[DRAFT NO. 2]
BLUE BUILDING ACTION AGENDA
Production Date: 12-7-2007

Overview: While the demolition phase of the Blue Building KANSTEP project was met with extreme enthusiasm by the Horton and Brown County community, discovery of serious building structural deficiencies triggered a more expansive investigation of the structural columns, column piers, and geological attributes of the area immediately surrounding the Blue Building to determine an agreeable plan of action for the remediation of the structural deficiencies. Terracon Consulting Engineers & Scientists ("Terracon") was contracted by the City of Horton to perform a geotechnical analysis of the areas immediately surrounding the Blue Building structure, and a final report was submitted to the City of Horton on Tuesday, December 4, 2007. After review by Levi Henry, CDBG and City Administrator, and Shane Holthaus, KRWA Construction Inspection Tech, this Action Agenda was prepared as a proposal to identify a plan of action for remediating the structural deficiencies and for completing the project by or before June 2008.

Statement of Purpose: The purpose of the Blue Building Action Agenda ("Action Agenda") is to identify benchmark construction dates critical for meeting the expedited construction calendar for the re-construction of the Blue Building. Benchmarks are separately identified within the Action Agenda as clear, concise and short statements.

Action Agenda: This Action Agenda identifies key benchmark items within each remaining phase of the construction detail of the Blue Building. In the corresponding calendar, these key benchmarks have been identified as an objective for completion with a corresponding date set as a goal for completion. Additionally, key work-a-days and work-a-weekends have been identified within the construction calendar when organized, well-publicized volunteer drives will be conducted.

1. Remediate Structural Deficiencies. On November 9, 2007, Terracon conducted a series of four borings from the north, south, east and west sides of the Blue Building existing structure. See Geotechnical Report, Horton Community Center, Horton, Kansas, Project No. 14075073, Terracon, Appendix A. All borings were to approximately 15 feet, and boring samples were removed and environmentally sealed for further laboratory analysis.

The findings of the Geotechnical Report were, generally, that non-native fill materials were found in all boring locations to depths between three (3) and three and one-half (3.5) feet below the surface, which are capable of storing higher densities of moisture in the soil that can cause unpredictable structural performance. See id. at 3. The ideal moisture range for supporting the columns and piers of this structure is between 24 and 26 percent. Verbal Report, Tuesday, November 27, 2007. In the B-3 boring log site (south side of structure), id. at Appendix A, it was determined that there was unsuitable fill material, having a moisture contact of 20.8 percent; however, it was also determined that at a point approximately three (3) feet below the surface was sufficient very stiff, fat clays with a moisture content of 25.4 percent—the ideal conditions for bearing the weight of the piers contemplated. During the Verbal Report, Mr. Steve Pretsch of Terracon reported that the City would be, generally, required to over-excavate by two more feet below the line identified within the report. Therefore, in the instance of boring site B-3, KANSTEP volunteers will need to excavate to a point of approximately five (5) feet, or two more feet beyond the point where the fat clays begin and moisture stabilizes within the ideal range of plasticity.

The footings, or piers, of the structure that are in need of replacement shall be replaced by footings that are a minimum width of 24 inches and be placed at a subsurface level approximately two (2) feet below the boring logs level of geological stability.

Additionally, while City officers and KANSTEP volunteers sought an alternative method of controlling the subsurface soils below the concrete slab of the facility, the Geotechnical Report found that:

> "Highly plastic, fat clay soils are present on this site at an elevation that would impact both shallow foundations and floors slabs. Such soils are commonly referred to as 'expansive' or 'swelling' soils because they expand or swell as their moisture contents increase. However, these soils also 'contract' or 'shrink' as their moisture content decrease. Footings and floors slabs supported on expansive soils can move upward and downward significantly and such movements can result in distortion of, cracking in and cosmetic as well as structural damage to the structure, which may be a contributing factor to the previous foundation movement." Id. at 3.

In order to account for these highly plastic soils, the original architectural recommendation, that a soil formed concrete footing wall be poured, at a minimum, across the entire north side of the structure in order to mitigate moisture entry and to also minimize frosting under the concrete slab, will be followed.

Finally, other existing and known possible concrete needs may include the removal of existing bathroom slabs, capping of the existing sanitary sewer lines according to Horton City Code and the replacement of the removed slabs where the bathrooms existed in the original structure.

