

Cost to build a Fire Hall

What is the approximate cost to build a fire hall?

- The BC Building Code requires fire halls to resist floods, windstorms, wildfire, seismic events and more.
- This Code also requires professional design, strong construction, and compliance to rigorous building standards -- far greater than commercial or other types of buildings.
- BC project development costs range in Vancouver range from \$315 to \$450 per square foot, with costs in the Southern Interior indexed at 5% less. (Source: The

2018 Altus Canadian Construction Cost Guide.)

- **Based on this, an estimated construction cost range for Creston is between \$300 and \$350 per square foot.**
- BC construction costs for fire halls are notably higher than Alberta's. (Source: The 2018 Altus Canadian Construction Cost Guide.)
- Fire halls have a long working life, frequently more than 50 years. They must be built to adapt to changes in equipment, staffing, training and regulations.

Referendum questions answered

To proceed with determining the design, construction materials, site prep, tendering, etc., the Town is required by law to obtain voter permission to borrow up to a maximum amount.

- Process would require a Town Bylaw with three readings prior to the Province's approval for a Referendum.

How is a Referendum Question determined?

- The Province of BC mandates the content of the Referendum Question.
- The Question would represent a "worst case" scenario for estimate of project cost.
- The Question would be related specifically to a maximum borrowing amount.
- Project costs would be based on land cost estimates, square footage, and application of industry standard costs (specifics are unknown at this point).
- The borrowing amount would include costs related to the project not paid for by reserves or surplus.
- Project costs would contain a responsible amount of contingency funding.

Is the amount in the Referendum Question the amount Creston taxpayers will be expected to pay?

- No. This is a "worst case" scenario to establish a maximum borrowing amount.
- Project costs can be reduced through the design, tender, and construction process, and with grants and fundraisers.
- Referendum Question amounts cannot include grants not yet approved.
- Referendum Question amounts would not include savings from the competitive bid process.
- Town taxpayers pay only for the Town of Creston's share.
- RDCK would pay its own share. This is a contractual obligation of approximately 28 per cent of the total cost.

We want to hear from you!

- Fill in our online feedback form at creston.ca
- Fill in a paper copy available at Town Hall & events
- Email your insights, or to make a presentation to the ASC, email Committee Facilitator Kerry McArthur at cfhasc.facilitator@gmail.com
- Join us to observe the next ASC meeting (see creston.ca for schedule).
- Ask us to make a presentation at your next association or club meeting. Contact Committee Facilitator Kerry McArthur at cfhasc.facilitator@gmail.com.
- Visit us at select Creston Farmers' Markets & other events (see creston.ca for details)

Thank you for your time and interest in helping ensure safe and sustainable fire protection services for our community!



CRESTON VALLEY

TOWN of CRESTON

Creston Fire Hall Update



Exploring Fire Hall options

Following the unsuccessful borrowing referendum for construction of a new Fire Hall, Council appointed a Fire Hall Advisory Select Committee (ASC) of community volunteers, technical experts, and elected officials to identify potential recommendations and action items.

ASC volunteers were selected through an application process representing a broad range of community interests and experience. Of 24 applications received, 11 Creston Valley volunteers were selected and a youth representative invited to participate.

The ASC reviews documents, information and presentations, and makes recommendations to Council for Fire Hall solutions.

Citizens are invited to observe the next ASC meeting (consult www.creston.ca for the ASC meeting schedule).

ASC conclusions so far

- The existing Fire Hall site cannot support a renovated facility to meet provincial regulations, industry standards, employee safety, space, and parking requirements.
- The long-term solution is the construction of a new Fire Hall.
- A new Fire Hall must be safe and sustainable for both current and future generations – built to last for the next 50 to 100 years.
- Of four sites reviewed, the Cook Street Site (Site 2) is the preferred site for a new Fire Hall based on site size, centralized location to maintain response times, geotechnical and site development considerations and costs, and other associated factors.
- **14,000 square feet is considered an adequate size for a new Fire Hall.**
- The Altus Canadian Construction Cost Guide provides a reliable range of costing estimates on which to base a borrowing question.

