

## EPB AGENDA SUMMARY

**DATE:** March 8, 2010  
**APPLICATION:** #1004, St. Luke's Community Service, Incorporated  
**LOCATION:** 141 Franklin Street - Lot 22      **ZONE:** R-H

**WATERSHED:** Rippowam River      **AREA:** 1.59 acres

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**MAP REFERENCES:**

    "Property & Topographic Survey"  
    prepared by: Redniss & Mead, Inc.  
    dated: April 5, 2004

    "Site Development Plan"  
    "Inverter Location Sketch"  
    prepared by: Brian P. McMahon, P.E., Redniss & Mead, Inc.  
    dated: February 12, 2010

    "Drainage Narrative"  
    prepared by: Brian P. McMahon, P.E., Redniss & Mead, Inc.  
    dated: February 12, 2010

    "Photo Exhibit - Sheets 1 - 3"  
    prepared by: Redniss & Mead, Inc.  
    dated: February 12, 2010

**PROPOSAL:** The applicant is proposing to construct an equipment cabinet housing an inverter unit for solar panels to be installed on the existing building within designated flood hazard areas on property within the non-drinking water supply watershed of the Rippowam River at 141 Franklin Street.

Approximately 300 square feet of floodplain area will be affected by the construction as planned as estimated by the applicant.

This application for permit was filed on February 16, 2010, and may be ACCEPTED by the Board at its meeting to be held on March 18<sup>th</sup>. The Board may consider rendering a decision at the March meeting due to the minimal nature of the proposed work.

The application package includes photo of the affected area of the property, a site development plan, and an engineering analysis addressing pertinent floodplain standards/criteria for decision. There are no wetlands or watercourses within or near the site, which is in an intensively developed urban area, and no natural resources are affected.

**DISCUSSION:** The site is the home and headquarters of St. Lukes Community Service, Inc. and St. Lukes Lifeworks. The proposed activities are part of an ongoing effort to improve the facilities. The installation of solar panels requires the installation of ground-level electrical components. It has been determined that locating the facility within the building is not feasible. The chosen location is already in use for a variety of utilities that service the building.

The property is partially within the designated flood hazard area associated with the Rippowam River. It is depicted on Flood Insurance Rate Map (FIRM) #090015-0007D with a Base Flood Elevation of 28.1' NGVD. There would be an estimated 0.5' of water within the floodplain at this location during the 100-year storm event.

There will be no net increase in impervious area within the property, and no significant increase in runoff is anticipated.

An application of this type requires certification that the new construction will neither impact flood heights and flooding conditions, nor impact adjoining properties. In addition, Stamford's Flood Prone Areas Regulations require certification of structural stability and other flood-proofing elements.

The project engineer has determined that the floodplain area affected by the proposed activities has minimal depth of water, no velocity, and has provided certification of the adequacy of the anchoring of the structures to their foundations as well as the required notations pertaining to the requirements of Section 7.1 D(f-g) of Stamford's Flood Prone Areas Regulations:

**All structures.** All new construction and substantial improvements (including the placement of prefabricated buildings) shall comply with the following requirements:

- (a) be designed (or modified) and adequately anchored to prevent flotation, collapse or lateral movement of the structure resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy;
- (b) be constructed with materials resistant to flood damage;
- (c) be constructed by methods and practices that minimize flood damage.
- (d) be installed using methods and practices which minimize flood damage, including providing adequate access and drainage.
- (e) electrical, heating, ventilation, plumbing, air conditioning equipment, and other service facilities shall be designed and/or located so as to prevent water from entering or accumulating within the components during conditions of flooding.

**No Significant Increase in the Base Flood Elevation.** All development including, but not limited to, fill, new construction, substantial improvements and manufactured home placement shall be prohibited unless the applicant provides written certification from a professional engineer registered in the State of Connecticut that no significant increase in the base flood will result.

**Floodproofing Design Certification.** Where floodproofing is utilized for a particular structure, a Connecticut registered professional engineer or architect shall certify in writing that the floodproofing methods are adequate to withstand the flood depths, pressures, velocities, impact and uplift forces and other factors associated with the base flood.

These standards/criteria have been addressed by the project engineer. The inverter unit will be placed on a concrete slab that will raise its elevation to a foot above the height of flooding.

Technical reports and certifications have been provided by the project engineer and are appropriate to the circumstances.

**RECOMMENDATION:** If the Board elects to approve the application, staff recommends the following conditions:

1.) Notification of staff no less than 48 hours prior to the start of work, and notice of completion.

2.) Upon the completion of construction, and prior to the issuance of a Certificate of Occupancy, a Connecticut registered professional engineer or architect shall submit a written statement, signed and sealed, certifying that he/she has inspected the completed construction and that the slab and cabinet have been constructed at the specified elevation and constructed to withstand the flood depths, pressures, velocities, impact and uplift forces and other factors associated with the base flood, as specified in the issued permit and in accordance with the provisions of Section 7.1 of the Flood Prone Areas Regulations.

3.) Permit Filing Fee of \$53.00 to be submitted to staff within 15 days.

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David M. Emerson