

FLOOD PROOFING – STATE OWNED BUILDINGS

FIELD DATA SUMMARY SHEET

Building No.: 06015 (Old No. 5008)

110 State Street

Location: Montpelier Complex

100-Year Flood Elev. 525.4

Total No. of Floors: 2

Floors including basement - 3

Gross Floor Area: 14,910 sq ft

Rentable Area: 8,401 sq ft

Lowest Level Floor Elev. 519.6

First Floor Level Elev. 528.6

Type of Structure: Masonry and brick structure. Basement walls constructed of brick and mortar and stone and mortar and floor constructed of concrete.

Primary Area Usage: OFFICE space is the primary usage of all floors except the basement floor. Basement floor used for utilities, and bathroom with shower.

Primary Flood Damage:

Mechanical rooms:

- Chiller units +/- 12 inches above the floor.
- Control panels for units +/- 32 inches above the floor.
- Air compressor on the floor.
- Condensate pumps on floor.
- Electrical panels mounted on wall +/- 24 inches above the floor.
- Communication panel +/- 36 inches above the floor.

Plumbing, restrooms with shower, toilets and sinks located in basement. This building has a sewer lift station in the basement.

There is a door to the outside from the basement with a metal bulkhead door on the exterior. Potential for floodwaters to enter building through bulkhead door.

Elevator equipment located above the 100-year flood.

Potential Methods for Damage Reduction:

Electrical distribution panels, switch panels, service connections, wall penetrations below the 100-year flood elevation protect from water infiltration or elevate above 100-year flood elevation.

HVAC equipment below the 100-year flood elevation protect from water infiltration or elevate above 100-year flood elevation.

Plumbing wall penetrations, water heaters, toilets, sinks, floor drains, and shower drains 100-year flood elevation protect from water infiltration or elevate above 100-year flood elevation. This building has a sewer lift station that will protect this building from floodwaters from entering the building through the sewer system.

Dry-floodproofing this building may not be practical; the difference between the 100-year flood elevation and the basement floor is 70 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 in the older buildings.

Wet floodproofing has limited applicability due to the depth of flooding.



Montpelier Complex – 110 State Street (Date: June 2006)