

**Shawsheen River
Flood Emergency Operations Plan
FEOP**

for

Washington Park Condominiums

Washington Park Condominiums FEOP

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1. Foreword

This plan strives to provide a comprehensive approach to ensuring the safety of all of the residents and the minimization of damage to property associated with Washington Park Condominiums (WP). In the event of a threatening flood emergency this plan will guide thoughtful decision making.

A key component to the success of this flood plan is consultation with local, state, and federal officials in order to get multiple perspectives in optimizing a plan. Documentation of these communications will be retained by Greater Boston Properties (GBP).

2. History

Washington Park Condominiums lies in a flood zone next to the Shawsheen River in the city of Andover, Massachusetts. There are two gauges that monitor the river's height: Balmoral St. in Andover, MA and Wilmington. In addition there are gauges on the Merrimack River in Lawrence and in Lowell, MA. The Merrimack River level is important as the Shawsheen enters the Merrimack just below the Lawrence river gauge.

On March 16, 2010, Washington Park Condominiums suffered several inches of flooding to 12 first level units located in Exeter and Dover Houses. At this time, the Balmoral gauge indicated that the river's height reached 36 ft. - two feet above the flood stage. Similarly the Wilmington gauge indicated that the river's height was 10.59 ft, also above flood stage (7 ft). The Merrimack River gauge indicated the river's height above the flood stage (20 ft) at 23.4 ft.

On May 15, 2006 Washington Park Condominiums suffered more serious flooding in which all first floor units in the complex were flooded with over 1.5 ft of water. The Balmoral gauge was not operational at that time; however the river's height at that location was estimated to have been at

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37.45 ft. The Wilmington gauge indicated the river’s height as 8.94 ft. On that date the Merrimack gauge at Lawrence indicated the river’s height as 30.20 ft.

The chart below shows dates and gauge readings when the Shawsheen River at Wilmington was recorded at Flood Stage but did not enter the buildings. Also listed are the gauge reading during the 2006 and 2010 floods. In 2006, 8 buildings were flooded and 2 buildings in 2010. On 4/1/2014 the river at crest was about 2 -3 ft below the asphalt

River Gauge (in ft)	Shawsheen		Merrimack		
	Balmoral	Wilmington	Lowell	Lawrence	
Flood Stage	34	7	52	20	
2/27/2010	31.49	8.15	51.49	20.2	
4/18/2007	34.15	7.75	58.09	27.2	
4/1/2010	33.98	9.42	54.64	24.3	
4/1/2014	30.62	7.26	50.62	18.73	note: ~ 3 ft below asphalt
3/15/2010	36.16	10.59	53.63	23.4	
5/15/2006	37.45	8.94	58.84	30.20	

3. Flood Terms

Several terms are used in describing flood hazards. The following list of definitions used is provided for residents’ understanding:

Flood Alert – Heavy rains are expected and rivers will rise. Board will contact GBP to begin process. Management and the Board of Trustees meet to review all procedures and confirm all contacts.

Flood Watch – Flooding is possible. Residents are notified of possible flooding by voicemail. Flood proofing measures start and cars are moved to higher ground.

Flood Emergency– Flooding will occur soon. All facilities evacuated and final flood prevention measures implemented.

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4. Essential Personnel Contact Information: In the event of a Flood Watch the following service providers will be contacted by GBP

- Callahan Plumbing is responsible for maintaining all heating systems. 978-689-9233
- Wildwood Nurseries Inc. is responsible for all flood proofing preparations and sump pump operations. 978-265-8149
- Elm Street Garage will provide towing services if needed. 978-475-5873
- A-Phase Electric will be notified in the event that electrical service is needed. 800-685-8316

5. Flood Alert - 5 inches of continuous rain is expected or the 72 hr prediction of the Balmoral gage is 28 ft.

- Management and the Board of Trustees (BOT) will convene at the Main office in person or by conference call with Wildwood .
- Review current predictions and adapt part 5 of flood plan based on predictions.
- All essential personnel will be contacted.
- A voice shot to all residents is sent out. (see voice shot #1 page 7)

It is important that all residents register a contact phone number with GBP, preferably a cell phone or an alternate land line not at WP. This may be done directly by signing on to the association communication portal at www.GBProperties.com or by calling Greater Boston Properties at 855-536-4900.

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6. Flood Watch - When both the Balmoral gauge 72 hr predicts 29 ft and the Wilmington gauge at 7 ft. A forecast of flooding will occur in 3 days.

This stage will involve the most communication and variation based on the information received. It will take 3 days from start to finish for Wildwood to complete the making of sandbags to fully installing them.

1. When the Wilmington gauge projected river level will reach the 5 feet action level Wildwood will be notified. They will begin discussions of the process for the preparation of sand bags and plastic coverings for distribution.
2. When the Wilmington gauge projected river level will reach the 7 feet flood level, Wildwood will begin filling and moving the sandbags and plastic coverings near all doors and sliders to be ready for installation.

A voice shot will go out informing all residents that WP is starting preparation for potential flooding and they should start their own preparations in case we need to evacuate. (See voiceshot #2 page 7)

3. When the Wilmington gauge projected river level will reach the 8 feet moderate flood level, Wildwood will begin placing the plastic and sand bags on all back doors and sliders.

