

**FACILITY CONDITIONAL ASSESSMENT**

**4701 WEST CHARLES BUSSEY AVENUE  
LITTLE ROCK, ARKANSAS  
FOR  
ARKANSAS STATE VETERANS HOME**



**Prepared By**

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## I. EXECUTIVE SUMMARY

The Arkansas Department of Veterans Affairs (ADVA) requested that the Arkansas Building Authority assist ADVA in assessing the State Veterans Home located at 4701 West Charles Bussey Avenue in Little Rock, Arkansas to determine the physical condition of the building and systems, and the estimated cost of repairs to bring the facility up to current codes and reliable conditions. On July 31, and August 2, 2012, the Arkansas Building Authority Design Review Section (ABA) visited the site for the purpose of determining the condition of the existing facility and to estimate the probable cost to repair or renovate the facility.

The property is located in an area zoned for residential use inside the city limits of Little Rock. The exact age of the original construction is unknown at this time. Based on interviews with the building staff, review of existing records and historical articles, the building was originally constructed as a school for blind and deaf children. The school, commonly known as the Madison Street School, occupied the building from about 1949 until the mid-1970s when the facility closed the students transferred to the Arkansas Schools for the Blind and Deaf campus currently located on Markham Street in Little Rock. During this period several additions were made to the facility. In 1951, the west wing was added, in 1962 the Annex was added and in 1966 the Principal's house was constructed. In 1973, a building fire alarm system was installed. Plans indicate the building was still being used as a Deaf school.

The building underwent a major renovation in 1980 to convert the facility to its current use as a State Veterans Home. This renovation included replacement of the heating and air conditioning systems, major upgrades to the building electrical systems, partial upgrades to the building plumbing systems and reconfiguration of some of the interior rooms to adapt for the new occupancy. Improvements to the landscaping, parking and exterior sidewalks were also completed. The building has not had substantial upgrades since the 1980 renovation.

During the site visit walk through, the ABA team saw evidence of many repairs and patches (which is a common practice in a facility of this age) which indicate that many of the building components and systems have exceeded their normal useful life expectancy. Many of the repairs have been made with materials or components that do not conform to the materials of the original construction. This is due primarily to the fact that many of these components were no longer available from the original manufactures. While the facility operators have done a very good job of finding acceptable replacement parts to keep the systems working, the scarcity of locating replacement parts are becoming a reality. While the basic structure of the building and interior finishes are in relatively good condition and still serviceable, the remaining useful life of many of the infrastructure systems is very short-term.

In addition to the aging condition of the existing systems in this building, much of the exterior construction and energy using systems were installed at a time when the cost of energy was relatively low and emphasis on energy conservation and sustainable buildings were almost non-

existent. Therefore energy consumption of the building by today's standards is very high. Any renovation of this facility warrants the inclusion of replacement of these inefficient components if a modern energy efficient facility is to be achieved. In addition, significant changes in building codes have occurred over the past 30 years and any current functioning components may well need to be replaced to meet the current building codes.

During the limited review of this facility and records, ABA was not able to locate any environment assessment reports or surveys. Any renovation or alternation of the existing facility will require as a minimum a survey of the building for the presence of asbestos containing materials (ACM). If ACMs are present, abatement or removal of these materials may be required before construction can begin. In addition, due to the age of the building, testing for lead based paints and other hazardous materials are recommended. If hazardous materials are present, the removal of existing finishes or materials to access these materials for remediation may be required. The ABA assessment of the facility did not include any testing or inspection for this purpose.

Comparing the construction cost on recent projects of the size and type undertaken by other State and Federal agencies, ABA has determined that the probable cost of repairing and renovating the facility to be in a range of \$7.5 million to \$10 million. The estimate includes improvements necessary to the meet building codes, the Arkansas Energy Code and the rules for Energy Efficiency and Natural Resource Conservation in public buildings and is based upon a high level assessment of the existing conditions and nominal construction cost for the elements that would normally be included in a project of this nature. The final cost will depend upon the actual design project requirements and the architects design solution which may differ substantially from the solution assumed in this report.

