

## PROJECT STATUS REPORT

To:	Village of Lytton	Contact:	CAO – Michael Baker
Project:	Lytton Recovery	From:	Recovery Project Manager - James Heigh
Report Period:	August 2022	Date Issued:	Sep 20, 2022

### 1. Project Dashboard

Current Project Phase:



Status	Overall Status	Scope	Budget	Schedule
Last Period	Moderate Risk	Moderate Risk	Low Risk	Moderate Risk
This Period	Moderate Risk	Moderate Risk	Moderate Risk	High Risk

### Project Status Executive Summary

#### Matcon

Actions this month included:

- Removal of metal and ACM debris from the footprint of 5 municipal properties and 90 private properties.
- Sewer and water capping at 90 properties.
- Concrete footings removal from 55 properties.
- Contaminated soil removal from 30 properties.
- Temporary space for the Village Site Support and incoming CAO,
- Vegetation Mgmt in Village.

As properties become accessible for remediation via homeowner sign off, schedule risk will be reduced. Slower excavation rates have been observed due to archeological shutdowns (chance finds) and limited excavation depths. These obstructions will affect schedule and more machinery may be required. Archeological Soil Screener arrived August 15 and, to date, screening has been going quicker than hand screening. IBI completing bunch NIR's as of August 5th and increased Soil Excavation will be able to occur. Excavated soil removal from the properties to the disposal location is pending Archeological screening and approval from LFN and Heritage Branch. This will delay project end if removal cannot be expedited.

#### IBI Group

IBI Group was concurrently completing the following activities in the VoL during this time period:

- Stage 1 Preliminary Site Investigation (PSI)

- 
- Issuing Notifications of Independent Remediation (NIR)
  - Monitoring remedial contractor (Matcon Environmental) works
  - Collection of samples of anthropogenic materials that have undergone combustion (debris samples) for laboratory analysis
  - Collection of soil samples for laboratory analysis

A Stage 1 PSI is being conducted for all VoL properties to identify historic Schedule 2 activities under the BC Contaminated Sites Regulation (CSR) and other potential land uses of concern such as residential vehicle maintenance areas and residential fuel storage tanks (above and below ground). Areas of Potential Environmental Concern (APECs) identified by the Stage PSI that are not already encompassed by the assessment of wildfire impacts, may require additional site-specific investigations.

The Stage 1 PSI has identified CSR Schedule 2 Industrial or Commercial Activities at the following VOL properties:

- 280 Main Street – Underground fuel storage tank (UST)
- 281 Main Street - USTs
- 120 Third Street - USTs
- 350 Main Street – USTs
- 424 Main Street – UST
- 464 Main Street – UST
- 475 Main Street – USTs
- 537 Fraser Street – Electrical Generation and Fuel Storage
- 556 Main Street – UST
- 575 Main Street - USTs
- 140 Seventh Street – UST
- 810 Main Street – USTs

Notifications of Independent Remediation (Initiation) have been issued to the BC Ministry of Environment and Climate Change Strategy (ENV) in accordance with the requirements of the Environmental Management Act (EMA) and Contaminated Sites Regulation (CSR) for sixty-one (61) properties throughout Zones 1 to 7. NIR's will continue to be issued (where applicable) within the VOL.

IBI has also registered the Public Works Yard (14 Main Street) as a Hazardous Waste Generator and received the BCG # from Ministry of Environment which will enable the shipping of Hazardous Waste from VoL to an offsite secured landfill authorized to accept Hazardous Waste. Matcon is currently reviewing suitable Hazardous Waste facilities and it is anticipated that Hazardous Waste removal will start next month.

Remediation of contaminated soil by excavation and offsite disposal has been completed at all Zone 1 properties (where applicable) during this period including:

- 85 Fraser Street
- 71 Fraser Street
- 57 Fraser Street
- 47 Fraser Street
- 33 Fraser Street
- 84 Main Street

- 
- 165 First Street
  - 30 Main Street
  - 44 Main Street
  - 55 Main Street
  - 58 Main Street
  - 68 Main Street
  - 71 Main Street
  - 87 Main Street

Excavated soils were classified as waste quality (IL+) and were disposed by Matcon at the Campbell Hill Landfill. All of the above sites will require a 5cm-bgs cleanup scrape following completion of the archeological screening activities. Following completion of the scrape, IBI will begin collection of confirmatory soil samples.