A voice shot will go out informing residences of a pending flood and that their sliders and back doors are being sand bagged. Residents will move their cars to higher ground such as Fry Circle. (See voiceshot #3 page 7)

7. Flood Emergency/Evacuation - Balmoral gauge will reach 32 ft or greater. Flood waters are expected to cover the entire property and rise above building floor levels

1. When the decision to evacuate is made a voice shot will go out informing everyone to evacuate the property. (See voiceshot #4 page 7-8)
2. Management does a door to door check to assure total evacuation. Any resident refusing to leave will be subject to removal/ arrest by the Andover Police.

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3. Wildwood will begin placing the plastic and sand bags on all front doors as buildings are emptied.

8. Re-Occupancy

A voice shot will be send by GBP when the decision is made to reoccupy. (See voiceshot #5 page 8)

Note: This plan was developed in consultation with Lt. Pomerleau of the Andover Fire Dept and Nicole Belk from NOAA, Taunton, MA

9. Resources:

The following websites are provided for residents' monitoring

National Weather Service Website

<http://forecast.weather.gov/MapClick.php?CityName=Andover&state=MA&site=BOX&textField1=42.6553&textField2=-71.1431&e=0>

USGA Website

The following websites provides real time updates on the height of the Shawsheen River at the Balmoral River Gauge.

<http://water.weather.gov/ahps2/hydrograph.php?wfo=box&gage=andm3>

Shawsheen River gauge in Wilmington MA

<http://newweb.erh.noaa.gov/ahps2/hydrograph.php?wfo=box&gage=wlmm3>

Merrimack River Gauge in Lawrence MA

<http://newweb.erh.noaa.gov/ahps2/hydrograph.php?wfo=box&gage=lwmm3>

National Weather service <http://weather.gov/boston> -

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Section 10

Voiceshots

- 1) Residents of Washington Park Condominiums. This is a precautionary announcement to inform you that due to the anticipated rain fall the Board and Greater Boston Properties are monitoring the current river height on an hourly basis. We will make additional announcements if needed.

- 2) Washington Park Residents today _ (Day, Month year) The Board of Trustees and GBP are closely monitoring the river levels and staying in contact with Town officials. At this time you do not have to do anything. However GBP and the Trustees highly advise that you prepare to evacuate your unit and plan to be out of your unit for at least three days. You may also be asked to move your car to higher ground. If you can please verify where you might stay while you are out of your unit. When we have information about a shelter we will let you know. Also sand bags will start to be placed around the property as needed in preparation for sealing the doors and sliders. Again as of the time of this notice you do not need to do anything. However we HIGHLY advise that you plan for the possibility of evacuating your unit and being out of your unit for at least three days. We will continue to send you updates as we receive information. If you have any questions please call us at 855-536-4900. Thank you.

- 3) Residents of Washington Park today is _____ at _____. We would like to inform all residents that as of this date and time there is no evacuation in place. Again as of (day and time) there is no evacuation in place. However we are currently monitoring the river for a potential flood and highly recommend that all residents prepare for a potential evacuation. As a precautionary measure we have begun to place sandbags on all rear sliders and rear doors. Should an evacuation occur it is recommended that you plan to make arrangements for a minimum of three days where you will not be able to access your home. Also at this time you must move your vehicles to higher ground. We have made arrangements for residents to park across the street at Frye Circle. If you choose to park your vehicle there please do not park in any tenant spaces. Instead please park your vehicle as close to the curb as possible allowing buses and emergency vehicles to pass by safely. Updates can also be found at Washington Park's website at www.washingtonparkandover.com . Should you have any questions please contact Greater Boston Properties at 855-536-4900

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- 4) This is an urgent message from Greater Boston Properties regarding Washington Park Condominiums. The Board of Trustees request that you start evacuation of the property now as the river is supposed to crest at (time) today. If you need assistance evacuating please contact the Andover Fire Department at 978-475-1281. If you are experiencing a life threatening emergency please dial 911. Staff from Greater Boston Properties are on site. If you need to reach them please call our office at 855-536-4900 and a staff member will follow up with you. People should be making final preparations to be leaving their unit for a three day period. The Board highly recommends that you start to evacuate the property at this time.

- 5) This is Greater Boston Properties with a very important message for all Owners and Residents of Washington Park. We have just been notified that as of _____ you will be allowed to re-enter your residence. Secondly there will be a special Owners meeting on _____ at St. Augustine's Church at 1 St. Augustine's Road in Andover. The phone number for St. Augustine's is 978-475-8993 if you need directions. The Washington Park website is going to have daily updates for the Owners posted by the Board of Trustees. The address for the website is www.Washingtonparkandover.com. To recap. Residents can re-enter the property on _____. There will be a meeting at St. Augustine Church on _____. Finally updates can be found on the Washington Park website at www.washingtonparkandover.com. If you have any questions please do not hesitate to contact Greater Boston Properties at 855-536-4900.

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Section 11

Order of Sandbagging: As of Aug 2016 there were approx. 700 sandbags that are stored on pallets on the concrete slab at the entrance to the picnic area.

- 1. 10 Dover**
- 2. 20 Exeter**
- 3. 70 Franklin**
- 4. 50 Jefferson**
- 5. 80 Hamilton**
- 6. 60 Groton**
- 7. 40 Manchester**
- 8. 30 Lexington**

Location of Pumps

Two backup pumps are stored in the Franklin basement.

**237 North Main Street
247 North Main Street
257 North Main Street
259 North Main Street
70 Franklin House
30 Lexington House**