is understood that in the event of a discrepancy between any of the clauses in the contract pertaining to environmental protection specifications, the provisions of any legislation, regulations, or municipal bylaws, the provisions of existing laws, regulations, and bylaws shall prevail.**

## 4.0 ENVIRONMENTAL MONITORING

The proposed project, construction activities, and associated mitigation measures require the presence of an Environmental Monitor (EM). Environmental monitoring will be provided by ISL for the duration of the proposed works. The Contractor is not responsible for obtaining their own EM.

The EM will ensure activities are undertaken in compliance with the relevant legislation, regulatory authorizations, and in conformance with this EMP.

## 4.1 Environmental Orientation and Monitoring Frequency

- Prior to any works on-site, a field pre-construction meeting will be held amongst the EM, Designer, Contractor's Site Supervisor (or Foreman) to conduct a site walk-through and identify site-specific risks, environmental constraints, discuss the project schedule, and ensure all parties understand the mitigative BMPs outlined in this EMP.
- The EM will complete a Contractor Environmental Orientation Record (CEOR) based on the reference in **Schedule 2** as part of the field pre-construction meeting and submit that to the CA.
- EM for this is required to be present on site during the following activities:
  - Pre-construction meeting,
  - If any vegetation removals or tree trimming are required
  - Construction and installation of the aerial crossing
  - Deconstruction of the aerial pipeline crossing above Fitzsimmons Creek, and
  - In the event of incidental spill.
- The EM will be notified a **minimum of five (5) days prior** to the start of construction.
- The EM will be immediately notified in the event of an incidental spill.

## 4.2 Environmental Monitoring Requirements

The EM will:

- The EM will ensure mitigation measures are implemented for the protection of fish and fish habitat.
- Modify or halt any construction activity, if deemed necessary, for protection of organisms, habitat, or other environmental resources.
- Advise the Contractor on required protective or mitigatory measures to meet requirements of environmental regulatory advice, and applicable BMPs as required by this EMP.
- Ensure that all project components are completed in conformance with this EMP.
- Ensure that the best management practices related to the nature of the construction work occurring are adopted to avoid contravening provincial or federal legislation.
- Require that the Contractor have all documentation regarding environmental mitigation and Environmental authorizations, including this EMP on-site in hardcopy.
- Report Environmental Incidents or non-compliances to the regulatory agencies with jurisdiction in the event of circumstances that would trigger a requirement for agency involvement.
- Report environmental non-compliance to the Site Supervisor, Engineering Inspector, CA and RMOW.
  - Provide inspection memoranda to the Contractor at the end of each site visit.
  - Not consider the project to be complete and in compliance with best practices for mitigating the works if there are any outstanding proposed mitigation measures.

## 5.0 PROJECT MITIGATION MEASURES

The following sections describe the applicable mitigation measures for the project. Implementation of the measures by the Contractor are required to mitigate the environmental risks, and ensure compliance with the applicable legislation, authorizations, and BMPs.

### 5.1 Footprint Minimization

As the project is in proximity to Fitzsimmons Creek, the Contractor is responsible for minimizing the extent of the project footprint as possible:

- The Contractor is responsible for providing a site plan to the EM, detailing the construction area extents, including: ingress/egress points, laydown/staging areas, demolition areas, personnel movement corridors, spoil areas, and/or any other areas with potential construction footprint.
- The EM is responsible for reviewing the site plan and notifying the Contractor if any portions of the construction footprint will infringe on designated wildlife or aquatic buffer zones.
- The Contractor must respect any buffer zones and not change construction area footprint without consultation with the EM.

