

# **CRESTON FIRE STATION WORKSHOP**

**FEBRUARY 24, 2021**



# SEGMENT OBJECTIVES

**01**

**Establish and clarify timeline of events from February 18, 2018 to current.**

**02**

**Review activities related to cost containment and transparency.**

**03**

**Set the stage for “What’s Next” Discussions.**

- **ADVISORY SELECT COMMITTEE FORMED**

- **PROVIDE A COMMUNITY VOICE**
- **GUIDANCE AND RECOMMENDATIONS TO COUNCIL**
- **COMMUNICATE WITH THE TOWN AND RD**
- **REFLECT COMMUNITY VALUES IN PROJECT DECISION MAKING**

**FEBRUARY  
2018**

# ASC PRINCIPLES

**BUDGET CERTAINTY THROUGH  
RIGOROUS PLANNING AND  
PROJECT MANAGEMENT**



**BASED ON CURRENT CRESTON  
FIRE RESCUE SERVICE LEVELS  
AND NEEDS, NOT BASED ON  
WANTS AND LIKES**



**PROVEN TECHNOLOGIES WILL  
BE EXPLORED TO ACHIEVE A  
BALANCE BETWEEN ENERGY  
EFFICIENCY AND COST  
EFFECTIVENESS**



**EVALUATE ALL POSSIBLE  
FUNDING SOURCES,  
INCLUDING GRANTS AND  
OPPORTUNITIES TO REDUCE  
BURDEN ON TAXPAYERS.**

# ASC DESIGN PRINCIPLES

- **A FIREHALL THAT IS COMFORTABLE IN ITS ENVIRONMENT**
- **A FIREHALL THAT IS MODERN AND THAT FITS THE COMMUNITY.**
- **A FIREHALL THAT IS FUNCTIONAL AND ADAPTABLE.**
- **A FIREHALL THAT WILL FIT WITH THE REGIONAL DISTRICT FIRE SERVICE NOW AND IN THE FUTURE.**

# **FIREWISE CONSULTING**

- **FIREWISE WAS ENGAGED IN FEBRUARY 2018**
- **PRODUCED TWO REPORTS**
  - **INTERIM MEASURES- MARCH 2018**
    - **WHAT WAS WRONG WITH CURRENT STATION?**
    - **WHAT NEEDS TO BE DONE TO MAKE IT WORK IN THE INTERIM?**
  - **FIRE STATION REPORT- MAY 2018**
    - **LONG TERM CONSIDERATIONS RELATED TO UPGRADE OR REPLACEMENT OF FIRE STATION**



# REPORT OUTCOMES

- **STATION LOCATION**
- **INFORMED DISCUSSIONS ON SPATIAL REQUIREMENTS**
- **CONFIRMED EXISTING UNDERSTANDINGS**
- **LINKED EVERYTHING TO APPLICABLE LEGISLATION, STANDARDS, REGULATIONS OR APPLICABLE INDUSTRY ACCEPTED PRACTICES**

# DESIGN DEVELOPMENT REPORT

creston firehall design development report			Option 1: FIREHALL + AMBULANCE
Space Program	NET	NET	R6
BASE BUILDING	17-Mar-27	17-Mar-27	NOTES
	SF	SM	
<b>QUARTERS</b>			
1 Vestibule	54	5.00	weather vestibule
2 Public Entry	161	15.00	
3 Community Rm + EOC Breakout Rom	350	32.50	seat 12-14 people
4 Public Washroom H/C	43	4.00	
5 Fire Chief's Office	183	17.00	Desk and table
6 Assistant Chief's Office	161	15.00	Desk and table
7 Office - Flex	161	15.00	
8 Unit Chief - BCAS	140	13.00	
8A Community Paramedicine Office	140	13.00	
9 Open Work stations (4 @ 6sm )	258	24.00	including PSCO
10 Copy Room / Office Storage	97	9.00	
Emergency Operations Centre / Training			
11 Room	1453	135.00	50 people @ Round Tables + Split in half.
12 Public Washrooms (2 @ 3sm ea)	65	6.00	
Dayroom / Dining + Kitchen / Incident Command	646	60.00	Dining 12 - 15 people. 3 w/r for CFR and 1 W/R for BCAS
14 Gender Neutral W/R (4 @ 7sm)	301	28.00	7.5sm ( 81sf) ea - includes lockers
Work Experience Program - Dorms (6 @ 7.5sm)	484	45.00	7.5sm ( 81sf) ea - includes lockers
16 Dorms - BCAS (4 E@ 7.5sm ea.)	323	30.00	7.5sm ( 81sf) ea - includes lockers
17 Quiet Room - BCAS	140	13.00	
18 Health and Wellness	258	24.00	
19 Janitor / Laundry (Upper Floor)	54	5.00	
<b>Sub Total</b>	<b>5,473.63</b>	<b>508.60</b>	
<b>APPARATUS BAY AREA</b>			
20 Decontamination Washroom	65	6.00	
21 Turnout Gear Storage (39 units)	431	40.00	Jumbo size lockers
22 Utility/Janitor/Car Washer / Recycling	129	12.00	
23 Decontamination Washdown - in tower	0	0.00	
24 3 Tandem Apparatus Bays ( 6 vehicles)	4855	451.00	
2 bays @ 27.5m x 5.6 (85'x 18.6') = 308 sm			
1 bay @ 27.5m x 5.2 (85'x 17') = 143sm			
25 1 Vehicle Bay - 2 vehicles for BCAS	1658	154.00	Storage for 2 ambulance vehicles
26 Workshop	145	13.50	
SCBA ( Self Contained Breathing Apparatus)			
27 Repair Room	108	10.00	
28 Compressor Room	65	6.00	
29 Hose/Training Tower	366	34.00	
30 Hose Storage	86	8.00	
31 Storage - Storage 1	108	10.00	
32 Storage - Storage 2	108	10.00	
33 Radio Room	86	8.00	
34 Pole Rm (Main Floor & Upper Floor)	43	4.00	
25 First Aid Storage - BCAS	129	12.00	
35 Town Back-up Server	129	12.00	
Mezzanine	0	0.00	TBD
<b>Sub Total</b>	<b>5,509.15</b>	<b>790.50</b>	
<b>SERVICE SPACES</b>			
36 Mechanical Rm	161.46	15.00	
37 Electrical Rm	129.17	12.00	
38 Valve Rm - under stairs	0.00	0.00	
39 IT Room	43.06	4.00	
<b>Sub Total</b>	<b>333.69</b>	<b>31.00</b>	
<b>Building Total ( PreMark-up)</b>	<b>14,316.47</b>	<b>1,330.00</b>	
Mark-up ( Excluding App Bays) 20%	1,888.09	175.80	
Mark-up (App Bays) 5%	242.19	22.55	
<b>TOTAL FIREHALL</b>	<b>16,446.75</b>	<b>1,528.35</b>	





