



EARTH SURFACE RESEARCH

Bill Hopkins
Archtellic
39 Preble Street
Portland, Maine 04101

January 23, 1985

Dear Bill:

This letter is in response to your request of December 23 for a preliminary analysis of flooding, wave impacts, and recommended techniques for diminishing wave heights in the area of Central Wharf, Commercial Street, Portland.

FLOOD ELEVATIONS AND FREQUENCIES

Attached is a xerographic copy of the Portland Harbor portion of the Portland Flood Insurance Rate Map (FIRM). Central Wharf encompasses two flood zones. The very end edge of the wharf is in a A2-Zone with a base flood elevation of +12.0 feet NGVD (Mean Sea Level for all extensive purposes). The remainder of the wharf all the way back to Commercial Street is in an A3-Zone with a base elevation of +10.0 feet NGVD.

In order to meet locally-accepted flood insurance requirements, the very end building on the south side of the wharf must have a first floor elevation of +13.0 feet NGVD. All remaining buildings must have first floor elevations of +11.0 feet NGVD. These elevations comply with the guideline that enclosed first floor elevations be 1.0 feet above the 100-year storm base flood elevation. According to the flood map, all structures on Central Wharf should have flood insurance coverage.

As far as I can determine from the Base map of the wharf which you gave me, the interior sections of the wharf maintains its flood integrity until waters rise to an elevation of +8.2' at the margins of the wharf. The following table provides known flood elevation frequencies of coastal storm high water levels (Stone and Webster, 1978).

5820 17th Street NE, St. Petersburg, Florida 33733

4 Amy Street, Narragansett, Rhode Island 02882

114 State Street, Augusta, Maine 04330

813 527 0911

401 789 3727

207 555 4376

6972-20172