

DOCKET NO. D-2007-36-1

DELAWARE RIVER BASIN COMMISSION

**Waterford Development Associates, L.P.
Waterford Apartments
Philadelphia, Pennsylvania**

PROCEEDINGS

This docket is issued in response to an Application submitted to the Delaware River Basin Commission (DRBC or Commission) by F.X. Browne, Inc. on behalf of the Waterford Development Associates, L.P. on October 31, 2007 (Application), for review of their Waterford Development.

The Application was reviewed for approval under Article 6 of the *Delaware River Basin Compact* and conformance with the Commission's Administrative Manual Part III - Flood Plain Regulations (FPR). The Philadelphia City Planning Commission has been notified of pending action. A public hearing on this project was held by the DRBC on September 24, 2008.

A. DESCRIPTION

- 1. Purpose.** The purpose of this project is to approve the construction of one five-story building comprising 205 residential apartment units on Venice Island and associated parking facilities located under and around the structure.
- 2. Location.** The proposed Waterford Apartment Project is located on Venice Island, on Cotton Street in the Manayunk section of Philadelphia, Pennsylvania. The apartment complex is located in the flood fringe portion of the flood hazard area, adjacent to the Schuylkill River, a Warm Water/Migrating Fishery (WWF/MF) stream that flows to the Delaware River.

The project is located in the Schuylkill River Watershed as follows:

PROJECT	LATITUDE (N)	LONGITUDE (W)
Waterford Apartments	40° 01' 29.79"	75° 13' 27.20"

3. **Project Area.** Waterford Apartment project will provide 205 dwelling units for residents of the Manayunk region of Philadelphia, PA. Public water and sanitary sewer will be provided by the Philadelphia Water Department.(PWD). The project facilities are located within the 100-year flood zone. The development is to be constructed on Venice Island, which is located in the flood fringe portion of a flood hazard area. A flood hazard area is defined by DRBC Flood Plain Regulations as the area inundated by the regulatory flood, which in turn is defined as “the flood which has a one percent chance of occurring in any one year (the 100-year flood)”. FPR § 6.1.2 B.J. The Waterford Apartments project is a Class II Project as defined in the Commission’s Flood Plain Regulations (see discussion in the Findings section).

For the purpose of defining the Project Area, the Application is incorporated herein by reference consistent with conditions contained in the DECISION section of this docket.

4. **Physical features.**

a. **Design criteria.** The docket holder proposes to construct a five-story apartment complex with associated parking on Venice Island.

b. **Facilities.** The five-story apartment complex will accommodate 205 dwelling units. The apartment complex will be constructed with elevated first floors, which will allow any flood waters to flow under it through the parking area. A 250 space parking lot is provided under and around the building for all tenants and personnel. In addition, the docket holder will construct a pedestrian bridge above the Flood Protection Elevation, defined as “one foot above the elevation of the flood that has a one percent chance of occurring in any one year (the 100 year flood)”, connecting the first floor of the building to Main Street in Manayunk.

c. **Water withdrawals.** The potable water supply in the project service area is supplied by PWD’s Queen Lane Water Filtration Plant. On July 25, 1962, the Commission adopted Resolution No. 62-14, amending the Comprehensive Plan by the addition of a new Section VII – Pre-Existing Projects. PWD’s Baxter (formerly Torresdale), Queen Lane and Belmont Water Filtration Plants were among those listed in Resolution No. 62-14.

d. **Wastewater Discharges.** The WWTP accepting sanitary sewer flows from the Waterford Apartments project is PWD’s Southwest WWTP, which was approved by Docket No. D-70-53 CP on December 12, 1972.

e. **Cost.** The overall cost of this project is estimated to be \$33,700,000.

B. BACKGROUND

In April 2007, PADEP advised the Commission staff that residential development was proposed to be constructed on Venice Island in the Manayunk section of Philadelphia, Pennsylvania. The Federal Emergency Management Agency's (FEMA) official Flood Insurance Rate Map (FIRM) No. 4207570088G (Revised January 17, 2007) identified the project area as being located in the floodway portion of the 100 year flood plain. Based on the Commission's Flood Plain Regulations (FPR), the project's location and the FEMA FIRM, Commission staff determined that the project was proposed to be located in an the floodway portion of the flood hazard area as defined in the Commission's FPR. The Commission staff advised PADEP of its determination and that the project would be subject to Commission review and approval under the FPR.

