

FLOOD PROOFING – STATE OWNED BUILDINGS

FIELD DATA SUMMARY SHEET

Building No.: 06029 (Old No. 5024)
15 Green Mountain Drive
Location: Montpelier Complex

100-Year Flood Elev. 521.5

Total No. of Floors: 1
(Floors including basement – 2)
Gross Floor Area: 9,265 sq ft
Rentable Area: 8,442 sq ft
Lowest Level Floor Elev. 516.4
First Floor Elevation: 523.0

Type of Structure: Masonry (brick) with a basement. Basement walls and floor constructed of concrete.

Primary Area Usage: OFFICE space is the primary usage of all floors except the basement floor. Basement used for office space, kitchen area, storage, and utilities.

Primary Flood Damage:

Electrical distribution panel mounted on the wall, +/- 24 inches above basement floor.

Communication panel mounted on wall, +/-24 inches above the basement floor.

New furnace on 4 inch pad on basement floor.

Plumbing, water heater on basement floor. Two restrooms in basement with toilets, sinks and showers.

A/C chiller unit inside on basement floor. A/C unit outside on concrete pad outside on the ground between the warehouse and office.

Miscellaneous storage.

Potential Methods for Damage Reduction:

Electrical Distribution panels, switch panels, service connections, wall penetrations and meter below the 100-yr flood elevation protect from water infiltration or elevate above 100-yr flood elevation.

Heating circulating pumps and condensate pumps below the 100-yr flood elevation protect from water infiltration or elevate above 100-yr flood elevation.

Plumbing wall penetrations, water heaters, toilets, sinks, floor drains below the 100-yr flood elevation protect from water infiltration or elevate above 100-yr flood elevation. Typically toilets, sinks and floor drains below the 100-yr flood elevation require back-flow valve installation. If back-flow prevention not practical, all restrooms, sinks, toilets could be moved to the 1st floor above the 100-year flood elevation.

Dry-floodproofing this building or individual rooms may not be practical; the difference between the 100-year flood elevation and the basement floor is 61 inches. Typically the rule of thumb for dry-floodproofing is only used for flood depths less than three feet (36 inches). Dry-floodproofing old existing buildings may be technically feasible, however sealing the walls and floors of older buildings have a high probability of failure due to unforeseen factors.

An possible floodproofing option would be to locate electrical, HVAC and communication utilities on high ground between the office and the warehouse. Installation of a back-flow valve on the sewer line to prevent floodwaters from backing up the sewer lines into the building.



Montpelier Complex – 15 Green Mountain Drive – Liquor Control Office (Date June 2006)