Benchmark No. 1

Remediation of the structural deficiencies of the Blue Building will require (i) excavating to approximately 5 and 5 ½ feet for piers requiring replacement; (ii) replacing piers with 24-inch minimum piers with concrete, at a minimum rating, of a total load net bearing pressure 3,000 pounds per square foot; (iii) replace previously removed fill material with low-density concrete or flowable fill; (iv) build a six (6) inch earth-formed wall across the entire south side of the structure to minimize moisture and extreme temperatures from penetrating the slab subsurface; and (v) capping of existing sanitary sewer lines and replacement of any concrete required to be removed.

2. Exterior Construction. Exterior construction is estimated as requiring 1,224 person-hours to complete. Task scope includes not only installation of new exterior, sheet-metal walls, but also installation of new insulation and exterior door frames, doors and door trim for the facility. Also included is the installation of trim, doors and guttering for the facility, as well as window installation.

Benchmark No. 2

The replacement of the exterior, sheet-metal skinning of the facility includes complete installation of (i) new exterior sheet-metal; (ii) exterior door frames, doors and frame trim; (iii) exterior windows; and (iv) wall and ceiling insulation.

3. Interior Wall Construction. Interior wall construction, which includes the newly planned south common-entry wall and the north mechanical wall and kitchen (cumulatively over 600 linear feet), has been allotted just over 150 hours for volunteer efforts.

Benchmark No. 3

Interior rough wall construction of over 600 linear feet of new walls for the south primary entrance corridor and the north mechanical corridor.

4. Electrical Conduit and Wiring Installation. Prior to sheet rocking the facility volunteer crews will be responsible for the installation of all electrical wiring. Four-hundred and twenty-eight (428) hours have been estimated by the architect to accomplish this benchmark.

Benchmark No. 4

After roughed construction of the interior walls, all electrical systems will be installed before the exposed areas are covered by finishing materials.

5. Exposed Plumbing and Mechanical Rough-In. Plumbing and mechanical rough-in includes not only the installation of critical pieces to the plumbing and mechanical systems of the facility but also includes the fabrication of the necessary materials to accomplish the installation. Just under an additional 400 hours have been estimated by the architect to accomplish this benchmark.

Benchmark No. 5

The plumbing and mechanical systems rough-in must be completed prior to the installation of interior wall construction for purposes of access. Included in the architect's time estimate was the volunteer hours dedicated to the fabrication of materials required for electrical and mechanical rough-ins.

6. Drywall Construction, Finishing and Painting. Approximately 12,000 square feet have been estimated to be required for the project. Drywall construction, finishing and painting, while separated within the architect's work estimate, have been combined as a single benchmark within this Action Agenda. Cumulatively, the architect estimated just over 1,210 hours to complete this benchmark.

Benchmark No. 6

Installation of drywall in entire interior of facility, including drywall taping, compounding and sanding and interior painting.

7. Interior Finishing. Interior finishing includes interior door installation, installation of interior trim and finish, and the installation of necessary cabinetry items. The architect estimated that this benchmark would take, in totality, 463 volunteer-hours to complete.

Benchmark No. 7

Interior door, trim and cabinetry installation.

8. Interior Suspended Ceiling Installation. While the original drawings are void of the correct drawings for suspended ceilings, which had only the kitchen and bathrooms as having suspended ceilings, the architect originally estimated, based on the installation of 10,150 square feet of suspended ceiling, that 217 hours would be required for comprehensive ceiling tile coverage within the facility.

Before this benchmark may be met, however, the architect will be required to re-draw the prints with not only the correct suspended tile coverage but also the re-drawing of the HVAC for the facility. Currently, the HVAC system is designed for the use of an open ceiling and not for the installation of suspended ceilings. While the architect believed this was the desire of the City, there are numerous communications to the opposite stating the City's desire to have a suspended ceiling throughout the building in order to serve as additional sound shielding and, also, improve the general aesthetics of the facility.

Benchmark No. 8

Require and receive correct architectural drawings for amended HVAC drawings and suspended ceiling tile. Bid new materials within amended plan and construct.

9. Interior Electrical and Mechanical Systems Finishing. Interior electrical systems finishing includes the installation of interior lights, electricity outlets and switches; and interior mechanical systems finishing includes the installation of the furnaces and central air units, exhaust fans, and plumbing fixtures. The total estimate of volunteer hours for the successful completion of this benchmark is just over 680 hours.

Benchmark No. 9

Finish interior electrical and mechanical systems components, such as light fixtures, toilets, plumbing fixtures and heating and cooling units.