Your Advisory Select Committee (ASC)



From left to right, back row: Don Cherkas, James McLeod, Wendell Marshall, Ryan Tucker, Randall Fabbro
From left to right, front row: Brandon Vigne, Larry Hogan, Jim Elford, Harry Haberstock, Gertie Brown
Missing: Olivia Kettle, Tony Mulder, Joanna Wilson, Tanya Wall, Larry Binks.

Photo by Warren Bruns

What's in a Fire Hall?

What else is in a Fire Hall besides office space, equipment, and apparatus storage?

Training space: Firefighters must train to perform their duties effectively. Fire halls must support training (including practical, physical, classroom and online learning) to meet legislated standards.

Dormitory space: Dorm space is required for existing and future service levels. BC Ambulance will also require space if they partner in the project.

Kitchen and eating facilities: These facilities are required by volunteer firefighters, staff, Emergency Operations Centre and the Work Experience Program.

It's also important to know that, under WorkSafeBC regulations, a new fire hall must include:

- Vehicle exhaust management practices that remove exhaust fumes from the interior of the building.
- Chemical and carcinogen expo-

sure facilities that effectively reduce the risk of exposure to personnel.

- Adequate facility space for safe operations.
- Changing areas and food service areas separated from possible contamination from operations.
- Proper storage spaces for essential equipment.



What else determines Fire Hall site selection?

Response Times

Response times are crucial to saving lives and property, therefore site selection is a critical decision for a new fire hall. Volunteer firefighters must report to the hall from home, then from the hall to the fire.

The BC Building Code identifies that when a fire department's response **exceeds 10 minutes**, then new construction setbacks, building materials, and construction style are impacted.

Site Preparation

Besides land costs, other elements affect overall cost:

- Removal of soils not appropriate for building on
- Removal of foundations and contaminants
- Relocation of electrical utilities (Cedar St.)
- Managing site grading issues (Vancouver St.)
- Installation of rail crossing controls (Cedar St.)

Factors considered in site selection

Evaluation conducted by geotechnical and other experts reveals factors that ultimately led to the ASC's selection of Cook Street as the preferred site.

Site #1 (CEDAR STREET)

- Too small to accommodate the size of the required structure, estimated at 14,000 square feet.
- Geotechnical and environmental reports suggest base is inadequate for construction of a fire hall and has environmental contamination, both of which are costly to remediate.
- Bordered by CP Railway, which presents possible crossing delays and delayed response times.
- Volunteer parking would be located across the street at Millennium Park, which can be busy in summer months.
- Relocating utilities on this site would incur significant costs.

Site #2 (COOK STREET) -- Preferred Site

- Already serviced.

- Geo-technically adequate and has a solid base for construction.
- No environmental concerns.
- Centrally located for optimal response times.
- Allows for future growth.

Site #3 (NW BOULEVARD)

- Too narrow for accommodating the size of the required structure.
- Doesn't meet minimum response time standards for residential areas.
- Would affect fire protection contract areas (Arrow Creek).

Site #4 (VANCOUVER STREET)

- Centrally located for residential response times.
- Would incur significant costs for demolition of current foundation.
- Limits functionality of apparatus movement.
- Contains grade differences that would require retaining walls.
- Limited opportunity for expansion.

Summary of factors considered for site selection

Site #	Site Locations	Meets Minimum Response Times (10 minutes)	Site Footprint Big Enough for Current Needs	Already Own the Land	Site Preparation Costs	Room for Future Expansion
1	Cedar St.	Yellow	Red	Green	Red	Red
2	Cook St.	Green	Green	Red	Green	Green
3	NW Blvd.	Red	Red	Red	Yellow	Red
4	Vancouver St.	Green	Green	Red	Red	Yellow

Legend

Green: Meets all requirements or least cost

Yellow: Meets some requirements or some cost

Red: Meets no requirements or most cost