### 5.2 Erosion and Sediment Control

The Contractor will be required to prepare an erosion and sediment control drawing and implement the ESC Requirements below:

- The ESC Plan must have specific measures to avoid the introduction of sediment into the adjacent watercourse.
- Prior to commencement of the work the Contractor must obtain sufficient quantities of materials to be used to stabilize erodible surfaces (for example, silt fence, straw bales, grass seed mix, sandbags, erosion control blanketing, polyethylene sheeting, mulch etc.)
- Ensure that ESC control materials and labour required to install the materials are on-site, and available for inspection and deployment prior to the commencement of any ground disturbance.
- Install effective ESC measures prior to beginning the work, in order to stabilize all erodible and exposed areas and prevent the entry of deleterious materials or sediment into the watercourse or surrounding drainages.
- ESC measures will be inspected by the EM during site visits. Necessary repairs will be made by the Contractor immediately if any damage occurs such that erosion and sediment control is compromised.
- Complete construction in a manner that will prevent the release of sediment or sediment-laden waters to watercourses, ditches, storm sewers and swales draining to fish habitat.
- Leave undisturbed native vegetation wherever possible.
- Apply a reclamation seed mix, fertilizer, and tackifier, via hydroseeding to all disturbed areas. If necessary, mulch will be applied to further stabilize disturbed areas.

- Stabilize all disturbed slopes, and ground surfaces that may contribute sediment-laden water into sensitive fish habitats during precipitation events, through application of organic (i.e. straw) or inorganic (i.e. plastic) material over the course of the project.
- Complete the works as quickly as possible once started.
- Maintain effective sediment and erosion control measures until all disturbed ground has been permanently stabilized (i.e. revegetation of disturbed areas is achieved).
- Schedule works to avoid wet, windy, and rainy periods (and heed weather advisories) that may increase erosion and sedimentation.
- The Contractor must suspend or modify work activities to avoid sedimentation of Fitzsimmon Creek during periods of significant rainfall (>25 mm over 24-hour period).
- Soil stockpiles are to be stabilized to prevent them from entering the watercourse by covering stockpiles with 6 mm polyethylene sheeting weighted down with sandbags. Sheeting must be overlapped by minimum of 30 mm.
- Avoid tracking of sediments to roads. The Contractor will sweep paved roadways clean daily and when they become fouled with sediment.

### 5.3 Deleterious Substance, Hydrocarbon Wastes, and Fuel Spill Mitigation Measures

The Contractor will be responsible for ensuring that substances that are hazardous to the environment do not enter watercourses, or any other environmentally sensitive areas. To prevent the discharge of deleterious substances such as raw-sewage, oils, fuel, grease, and hydrocarbons, the Contractor is to develop a spill response plan that provides written Safe Work procedures in the event of a spill. Costs of the preparation of the Spill Response Plan are incidental to the Contract. The minimum conditions are set out below:

- Develop a spill response plan, based upon the reference spill response plan (**Schedule 3**). The spill response plan shall include the reference Contact List (**Schedule 4**).
- Ensure a spill response plan and spill kit suitable for all substances onsite is readily accessible onsite in the event of a release of a deleterious substance to the environment.
- Prevent the introduction of silt, debris, sediment, sediment-laden water, sewage, or any other deleterious substance into the aquatic environment.
- Develop and identify waste receptacles for the safe disposal of construction generated waste including hydrocarbons and lubricant fouled waste material.
- The Contractor must dispose of any excavated soils per the provincial *Contaminated Sites Regulation*.
- Ensure that equipment and machines that are utilized onsite are in good operating condition and free of leaks, excess oil and grease.
- Keep large spill kits onsite immediately adjacent to any work near the watercourse and near the aerial crossing on both sides of the watercourse. Large spill kits should have a minimum 200 litre sorbent capacity, be equipped with spill booms, and be able to sufficiently address any kind of hydrocarbon spill.

- In addition to the large spill kit, each machine utilized on-site for construction activities will be equipped with a small spill kit with a minimum sorbent capacity of 30 L.
- Spill kits will be restocked within 48 hours of a spill.
- The spill kits will be inspected on a regular basis by the Contractor and the EM to ensure that enough spill response material is present.
- Machine or equipment refueling, or machine maintenance will be strictly prohibited within 30 m of any watercourses.
- Machinery working within 15 m of the stream will have hydraulic fluids that are inherently biodegradable.
- Oil/fuel absorbent pads will be wrapped and secured around all fittings during machine refueling to mitigate any spillage.
- The refueling attendant must maintain a hand on the refueling hose at all time (may not lock the hose and attend to other matters while refueling operations are underway).
- Jerry cans will be stored in a plastic spill containment tray / secondary containment tray with 125% capacity and be stored away from construction equipment traffic or large open areas, to avoid potential damages.
- Machines shall be parked in a designated laydown area at the end of each day. The laydown area is to be located a minimum of 30 m away from any watercourses unless otherwise approved by the EM.
- Smoking is prohibited near the containment facility or near fuel storage. Designated smoking area must be established if smoking on site is permitted.
- Spills will be immediately reported to the EM who will determine the need for reporting to Emergency Management BC, 24-hour phone line at 1-800-663-3456.
- Call before you dig. BC One Call 1-800-474-6886.
- The Contractor is wholly responsible for costs associated with clean-up of spills originating from their equipment or work practices and with any regulatory penalties.

