

PROJECT STATUS REPORT

To:	Village of Lytton	Contact:	CAO – Michael Baker
Project:	Lytton Recovery	From:	Recovery Project Manager - James Heigh
Report Period:	September 2022	Date Issued:	Oct 11, 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	High Risk	Moderate Risk	High Risk	High Risk

Project Status Executive Summary

Matcon

Actions this month included:

- Removal of metal and ACM debris from the footprint have now been completed at a total of 5 municipal properties and 140 private properties.
- Sewer and water capping have now been completed on a total of at 130 properties.
- Concrete footings have now been removed from a total of 85 properties.
- Contaminated soil has now been removed from a total of 55 properties.
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All properties have become accessible for remediation via homeowner sign off with exception of 10 properties. Slower excavation rates due to archeological shutdowns (chance finds) and limited excavation depths continue to affect schedule. The powered soil screener arrived August 15 and to date screening has been going quicker than hand screening. IBI is completing bunch NIR's as of August 5th which will allow soil excavation to continue. Some soil removal from properties during September are still pending Archeological screening, which has shut down shipping contaminated soil as of Aug 31 pending approval from LFN and Heritage Branch. These delays paired with the archeological screening have added a minimum of 40 working days to the project

IBI Group

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

- Stage 1 Preliminary Site Investigation (PSI)

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- 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 1 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: 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 ninety three (93) 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.

Remediation of contaminated soil by excavation and offsite disposal has been substantially completed on 49 properties:

- Zone 1 – 14 properties
- Zone 2 – 8 properties
- Zone 3 – 9 properties
- Zone 4 – 8 properties
- Zone 5 – 5 properties
- Zone 6 – 2 properties

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- Zone 7 – 3 properties

Excavated soils were classified as waste quality (IL+) and were disposed by Matcon at the Campbell Hill Landfill.

Matcon has begun stabilizing hazardous waste soils and debris by the addition of Portland Cement at the following properties:

- 84 Main Street
- 58 Main Street
- 341 Fraser Street

IBI is in the process of collecting post treatment samples following implementation of Matcon's stabilization process to determine the efficacy of the stabilization program. These samples are analyzed for leachable metals (based on TCLP analysis) to determine subsequent waste classification.

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 PCOCs including metals, benzene, toluene, ethylbenzene, xylenes (BTEX), volatile petroleum hydrocarbons (VPH), polycyclic aromatic hydrocarbons (PAH) and/or sodium chloride.

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 September, AEW conducted 19 days of monitoring contractor debris removal, screening/raking material for potential heritage artifacts, and testing material. Currently, 151 lots have been approved for monitoring. AEW is actively monitoring, or has monitored, work at 141 of these approved lots. A total of 64 potential heritage sites have been identified and are undergoing further investigation.

Notice of Intent's (NOI) were sent September 9, 14, 21 and 22.

A high risk has been assigned to AEW's budget due to additional crew utilized. September's average crew size was 13.6, versus August's average size of 11.2. The addition of a power screener continues to expedite the assessment process; however, we are seeing increased crew capacity to stay in step with the remediation works being conducted.

Shovel testing has been limited, and will likely be utilized as a tool to help develop a work plan for remediation activities on different properties. 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. Clinton Coates of Horizon Archaeology has also

contributed as a part-time Field Director. Brittany and Luke split the time on the ground in Lytton and provide office support when not in Lytton. A new Lytton based project coordinator started August 29th and has provided field and logistical support to the Field Directors and crews.

The number of Heritage technicians monitoring per day ranged from 8 to 20 with an average of 13.6 Heritage technicians per day. Colliers will start sharing with AEW when a lot is deemed complete (confirmed remediated). The weekly AEW and Colliers project management call allows issues and concerns to be raised and dealt with.

Infrastructure

The new VFD has been installed in Well #2 by Com Com. This will provide a backup source of water to the Village in the event of high turbidity in Lytton Creek.

DFA continues to review the additional funding requests for the Lytton Creek debris pond and intake pond, and various Water System related works. No timeline on approval is available.

Phase 1 of the leak detection program has been completed by Cloudburst Water. A major leak has been found in the Ponderosa area, and a plan is being put together to fix this issue which will significantly reduce the current water usage of the Village. 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 3rd party Water Operator to ensure compliance with the Water Treatment Plant Operating Permit.

The recovery team is working with BC Hydro to develop a plan for their mobilization into the Village. Currently we are targeting the commencement of their scope of work by mid – end of November.

The OCP Consultant decision has been deferred until November when the new council is in place and ready for Council Meetings.

Staff are working to complete the Master Service Agreement with the Geotechnical Consultant in order to bring them on board and begin geotechnical assessments through the Village.

Due to changes in regulations and guidelines for watershed assessments, the RFP for the Lytton Creek watershed assessment was on hold until the new regulations were published on September 29th. With these new regulations now live, an updated RFP will be completed and submitted.

Staff continue to identify additional grant opportunities for future works, and Reports to Council will be provided for the approval to proceed with applications when eligibility is verified.

