

The Druker Company Ltd The Heritage on the Garden

Building Summary Construction Fire Safety Plan (NFPA 241)

ACTIVE CONSTRUCTION SUMMARY

Druker Co. Ltd Assigned Project ID Number	Project Name	Building Permit #	General Contractor	Floors Affected	Impairments (Y/N)				Project Timeline	
					Fire Alarm	Sprinkler	Egress	BFD Access	Start	End

This document is intended to serve as a summary of the ongoing projects at The Heritage on the Garden located in Boston, MA. All concurrent work within the building is outlined below and any impacts to fire protection systems, means of egress, fire department access etc. is summarized. This document has been prepared as required by 527 CMR 1.00 (*Massachusetts Comprehensive Fire Safety Code*) and NFPA 241 (*Standard for Safeguarding Construction, Alteration, and Demolition Operations*). The Druker Company Ltd oversees all construction work. However, construction safeguarding roles and responsibilities are designated to the general contractors and sub-contractors completing work in the building.

The following persons are designated as Fire Prevention Program Manager(s) whom acknowledge that they will be responsible for ensuring that the CFSP is implemented and followed by on-site personnel for the duration of this project.

	Primary Fire Prevention Program Manager	Alternate Fire Prevention Program Manager
Title:	Diane Ashen	Daryl Swartz
Name	The Druker Company Ltd.	The Druker Company Ltd.
Company	Property Manager	Lead Major Domo
Title:	774.277.7409	781.771.0748
Phone Number	dashen@drukerco.com	dswartz@drukerco.com
Email Address		

1. BUILDING DESCRIPTION

A. Building Use:

The Heritage on the Garden is an existing 12-story above grade building with a 3-story below grade parking garage. The building is provided with three (3) towers. Vehicular access is provided on all four sides of the structure. The building is classified as a mixed-use occupancy that primarily contains residential units, business spaces, restaurants, mercantile spaces, parking garage, and building support spaces. The residential units are located in the upper levels, the business, restaurant and retail spaces are located on the lower levels, and the parking is located underground. See Figure 1 below.

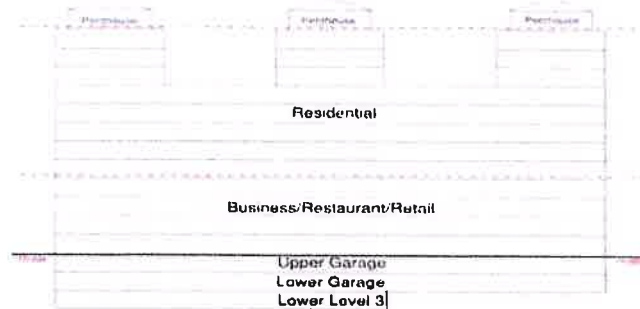


Figure 1: Heritage on the Garden

- Private Residences Floors 5 through 12
- Business/Restaurant/Retail Floors 1 through 4
- Below Grade Garage Levels Lower Level 3 to Upper Garage

B. Existing Fire Protection & Life Safety Features:

- Fire Department Access: The Boston Fire Department has vehicular access around the building directly off Park Plaza, Boylston Street Arlington Street and Hadassah Way. The Fire Command Center is located behind the security desk in the lobby off the 75 Park Plaza entrance. In addition to this entrance, there are multiple other entrances around the perimeter of the building. See Figure 2 below.

