

July 14, 2022

Michael Moser Physical Plant Director James River Correctional Center 2521 Circle Drive Jamestown, ND 58401

RE: Outside Building 16 East

Structural Assessment Jamestown, ND 58401

Project Number: EC22-04-219

To whom it may concern,

Interstate Engineering was retained to review the condition of the above referenced building at the James River Correctional Center. The purpose of the review is to give an opinion on the overall condition of the building and make recommendations for repairs to bring the building into serviceable condition. A review of the building was completed by Wade Senger and Jeff Douty on June 22, 2022, and present during the review was Michael Moser. The review consisted of visual observations of the building. No demolition occurred during the review.

## A. Background Information

According to Mr. Moser the building was constructed in 1915. The building is a three-story brick building with concrete floors. It is currently being used by the JRCC Maintenance staff as their physical plant facility. The original use of this building was to be used as a hospital for inpatients at the ND State Hospital Campus. The staff have used the space available, however the layout and function of the building is not intended for its current use. The third floor of the facility is vacant and unused, the second floor is used for material storage, the first floor is used as office space and shop space, and the basement is used as salvaged parts storage. With no elevator in the building it makes it difficult to utilize the multi-story building and requires staff to carry materials and tools up and down stairs constantly.



## **B. Observed Conditions**

During the review several items were noted. The contents of this report are set up in five sections including the exterior conditions, third floor, second floor, first floor, and basement. The following is a narrative description of the observed conditions, and **Appendix A** shows a photo log of the observed conditions.

## 1. Exterior Condition

- The exterior of the building is in poor condition. **Image 1A-1D** show the side elevation views of the building. The brick mortar joints are in bad condition with some bricks starting to be loose. To repair this condition the brick walls should be tuckpointed on all sides of the structure.
- The roof is in bad condition, and needs to be replaced.
- Many of the windows are cracked or damaged and all of them need to be replaced.
   Image No. 2 below shows damaged window and windowsills.
- All entrances front, rear, and the fire escape need improvements. The doors need to be replaced, and there is structural damage to the brick where tuckpointing and replacement is required. Image No. 3 shows the damages to the front and rear entracnces.

### 2. Third Floor Condition

- The third floor has reached its useful life and needs to be repaired before it can be occupied and used. The ceiling walls and flooring are crumbling and needs to be removed and replaced.
- Due to the age of the facility, it is likely that there is asbestos and lead paint in this space.
- Many of the radiators have been removed or are inoperable. The heating and electrical would need to be renovated to bring it up into current code requirements.
- The bathroom on this floor is not operational.
- This floor would need to be completed renovated to be able to be used. Image
   No. 4 shows the conditions of the third floor.

## 3. Second Floor Condition

- The second floor is in slightly better condition than the third floor, however it is still in very poor condition. The ceiling, walls, and flooring are damaged throughout the space and needs to be removed and replaced.
- Due to the age of the facility, it is likely that there is asbestos and lead paint in this space.
- The heating and electrical would need to be renovated to bring it up into current code requirements.
- The bathroom on this floor is not operational.

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 This floor would need major improvements to be able to useable space for anything other storage. Image No. 5 shows the conditions of the secong floor.

## 4. First Floor Condition

- The first floor is in the best condition of all the floors; however it is still in poor condition.
- This has the only functioning bathroom in the building, however it needs improvements, and is not handicap accessible.
- The radiators are old and need to upgrade.
- The floors walls and ceilings on this floor are in fair condition considering the age of the facility.
- This space would need minor improvements. Image No. 6 shows the conditions
  of the first floor.

### 5. Basement Condition

- The basement is currently in poor condition. There are several areas where the concrete foundation wall is starting to decay as seen in **Image 7** below.
- There is exposed rebar in the porch floor as seen in **Image 8** below.
- The foundation of the building has structural concerns and needs to be repaired.

### C. Recommendations

The building is in overall poor condition and needs to be repaired to maintain the safety and use of the facility. The original use of the building was intended to be used as a hospital, and the layout does not function well for the current use as a maintenance shop.

**Appendix B** shows an Opinion of Probable Cost to make the recommended repairs to the building to make if functional. These estimates are preliminary in nature, and a more detailed design would need to be reviewed with the Owner to discuss the scope of a renovation project, choose finishes, and look at the project as a whole. The costs shown are intended for planning purposes only to give an idea of the extent of work required to bring this building back into safe serviceable condition.

## Summary of Costs:

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Exterior Improvements	\$1,556,000			
Third Floor Improvements	\$ 651,000			
Second Floor Improvements	\$ 651,000			
First Floor Improvements	\$ 293,000			
Basement Improvements	\$ 293,000			
Total Improvements	\$3,444,000			

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If you need any additional information regarding other options for this facility or would like more detailed work completed for chosen repairs to the facility please contact our office at (701) 252-0234

Sincerely, INTERSTATE ENGINEERING, INC.