2. Key Risk Changes

Risk Title	Impact on Scope / Schedule / Budget	Mitigation Strategy
Soil removal requiring 100% screening and approval prior to being removed	Schedule & Budget	<ul style="list-style-type: none"> Schedule A to the SAP will define procedures and requirements for soil removal.

<p>Archeological delays due to registered archaeological sites or chance finds</p>	<p>Schedule & Budget</p>	<ul style="list-style-type: none"> • Work closely with Archaeologist and KHC to add applicable data to Site Alteration Permit for identified sites. • Increase manpower and machinery to expedite the schedule if needed.
<p>RoEP signoffs are required to access properties. Delay's in obtaining the RoEP will delay the project.</p>	<p>Schedule</p>	<ul style="list-style-type: none"> • Follow up with residents to receive RoEP signoffs on a timely manner to prevent project delays. • 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.
<p>Heritage Investigation Permit delays can affect project schedule and budget</p>	<p>Schedule & Budget</p>	<ul style="list-style-type: none"> • 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 allow subsurface soil sampling and excavation. • Maintain a project contingency within the budget to compensate for additional equipment and workforce needs during investigation work.
<p>Site Alteration Permit delays can affect the project schedule and budget</p>	<p>Schedule & Budget</p>	<ul style="list-style-type: none"> • 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. • Maintain a project contingency within the budget to compensate for additional equipment and workforce needs during investigation work.
<p>Asbestos and Vermiculite content in soil and air</p>	<p>Schedule & Budget</p>	<ul style="list-style-type: none"> • Matrixes containing asbestos and vermiculite found in soil and air are above 1% according to CSR regulation, further analysis and study required. • Continue to complete air monitoring and testing on a weekly basis to analyze the risks during construction activities.
<p>Misunderstanding between the prime contractor and subcontractors</p>	<p>Schedule</p>	<ul style="list-style-type: none"> • Colliers to ensure and lead the communication and coordination among all the contractors and subcontractors. • Matcon to coordinate bi-weekly construction/coordination meetings to



		ensure clear communications to all teams.
Long process in dealing with Chance finds	Schedule	<ul style="list-style-type: none"> 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.
Creek Turbidity will result in no water available	Scope	<ul style="list-style-type: none"> 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 Expedite the repairs to Well #3 to provide additional ground water capacity for the Village.
Former gas stations and underground tanks	Scope & Budget	<ul style="list-style-type: none"> 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.

3. Budget Status

In September we have been notified of significant risks to the current project budget. Extension to the project schedule coupled with larger than planned volumes of material for offsite disposal are the key factors affecting the project budget at this time. The recovery team is gathering additional information so we can update the Forecast Cost at Completion in the October reporting period.

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 amount of unexpected chance finds encountered in the excavation of the insured and uninsured properties, and the required additional archeological screening required in assessing the sites. In discussion with Matcon, we are now projecting completion of most key task (i.e. surface debris, soil remediation and capping of services) to be completed by November 30, 2022. We expect that Archaeological work will continue past this date and continue into the new year.

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	Dec, 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 16, 2022		3
15	Completion of Work in Zone 7	August 29, 2022	August 29, 2022		0
16	Leak Detection Phase 1		September 16, 2022	Sept 16 th , 2022	0
17	Geotech Agreement signed	September 30, 2022	October 26, 2022		0
18	Leak Detection Phase 2		October 28, 2022		0
19	Substantial Performance	Sept 30, 2022	November 30, 2022		8

5. Project Photos



Figure 1 - Lots# 665, 625, 619 Main

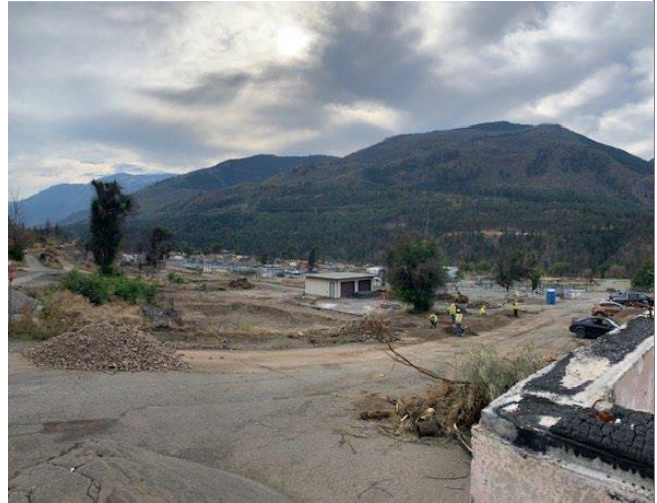


Figure 2 – Lots# 666, 650, 636 Station



Figure 3 – Zone 1 Lots# 459, 255 Alonzo, 273 5th



Figure 4 – Lots# 379, 339, 319 Main



Figure 5 – Separated piles



Figure 6 – Portland Cement stabilization of contaminated soils



Figure 7 – Capping of Sewer and Water infrastructure



Figure 8 – Salvage bricks for re-use