Soil samples continue to be collected from properties in Zones 2 to 7 primarily for delineation purposes. Samples were submitted to CARO for analysis of potential contaminants of concern (PCOCs) including metals, benzene, toluene, ethylbenzene, xylenes (BTEX), volatile petroleum hydrocarbons (VPH), polycyclic aromatic hydrocarbons (PAHs) and/or sodium chloride. Available sample analytical results (draft) have been summarized in tables submitted to Colliers.

Soil samples collected below burned debris halos typically contain contaminants (metals, BTEX, PAH and/or chloride) at concentrations elevated above environmental standards developed under the BC CSR for the protection of human health and/or the environment and are classified as 'waste' (exceeding CSR industrial land use standards). Samples with high metals concentrations have been submitted for TCLP metals to confirm whether metals are leachable under acidic conditions and to determine if these soils would be classified as Hazardous Waste.

All Hazardous Waste will be excavated, handled, manifested and disposed offsite at a facility which can accept Hazardous Waste.

Soil sample data is being used to develop remedial action plans for each property which Matcon will use for subsequent remedial excavation and offsite disposal.

#### A.E.W LP

In August AEW conducted 19 days (out of an original estimate of 23 days) of monitoring contractor debris removal and screening/raking material for potential heritage artifacts. Currently, 151 lots have been approved for monitoring. AEW is actively monitoring work, or has monitored, at 131 of these approved lots, 31 Ad hoc sites (an area outside of a lot identified as requiring monitoring or screening, for example a roadside or sidewalk). A total of 35 potential heritage sites have been identified and are undergoing further investigation.

A high risk assigned to budget due to additional crew utilized; August average crew size was 11.2 (original budget of 2 crew size). AEW has invoiced a total of \$49,886 for March and April (about 11% of the budget). AEW continues to monitor impacts to budget. The addition of a power screener has

---

---

expedited the assessment process; however, increased crew capacity may be required to stay in step with the remediation works being conducted.

On August 16, AEW was approved for a Change Order in the amount of \$631,337.45 to perform archaeological and heritage monitoring for 60 insured properties.

Shovel testing has been limited, will likely be utilized as a tool to help develop a work plan for remediation activities on different properties.

AEW Field Director Sarah Lebedoff has transitioned off the project for maternity leave. Field Directors Brittany Lynas and Luke Kowalski are currently active and co-directing the project. Abby Wilson of AEW archaeology has also been subcontracted as a field director on the project. Brittany and Luke will split the time on the ground in Lytton and provide office support when not in Lytton. A new Lytton based project coordinator started August 29<sup>th</sup> and will provide field and logistical support to the Field Directors and crews.

There was 1 day of partial work due to a death in the community. Productivity was also impacted as some crew members assisted in firefighting efforts on the Nohomin Creek fire on the west side of the river. The number of Heritage technicians monitoring per day ranged from 6 to 15, with an average of 11.2 Heritage technicians per day. Monitoring is budgeted at a 2-person crew per monitor day. Colliers will inform AEW when a lot is deemed complete.

The weekly AEW and Colliers project management call allows issues and concerns to be raised and dealt with.

### Infrastructure

Well #2 is awaiting the approved VFD installation with Com Com. This will provide a backup source of water to the Village in the event of high turbidity in Lytton Creek.

DFA is reviewing the additional funding requests and approvals will be received in the coming weeks. This will be for the Lytton Creek debris pond and intake pond, and various Water System related works.

Cloudburst water was selected to perform the leak detection, and will be commencing Phase One between September 14-16<sup>th</sup>. This includes the Ponderosa, Loring Way, and IR 17 areas. Phase 2 will commence in the Village core once all services are capped and confirmed closed on remediated lots.

CAO is working to complete a Contract with a 3<sup>rd</sup> party Water Operator to ensure compliance with the Water Treatment Plant Operating Permit.

The OCP RFP has been closed and the highest ranking proponent will be presented for recommendation to Council at the Special Council meeting on the 21<sup>st</sup> of September.

The RFP for a Geotechnical Consultant has closed, and Staff are working to complete the Master Service Agreement with the Consultant in order to bring them on board and begin geotechnical assessments through the Village.