## 5.4 Non-hazardous Waste Management

Trash cans will be required with appropriate wildlife-proof lids for the disposal of crew-generated wastes.

- The Contractor shall provide locking waste receptacles (that are specifically designed to be wildlife-proof) for all waste.
- In case of damage from wildlife occurring to any receptacles due to negligence or improper waste storage, repair or replacement will be at the Contractor's expense. The Contractor will work with the EM to find a solution if wildlife damage is an ongoing problem.
- Trash cans shall be stored in a locked container (i.e. sea can) or removed from the site at the end of each day to avoid wildlife attraction.

- Disposal of solid wastes onto the site will not be permitted, including into ditches, road edges or private property.
- Littering is prohibited and monitoring for this activity will be on-going throughout the project.
- Food and food waste shall be stored in such a way that is not easily accessible by animals.
- All solid waste will be either recycled or disposed of at approved waste disposal facilities.
- Pets will be prohibited from the construction site.
- The Contractor's crew **will not feed or handle wildlife**.

## 5.5 Environmental Incidence Response

Effective communications regarding Environmental Incidents is important. A list of project contacts and external agencies related to incident reporting is provided in **Schedule 3**. For this project, Environmental Incidents will be defined as:

- Spill to lands exceeding reportable quantities outlined in **Schedule 3** of the Spill Reporting Regulation of the BC *Environmental Management Act*.
- Spill to water or watercourse (any).
- Other environmental issues that considered together are deemed to represent a significant risk to the environment.
- If an Environmental Incident is observed by the EM, Engineering Inspector or Contractor, it must be reported up the line via the Spill/Environmental Incident Reporting framework outlined in BC Spill Reporting Regulation.
- The EM will determine if a regulatory threshold has been crossed which requires reporting to senior government agencies.
- Construction activities will cease, and the EM and the Contractor will discuss immediate and longer-term contingencies to avoid reoccurrence.
- The EM will issue an interim incident report to the Contractor on the day the incident is observed.
- The EM will provide a follow up Environmental Incident Report to the Contractor Administrator, Owner and within one business day of the observation of the incident.
- Repeated Environmental Incidents will lead to the EM recommending to the CA a local 'shut-down' for environmental non-compliance.
- The local shutdown will not be lifted until the construction is brought into conformance with this EMP.

## 5.6 Vegetation Protection Requirements and Riparian Impact Mitigation

The FCTSC site does not have any rare or invasive plant species present. However, the following vegetation protection requirements will be implemented during the project's construction phases to minimize damage to the surrounding vegetation:

- Avoid clearing trees, woody shrubs, or snags where possible.
- Use existing trails, roads, access points or cut lines wherever possible. Utilize any existing walkways to avoid further vegetation clearing.
- Avoid stockpiling vegetation debris within the riparian area;
- Limit any disturbance of the riparian vegetation to low-quality habitats, such as areas that lack trees and woody shrubs and areas that contain invasive plants, where possible. Avoid disturbing noxious plants for access.
- Revegetate the disturbed area with native species suitable for the site.

## 5.7 Nesting Bird and Wildlife Protection

It is not anticipated that the project will require tree and vegetation removal. The Fitzsimmons Creek riparian zone could provide habitat for nesting birds. All work will adhere to the *Wildlife Act* and the MBCA through following this EMP.

