

20 June 2012

RWP Task No. 2.19 Technical Memorandum

To: Joel Komarek and Dave Prock, City of Lake Oswego
From: Aaron Eder, P.E., Kennedy/Jenks Consultants
Subject: Lake Oswego-Tigard Water Partnership - Raw Water Pipeline
City of West Linn Pipeline Encroachment into the Floodway
K/J 1191016.10

The purpose of this memorandum is to address City of West Linn Community Development Code (CDC) Section 27.060(F). This code section prohibits encroachments, including fill, new construction, substantial improvements, and other development, in floodways unless certification by a professional civil engineer licensed to practice in the State of Oregon is provided demonstrating that encroachments shall not result in any increase in flood levels during the occurrence of the base flood discharge. The Raw Water Pipeline (RWP) will encroach within floodway as defined in the attached figure. Although the RWP will encroach into the floodway, it will be located 65 to 50 feet below the floodway surface. Therefore, the installation of the RWP in the floodway will not result in any increase in flood levels under any circumstance.



cc: Brad Moore, KJ Portland

FEDERAL EMERGENCY MANAGEMENT AGENCY
NATIONAL FLOOD INSURANCE PROGRAM
FLOODPROOFING CERTIFICATE
FOR NON-RESIDENTIAL STRUCTURES

The floodproofing of non-residential buildings may be permitted as an alternative to elevating to or above the Base Flood Elevation; however, a floodproofing design certification is required. This form is to be used for that certification. Floodproofing of a residential building does not alter a community's floodplain management elevation requirements or affect the insurance rating unless the community has been issued an exception by FEMA to allow floodproofed residential basements. The permitting of a floodproofed residential basement requires a separate certification specifying that the design complies with the local floodplain management ordinance.

BUILDING OWNER'S NAME
City of Lake Oswego

STREET ADDRESS (Including Apt., Unit, Suite, and/or Bldg. Number) OR P.O. ROUTE AND BOX NUMBER
380 A Avenue

OTHER DESCRIPTION (Lot and Block Numbers, etc.)

FOR INSURANCE COMPANY USE
POLICY NUMBER
COMPANY NAIC NUMBER

CITY
Lake Oswego

STATE
OR

ZIP CODE
97034

SECTION I FLOOD INSURANCE RATE MAP (FIRM) INFORMATION

Provide the following from the proper FIRM:

COMMUNITY NUMBER	PANEL NUMBER	SUFFIX	DATE OF FIRM INDEX	FIRM ZONE	BASE FLOOD ELEVATION (In AO Zones, Use Depth)
410017	0038	D	6-17-08	AE	47.5 Feet

SECTION II FLOODPROOFING INFORMATION (By a Registered Professional Engineer or Architect)

Floodproofing Design Elevation Information:

Building is floodproofed to an elevation of **N/A** feet NGVD. (Elevation datum used must be the same as that on the FIRM.)

Height of floodproofing on the building above the lowest adjacent grade is **N/A** feet.

(NOTE: for insurance rating purposes, the building's floodproofed design elevation must be at least one foot above the Base Flood Elevation to receive rating credit. If the building is floodproofed only to the Base Flood Elevation, then the building's insurance rating will result in a higher premium.)

SECTION III CERTIFICATION (By Registered Professional Engineer or Architect)

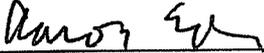
Non-Residential Floodproofed Construction Certification:

I certify that, based upon development and/or review of structural design, specifications, and plans for construction, the design and methods of construction are in accordance with accepted standards of practice for meeting the following provisions:

The structure, together with attendant utilities and sanitary facilities, is watertight to the floodproofed design elevation indicated above, with walls that are substantially impermeable to the passage of water.

All structural components are capable of resisting hydrostatic and hydrodynamic flood forces, including the effects of buoyancy, and anticipated debris impact forces.

I certify that the information on this certificate represents my best efforts to interpret the data available. I understand that any false statement may be punishable by fine or imprisonment under 18 U.S. Code, Section 1001.

CERTIFIER'S NAME Aaron Eder	LICENSE NUMBER (or Affix Seal) 62653
TITLE Raw Water Lead / Project Engineer	COMPANY NAME Kennedy/Jenks Consultants
ADDRESS 200 SW Market St., Suite 500	CITY Portland
	STATE OR
	ZIP CODE 97201
SIGNATURE 	DATE 2/17/12
	PHONE (503) 423-4016

Copies should be made of this Certificate for: 1) community official, 2) Insurance agent/company, and 3) building owner.