## II. PURPOSE

At the request of the Arkansas Department of Veterans Affairs, the Arkansas Building Authority (ABA) visited the State Veterans Home located at 4701 West Charles Bussey Avenue in Little Rock, Arkansas to determine the physical condition of the building and systems and the estimated cost of repairs to bring the facility up to current codes and reliable conditions. This report is a preliminary assessment of the facility conditions and an estimate of the probable cost of repairs and renovations to bring the facility up to current codes and efficient operating condition. This study is not intended to be a final description of all repairs need or a cost assessment for the final construction cost but rather is intended to provide ADVA with information necessary to make an informed decision regarding the viability or repairing and renovating this particular property for ADVA's current needs.

### III. APPROACH

On July 31 and August 2, 2012, the Arkansas Building Authority Design Review Section (ABA) visited the site for the purpose of determining the condition of the existing facility and to estimate the approximate cost to repair or renovate the facility. The ABA team reviewed available records of the construction and repair history for the facility and interviewed the building operation staff to gain an understanding of the age of the building systems, history of maintenance and repair problems, and current operational concerns. The team walked through the building and observed the conditions of the finishes and equipment. This assessment is based upon visual observations and conversations with the building staff and upon knowledge and experiences of the ABA team gained from years of design and construction experiences. There were no material or equipment tests performed for this assessment and no examination of the interior components of the equipment of building structures. There were no maintenance test reports available at the time of the ABA site visit. Additional investigations and testing may reveal conditions that could alter the assessment conducted by ABA.

ABA consulted with the State Fire Marshal's Office and the Arkansas Department of Health to ensure that appropriate code upgrades were considered in the estimated cost for repairs and renovations.

Estimates of the probable repair and renovation cost were established by reviewing construction cost from several recently constructed state projects of similar size, construction cost guidelines published by the US Department of Veterans Affairs, and industry standard estimating guide manuals. Due to the limited time available to prepare this initial assessment, the statements of probable construction costs contained in the report are shown as a range of probable cost. A more detailed assessment would be necessary to refine the cost to a single number.

### IV. FINDINGS

The descriptions below are a high level review of the conditions of each area or subsystem of the facility. Where the conditions of materials or components are noted, the following is a general guide to the classifications of "good, fair, and poor".

Good condition requires a light level of renovation. Examples of light renovations include items such as the replacement of flooring coverings, paint, ceiling tile replacement, minor reconfiguration of gypsum board partitions and minor repair of existing systems or replacement of minor interior components inside equipment at existing locations.

Fair condition requires a moderate level of renovation. Examples include everything noted under good condition plus the replacement of major components existing systems, upgrades to

elevators, major reconfiguration of interior walls, replacement of plumbing fixtures at existing locations, replacement of portions of systems but not the entire system.

Poor condition requires complete replacement or major renovation. Example include everything noted under good and fair condition and items requiring extensive material or labor such as, below grade waterproofing of exterior wall, major changes in the interior room layouts, new roof system, new mechanical system, new plumbing (both supply and waste), new electrical system, replacement of exterior windows and replacement of exterior exit stairs.

1. Exterior Site:

The sidewalks and asphalt drives and parking lots surrounding the building appear to be in good condition. There were no potholes in the asphalt or spalling of the concrete walks. The site drainage appears to be in good condition although there has been little or no rain in the area for the past several months. The building operator did not indicate that there were any problems with surface runoff. There are a few downspouts that are connected to underground pipes that may be collapsed or clogged. Further investigation of these lines will be required to determine the extent or repair or replacement necessary.

2. Exterior Building Repairs:

Though the brick veneer exterior of the building is in good conditions, failing control joint sealants should be replaced with new. A clear water repellent coating is recommended for masonry building exterior to extend the life of the existing masonry materials. The exterior walls of the first floor below grade have been leaking and will require below grade water proofing. This activity will require extensive excavation around the perimeter of the building to allow access to these walls. Installation of a french drain system around the foundation may be required at that time. The existing exterior single pane metal frame windows are in good condition but should be replaced with new energy efficient insulated windows to reduce energy consumption and water intrusion during heavy rains. The two metal exterior stairs are in poor condition and should be replaced with new code compliant stairways. The areas intended for rescue assistance at these stairs requires further analysis to ensure full compliance with the Building code. The existing roof system on the main building is a low slope bituminous roof system is in constant need of repair and is considered to be in very poor condition. The building operator indicated that the roof has several areas which leak in rainy weather. The roof should be replaced and additional insulation added to reduce energy consumption, water intrusion, and improve occupant comfort.