Wade Senger, PE Principal Engineer



# APPENDIX A BUILDING PHOTOS





Image 1A: Building 16 East (South Elevation)



Image 1B: Building 16 East (North Elevation)





Image 1C: Building 16 East (West Elevation)



Image 1D: Building 16 East (East Elevation)

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Image 2: Damaged Window and Window Sill



Image 3: North Entrance (Left) South Entrance (Right)







Image 4: Third Floor Ceiling (Left) Flooring (Right)





Image 5: Second Floor Ceiling (Left) Flooring (Right)







Image 6: First Floor Radiator (Left) Bathroom (Right)





Image 7: Damaged Foundation Wall





Image 8: Exposed Rebar in Basement



# APPENDIX B COST ESTIMATES



Project No.: 22-04-219 June 30, 2022

Exterior

Item No.	Description	No. Of Units	Unit	Unit Price	Bid Amount
1	New Roof	4,700	SF	\$20.00	\$94,000.00
2	Modification of Fire Escape	1	LS	\$10,000.00	\$10,000.00
3	Tuc Point Exterior Walls	12,300	SF	\$45.00	\$553,500.00
4	New Windows	75	EA	\$1,500.00	\$112,500.00
5	New Doors	4	EA	\$4,000.00	\$16,000.00
6	Exterior Brick and Decorative Cap Repair	1	LS	\$200,000.00	\$200,000.00
7	North and South Entrances Repaired	1	LS	\$224,000.00	\$224,000.00
8	ADA Accessibility Requirements	1	LS	\$20,000.00	\$20,000.00

 SUBTOTAL
 \$1,230,000.00

 CONTINGENCY (10%)
 \$123,000.00

 OPINION OF PROJECT CONSTRUCTION COSTS
 \$1,353,000.00

ESTIMATED ARCHITECTURAL, ENGINEERING, LEGAL,
AND ADMINISTRATIVE \$203,000.00
OPINION OF PROJECT COST \$1,556,000.00



Project No.: 22-04-219 June 30, 2022

Third Floor

Item	Description	No. Of Units	Unit	Unit Price	Bid Amount
1	New Reflective Ceiling	4,700	SF	\$20.00	\$94,000.00
2	New Walls	4,700	SF	\$15.00	\$70,500.00
3	New Flooring	4,700	SF	\$25.00	\$117,500.00
4	Asbestos and Lead Paint Removal Allowance	4,700	SF	\$14.00	\$65,800.00
5	Paint and Plaster Repair	4,700	SF	\$16.00	\$75,200.00
6	Electrical Improvements	4,700	SF	\$5.50	\$25,850.00
7	Mechanical Improvements	4,700	SF	\$14.00	\$65,800.00

 SUBTOTAL
 \$514,650.00

 CONTINGENCY (10%)
 \$51,465.00

 OPINION OF PROJECT CONSTRUCTION COSTS
 \$566,115.00

ESTIMATED ARCHITECTURAL, ENGINEERING, LEGAL,
AND ADMINISTRATIVE \$84,885.00
OPINION OF PROJECT COST \$651,000.00



Project No.: 22-04-219 June 30, 2022

Second Floor

Item	Description	No. Of Units	Unit	Unit Price	Bid Amount
1	New Reflective Ceiling	4,700	SF	\$20.00	\$94,000.00
2	New Walls	4,700	SF	\$15.00	\$70,500.00
3	New Flooring	4,700	SF	\$25.00	\$117,500.00
4	Asbestos and Lead Paint Removal Allowance	4,700	SF	\$14.00	\$65,800.00
5	Paint and Plaster Repair	4,700	SF	\$16.00	\$75,200.00
6	Electrical Improvements	4,700	SF	\$5.50	. ,
7	Mechanical Improvements	4,700	SF	\$14.00	\$65,800.00

SUBTOTAL
CONTINGENCY (10%)
OPINION OF PROJECT CONSTRUCTION COSTS

\$514,650.00

\$51,465.00

\$566,115.00

ESTIMATED ARCHITECTURAL, ENGINEERING, LEGAL, AND ADMINISTRATIVE OPINION OF PROJECT COST

\$84,885.00

\$651,000.00



Project No.: 22-04-219 June 30, 2022

First Floor

Item	Description	No. Of Units	Unit	Unit Price	Bid Amount
1	Asbestos and Lead Paint Removal Allowance	4,700	SF	\$14.00	\$65,800.00
2	Paint and Plaster Repair	4,700	SF	\$16.00	\$75,200.00
3	Mechanical Improvements	4,700	SF	\$14.00	\$65,800.00
4	Bathroom Improvements	1	LS	\$25,000.00	\$25,000.00

 SUBTOTAL
 \$231,800.00

 CONTINGENCY (10%)
 \$23,180.00

 OPINION OF PROJECT CONSTRUCTION COSTS
 \$254,980.00

ESTIMATED ARCHITECTURAL, ENGINEERING, LEGAL,
AND ADMINISTRATIVE \$38,020.00
OPINION OF PROJECT COST \$293,000.00



Project No.: 22-04-219 June 30, 2022

Basement

Item	Description	No. Of Units	Unit	Unit Price	Bid Amount
1	Foundation Repair	290	LF	\$400.00	\$116,000.00
2	South Porch Foundation Repair	60	LF	\$400.00	\$24,000.00
3	Mechanical Improvements	4,700	SF	\$14.00	\$65,800.00
4	Electrical Improvements	4,700	SF	\$5.50	\$25,850.00

SUBTOTAL
CONTINGENCY (10%)
OPINION OF PROJECT CONSTRUCTION COSTS

ESTIMATED ARCHITECTURAL, ENGINEERING, LEGAL,
AND ADMINISTRATIVE
OPINION OF PROJECT COST

\$38,185.00

\$231,650.00

\$23,165.00

\$254,815.00

\$293,000.00