

USD 377, Atchison County Community Schools

Building Assessments

Structures

The USD 377 School District has a wide range of buildings and sites. The Middle School was originally constructed in 1913 as a high school, with three later additions. Effingham Elementary School was built in 1938 with three additions. Cummings Elementary (JU4) was constructed in 1961 with one addition. Lancaster Elementary was opened in 1936 and has had two additions. The High School located in Effingham was constructed in 1976.

Middle School

The primary purpose of this building has changed greatly over the many years since its opening. The several additions have almost doubled the size of the original 1913 building to over 79,000 square feet. While the overall construction of the original structure has served very well over the years there are several noticeable problems observed.

1. The heating, ventilating and air conditioning (HVAC) is a varied component in this building. It's main heat source is a Peerless cast iron sectional steam boiler, this is an excellent unit but it is in a very problematic location. The original boiler room is very wet, it has numerous ground water and steam leaks that make this area a constantly overheated moisture laden atmosphere. These conditions lead to an overall deterioration of the boiler jacket and controls. Repairing the steam leaks and traps would reduce heat loss and energy costs and reduce part of the moisture problems. When the asbestos pipe lagging was abated several years ago, the pipe insulation was not replaced, this also adds to moisture problems due to the condensation of the piping. This insulation should be replaced with new to prevent this. Since this is the lowest area in the structure and has several steam tunnels and an abandoned coal storage area, there is also significant ground water problems, causing this area to be constantly wet and drains into a sump pump pit. The air conditioning in the building is being accomplished with window units. While this arrangement does serve the purpose, it is neither inexpensive to operate or can it meet all the requirements on extremely hot Kansas day. It also does not meet the present day requirements on building ventilation and required air changes in the classroom areas of newer buildings.

2. Restrooms are another major concern for several reasons. Many of the men's restroom areas have floor mounted urinals which are no longer accepted by the Kansas Health Code due to the difficulty in addressing the cleaning of the unit and the associated floor drain trap. Several of the restrooms do not meet ADA requirements for the proper number of

lavatories, heights, and placement of units. Water closets throughout the building are too low for ADA use and lack the needed hand grab bars. Most of the flush valves need replacing with new low water flow units to assist in water usage. The ceramic tile on numerous restroom walls is cracked and needing repaired or replaced, these cracks make cleaning very difficult and the sharp edges are a safety issue with younger students. The locker rooms have some of the same plumbing problems as listed above along with accessibility problems to showers and the height of shower controls. While an effort has been made to replace the original toilet partitions, these should be addressed with the possible remodel of the restroom areas to rectify the concerns listed above.

3. Electrical requirements have advanced greatly in the last ninety-six years since the opening of the structure as a Community High School for western Atchison County. Many common place educational tools have been developed since then, drastically affecting how the school occupants conduct their everyday tasks. To this end, we recommend a study be performed to determine the number of new circuits needed to meet the ever changing requirements of the staff and students and the changes needed in the building electrical supply system. We have included a budgetary amount in our estimates. Consideration must be given to the changeover from standard incandescent light fixtures to more energy efficient fluorescent T-8 and T-5 throughout the entire building giving better lighting for corridors and classrooms.

4. Handrails throughout the entire complex do not meet the new accessibility requirements for stairs and bleachers. Much of the gymnasium and bleacher area does not meet any of the current codes for ADA accessibility and usability. The bleachers are original to the addition and should be considered for complete replacement to insure continued use and prevent accidents by both the occupants and the custodial-maintenance staff.

5. Numerous interior doors in the later 1955 and 1965 additions are broken or badly scarred from constant usage and should be replaced. An effort could be made to match the older oak doors in the original sections and give some consistency to the entire building with their replacement.

6. There are very noticeable cracks in the concrete block walls in the northwest corners of the building, north of the main gymnasium and wrestling areas. These should be repaired and monitored to check the additional de-lamination.

7. While most of entire structure has been re-roofed with a very serviceable standing-seam metal roof, the abrupt changes from building to building addition tends to lend itself to leaks with the height changes. These are particularly noticeable in room 51, north special education classrooms, and band room. While these leaks are difficult to repair, these leaks

must be repaired due to the detrimental effect this moisture has on the walls and roof supports in a building of this size and complexity.