- If any tree trimming, removal, or vegetation clearing is to take place within the nesting bird window (between March 1 to August 15), the EM will perform a nesting bird survey prior to vegetation disturbance activities:
  - The nesting bird survey will be conducted a maximum of 48 hours prior to vegetation disturbance.
  - If an active bird nest is discovered, the EM will apply a 'no disturbance' buffer of appropriate species-specific size. The no disturbance buffer will remain in place until a second survey has confirmed that the nest is no longer active.
  - If bird nests which have year-round protection (whether occupied or not) per s. 34 of the *Wildlife Act* or Schedule 1 of the *Migratory Birds Regulations* are identified within trees to be removed and cannot be avoided, the EM will notify the CA and provide prescriptions and/or obtain appropriate permits for these nests.
  - The Contractor will not conduct tree trimming, removal, or vegetation clearing until the EM has provided a Notice to Proceed.
- The EM will be given 5 days' notice before any shrub and tree clearing activity.
- The EM will be notified of any wildlife (i.e. bears, coyote, beaver, etc.) that is encountered onsite during construction activities. If wildlife is encountered, works shall be suspended to allow for wildlife to safely pass.
- Any chance discoveries of bird nests, wildlife denning sites, and other areas of wildlife habitation during construction will be reported to the EM. It is the Contractor's responsibility to ensure their crew are aware of their wildlife reporting responsibilities.