# **SPATIAL ANALYSIS**

- **DESIGN DEVELOPMENT A COMBINATION OF PREVIOUS WORK, 6 MONTHS OF DELIBERATIONS, SCIENCE, LEGISLATION**
- **SPACES JUSTIFIED AS “NEEDS”, NOT “WANTS”**
- **2017 SPACE ASSESSMENT “FED” ONGOING PROCESSES**
- **REFLECTS LEGISLATED, ACCEPTED PRACTICE, WORKSAFEBC AND OTHER REQUIREMENTS**
- **REFLECTS COUNCIL APPROVED SERVICE LEVELS**

- **BASED ON MULTIPLE SOURCES**
  - **COMPARISONS WITH RECENT, BC FIRE STATION PROJECTS**
  - **2018 CLASS C ESTIMATE**
  - **ANALYSIS OF BC CONSTRUCTION COSTS**
  - **ALTUS CONSTRUCTION GUIDE**

**BUDGET**

# UPDATED EXISTING DESIGN EFFORTS



**Work was generally reflected  
required design principles**



**Big investment in time and dollars**



**Time saver**



**Design development hadn't changed  
much- edits were straight forward**



**Fulfill commitment to community for ongoing engagement**



**Offer technical guidance to project team**



**Has been incredibly helpful navigating the process and working through challenges**

**TBAC**

# **PREQUALIFICATION**

- **RFIQ ISSUED FOR PREQUALIFICATION OF GENERAL CONTRACTORS - CLOSED  
NOVEMBER 18, 2019**
- **EXCELLENT RESPONSE**
- **NO INDICATION OF ANY CONCERNS WITH BUILDING BUDGET OR DESIGN  
BUILDABILITY**

# **LAND PURCHASE FINALIZED**

- **TOWN ANNOUNCES COMPLETION OF LAND PURCHASE JANUARY 24, 2020**
- **ABLE TO PROCEED TO FINAL DESIGN**
- **TENDER PACKAGE MOVING FORWARD**

- **SERIOUS DISRUPTION TO WORK ON PROJECT**
- **MAJOR IMPACTS ON COSTS- LUMBER, STEEL, MECHANICAL SYSTEMS, LABOUR**
- **AVAILABILITY OF MATERIALS AFFECTED**

**COVID-19**

# **TENDER CLOSES AUGUST 2020**

- **ONLY 2 RESPONSES- BOTH GROSSLY OVER BUDGET**
- **NO LOCAL TRADES**
- **ANALYSIS- NO SINGLE REASON FOR POOR UPTAKE**
- **BUILDING CODE CHANGES PLAYED A ROLE**



# **VALUE ENGINEERING**

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**TBAC employed to find  
efficiencies with  
drawings**

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**Redesigned elements of  
the building**

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**Worked with BC Ambulance  
to ensure their needs met**

# CHANDOS- DECEMBER 2020

**Evaluated design**

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graph TD; A[Evaluated design] --> B[Value engineering processes of their own]; B --> C[Evaluated 'buildability' of design]; C --> D[Met with contractors and other construction professionals];
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**Value engineering processes of their own**

**Evaluated "buildability" of design**

**Met with contractors and other construction professionals**

# TODAY



**The building as designed cannot be built within the approved budget**



**The fire station must be replaced**



**There are options**



**We need your help to explore and move them forward**

**QUESTIONS?**