## 2. Key Risk Changes

Risk Title	Impact on Scope / Schedule / Budget	Mitigation Strategy
<b>Soil removal requiring 100% screening and approval prior to being removed</b>	Schedule & Budget	<ul style="list-style-type: none"> <li>Schedule A to the SAP will define procedures and requirements for soil removal.</li> </ul>
<b>Archeological delays due to registered archaeological sites or chance finds</b>	Schedule & Budget	<ul style="list-style-type: none"> <li>Work closely with Archaeologist and KHC to add applicable data to Site Alteration Permit for identified sites.</li> <li>Increase manpower and machinery to expedite the schedule if needed.</li> </ul>
<b>RoEP signoffs are required to access properties. Delay's in obtaining the RoEP will delay the project.</b>	Schedule	<ul style="list-style-type: none"> <li>Follow up with residents to receive RoEP signoffs on a timely manner to prevent project delays.</li> <li>Develop a process using the State of Local Emergency (SOLE) that will allow the project team to complete debris removal and remediation activities where RoEP have not been received.</li> </ul>
<b>Heritage Investigation Permit delays can affect project schedule and budget</b>	Schedule & Budget	<ul style="list-style-type: none"> <li>Continue to work with Kumsheen Heritage Committee and the Province of BC, Heritage Branch to have properties listed on Heritage Investigation Permit in order to start subsurface soil sampling and excavation.</li> <li>Maintain a project contingency within the budget to compensate for additional equipment and workforce needs during investigation work.</li> </ul>
<b>Site Alteration Permit delays can affect the project schedule and budget</b>	Schedule & Budget	<ul style="list-style-type: none"> <li>Work with AEW, Kumsheen Heritage Committee, and the Province of BC to identify properties requiring to be included on the Site Alteration Permit and expedite the planning for those sites.</li> <li>Maintain a project contingency within the budget to compensate for additional equipment and workforce needs during investigation work.</li> </ul>
<b>Asbestos and Vermiculite contents in soil and air</b>	Schedule & Budget	<ul style="list-style-type: none"> <li>Matrixes containing asbestos and vermiculite found in soil and air are above 1% according to CSR regulation, further analysis and study required.</li> <li>Continue to complete air monitoring and testing on a weekly basis to</li> </ul>



		analyze the risks during construction activities.
<b>Misunderstanding between the prime contractor and subcontractors</b>	Schedule	<ul style="list-style-type: none"> <li>Colliers to ensure and lead the communication and coordination among all the contractors and subcontractors.</li> <li>Matcon to coordinate bi-weekly construction/coordination meetings to ensure clear communications to all teams.</li> </ul>
<b>Long process in dealing with Chance finds</b>	Schedule	<ul style="list-style-type: none"> <li>Colliers to expedite getting properties on the Heritage Investigation Permit, so that contractors can move and work on the other properties as the archeological assessments are being completed during chance finds.</li> </ul>
<b>Creek Turbidity will result in no water available</b>	Scope	<ul style="list-style-type: none"> <li>Expedited repair of the Well #2 VFD will allow for a backup water source in the event of a high turbidity event in Lytton Creek</li> <li>Expedite the repairs to Well #3 to provide additional ground water capacity for the Village.</li> </ul>
<b>Former gas stations and underground tanks</b>	Scope & Budget	<ul style="list-style-type: none"> <li>Gas station and underground tanks are very old and could possibly impact the schedule. Limited investigation should be conducted ahead of the situation to avoid risk.</li> </ul>

### 3. Budget Status

In August the recovery team issued additional change orders to Matcon, IBI and A.E.W LP as they take on the additional scope of completing the insured properties in the Village.

By adding the additional scope of the insured properties to the recovery team, the project budget will be in moderate risk. Some planned activities will be deferred to later in the project until the final costs associated with the scope increase is fully confirmed.

Current Project Status	Cost	Comments
Baseline Budget	\$19,190,500.00	Planned budget
Committed	\$19,480,750.45	Exton & Dodge, OnSide, Colliers Project Leaders, Matcon Environmental, IBI Group, and A.E.W LP
Approved Change Orders	\$17,044,036.00	Matcon, IBI & AEW CO's
Forecast Cost at Completion	\$19,480,750.00	
Forecast Variance at Completion	\$ (290,250)	Negative Variance

#### 4. Schedule Status

Matcon continues with surface debris removal as the Village receives RoEPs, once properties have been reviewed by the Kumsheen Heritage Committee (KHC) and added to the Heritage Investigation Permit by AEW, IBI Group will start subsurface soil sampling, and will develop NOIs based on the test results. Matcon will then proceed with subsurface soil and concrete removal. AEW will cease all mechanized work and contact VoL, NNTC and the Archeology Branch in the event of any unanticipated potential cultural materials or features (“chance finds”) are encountered by construction personnel or other individuals during development activities, or observed by heritage field technicians during monitoring. Matcon would continue work on other properties until the archeological assessment of any such finds is completed, minimizing schedule impacts.