8. Replace the stained and sagging ceiling tile throughout the building. This would give a lighter, more uniform and more acoustical treatment to the entire structure. The replacement of the ceiling in the cafeteria with a non-sag acoustical ceiling would greatly enhance the usability of this room as a multi-purpose area for future uses.

9. Much of the vinyl floor tile contains asbestos. A replacement of all the existing floor tile and carpet should be considered to brighten the interior halls and classrooms, give a more uniform appearance, and replace the worn and cracking tiles.

10. The present weight, exercise room, and maintenance building was originally a Vocational Agriculture and Industrial Education Shop area. The south wall of this building is showing signs of severe cracking in the block joints and window lintels. These problems should be addressed to prevent possible failure of the wall section. All the suspended ceiling tile needs replaced, most are sagging and stained.

10. Twenty-three of the single pane window units in the building should be replaced, particularly the south center section (principals' office) with more energy efficient double pane units with better weather stripping and sealing to prevent present heat loss and air infiltration. Along with those windows, the following other single pane units should be replaced: thirteen windows in the cafeteria area, twelve windows in the northwest addition, locker-rooms, and the single pane windows left in the front (south) and west entry areas.

11. Consideration should be given to the general tuck pointing and waterproofing of the entire structure. The cleaning and sealing of stone face work on the south and tower sections to prevent further damage to the exterior surfaces.

12. Much of the exterior asphalt and some of the exterior concrete sidewalks are in need of replacement:

- Asphalt--approximately 41,452 square feet of replacement and overlays, and
- Concrete--approximately 700 square feet of sidewalks with cracks, will not meet ADA compliance and need to be replaced.

Atchison County Community High School

The High School was constructed in 1976 and has almost 90,000 square feet of space. In our review of this building, we were impressed with the both the upkeep and cleanliness of the school. The major recommendations for this structure are similar to the recommendations for the Middle School in many aspects.

1. Replace all floor tile. Much of it is cracked and worn, particularly in the main corridors and commons area (it is asbestos containing). Look over existing carpeted areas and replace as needed.
2. Replacement of **all the 2' by 4' suspended acoustical** ceiling tile.
3. Replace any restroom fixtures not in compliance with ADA.
4. Replace any restroom partitions in need of repair.
5. **Replace trough type urinals in Commons Area Men's Room.**
6. Bring all metal railings up to present code requirements.
7. Budget electrical upgrades to approximately 25 areas for new technology and upgrade the building lighting to all new fluorescent T-8 and T-5 fixtures.
8. Auditorium:
 - A. Investigate water infiltration problems in center and southeast corner of stage and steps and repair. Patch this stairway and install new rubber treads or seamless epoxy coating to area. Replace carpet in entire area by stage to seating.
9. Investigate additional water infiltration and settling conditions in southeast corridor area. Consider additional re-grading of exterior landscape in area to further divert water flow to building. Concrete pavement is pulling away from east wall at this corner.
10. Replace southeast and southwest exterior entry doors. (total of 4 doors, **3'0" x 7'0"**)
11. Replacement of 20 single-pane windows in building with tinted double-pane energy efficient units.
12. Re-attach any and all metal siding material which has shifted loose during wind storms. Replace any as needed.
13. Exterior Asphalt and Concrete:
 - a. South Asphalt Lot: Repair and overlay approximately 46,810 square feet.
 - b. Front Entry and Parking Areas: Approximately 6000 square feet
 - c. North entry, parking areas and by shops; Much of this area would have to have asphalt removed and new 6 inch to 8 inch material if bus traffic is expected; approximately 35,463 square feet.
 - d. Remove existing concrete and replace by southeast corner of building by retaining wall. Consider installation of drain tile to assist in removing water from building; Area is approximately 1522 square feet of 4 inch concrete.

Effingham Elementary School

Effingham Elementary School was built in 1938 as a WPA project. It had additions and remodels in 1957 and 1999. The building has a total of 12,304 square feet. The structure is in excellent maintenance and repair except for the following items:

1. Clean, tuck point and water proof the north and west walls (by entry).
2. Clean and waterproof remaining brickwork on the rest of building.
3. The boiler room area has excessive amounts of water on the floor and leaking into the area. Should consider modifying floor and better drainage. This should help in reducing water damage to expensive heating and boiler equipment.
4. Replace boiler room exterior door.
5. Main north entry exterior concrete walk and part of the ADA ramp need replaced.
6. Restrooms:
 - a. **Boy's** restroom has two floor mounted urinals and non-compliant lavatory.
 - b. East corridors Girls and Boys restrooms are not ADA compliant.
7. The asphalt on the playground (south and west of the building) is cracked and separated in numerous areas and slopes towards the building in many places. Patch, remove and replace approximately 9500 square feet of asphalt.
8. Replace west concrete by alley parking area **is 320 square feet of 6" concrete.**
9. Installation of new playground asphalt with slope draining away from the building could assist in drying out the boiler area.
10. **The floor tile (9" VAT)** is coming up in the lunchroom under the seam-less epoxy floor surface. This should be considered for abatement of the VAT and replacing the epoxy floor. Budget to replace floor tile and carpet in other needed areas.
11. Budget electrical upgrades for ten classroom and areas.

Lancaster Elementary School

The Lancaster Elementary School was constructed in 1936 it also has had two additions one in 1950 and one in 1976. It is a single story building with a full basement in the original 1936 section, with a basement lunchroom/kitchen addition. The following items were observed:

1. Consider replacement of the double entry doors, these are sticking and showing their age and use.
2. Numerous ceiling tiles do not match and some sag.
3. Title One room needs new subfloor and floor tiles.
4. Check attic in original building for proper ventilation and replace or repair window trim on south attic window.
5. **Patch and apply 2" overlay of asphalt** in front parking area 3312 square feet.
6. South playground, **patch area and apply 2" overlay of playground grade asphalt** 2925 square feet.
7. **Front concrete entry ramp needs replaced due to cracks 12' x 11'.**
8. **Front concrete by kitchen window well needs replaced approximately 8' x 10".**
9. Add sidewalk to rear of building as per State Fire Marshal.
10. Add protective screens to rear windows of basement storm-shelter area.
11. Investigate the water seepage problems in southeast basement area and repair.
12. Budget for electrical updates to ten classroom areas.

Note: Care must be shown when exterior concrete and asphalt work is completed that drainage away from the structure be accomplished.

JU-4 Cummings Elementary School

JU-4 Elementary School was originally built in 1961 with an addition in 1976 it has 12,480 square feet of space. It is a single story building with a metal roof deck and no basement area.

Recommendations:

1. Front entry area is not ADA compliant and has cracks in the concrete this should be replaced with an accessible ramp.
2. Northeast Restrooms: Boys room has floor urinals, lavatory and water closet are not ADA compliant, and need correct grab bars. Girl's restroom needs proper ADA grab bars in water closet.
3. Cafeteria/Gym area:
 - a. Vertical crack in west gym wall.
 - b. Snow and moisture blows through the top of the north block wall and metal roof deck.
 - c. Note: Inspection of the exterior indicates upper fascia is deteriorating and needs to be replaced with better flashing.
 - d. Water is coming in under exterior east door. Needs better bottom door seal and slope concrete away from door and building.
3. North corridor at Kitchen, water is coming in under door and repair as gym door above.
4. Classrooms ceiling tiles do not match and some sag.
5. Numerous floor tiles are 9 inch vinyl asbestos tile and should be replaced.
6. Windows: All the windows are single pane, non-tinted and not energy efficient and it is our recommendation to replace them: **Total of 28 units (48" x 32")**.
7. Budget for electrical upgrades to nine areas.
8. Repair and overlay approximately 8600 square feet of asphalt playground and sidewalk .

The following costs and recommendations are meant to only be a budgetary guide. While every effort has been made to use local contractors with the most up-to-date figures possible, for real time pricing, the construction industry is very volatile at the present time, making this a difficult process. A seven to ten percent contingency amount should be added to any budget and a six to eight percent charge should be added to cover professional fees. The figures for repaving, assumes that it would all be performed under one contract.