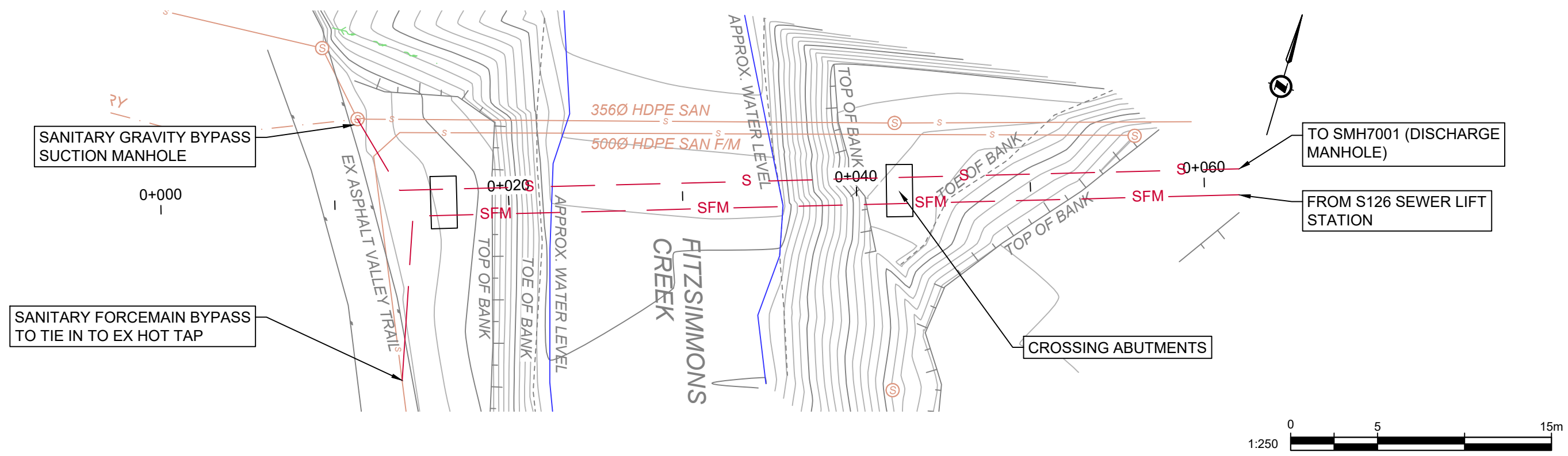




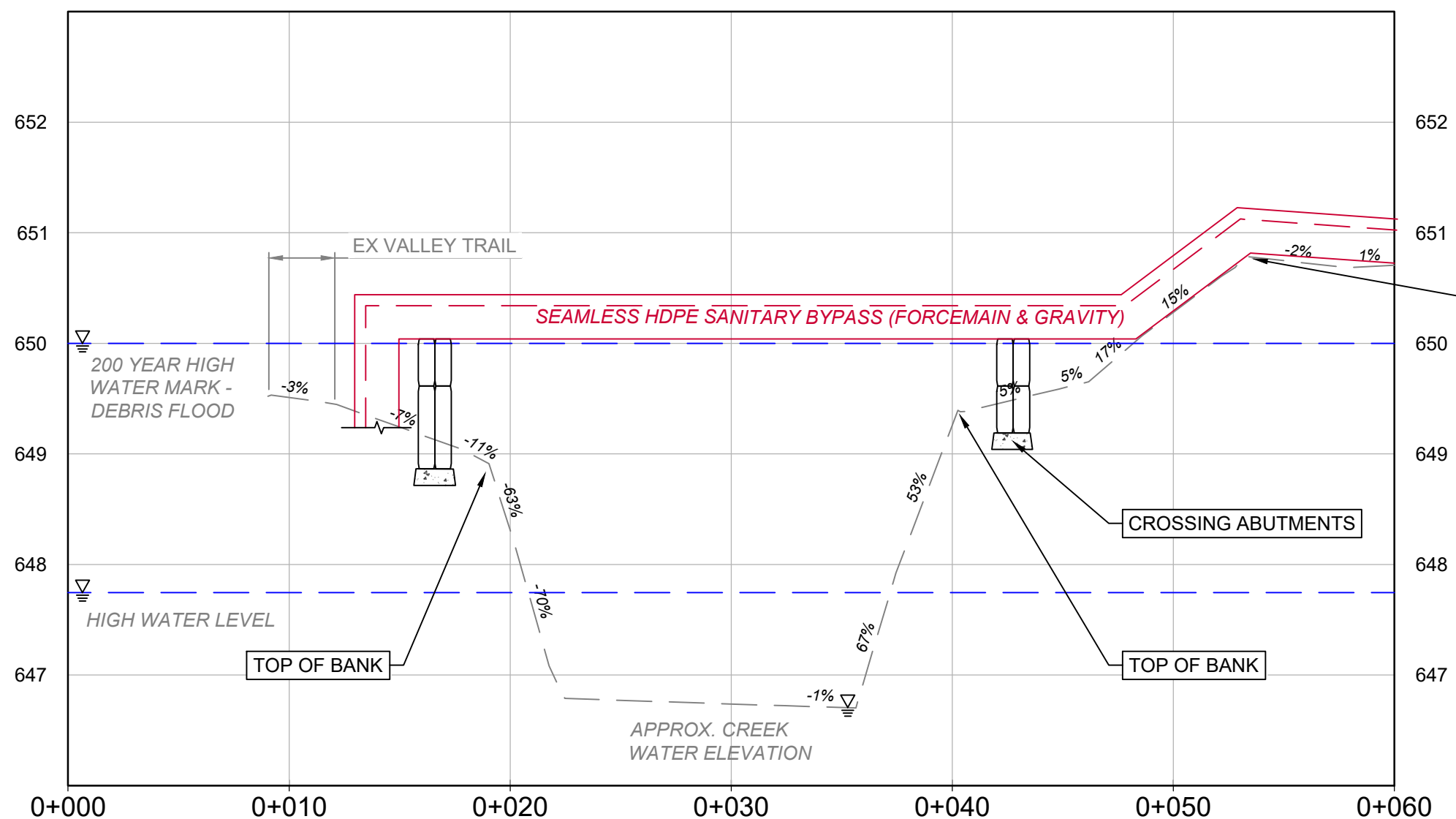
## SCHEDULE 1

CONCEPT ENGINEERING DESIGN DRAWINGS

James Taplin / Jan. 22, 24 / G:\Projects\32000\32500\32564\_RMW\_Fiz\_Creek\_Mamhole\_Replacement\02\_CADD\02\_Drafting\Sketches\31218\_FitzCreek\_Xsect\32564\_FitzCreek\_CrossSection.dwg



