

Project: Station Arts Centre - Fire & Life Safety Condition Assessment

Location: Tillsonburg, Ontario

Gross Floor Area: 5,600 sq.ft. [520m²]

Client: Town of Tillsonburg

Elemental Cost Analysis

Prepared By: a+LINK Architecture Inc., London, On

20-Nov-2018 Updated 05-Feb. 2019

Preliminary Budget

1831

Reference	Description	Maintenance Priority (1,2,3)	Option 1 Sprinklers	W/O Estimate	Option 2 With Sprinklers	Estimate	Option 3 Reduce Area	Estimate
Station Arts Centre - Building Condition Assessment								
12.0 Fire & Life Safety								
1.	Provide 3/4 hour fire separation to floor assembly above basement. 3.2.1.4	1	Is required		FRR is not required if sprinklered under Table 11.4.3.4A		Is required	
.a	Remove existing ceiling finishes and provide new GWB membrane.			\$ 17,600		\$ -		\$ 17,600
.b	Upgrade walls separating the basement to 3/4 hr. FRR.			\$ 10,500		\$ -		\$ 10,500
.c	Provide new labeled doors, closers, and hardware to 3/4 hr. FRR in fire sep.			\$ 6,000		\$ -		\$ 6,000
.d	Provide fire dampers and fire stopping at penetrations in fire sep.			\$ 5,000		\$ -		\$ 5,000
.e	Provide new sprinkler system whole building.					\$ 65,000		
2.	Provide 3/4 hour fire separation for supports. 3.2.1.4	1	Is required		Is not required		Is required	
.a	Coordinate with item 1 above.			\$ 4,000		\$ -		\$ 4,000
3.	Provide direct exits from basement.	1	Is required		Is required		Is required	
.a	See item 4 below.							
4.	Provide 2 exits or reduce floor area.	1	Two exits are required		One exit is required		Two exits are required	
.a	Two exits, min. travel distance is [30m] if unsprinklered. 3.4.2.5 (1) f.		Upgrade lobby GWR	\$ 30,000		\$ -		
.b	Two exits, min. travel distance is [45m] if sprinklered. 3.4.2.5. (1) c.							
.c	Reduce basement floor area to less than 150 m ² .		Is required for one exit		Area increased to 200 m ² with Sprinklers			
	Work associated with physical reduction of basement to create cellar space							\$ 5,000
	Selective demolition of area above 150 m ² included floor for concrete wall.							\$ 5,000
	Construction of foundation wall and partition wall to underside of structure							\$ 6,000
	Infill area with compacted granular fill, vap. Barrier, mud slab to create cellar							\$ 1,200
	Install fire rated access panel							\$ 5,000
	Mech. dampers, Elect. lighting adjustment, Detectors							
.d	One exit, min. travel distance is reduced to [25m]. 3.4.2.1 (2) b if sprinklered.					\$ -		
.e	One exit, min. travel distance is reduced to [15m]. 3.4.2.1 (2).							
.f	Construct exterior stair from basement to grade on west end of gallery addition.			\$ 25,000		\$ 25,000		\$ 25,000
5.	Provide interconnected smoke alarms	1	Is recommended		Is recommended		Is recommended	
	Option 1: Upgrade existing smoke alarms, exit signs, and emergency lighting							
.a	Upgrade smoke alarms to interconnected on all levels			\$ 9,500		\$ 9,500		\$ 9,500
.b	Upgrade Exit Signage and Emergency Lighting			\$ 5,000		\$ 5,000		\$ 5,000
	Option 2: Provide new fire alarm system							
.c	Fire alarm would be required if occupancy over 150 for licensed events. 3.2.4.1 g.		\$ 22,000					
	Fire alarm may be connected to the existing security monitoring co.							
	Sprinkler signal to Fire Alarm - ULC Monitored?							
6.	Rebuild east access to exit stair to provide uniform risers.	1	Is required		Is required		Is required	
.a	Partial demolish, form and re-pour stairs over existing.			\$ 5,000		\$ 5,000		\$ 5,000
7.	Provide new handrails on basement access to exit stairs with extensions.	1	Is required		Is required		Is required	
.a	Remove existing and install new railings - one side if under 1100mm.			\$ 3,000		\$ 3,000		\$ 3,000
8.	Headroom clearance on west stair.	1	Is required		Is required		Is required	
.a	Remove existing shelf and patch ceiling GWB.			\$ 650		\$ 650		\$ 650
.b	If min. headroom clearance cannot be obtained, rebuild stairs and landing to suit.			\$ 5,000		\$ 5,000		\$ 5,000
9.	Clear pathways at ground floor exit doors. 4 exits required.	1	Is required		Is required		Is required	
.a	Tenant to remove stored materials and maintain clear paths to exits.			-		-		-
.b	Decommission west exit - not required.		Is recommended	-	Is recommended	-	Is recommended	-
10.	Modify & update facility Fire Plan Map	1	Is required		Is required		Is required	
.a	Update fire plan map posted on walls to reflect current & future site conditions.			-		-		-
11.	Remove stored materials under west basement stair.	1	Is required		Is required		Is required	
.a	Tenant to remove stored materials.			-		-		-
Subtotal				\$ 126,250	\$ -	\$ 118,150	\$ -	\$ 118,450
Contractor OH&P (20%)				\$ 25,250	\$ -	\$ 23,630	\$ -	\$ 23,690
SubTotal				\$ 151,500	\$ -	\$ 141,780	\$ -	\$ 142,140
Contingency (20%)				\$ 30,300	\$ -	\$ 28,356	\$ -	\$ 28,428
TOTAL PROJECT ESTIMATE				\$ 181,800	\$ -	\$ 170,136	\$ -	\$ 170,568

** HST Tax of 13% is additional to the cost estimate

- Notes:**
- Maintenance Priority (1,2,3) is defined as 1 = within 1 year, 2 = within 2 to 3 years, 3 = 3 to 5 years.
 - High priority items identified in the report of a structural or fire and life safety nature will require immediate attention.
 - All costs indicated are based on 2018 values.