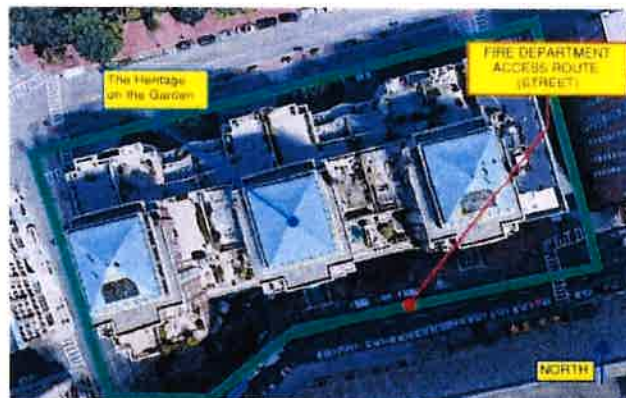


Figure 2: Google Maps Site Plan

- b. Fire Suppression Systems: The building is protected by an automatic sprinkler system throughout which is supervised by the building's fire alarm system. The sprinkler system is fed from a private fire service which is serviced by a diesel fire pump. The private fire service also supplies the standpipe connections which are located in the building stairwells.
- c. Fire Alarm System: The building is protected by an addressable voice alarm communication fire alarm system. This system is comprised of audible and visual notification appliances throughout the building as well as smoke detection in select areas such as stairwells and at fire alarm control equipment. Manual fire alarm boxes are also located at all exits. The fire alarm system reports alarm signals to the Boston Fire Department (BFD) via local energy master box located at the fire command center. The associated master box is #14-1531
- d. Fire Extinguishers: Fire extinguishers are located throughout the building in conspicuous locations.
- e. Means of Egress: The building is provided with six exit stairways that serve the building. The stair designations and locations are as follows:
 - Two (2) stairs are located in the "West Tower" designated as Stair 1 and Stair 2.
 - Two (2) stairs are located in the "Center Tower" designated as Stair 3 and Stair 4.
 - Two (2) stairs are located in the "East Tower" designated as Stair 5 and Stair 6.
- f. Occupancy: The building is occupied and will remain occupied for the duration of the projects unless otherwise noted.

2. ACTIVE PROJECTS

A. Overview

A summary of each active construction project is provided in Appendix B.

B. Fire Protection During Construction

All construction projects are overseen and coordinated through The Duker Company Ltd. The Duker Company Ltd serves as the Owner's fire prevention program manager and is responsible for ensuring all system impairments are coordinated and scheduled as indicated by the "The Heritage on the Garden Fire Protection System Impairment Procedure" which has been presented and approved by BFD and is included as Appendix A. These procedures include provisions that ensure that all impairments are coordinated and scheduled with The Duker Company's knowledge and approval, sprinkler impairments do not occur on consecutive floors and fire alarm impairments are conducted such that they do not occur simultaneously with any sprinkler impairments on any floor or separated section of a floor.

Fire Suppression Systems:

Projects involving sprinkler impairments are specifically identified on the cover sheet summary. Refer to appendix B for project specific information regarding fire suppression impairments.

All fire suppression impairments are coordinated and scheduled through The Duker Company Ltd per the above description and approved impairment procedure as attached in Appendix A.

Fire Alarm System:

Projects involving fire alarm system impairments are specifically identified on the cover sheet summary. Refer to appendix B for project specific information regarding fire alarm system impairments.

All fire alarm system impairments are coordinated and scheduled through The Duker Company Ltd per the above description and approved impairment procedure as attached in Appendix A.

Fire Extinguishers: Fire extinguishers are located throughout the building in conspicuously marked areas. Additionally, a minimum of one fire extinguisher will be located in each renovation area on each floor of the building throughout the duration of the project.

C. Means of Egress During Construction

Exit Stairs, Exit Access & Exit Discharge:

Projects involving means of egress system impairments are specifically identified on the cover sheet summary. Refer to appendix B for project specific information regarding means of egress impairments.

All means of egress impairments are coordinated and scheduled through The Duker Company Ltd per the above description and approved impairment procedure as attached in Appendix A.

D. Fire Department Access During Construction

Fire Department Access (Vehicular Site & Building Access):

Projects involving impairments / obstructions to the fire department access routes and building entry points are specifically identified on the cover sheet summary. Refer to appendix B for project specific information regarding impairments to fire department access features.

All fire department access is coordinated and scheduled through The Duker Company Ltd per the above description and approved impairment procedure as attached in Appendix A.

E. Code Compliance

All necessary permits will be obtained and work will be completed in accordance with the applicable state and local codes as well as NFPA 241 (*Standard for Safeguarding Construction, Alteration, and Demolition Operations*).

C. Fire Response

In case of fire, on-site personnel will complete the following:

- Pull nearest fire alarm
- Evacuate area
- Make follow up phone call to BFD via 911 operator
- Make follow up phone call to The Heritage on the Garden staff (FPPM)
- Meet BFD at entrance to building on Park Plaza

Appendix A: The Heritage on the Garden Fire Protection System Impairment Procedure

The Druker Company Ltd
The Heritage on the Garden
Fire Protection & Life Safety Feature
Impairment Procedures

This document contains the required procedures for executing impairments to fire safety features within The Heritage on the Garden. These procedures are referenced by the overall construction fire safety procedures for The Heritage on the Garden.