BYPASS PIPE CROSSING CREEK TO BE SUPPORTED BETWEEN ABUTMENTS WITH ENGINEERED STRUCTURE





## SCHEDULE 2

### CONTRACTOR ENVIRONMENTAL ORIENTATION RECORD

# ISL ENVIRONMENTAL MANAGEMENT

## SOP CONTRACTOR ORIENTATION RECORD

CATEGORY: Field Services



### ISL Environmental Management - Contractor Environmental Orientation Record

The Contractor Environmental Orientation Record (CEOR) shall be completed for all works involving an environmental component. The Environmental Monitor is responsible for ensuring that the environmental requirements of the work are reviewed with the Contractor before work is started, and that a record of the discussion is documented on the CEOR. The form must be signed by both the Environmental Monitor and the Contractor. By signing the CEOR, the Contractor indicates he/she has been advised of the environmental requirements of the project. The CEOR shall be filed with the Contract documents as required to confirm pay items, or to otherwise satisfy requirements of the contract.

Date:		File No.	
<b>1</b>	<b>Project Information</b>		
	Project Title		
	Project Description		
	Project Location		
<b>2</b>	<b>Contractor Information (if applicable)</b>		
	Company Name		
	Company Address		
	Site Contact/Representative Name		
	Tel. #	Fax #	E-mail
<b>3</b>	<b>Environmental Management Plan</b> Review the environmental issues and requirements of the work as specified in the Environmental Management Plan (EMP), Regulatory approvals or Best Management Practices (BMP)		
	Is there an EMP, CMP, BMP or Field Guide for the work?	<input type="checkbox"/> Yes	<input type="checkbox"/> NA
	Have the environmental requirements been reviewed with the Contractor and the Contractor's staff? (Use the checklist below to guide discussion)	<input type="checkbox"/> Yes	<input type="checkbox"/> NA
	<b>Environmental Issues</b>	<b>Environmental Management Plan Requirements</b>	<b>Discussed</b> <b>NA</b>
	Fish and Aquatic - habitat alteration, disturbance or loss		<input type="checkbox"/> <input type="checkbox"/>
	Site isolation & Bypass		<input type="checkbox"/> <input type="checkbox"/>
	Instream footprint mitigation		<input type="checkbox"/> <input type="checkbox"/>
	Riparian footprint mitigation (Vegetation disturbance or removal and mitigation)		<input type="checkbox"/> <input type="checkbox"/>
	Noxious weed control		<input type="checkbox"/> <input type="checkbox"/>
	Wildlife and Bird - habitat alteration, disturbance or loss		<input type="checkbox"/> <input type="checkbox"/>
	Soil erosion/compaction Water quality - erosion and siltation		<input type="checkbox"/> <input type="checkbox"/>
	Disturbance to Heritage Resources/Archaeological Sites		<input type="checkbox"/> <input type="checkbox"/>
	Noise Concerns		<input type="checkbox"/> <input type="checkbox"/>
	Hazardous waste (garbage)		<input type="checkbox"/> <input type="checkbox"/>

**ISL ENVIRONMENTAL MANAGEMENT**  
**SOP CONTRACTOR ORIENTATION RECORD**



**CATEGORY: Field Services**

Environmental Issues	Environmental Protection Requirements	Discussed	NA
Air emissions/ dust generation/other		<input type="checkbox"/>	<input type="checkbox"/>
Generation and disposal of waste (litter, latrine)		<input type="checkbox"/>	<input type="checkbox"/>
Fuel and flammable storage		<input type="checkbox"/>	<input type="checkbox"/>
Fuel-Spill of Spill of hazardous substances		<input type="checkbox"/>	<input type="checkbox"/>
Generation and disposal of hazardous substances		<input type="checkbox"/>	<input type="checkbox"/>
Property Considerations		<input type="checkbox"/>	<input type="checkbox"/>
Do the tools and equipment meet the requirements?		<input type="checkbox"/>	<input type="checkbox"/>
<b>Permits and Approvals Information:</b> Ensure the necessary environmental permits and approvals relating to the work have been obtained prior to starting work.			
Are environmental notification, permits, licenses or approvals required?		<input type="checkbox"/> Yes	<input type="checkbox"/> NA
List applicable regulatory requirements and permit reference numbers.			
Have the permits, licenses and approvals obtained and/or checked?		<input type="checkbox"/> Yes	<input type="checkbox"/> NA
<b>Emergency Response Plan/Oil and Chemical Spill Response Plan</b>			
Has the Oil and Chemical Spill Response Plan been discussed?		<input type="checkbox"/> Yes	<input type="checkbox"/> NA
Are there spill kits available on location?		<input type="checkbox"/> Yes	<input type="checkbox"/> NA
Where are the spill kits located?		<input type="checkbox"/> Yes	<input type="checkbox"/> NA
Does the contractor have an Emergency Response Plan? Has it been discussed?			
<b>Environmental Incident Reporting</b>			
Environmental Incident Reporting Procedures discussed?		<input type="checkbox"/> Yes	<input type="checkbox"/> NA