3. Interior Building Repairs:

Generally, the floors and interior walls are in good conditions while the first floor slab is fair. The ceiling system consist of a lay-in tiles suspended below a plaster ceiling which is part of the floor to ceiling fire protection system. A renovation of the facility will most likely require the relocation of some walls. Much of the first floor concrete slab at wet areas will require removal for installation of new plumbing drain lines. Removing most of the ceiling system will be required for mechanical and electrical repairs or upgrades.

4. Mechanical Systems:

Existing building mechanical system is divided into various systems. Main building system heating and cooling consists of heat pump fan coil units in each room connected to a cooling tower in the rear of the building and multiple boilers in the mechanical room via chilled\hot water loop. The first and second floor of the Annex Building also has heat pump fan coil units connected to the cooling tower. The balcony level of the Building Annex and around the Multi-purpose room is being heated\cooled by ductwork fed by stand-alone packaged units. This equipment is in very poor condition and should be replaced.

Main building system is in poor condition and is currently being augmented by ceiling fans in the corridors and window units in many rooms. Several heat pump fan coil units were observed cannibalized for parts to repair other units and nonfunctioning. Building Annex system was served by three units with no return air system evident. The original return air location to the hall was removed and the hole in the wall patched with concrete block to match the wall construction. Outside air was furnished for these three units via exterior wall louver from previous single system that was installed in the room.

The entire heating and cooling system should be replaced with state of the art system providing reliable operation, improved occupant comfort and energy efficiency.

5. Plumbing Systems:

Existing plumbing piping is in very poor shape. Evidence of clogged, rusted out and collapsed lines was observed during walkthrough primarily on the first floor. Make shift repairs were seen in many places. Some repairs consisted of incorrect type of plumbing pipe and held together with duct tape. Building operators noted that the sewer lines get clogged up several times a month requiring snaking the drains from various first floor cleanouts. There is evidence of numerous repairs to these lines and the replacement of the entire drainage and venting system will be required in the near future.

The domestic water heating equipment is obsolete and inefficient. This equipment should be replaced with new efficient equipment for improved reliability and efficiency.

The majority of the plumbing fixtures are operational although the building operator notes that when a fixture fails, direct replacement fixtures are no longer available. Replacement of all existing fixtures will be necessary.

6. Electrical Systems:

Buildings existing electrical system is obsolete and extremely old. Availability of serviceable parts for the building switchgear and distribution panels will most likely be nonexistent due to the age of the equipment. Building wiring observed at the electrical panels was also dated and worn. Building lighting was a combination of old and new style fixtures. Light switches observed throughout the building were in old style wire mold and switches were also old style. The majority of the electrical system is in poor condition and should be replaced.

The building does have an electric generator for emergency power. The generator was installed in 2002 and appears to be in good condition. Depending upon the total building emergency power requirements, this generator may be suitable for reuse.

7. Fire and Security Systems

Existing fire sprinkler system provides full coverage of the existing building. Sprinkler piping appears to be in good condition, but sprinkler heads are worn and dated.

Existing fire alarm system is a conventional fire alarm panel providing partial coverage of the building. Remaining areas have residential grade stand-alone battery fire alarm detectors. The existing fire alarm panel is at the end of its standard service life and replacement parts will be difficult to obtain. Notifications appliances are also dated and worn. Initiating appliances are relatively new and in good condition.

Existing security system consist of controlled access to employee parking areas by barbed wire fence and automatic gate using electronic access control system. Building interior is partially monitored by closed circuit television system with cameras in some areas of the building as well as some exterior cameras to monitor the parking and recreation areas around the building. No obvious electronic burglar alarm equipment was observed throughout the building.



There is a fence around the facility which has some limited controlled access. The controls to the gates appear in to be in poor condition and should be repaired or replaced. The condition of the security lighting could not be determined during the walk through but should be investigated to ensure all fixtures are functioning and that appropriate light levels are provided without adversely affecting the adjacent properties.