Prepared For:

The Druker Company Ltd
The Heritage on the Garden
Boston, MA 02116

Prepared By:

Christopher J. LeClair
Fire Protection Consultant

JENSEN HUGHES
117 Metro Center Blvd. Suite 1002
Warwick, RI 02886
401-736-8992

TABLE OF CONTENTS

1.	GENERAL REQUIREMENTS	1
2.	IMPAIRMENT PLANS AND APPROVALS.....	1
3.	FIRE PROTECTION SYSTEM IMPAIRMENTS	1
3.1.	Water-Based Fire Protection Impairments:.....	1
3.2.	Fire Alarm System Impairments:.....	2
3.3.	Multiple & Simultaneous Fire Protection System Impairments:	3
4.	MEANS OF EGRESS IMPAIRMENTS.....	3
5.	FIRE DEPARTMENT ACCESS IMPAIRMENTS.....	3
6.	APPENDIX A: SAMPLE IMPAIRMENT AUTHORIZATION LETTER.....	1
7.	APPENDIX B: IMPAIRMENT REQUEST FORM.....	1

1. GENERAL REQUIREMENTS

As they are executed, all impairments shall be logged in the building fire protection system impairment log indicated when they are initiated and restored. This log shall be maintained in the building's construction fire safety binder.

If impairments are unexpectedly required to extend beyond their approved duration or one single working shift, The Druker Company Ltd and BFD shall be immediately notified and additional temporary safeguards, such as a fire watch may be required to be implemented. This shall be coordinated with all parties.

2. IMPAIRMENT PLANS AND APPROVALS

Where impairments to fire protection or life safety features are necessary to support a renovation / construction project, the contractor, design team or other qualified individual shall prepare formal impairment plans outlining the work to be done and the procedure to be followed in accordance with the requirements herein. These impairment plans shall be submitted to The Druker Company Ltd for review prior to completing the work and prior to submitting the same to BFD for approval / permit issuance. Once reviewed by The Druker Company Ltd, The Druker Company Ltd will issue an impairment approval letter (See Attachment A for a sample authorization letter). Once approved by The Druker Company Ltd, the impairment plan and associated Druker Company Ltd approval letter shall then be submitted to BFD for approval and issuance of a permit. Upon approval by BFD, a copy of the impairment plan, associated Druker Company Ltd approval letter and BFD approval shall then be inserted into the building's construction fire safety binder

After the above approvals have been obtained and when the contractor is ready to complete the work, the contractor shall submit a separate internal Druker Company Ltd impairment request form (Attachment B) to The Druker Company Ltd indicating the proposed times and dates of the impairment. The impairment shall not be executed by the contractor until The Druker Company Ltd approves the impairment request form. Once authorized by The Druker Company Ltd, a copy of the Druker Company Ltd signed impairment request form shall be inserted into the building's construction fire safety binder.

Should an impairment require an approach that differs from these procedures plan, the alternative approach shall be clearly identified in the specific impairment plan and specific approval shall be obtained by both The Druker Company Ltd and BFD prior to execution.

3. FIRE PROTECTION SYSTEM IMPAIRMENTS

3.1. Water-Based Fire Protection Impairments:

Water-Based fire protection systems shall not be simultaneously impaired on adjacent floors at any given time. Where the impairment of water-based fire protection systems is necessary on multiple floors, the work shall be scheduled such that the floors above and below the floor of work have active water-based fire suppression for the duration of the impairment. Refer to figures 1 & 2 below for clarification.

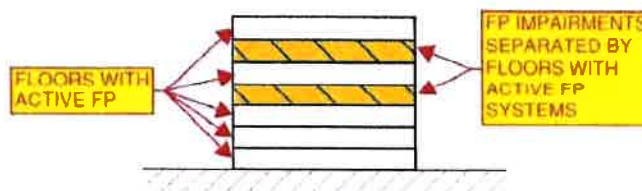


Figure 1: Allowed FP Impairment Diagram



Figure 2. Prohibited FP Impairment Diagram

Multiple General Contractors may request impairments on multiple floors, however, the Owners Fire Prevention Program Manager shall review all proposed impairments each day and authorize impairments based on the above requirements and guidelines. The Owners FPPM shall confirm that floors with water-based fire protection impairments are separated by at least 1 floor with active fire protection systems. The Owners FPPM shall review, coordinate and approve all simultaneous impairment requests from all general contractors within the building.

The waterflow switch associated with the area of work shall be disabled at the fire alarm control unit (FACU) prior to draining and re-filling the sprinkler zone. When a waterflow switch requires disabling, the Property Manager and Chief Engineer for The Heritage on the Garden shall be notified. The Chief Engineer will then contact the qualified approved subcontractor to physically disable the waterflow switch at the FACU.