***The undersigned has been briefed on the environmental requirements of the work as detailed above.***

Signed: \_\_\_\_\_ Contractor Foreman      Date: \_\_\_\_\_

Counter-signed: \_\_\_\_\_ Environmental Monitor      Date: \_\_\_\_\_

**Additional Comments:**

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## SCHEDULE 3

REFERENCE SPILL RESPONSE PLAN

## Reference spill response procedures

If a spill of fuel, oils, lubricants or other harmful substances occurs at the site, the following procedures will be implemented.

Spill Response Steps	
1.	<b>ENSURE SAFETY</b>
2.	<b>STOP THE FLOW</b> (when possible)
3.	<b>SECURE THE AREA</b>
4.	<b>CONTAIN THE SPILL</b>
5.	<b>NOTIFY/REPORT</b> (PEP 1-800-663-3456)
6.	<b>CLEAN-UP</b>
(Circumstances may dictate another sequence of events)	

### 1. ENSURE SAFETY

- Ensure Personal, Public, and Environmental Safety
- Wear appropriate Personal Protective Equipment (PPE)
- Never rush in, always determine the product spilled before taking action
- Warn people in immediate vicinity
- Ensure **no ignition sources** if spill is of a flammable material

### 2. STOP THE FLOW (when possible)

- Act quickly to reduce the risk of environmental effects
- Close valves, shut off pumps or plug holes/leaks, set containers upright
- Stop the flow of the spill at its source

### 3. SECURE THE AREA

- Limit access to spill area
- Prevent unauthorized entry onto site

### 4. CONTAIN THE SPILL

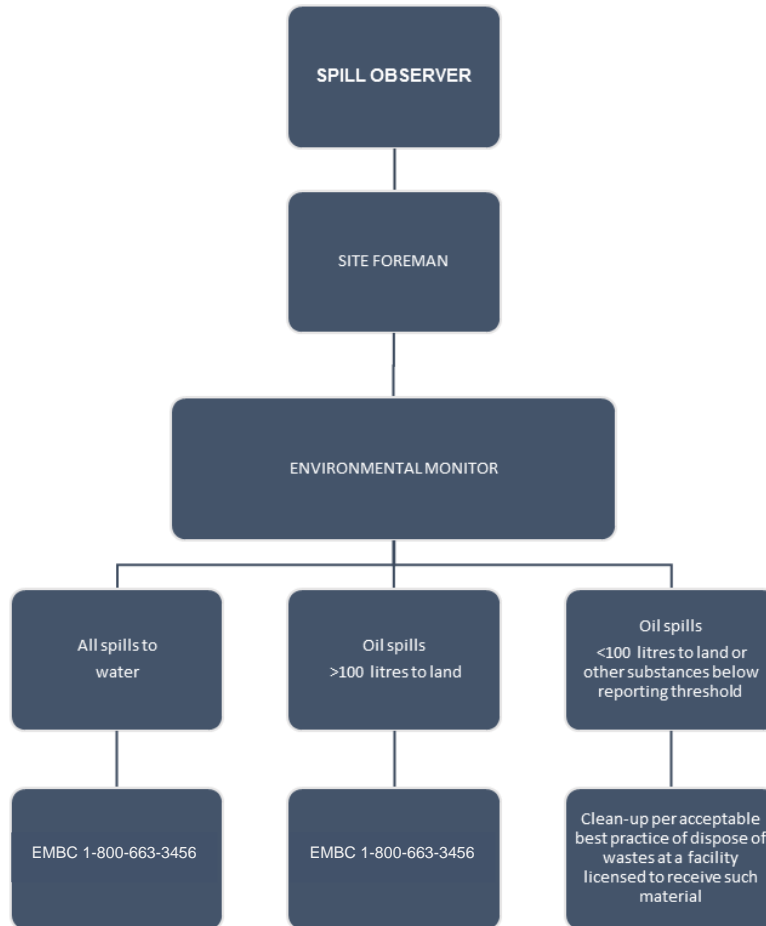
- Block off and protect ditches, drains and culverts
- Prevent spilled material from entering drainage structures (ditches, culverts, drains)
- Use spill sorbent material to contain spill
- If necessary, use a dike, berm or any other method to prevent any discharge off site
- Make every effort to minimize contamination
- Contain as close to the source as possible