The schedule is now considered at high risk due to the additional scope added to the recovery team to undertake all debris removals and remediation of the insured properties. In discussion with Matcon, we are now projecting completion of most key tasks i.e. surface debris, soil remediation and capping of services to be completed by October 30, 2022.

Leak detection and critical infrastructure work has now commenced in September. This work will increase as the remediation work finishes and additional access is provided.

Row	Milestone	Planned Baseline	Current Plan	Actual/Forecast	Variance Current Plan – Actual/Forecast (weeks)
1	Procurement of Environmental QP	Mar 01, 2022	Mar 01, 2022	Mar 01, 2022	0
2	Procurement of Prime Contractor	Mar 01, 2022	Mar 01, 2022	Mar 01, 2022	0
3	Procurement of Archaeologist and Heritage Monitors	Apr 01, 2022	Apr 01, 2022	Apr 01, 2022	0
4	Construction mobilization	Mar 08, 2022	Mar 08, 2022	Mar 08, 2022	0
5	Completion of Work in Zone 1 and Hobo Hollow	May 19, 2022	May 19, 2022	June 28, 2022	6
6	Establish a safe corridor between Highway 12 and CN Rail bridge for public access	May 19, 2022	May 19, 2022	May 22, 2022	0.5
7	Completion of Work in Zone 2	June 6, 2022	June 6, 2022		0
8	Completion of Work in Zone 3	June 22, 2022	June 22, 2022		0
9	Procure Watershed Analysis Engineering Team	June 24, 2022	June 24, 2022	Aug 11, 2022	6
10	Completion of Work in Zone 4	July 8, 2022	July 8, 2022		0
11	UV System Repair and fully operational	July 8, 2022	July 8, 2022	July 11, 2022	0
12	Completion of Work in Zone 5	July 26, 2022	July 26, 2022		0
13	Completion of Work in Zone 6	August 11, 2022	August 11, 2022		0
14	Source Water Protection Plan Update	August 26, 2022	September 16th, 2022		3
15	Completion of Work in Zone 7	August 29, 2022	August 29, 2022		0



Row	Milestone	Planned Baseline	Current Plan	Actual/Forecast	Variance Current Plan – Actual/Forecast (weeks)
16	Leak Detection Phase 1		September 16, 2022		0
17	Geotech Agreement signed		September 30, 2022		0
18	Leak Detection Phase 2		October 28, 2022		0
19	Substantial Performance	Sept 30, 2022	October 30, 2022		4

### 5. Project Photos



Figure 1 - Zone 1 Remediation Primarily Complete

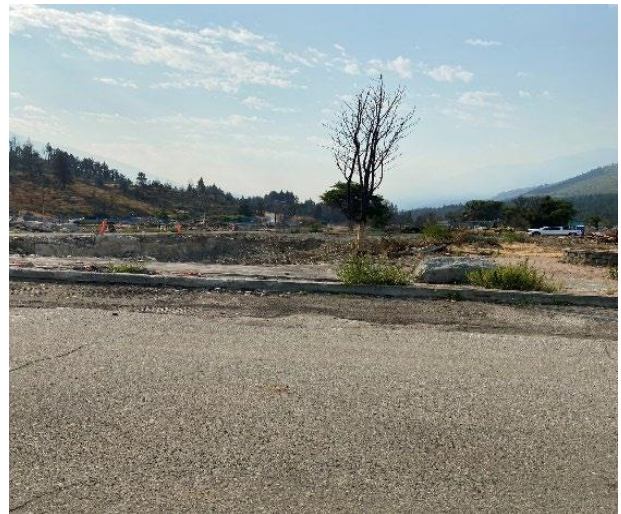


Figure 2 – Zone 6





Figure 3 – Zone 2 Remediation



Figure 4 – Archeological Screening Operations

#### Attachments

