

# Springfield Union Station

## Project Update - May 2015

### Work Completed and Underway

- Completed all selective demolition work inside Terminal Building
- Floor trenches inside Terminal Building have been filled with concrete
- New 8" water line replacement is the first utility on the site
- Completed the initial testing of the Pressure Injected Footing to verify subsurface conditions and ensure adequate pressure.
- Awarded the initial contracts for the Terminal Building to ensure that the building is weather tight by next winter
- Awarded the contract for the overall site work so that the open air bus terminal and the Liberty Street connector can have the initial paved surface installed before winter



5/15 - In order to test the Pressure Injected Footings (PIFs), a "dead weight" has to be constructed. For this test the massive dead weight must be greater than 250 tons, or 500,000 pounds. This is accomplished by meticulous balancing of concrete and steel of pre-weighted pieces.



5/15 - The foundation work for the new parking garage has started and the first step is to install 10 Pressure Injected Footings (PIFs) to determine the bearing strength of the subsurface soils. This photograph shows how some of the locations were scattered around the site.



5/15 - The test apparatus for the PIFs are placed under a structure and protected from outside influences such as wind and rain which would complicate the reading of test gauges.



5/15 - The red hydraulic jack is capable of lifting the entire 250 ton structure but only needs to be tested to 210 Tons (420,000 pounds.) The technician uses various gauges to measure changes in elevation and pressure, and the wire line also is an additional visual check for movement.

### Upcoming Work

- Masonry repairs to exterior of Terminal Building
- Subgrade consolidation for open air bus terminal
- Grading and subgrade preparation for Liberty Street connector
- Placement of ground slab at base of retaining wall to lock it in place
- New holes cut in floor slabs for elevator structure, mechanical shafts and new stairways inside Terminal Building
- Installation of new gas line, communication connections, electrical service, storm drainage and sewer connections