The project sponsor was advised by letter dated July 9, 2007, from the Project Review Section Head of the Commission that under the FPR, the project was designated as a Class II project. Class II projects include any development of land – whether residential or non-residential – within a flood hazard area located in a non-tidal area of the basin, which contains more than 25 dwelling units, or includes one or more structures covering a total land area of more than 50,000 square feet (FPR § 6.2.2 A.2.). The Waterford Apartment Project consists of structures covering a land area greater than 50,000 square feet or containing more than 25 dwelling units. Class II projects are subject to review and approval by the Commission.

The July 9th letter further advised the project sponsor that the site of the proposed Waterford Apartments Project lay entirely within the “Floodway” as that term is defined in Commission's FPR. The Commission's FPR define “Floodway” in relevant part as “the channel of the watercourse and those portions of the adjoining floodplains which are reasonably required to carry and discharge the regulatory flood (100-year flood)” FPR § 6.1.2 B. The FPR further provide that “whenever an official flood plain map . . . is available with respect to a given project, the map shall be used for delineation of the floodway” FPR § 6.4.4 A. The official FIRM No. 4207570088G (Revised January 17, 2007) issued by the FEMA places almost all of Venice Island, including the Waterford Apartments Project site, within the Floodway Area.

The Commission's FPR prohibit within the Floodway the “[e]rection of any structure for occupancy at any time by humans or animals.” FPR § 6.3.2 A.1. Although the regulations provide for the issuance of “Special Permits” for certain non-residential uses within the Floodway in accordance with specific standards, *see* FPR §§ 6.3.4 A. and B., residential construction is not subject to approval by Special Permit.

The project sponsor advised the Commission that its analysis demonstrated that the project site should be considered to lie within the flood fringe rather than the floodway and that it intended to seek a Letter of Map Revision (LOMR) from FEMA consistent with this analysis. FEMA's approval of the LOMR request would place the Waterford Apartments Project site outside of the floodway for purposes of the FPR, and the project would no longer be subject to the strict prohibition against residential construction in a floodway. The project would, however, remain subject to other aspects of the Commission regulations, including but not necessarily limited to minimum elevation and fill standards.

On March 11, 2008 the project sponsor wrote to FEMA initiating the LOMR revision process and providing documentation to support the request. The project sponsor provided supplementary information to FEMA during the LOMR process. On June 9, 2008 FEMA issued a Letter of Map Revision to FIRM No. 4207570088G, which removed the project site from the "floodway" portion of the 100-year floodplain. As indicated above the Commission uses official flood plain maps, where available in its determinations. Based on the FEMA determination, the project site is located in the flood fringe portion of the flood hazard area (the area inundated by a regulatory flood (100-year floodplain)).

As indicated above, the Waterford Apartments Project is located within the flood fringe and considered a Class II project (Section 6.2.2 of Commission's FPR). Under Sections 6.3.3 B.1. and 2. of the FPR, the following uses are permitted within the flood fringe:

1. Any use permitted in the floodway.
2. Residences and other structures constructed so that the first floor, including basement, is above the Flood Protection Elevation. When fill is used, the finished fill elevation shall be no lower than the Flood Protection Elevation for the particular area and shall extend at least 15 feet beyond the limits of any structure or building erected thereon.

The FPR include references to the "Regulatory flood", defined as "the flood which has a one percent chance of occurring in any one year (the 100 year flood)".

C. FINDINGS

The project sponsor will be constructing the residential developments as elevated structures. The first floor elevation of the Waterford Apartments Project is 6.33 feet above the Flood Protection Elevation (37.60'). The project sponsor has demonstrated that the first floor is above the Flood Protection Elevation. However, the parking areas located beneath and around the outside of the residential structure are a permitted use in the flood fringe. The project sponsor will generally be utilizing existing elevations for construction purposes, so the addition of fill will not change existing site elevations. In addition, the project sponsor has indicated on the project drawings that a Pedestrian Bridge above the Flood Protection Elevation shall be constructed connecting the elevated first floor of the building to Main Street in Manayunk on the other side of the Manayunk Canal.

Although the Waterford Apartments Project building is designed with a first floor elevation located entirely above the regulatory flood height, the project site is still subject to flooding during the regulatory flood. The Waterford Apartments Project is designed to have flood waters flow below the subject residential complex and through the residential parking areas. The Commission remains concerned about the sufficiency of access to the residences by safety personnel and equipment, including fire equipment, during a flood. The Commission is also concerned about the potential for flood damage to vehicles parked in the residential parking areas and for flood-prone vehicles to cause damage to the residential structure, downstream facilities, and environment. The Commission has included conditions "l thru t" in the Decision section of this docket to help ensure that residents are aware of these risks and take adequate precautions in advance of and during a flood. While the Commission believes that these docket conditions add a degree of protection, these conditions cannot be considered fully protective.

