

5. FIRE SAFETY

5.1 OVERVIEW

Stantec has completed the Fire Department checklist and will continue to perform ongoing coordination with Fire Department representatives and City Planning officials. The accompanying memorandum outlines our findings with respect to compliance with the City's Public Safety Standards as set forth in the City's Technical Manual, Section 3 – Public Safety Standards.

The development plans include the placement of new fire hydrants along the access road in accordance with previously approved Fire Safety Compliance plan documents. Similarly, the loop road will be completed in a manner that will provide improved access for fire safety apparatus. An updated Fire Safety Compliance Plan that depicts AutoTURN movements for fire apparatus accompanies this submission.

The building will be fully sprinkled and code compliant to current applicable standards.

Additional fire safety review and evidence of building related fire code compliance will be provided as part of the Building Permit process.

5.2 ATTACHMENTS

Attachment E – Portland Fire Department Site Review Checklist & NFPA 1 Review

ATTACHMENT E

Portland Fire Department Site Review Checklist & NFPA 1 Review



Stantec Consulting Services Inc.
482 Payne Road, Scarborough Court, Scarborough, ME 04074

March 29, 2017

Mr. Keith Gautreau, Assistant Chief

City of Portland Fire Department
380 Congress Street
Portland, Maine 04101

**Subject: Proposed Children's Museum & Theatre of Maine
Lot 7 Thompson's Point
Fire Safety Checklist**

Dear Assistant Chief Gautreau:

In accordance with instructions in the City's Level III Site Plan Review packet, please find enclosed the drawings necessary for your review of the proposed amended project. The current application is associated with the construction of the Children's Museum and Theatre on Lot 7 as well as additional access road and utility infrastructure. We have listed each item in your checklist below, followed by our response.

1. *Name, address, telephone number of applicant.*

Co-Applicant's:

Phase 2

Children's Museum & Theatre of Maine
Attn: Suzanne Olson
P.O. Box 4041
Portland, ME 04101
207.828.1234

Phase 1

Forefront Partners, I, LP
Attn: Chris Thompson
501 Danforth Street
Portland, ME 04101
207.747.5288

2. *Name, address, telephone number of architect.*

Bruner/Cott & Associates, Inc.
Attn: Greg Russell
130 Prospect Street
Cambridge, MA 02139
617.492.8400



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3. *Proposed uses of any structures (NFPA and IBC classification).*

Building	IBC Code	NFPA Code	Sprinkler
Museum & Theatre _ Construction Type II-A (protected, non-combustible)	A-1, A-3, B, S-2	Assembly NFPA 1 and NFPA 101	Yes NFPA 13

* Systems designed to meet NFPA

4. *Square footage of all structures (total and per story).*

Building	Footprint Area (SF)
29,046 SF total over 3 floors	9,682 SF

5. *Elevation of all structures.*

The building finish floor elevations will be as follows:

Building	Finished Floor Elevation	Building Height
CMTM	18.0 ft. (NGVD29)	45 ft. +/-

6. *Proposed fire protection of all structures.*

The proposed building will have a sprinkler system.

7. *Hydrant locations.*

Fire hydrants are currently located on the peninsula at various locations. The proposed work will include the extension of additional water supply main on the site and the placement of a fire hydrant immediately east of the proposed building and within 100 feet. We currently identify a fire department connection on the building's east side.

8. *Water main(s) size and location.*

There will be a 12" water main extended basically along the south and east perimeter of the Lot 7 site area. A 6" fire supply main will be extended into the building. The sprinkler riser will be located on the west side of the building per the current building floor plans.

9. *Access to all structures (min. 2 sides).*

The proposed structure will be accessible from at least three sides.

10. *A code summary shall be included referencing NFPA 1 and all fire department technical standards.*



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NFPA 1 – Chapter 18 Fire Department Access and Water Supply

18.2 Fire Department Access:

The project site is accessed via Thompson's Point connector road and an internal loop road. The accompanying fire compliance plan identifies fire apparatus routes and access conditions.

Per NFPA 1 – Chapter 18.2.3.2.2.1, all first story floors shall be located not more than 450 ft. from a Fire Department access road.

City of Portland Technical Manual – Section 3 Public Safety

3.4.1 Every dead-end roadway more than one hundred fifty (150') feet in length shall provide a turnaround at the closed end. Turnarounds shall be designed to facilitate future street connectivity and shall always be designed to the right (refer to Figure I-5).

Supporting Evidence: There are no dead-end roadways proposed. The paved yard area provides emergency vehicles accessibility.

3.4.2 Where possible, developments shall provide access for Fire Department vehicles to at least two sides of all structures. Access may be from streets, access roads, emergency access lanes, or parking areas.

Supporting Evidence: The Site Plan includes hard surface areas that circle the building and will provide at least three-sided access to the building.

3.4.3 Building setbacks, where required by zoning, shall be adequate to allow for emergency vehicle access and related emergency response activities and shall be evaluated based on the following factors:

- *Building Height.*
- *Building Occupancy.*
- *Construction Type.*
- *Impediments to the Structures.*
- *Safety Features Provided.*

Supporting Evidence: The proposed building and existing buildings will be fully accessible to emergency equipment.

3.4.4. Fire Dept. access roads shall extend to within 50' of an exterior door providing access to the interior of the structure.



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Supporting Evidence: The alleyway between Brick South and the CMTM entrance, located at the SW corner of the building will allow an emergency vehicle to pull within 10' of the structure.

3.4.5. Site access shall provide a minimum of nine (9) feet clearance height to accommodate ambulance access.

Supporting Evidence: There are no vertical obstructions for the proposed building.

3.4.6. Elevators shall be sized to accommodate an 80 x 24 inch stretcher.

Supporting Evidence: The building elevator will accommodate these stretcher dimensions.

3.4.7. All structures are required to display the assigned street number. Numbers shall be clearly visible from the public right of way.

Supporting Evidence: The street number will be displayed on the building and/or street signage (submitted under separate application). The development team will work with the Fire Dept., E911 and public works on the building numbering and address.

If you need any further information regarding this review, please contact our office.

Regards,

STANTEC CONSULTING SERVICES INC.

A handwritten signature in blue ink, appearing to read "Stephen R. Bushey".

Stephen R. Bushey, P.E.
Associate
Tel: 207-887-3478
Stephen.bushey@stantec.com

Attachments

c: Captain David Petruccelli, Fire Department (via email)

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