

## **FLOOD PROOFING – STATE OWNED BUILDINGS**

### **FIELD DATA SUMMARY SHEET**

**Building No.:** 06019 (Old No. 5006)

116 State Street

**Location:** Montpelier Complex

**100-Year Flood Elev.** 525.2

**Total No. of Floors:** 4

(Floors including basement – 5)

**Gross Floor Area:** 22,788 sq ft

**Rentable Area:** 16,379 sq ft

**Lowest Level Floor Elev.** 521.6

**First Floor Elev.** 532.6

**Type of Structure:** Masonry (brick) and granite block structure with basement. Basement walls constructed of stone and mortar, floor (cracked) concrete.

**Primary Area Usage:** OFFICE space is the primary usage of all floors except the basement floor. Basement used for storage, utilities and restroom with toilets, sinks and shower with floor drain.

#### **Primary Flood Damage:**

Mechanical Rooms:

Heating condensate pumps on the basement floor.

Electrical distribution panel mounted on the walls, +/- 41 inches above basement floor.

Hot water tank on +/-6 inch concrete pad located on basement floor.

Electrical panel +/-48 inches above floor.

Elevator equipment room, hydraulic unit on the basement floor with electrical control panel +/- 39 inches above the floor.

Electrical distribution panels mounted on the walls, +/- 18 inches above the floor.

Fire alarm panel mounted on wall +/- 48 inches above the floor.

Panels for key card system +/- 48 inches above the floor.

Communication panel mounted on wall, +/- 27 inches above the floor.

New cut out through the basement wall for sidewalk heating tubes. (Not watertight)

Plumbing, restroom in basement with toilet, sink and shower. There is a sewer lift station located in the basement of this building. The electrical control panel is located 53 inches above the floor.

The 100-yr flood level is approximately 43 inches above the basement floor; a number of the distribution panels are located above the 100-yr flood level.

Note A/C units on roof or in attic.

#### **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. This building has a sanitary sewer pump station in the basement. The electrical panel for pump station +/- 53 inches above the floor. The sanitary sewer pump station will protect this building from floodwaters entering the building through the sewer system.

Dry-floodproofing this building or individual rooms may not be practical; the difference between the 100-year flood elevation and the lowest floor is 43 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.

Wet-floodproofing through elevating equipment is a possible alternative.

Elevator hydraulic and power equipment below the 100-yr flood elevation protect from water infiltration or elevate above 100-yr flood elevation. The hydraulic jack is located in the elevator pit is located below the 100-yr flood and may be damage by the floodwaters.



Montpelier Complex – 116 State Street Date: June 2006