Section 6.1.3 B of the FPR lists a set of "principles and goals" determined to protect the public interest. Among these are the following: "Flood plain use shall not result in nuisance to other properties"; "Future land uses in private flood plains shall not result in public expenses to protect the property and associated public services from flood damage"; and "All future public and private flood plain users shall bear the full direct and indirect costs attributable to their use and actions." The FPR further provide that "When fill is used, the finished fill elevation shall be no lower than the Flood Protection Elevation for the particular area and shall extend at least 15 feet beyond the limits of any structure or building erected thereon." FPR § 6.3.3 B.2. The finished basement and/or first floor elevation(s) also must be above the Flood Protection Elevation.

The FPR similarly provide that "Commercial structures shall be elevated so that no first floor or basement floor is below the Flood Protection Elevation, or such structures may be flood proofed to the Flood Protection Elevation." FPR § 6.3.4 B.2. In connection with commercial structures, "Accessory land uses, such as yards, railroads and parking lots may be at lower elevations. However, a permit for such facilities to be used by the general public shall not be

granted in the absence of a flood warning system, if the area is inundated to a depth greater than two feet or subject to flood velocities greater than four feet per second upon the occurrence of the Regulatory Flood.” The parking lot elevation appears to be an average of 6.71’ below the 100-year flood elevation and therefore a flood warning system is warranted.

Condition “p.” of the DECISION section of this docket requires that within 6 months of issuance of the docket, the docket holder must submit a flood warning plan for review and approval by the Executive Director. The flood warning plan is also to be submitted to the City of Philadelphia’s Managing Director’s Office of Emergency Management (MDO-OEM) for review and comment, and the docket holder is required to ensure that all comments by the MDO-OEM are shared with the DRBC. The flood warning plan is required to identify areas that will be inundated during the regulatory flood and list all previous dates on which the regulatory flood is known to have occurred. It must set forth the methods to be employed to alert potential project users of an impending flood or flood forecast affecting the site and the actions that users should take to protect life and property, including removal of parked vehicles from the premises. A copy of the flood warning plan is required to be posted on a community bulletin board. Notices are also required to be posted in the parking area to advise users of the potential for flooding and to advise vehicle owners to remove their vehicles whenever flood warnings are issued by the docket holder. In order to ensure that future prospective purchasers or occupants are aware of the flood warning plan and the potential for the lands under the building to be flooded, Condition “s.” has been included in the DECISION section of this docket.

Changes in project ownership require a transfer of the docket and all its conditions. Condition “t” in the DECISION section provides that approval by the Executive Director is required for transfer of the docket to a new project owner. A docket transfer will be approved only upon a demonstration satisfactory to the Executive Director that legal responsibility for all docket obligations after the transfer is assumed by the transferee. In the event of transfer of only a portion of the project to one or more new owners, a docket modification is required to ensure that all docket obligations are legally assigned.

Condition “v” of the DECISION section provides that compliance with the conditions of this docket does not assure protection against flood damage. Condition “v” further provides that the docket holder indemnifies the Commission and holds it harmless against third party claims arising from the construction or use of the project.

D. DECISION

I. Effective on the approval date for Docket No. D-2007-30-1 below, the project and appurtenant facilities as described in the Section A “Physical features” of this docket are approved pursuant to Article 6 of the *Compact*, subject to the following conditions:

a. Docket approval is subject to all conditions, requirements, and limitations imposed by the PADEP. These include, but are not limited to the approval of Water Obstruction and Encroachment General Permits GP035108301 and GP045108304 and NPDES Permit PAG2015107028 for Stormwater Discharges Associated with Construction Activities, which are currently under review.

b. The facility and operational records shall be available at all times for inspection by the DRBC.

c. The facility shall be operated at all times to comply with the requirements of the Flood Plain Regulations of the DRBC.

d. Nothing herein shall be construed to exempt the docket holder from obtaining all necessary permits and/or approvals from other State, Federal or local government agencies having jurisdiction over this project.

e. Sound practices of excavation, backfill and reseedling shall be followed to minimize erosion and deposition of sediment in streams.

f. Within 10 days of the date that construction of the project has started, the docket holder shall notify the DRBC of the starting date and scheduled completion date.

g. Upon completion of construction of the approved project, the docket holder shall submit a statement to the DRBC, signed by the docket holder's engineer or other responsible agent, advising the Commission that the construction has been completed in compliance with the approved plans, giving the final construction cost of the approved project and the date the project is placed into operation.