8. Telecommunication Systems

Computer and telephone system cabling were both antiquated and outdated. Phone system was relatively modern but was still noticeably worn and dated. Telephone and computer wall outlets were old, worn and dirty in appearance and appeared to be in poor to fair condition. Replacement may be necessary to bring these systems up to current standards and operational needs.

The existing cable television system appears to be in good working condition. However, some abandoned cabling and junction boxes were observed and should be repaired or replaced during any upgrades to the building.

9. Food Service:

The kitchen and food service equipment appears to be in poor condition and should be replaced. The grease trap serving the kitchen is in very poor condition and in need of immediate attention. The kitchen coolers and walk-in freezer are very old, and in poor condition. A complete renovation of the kitchen food preparation area will be required.

10. Accessibility:

The ABA assessment does not include a detailed survey for a compliance with any accessibility standards. The original building was constructed before any known accessibility standards were published. During the ABA walkthrough, no major accessibility concerns were observed. The general impression is that due to the nature of the facilities current use, many building elements were constructed in a manner that will require little alteration to meet current accessibility standards. There will be some reconfiguration of some toilet rooms and lowering of thermostats and light switches to meet the new standards but most of this work will be accomplished coincidental to other repairs or renovations when the building is updated with little impact on the overall cost.

Alterations to the building and systems must be in compliance with the 2010 Standards for Accessible Designs as published by the US Department of Justice.

## 11. Environmental Issues:

During the limited review of this facility and records, ABA was not able to locate any environment assessment reports or surveys.

Due to the age of the existing facility and the date of the last major upgrades, it is possible that asbestos material may be present in certain elements of the building materials and equipment. During the walkthrough, ABA did not observe any materials that appeared to be constructed with asbestos or any evidence of materials that could be considered friable and indicative of asbestos.

Any renovation or alternation of the existing facility will require, as a minimum, a survey of the building for the presence of asbestos containing materials (ACM). If ACMs are present, abatement or removal of these materials may be required before construction can begin. In addition, due to the age of the building, testing for lead based paints and other hazardous materials is recommended. If hazardous materials are present, the removal of existing finishes or materials to access these materials for remediation may be required. The ABA assessment of the facility did not include any testing or inspection for this purpose.

ABA recommends that ADVA engage a properly licensed asbestos inspector to survey the building and prepare a maintenance and operation plan for use by ADVA staff if ACM is found to be present in the building. The mere presence of ACM does not imply an immediate hazard for the occupants provided that the materials are in good condition and not friable and that proper care is exercised when working with these materials.

Additionally, due to the condition of the building's exterior envelope, intrusion of water into the building interior can result in premature deterioration of building materials and other environmental concerns. The ADVA should consult with an environmental consultant experienced in this area to determine any additional corrective actions that may impact the cost of repairs or renovations to the building.

## V. PROBABLE DEVELOPMENT COST

Estimates of the probable repair and renovation cost were established by reviewing construction cost from several recently constructed state projects of similar size, construction cost guidelines published by the US Department of Veterans Affairs, and industry standard estimating guide manuals. Due to the limited time available to prepare this initial assessment, the statements of probable construction costs contained in the report are shown as a range of probable cost. A more detailed assessment would be necessary to refine the cost to a single number.

Comparing the construction cost on recent projects of the size and type undertaken by other State and Federal agencies, ABA has determined that the probable cost of repairing and renovating the facility to be in a range of \$7.5 million to \$10 million. The estimate includes improvements necessary to meet building codes, energy codes and sustainability codes for public buildings.

ABA has taken extreme care to ensure that all reasonable repairs and upgrades have been considered in the development of the estimate for the probable construction repair and renovation cost. However, the estimate provided in this report based upon a high level assessment of the existing conditions and nominal construction cost for the elements that would normally be included in a project of this nature and as such is not a statement of a final or expected cost of repair or construction.

This assessment does not include an estimate of the cost of environmental inspections, abatement, or remediation of hazardous materials. These costs can be significant and should be investigated and added to the final budget for any repair or renovation project.

The final cost will depend upon the actual design project requirements and the architect's design solution which may differ substantially from the solution assumed in this report.

### **Summary**

**Renovations/Improvements - \$7.5 million to \$10 million**

**ADVA Projected Operating Expense – Approximated at \$4,200,000/Annually**