If a sprinkler zone is turned off to facilitate work on the sprinkler system, the sprinkler control valves shall be checked at the end of each work shift to ascertain the protection is in service (NFPA 241 8.7.3.6).

All new sprinkler work shall be in accordance with NFPA 13, *Standard for the Installation of Sprinkler Systems*.

Sprinkler impairments shall be restored at the end of the approved impairment timeframe and at the end of each working shift unless specific approval and safeguards have been developed and approved by The Druker Company Ltd and BFD.

3.2. Fire Alarm System Impairments:

The fire alarm system shall not be impaired simultaneously with any water based fire protection system on the same floor. Where it is necessary to impair both the fire alarm system and water-based fire protection systems for a construction project, the work must be scheduled and authorized such that the impairments occur at different times.

Fire alarm system impairments shall be allowed on consecutive floors provided that the water based suppression systems and waterflow detection devices serving the floors of work remain operational during the impairments.

Fire alarm system notification shall be maintained throughout the building at all times and shall be provided in all work areas for the duration of the project.

Where smoke detectors are susceptible to nuisance alarms due to proposed construction activities, a bagging permit application shall be submitted to BFD for approval where smoke detectors are to be bagged. If, smoke detectors are proposed to be disabled electronically at the FACU in addition to being covered or "bagged", then this shall be explicitly stated on the bagging permit application. When smoke detectors are to be disabled electronically, The Property Manager and Chief Engineer for The Heritage on the Garden shall be notified. The Chief Engineer will then contact the qualified approved subcontractor to physically disable the detector at the FACU.

Where detectors associated with control functions such as elevator recall, smoke control, stair pressurization etc. require impairment, they shall be impaired for the shortest time possible and restored to normal operation as soon as the source of the impairment is no longer present. (i.e. a detector is bagged

for 15 minutes to allow a short cutting or sawing operation to occur). This shall be clearly identified in the impairment plan and shall be approved by The Druker Company Ltd and BFD.

Where detectors associated with control functions such as elevator recall, smoke control, stair pressurization etc. require frequent impairments and/or impairment for long durations, they may be changed to combination fixed temperature 135F and rate-of-rise heat detectors. These heat detectors shall only be in service for the duration of the project when the device location is susceptible to nuisance alarms (i.e. dusty demolition operations). When the working conditions are improved to a point where the device location is no longer susceptible to nuisance alarms, the devices shall be changed back to smoke detectors (i.e. after demolition is complete but when other less invasive work is still being performed such as framing, painting, finishes, furniture assembly etc.). This condition shall be addressed in a specific impairment plan to be submitted to BFD and The Druker Company Ltd for approval.

Similar to the above, area smoke detectors not associated with control functions (elevator recall, smoke control etc.) may be changed to heat detectors for the duration of the construction project when the construction environment is not suitable for smoke detection. When the working conditions are improved to a point where the device location is no longer susceptible to nuisance alarms, the devices shall be changed back to smoke detectors (i.e. after demolition is complete but when other less invasive work is still being performed such as framing, painting, finishes, furniture assembly etc.). This condition shall be addressed in a specific impairment plan to be submitted to BFD and The Druker Company Ltd for approval.

Fire alarm impairments shall be restored at the end of each working shift unless specific approval and safeguards have been developed and approved by The Druker Company Ltd and BFD.

3.3. Multiple & Simultaneous Fire Protection System Impairments:

Multiple impairments may be completed in the same day or working shift provided that they comply with the requirements of this procedure. Impairments can either be scheduled so as to not overlap durations (i.e. a sprinkler system impairment from 8:00am – 12:00pm followed by a fire alarm system impairment from 1:00pm to 3:00pm). Alternatively, fire protection system impairments may be completed simultaneously in certain scenarios as outlined in the following sections of this procedure. For example, impairing the sprinkler system on floors 2 and 4 simultaneously may be acceptable provided that the fire alarm system remains active on these floors and the sprinkler systems located on the adjacent floors (1, 3 & 5) also remain active for the duration of the impairments.

4. MEANS OF EGRESS IMPAIRMENTS

All existing building means of egress shall be maintained throughout the construction project unless otherwise approved by The Druker Company and BFD as required herein. Means of egress components include exit stairs, exit access corridors, exterior and interior exit discharge areas etc.

Where a project requires the impairment of a means of egress component, a specific means of egress impairment plan shall be developed and approved prior to execution as required by the impairment plan development requirements stated previously.