h. The project facilities are limited to those described in the Section A.3 Project Area and Section A.4 Facilities, above. Any change to the project or project area beyond this area or as described in this docket is subject to review in accordance with Article 6 of the *Compact*.

i. This docket approval shall expire three years from the date set forth below unless prior thereto the docket holder has commenced operation of the subject project or has expended substantial funds in relation to the cost of the project in reliance upon this docket approval.

j. No sewer service connections shall be made to newly constructed premises with plumbing fixtures and fittings that do not comply with water conservation performance standards contained in DRBC Resolution No. 88-2 (Revision 2).

k. The issuance of this docket approval shall not create any private or proprietary rights in the waters of the Basin, and the Commission reserves the right to amend, suspend or rescind the docket for cause, in order to ensure proper control, use and management of the water resources of the Basin.

l. Flood plain use shall not result in nuisance to other properties.

m. Land uses in private flood plains shall not result in public expenses to protect the property and associated public services from flood damage.

n. During construction when fill is used, the finish fill elevation shall be no lower than the Flood Protection Elevation for the particular area and shall extend at least 15 feet beyond the limits of any structure or building erected thereon. The basement and/or first floor elevation(s) also shall be above the Flood Protection Elevation.

o. Commercial structures shall be elevated so that no first floor or basement floor is below the Flood Protection Elevation, or such structures may be flood proofed to the Flood Protection Elevation.

p. Within 6 months of the issuance of this docket, the docket holder shall submit a flood warning plan (which shall include a flood warning system as described herein) for review and approval by the Executive Director. The flood warning plan shall also be submitted to the City of Philadelphia's Managing Director's Office of Emergency Management (MDO-OEM) for review and comment. The docket holder shall ensure that all comments by the MDO-OEM are shared with the DRBC. The flood warning plan shall identify areas that will be inundated during the regulatory flood and list all previous dates on which the regulatory flood is known to have occurred. It shall also set forth the flood warning system to be employed to alert potential project users of an impending flood or flood forecast affecting the site and the actions that users should take to protect life and property, including removal of parked vehicles from the premises. A copy of the flood warning plan shall be posted on a community bulletin board. Notices shall be posted in the parking area advising users of the potential for flooding and advising vehicle owners to remove their vehicles whenever flood warnings are issued by the docket holder.

q. The docket holder shall provide for safe access to the property by ordinary and emergency vehicles during a flood event.

r. The docket holder shall construct the walkway spanning the Manayunk Canal to facilitate evacuation of the building if required in advance of or during a flood and shall ensure that the finished walkway elevation is above the Flood Protection Elevation and connects to conveyance areas above the Flood Protection Elevation.

s. Prior to the lease of any unit, the property owner shall furnish to the prospective lessee both (i) a copy of the flood warning plan approved by the DRBC in accordance with condition “p” above and (ii) a written notice that the building and appurtenant parking areas lie within a flood zone and that parking areas are situated below the Flood Protection Elevation. Each lease shall obligate the primary lessee to furnish these items to prospective sub-lessees. As a condition of this approval, the docket holder shall submit for approval by the Executive Director a form of notice containing the flood warning plan and flood zone notice. A copy of such form, signed and dated by each lessee and sub-lessee, shall be kept on file by the owner or the owner’s management company and shall be available upon request by the Executive Director.

t. Prior to the transfer of ownership of the project, a DRBC docket transfer is required, which shall be issued by the Executive Director only upon evidence that legal responsibility for all docket obligations after the transfer is assumed by the transferee. No partial transfer shall be approved without prior approval of a docket modification to ensure that all docket obligations are assumed by a single party or by a combination of two or more parties.

u. The Executive Director may modify or suspend this approval or any condition thereof, or require mitigating measures pending additional review, if in the Executive Director's judgment such modification or suspension is required to protect the water resources of the Basin.

v. Compliance with the conditions of this docket does not assure protection against flood damage. The docket holder shall indemnify the Commission and hold it harmless against and from any and all claims made by or on behalf of any party arising from the construction or use of this project.

w. The docket holder and any other person aggrieved by a reviewable action or decision taken by the Executive Director or Commission pursuant to this docket may seek an administrative hearing pursuant to Articles 5 and 6 of the Commission's *Rules of Practice and Procedure*, and after exhausting all administrative remedies may seek judicial review pursuant to Article 6, section 2.6.10 of the *Rules of Practice and Procedure* and section 15.1(p) of the Commission's *Compact*.

BY THE COMMISSION

DATE APPROVED: