# Historic Cotton Mill Summary of Identified Needs for Site/Shell Building Improvements

The scope and cost of the Cotton Mill's site/shell building needs are dependent upon on the specific parts of the main building complex being considered rehabilitation. Staff believes the purpose of City participation now in 2013 would be to incentivize a substantial phase of site/shell building rehabilitation of approximately 40,000 square feet of shell office space (including associated corridors and common areas) in the eastern portion of the main building complex.

If the scope of the Cotton Mill's rehabilitation is approximately 40,000 square feet of shell office space (including associated corridors and common areas) in the eastern portion of the main building complex, then the Cotton Mill's site/shell building improvement needs would be as follows:

### Priority #1: Parking

- Approx. 70 spaces are required for the existing mix of tenants/uses.
- Approx. 52 spaces are currently provided (34 striped) in the existing asphalt parking area on the northwest side of the site and 18 (unstriped) in the existing concrete parking/loading area in the northeast corner of site).
- Thus, current deficit is 18 spaces.
- Near-future: Assuming the 40,000 square feet in the eastern portion of the main building complex are rehabilitated and used for office space (and associated corridors/common areas), then an additional 100 spaces would be required.
- Thus, on the northwest side of the site, to replace the existing asphalt parking area (34 spaces), make up the current deficit (18 spaces), and provide for the additional near-future needs of the eastern portion of the main building complex (100 spaces), 152 new parking spaces would need to be constructed. The in-house design drawn up by the City Engineering Department last year could add a total of 162 new parking spaces on the NW side of the building and could be done in phases. With a 26' wide concrete fire lane/drive aisle, lighting, landscaping, and irrigation, the Engineering Department estimates \$3,000 \$3,500 per parking space. So, constructing 152 spaces would cost \$456,000 \$532,000.

### Priority #2: Electrical Service

- Per several sources (including the Cotton Mill's mechanical/electrical/plumbing (MEP) engineer as well as the City Building Department), the Cotton Mill's main building complex (including the eastern portion) is served by old transformers that do not provide adequate power service.
- Each new office tenant in the eastern portion is anticipated to need at least a 200 amp service (some tech companies with really intense computing/server needs would need 400 amp service). In order to meet the anticipated increase in demand for electrical power from near-future office tenants in the eastern half of the Mill, the Cotton Mill needs two (2) new 1000 amp, 480 volt, threephase, four-wire services emanating from an Oncor power pole located west of the DART right-of-way. From the power pole, the services would be run underground for approximately 150 feet into a pad transformer. The services would be in close proximity to each other for convenience of the Fire Department and would be sufficient to power a new electric fire pump that would be needed in the future when the western side of the main building complex is rehabilitated for occupancy. This proposed service size would allow for a power density of 23 volt-amps per square foot (which is a standard power density in current commercial buildings). Per the Cotton Mill owner's discussions with Oncor, the estimated cost for this electrical service improvement would be approx. \$150,000.

#### Priority #3: Fire System

- The Mill's main building complex (including the eastern portion) is served by an existing 6-inch fireline entering the eastern portion of the Mill from Elm Street. This fireline supplies water to the existing fire sprinkler system (consisting of two 4-inch wet risers) which covers or partially covers the eastern portion of the complex. Per an evaluation last year by Mark Mehmken of Excel Fire Protection Systems, L.P. (coordinated through the City Fire Department), in order to meet code requirements for a few areas in the eastern portion of the main building complex as well as to provide sprinkler coverage to the basement area underneath the floor, it is necessary to upgrade some existing alarm valve risers and install additional alarm valve risers (approx. cost \$200,000).
- As an FYI, there will likely be significant fire system improvement needs (approx. \$600,000) when the western portion of the main building complex is rehabilitated for occupancy (e.g. new fireline; new fire pump system; new standpipe system; new fire department connection; new sprinkler system).

## Priority #4: Water Service

- Water service to the main building complex is provided by an old 3-inch line entering the western portion of the Mill from Elm Street. According to the Cotton Mill owner/developer, this 3-inch line currently serves approximately 120 water fixture units (approximately 35% capacity of the 3-inch line). (Additionally, there is also a 1½-inch line entering the southeastern portion of the site; however, according to the Cotton Mill owner/developer, this 1½-inch line is already at capacity because it serves 3 outbuildings (approximately 25,000 square feet), the landscaping/water feature in the garden on the south side of the main building complex, and approximately 4,000 square feet of rehabilitated space in the eastern portion of the main building complex).
- According to the Cotton Mill owner/developer, assuming a restroom facility for each future office tenant space, full finish out of the main building complex would represent an estimated water fixture load of approximately 920 water fixture units (120 existing water fixture units + 400 future water fixture units in the western portion + 400 future water fixture units in the eastern portion). The remaining 65% capacity in the existing 3-inch line is planned to serve the 400 future water fixture units in the western portion of the Mill. Thus, in order to specifically accommodate the 400 future water fixture units in the eastern portion of the Mill, there would need to be a new 3-inch water service line (approx. 125 linear feet) and 3-inch meter installed/connected from the water main in Elm Street. Per the Cotton Mill owner/developer, the estimated cost to construct this water service line would be approx. \$12,000. This new 3-inch meter would also cost approx. \$7,300 in utility impact fees.