5. FIRE DEPARTMENT ACCESS IMPAIRMENTS

Existing fire department access routes shall be maintained throughout the construction project unless otherwise approved by The Druker Company and BFD as required herein. Fire department access routes include vehicular access for fire apparatus as well as building entrances used by the fire department. Fire department connections, fire hydrants or other similar features typically located along fire department access routes shall be maintained and unobstructed throughout.

Where a project requires the impairment of a fire department access route or related feature, a specific fire department access impairment plan shall be developed and approved prior to execution as required by the impairment plan development requirements stated previously.

APPENDIX A: SAMPLE IMPAIRMENT AUTHORIZATION LETTER

DATE

Boston Fire Department
Fire Prevention Division
1010 Massachusetts Ave.
Boston, MA 02118

RE: The Heritage on the Garden
Impairment Authorization Letter

To whom it may concern:

As part of [INSERT BRIEF DESCRIPTION OF PROJECT] at The Heritage on the Garden, The Druker Company Ltd is aware that fire protection/life safety impairments are required. As specified in The Heritage on the Garden Construction Fire Safety Policies, this letter serves as acknowledgement of [CONTRACTOR NAME]'s proposed Impairment Plan. The Druker Company Ltd hereby authorizes [CONTRACTOR NAME] to proceed with the permit application for the proposed impairments. [CONTRACTOR NAME] is responsible for obtaining all permits, completing the work and conducting any required fire-watches for this work. The Druker Company Ltd and the project-specific FPPM will ensure all work is completed in accordance with permit conditions as well as the Construction Fire Safety Policies.

Per the building's Construction Fire Safety Policies, The Druker Company Ltd has directed the project-specific fire prevention program manager to insert a copy of the attached impairment plan to the master construction fire safety binder. This binder will be continually added to as additional documents are required and developed such as additional impairment plans.

Respectfully Submitted,



Property Manager
Primary Fire Prevention Program Manager
The Druker Company Ltd – The Heritage on the Garden
Boston, MA

CC

Subcontractor:

Name
Address

Project Specific Fire Prevention Program Manager:

Name
Address

APPENDIX B: IMPAIRMENT REQUEST FORM

Sheet

FIRE PROTECTION IMPAIRMENT LOG										Sheet # _____
Date		Contractor	Associated Project (if applicable)		Impaired Devices/Systems (List FA addresses/sprinkler zones)	BFD Notified? (YES/NO)				
Start Time	End Time	Mobile Phone Number	Impairment Type						Central Station Notified? (YES/NO) (if applicable)	
Date		Contractor	☐ Fire Alarm ☐ Fire Protection ☐ Other Associated Project (if applicable)		Impaired Devices/Systems (List FA addresses/sprinkler zones)				BFD Notified? (YES/NO)	
Start Time	End Time	Mobile Phone Number	Impairment Type						Central Station Notified? (YES/NO) (if applicable)	
Date		Contractor	☐ Fire Alarm ☐ Fire Protection ☐ Other Associated Project (if applicable)		Impaired Devices/Systems (List FA addresses/sprinkler zones)				BFD Notified? (YES/NO)	
Start Time	End Time	Mobile Phone Number	Impairment Type						Central Station Notified? (YES/NO) (if applicable)	
Date		Contractor	☐ Fire Alarm ☐ Fire Protection ☐ Other Associated Project (if applicable)		Impaired Devices/Systems (List FA addresses/sprinkler zones)				BFD Notified? (YES/NO)	
Start Time	End Time	Mobile Phone Number	Impairment Type						Central Station Notified? (YES/NO) (if applicable)	
Date		Contractor	☐ Fire Alarm ☐ Fire Protection ☐ Other Associated Project (if applicable)		Impaired Devices/Systems (List FA addresses/sprinkler zones)				BFD Notified? (YES/NO)	
Start Time	End Time	Mobile Phone Number	Impairment Type						Central Station Notified? (YES/NO) (if applicable)	
Date		Contractor	☐ Fire Alarm ☐ Fire Protection ☐ Other Associated Project (if applicable)		Impaired Devices/Systems (List FA addresses/sprinkler zones)				BFD Notified? (YES/NO)	
Start Time	End Time	Mobile Phone Number	Impairment Type						Central Station Notified? (YES/NO) (if applicable)	
Date		Contractor	☐ Fire Alarm ☐ Fire Protection ☐ Other Associated Project (if applicable)		Impaired Devices/Systems (List FA addresses/sprinkler zones)				BFD Notified? (YES/NO)	