### 5. NOTIFY/REPORT

- Notify Site Supervisor and EM (or alternate) of incident (provide spill details)
- When necessary, the first external call should be made to (see spill reporting requirements):  
**Emergency Management BC (EMBC) 1-800-663-3456 (24 hours)**
- Provide necessary spill details to other external agencies (see spill reporting requirements)



### Spill Reporting Notification Chart



Product	Quantity
<b>Class 2.1</b> - flammable gas (e.g., propane)	10 kg or 10 min.
<b>Class 2.2</b> - non flammable gas (e.g., SF6, CO <sub>2</sub> )	10 kg or 10 min.
<b>Class 3</b> - flammable liquids	100 liters
<b>Class 8</b> - corrosive liquid acids and caustics (e.g., battery acid)	5 kg or liters
<b>Class 9</b> - environmentally hazardous (e.g., PCB's, used ethylene glycol)	1 kg or liters
Oil & Waste Oil	100 liters
Other Substances (e.g., domestic sewage, new antifreeze, power-wash water)	200 kg or 200 liters
Pesticides & Herbicides	1 kg or 1 liter

**\*\*\*ALL SPILLS TO WATER ARE REPORTABLE\*\*\***

If in doubt as to whether to report a spill, err on the side of caution and report the spill.



## SCHEDULE 4

PROJECT CONTACT LIST – TO BE UPDATED PRIOR TO CONSTRUCTION



CONTACT	OFFICE #	CELL #	EMAIL
Contractor Superintendent	TBD	TBD	TBD
Contractor Foreman	TBD	TBD	TBD
Projects Manager Resort Municipality of Whistler  Chelsey Roberts	604-935-8305	-	<a href="mailto:croberts@whistler.ca">croberts@whistler.ca</a>
ISL's Project Manager/ Engineering Inspector  Grant Wilburn	604-815-4646	604-849-5543	<a href="mailto:gwilburn@islengineering.com">gwilburn@islengineering.com</a>
Environmental Monitor ISL  Mackaylen Bickle	604-371-0091	905-809-1170	<a href="mailto:mbickle@islengineering.com">mbickle@islengineering.com</a>
Environmental Monitor (Alternate) ISL  Larissa Darc	604-371-0091	604-318-0533	<a href="mailto:ldarc@islengineering.com">ldarc@islengineering.com</a>
Environmental Monitor (Alternate) ISL  Molly Zhang	604-371-0091	604-652-6082	<a href="mailto:mzhang@islengineering.com">mzhang@islengineering.com</a>
Environmental Lead ISL  David Neufeld, R.P.Bio.	604-371-0091	604-754-3996	<a href="mailto:dneufeld@islengineering.com">dneufeld@islengineering.com</a>
Department of Fisheries and Oceans (DFO)	<b>1-800-465-4336</b>	-	-
Ministry of Forests	<b>1-800-663-7867</b>	-	-
Emergency Management BC	<b>1-800-663-3456</b>	-	-
Report All Poachers and Polluters (RAPP)	<b>1-877-952-7277</b>	-	<a href="https://forms.gov.bc.ca/environment/rapp/">https://forms.gov.bc.ca/environment/rapp/</a>
TBD = To be determined after award			



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