Middle School Costs

Item # 1 HVAC

1. Repair steam traps and any steam leaks in entire system	\$ 25,000.00
2. Re-insulate steams lines in boiler room and throughout system	\$ 5,000.00
3. Redo exterior drainage and seal leaks into area	\$ 1,500.00
4. Installation of central air-conditioning and heat to entire building	\$569,000.00
Total costs repair existing heating system	\$ 31,500.00
Replace system add AC	\$569,000.00

Item #2 Restrooms & Locker-rooms

1. Renovate 2 sets of Boy's restrooms as outlined replace floor urinals , add lavatories, replace ceramic tile on walls, replace toilet stalls as needed, bring restrooms to ADA requirements... \$20-25,000.00 each	\$ 50,000.00
2. Replace all flush valves and faucets and fixtures	\$ 31,500.00
3. Install needed improvements for ADA requirements in all locker-rooms	\$ 4,500.00
Total for costs: \$ 71,500.00 to \$ 81,500.00	

Item #3 Electrical Considerations

1. Re-lighting of classrooms and halls with energy saving fixture	\$ 23,125.00
2. Consider new fire alarm system to meet all new requirements	\$ 35,500.00
3. Consider new telephone system	\$ 9,000.00
4. Reconfigure electrical needs to 18-20 classrooms	\$ 38,500.00
Total for costs: \$ 106,125.00	

Item #4 Gymnasium Updates

1. Repair bleachers, replace boards as needed	\$ 12,800.00
2. Replacement of Bleachers budget	\$125,000.00
3. Gym floor drum sand, repair and refinish	\$ 16,300.00
4. Railing update to new requirements	\$ 5,500.00
5. Replacement of gymnasium floor	\$ 90,000.00
Total for costs: \$34,600.00 to \$220,500.00	

Item #5 Door Replacement and repairs

1. Replace interior doors as needed	\$ 11,250.00
2. Replace exterior doors as needed	\$ 7,500.00
3. Replace needed door hardware in building to ADA requirements	\$ 2,500.00

Total for costs: \$21,250.00	
Item #6 Repair Interior plaster and wall cracks as needed	\$ 2,400.00
Item #7 Roof Repairs	
1. Repair roof leaks as outlined	\$ 3,000.00
Item #8 Replace ceiling tiles	
1. Repair replace ceiling tile throughout building	\$ 58,750.00
2. Replace ceiling tile in cafeteria with acoustical tile	\$ 9,875.00
Total for costs: \$68,625.00	
Item #9 Floor tile and Carpet	
1. Replace worn floor tile and carpet throughout the building	\$ 66,400.00
Item #10 Weight Room/Exercise Area	
1. Tuck-point , reinforce and support walls	\$ 9,850.00
2. Replace all ceiling tile	\$ 400.00
Total for repairs: \$10,250.00	
Item # 11 Building Exterior	
1. Replace windows in South Office area	\$ 12,700.00
2. Replace 13 windows in cafeteria with energy saving type	\$ 15,600.00
3. Replace windows in NW sections and locker-rooms 12 windows	\$ 8,925.00
4. Replace windows front entry (south & west)s area of 1955 addition	\$ 4,950.00
5. Clean and seal/tuck-point tower area	\$ 23,700.00
6. Consider clean seal/tuck-point remainder of building	\$ 59,300.00
Total for 1 ,2,3&4 Windows : \$42,175.00 Total 5 &6Tuck-point : \$83,000.00 Total for all: \$ 125,175.00	
Item #12 Asphalt and Concrete	
1. Repair and or replace of damage asphalt	\$ 39,379.00
2. Repair concrete and sidewalks	\$ 4,000.00
Total costs: \$43,379.00	
Total for all Items as outlined: \$ 584,204.00 to \$ 1,317,604.00	

High School Costs

Item #1 Floor Tile	
1. Replace floor tile and carpet	\$100,927.00
Item #2 Ceiling Tile	
1. Replace ceiling tile	\$ 71,250.00
Item #3, #4,#5 Restroom improvements	
1. Replace flush valves, toilets, urinals, partitions, as needed	\$ 19,400.00
Item # 6 Update Railings	
1. Renovate railings as required	\$ 5,000.00
Item #7 Classroom electrical upgrades	\$ 50,000.00
Building Lighting upgrade	\$ 31,250.00

Item # 8 Auditorium Repairs	
1. Install drainage system, replace carpet and stair treads	\$ 10,800.00
Item # 9 Water Problems Southeast Corridor	
1. Re-grade landscaping this area(see SE exterior concrete replacement)	\$ 1,500.00
Item #10 Exterior Door Replacements	
1. Replace Southeast and Southwest entry doors (4 doors total)	\$ 4,500.00
Item #11 Replace all single pane window units in classrooms (20 units)	\$ 21,000.00
Item # 12 Metal Siding	
1. Re-attach all metal siding: replace as needed	\$ 1,500.00
Item #13 Exterior Asphalt and Concrete	
a. South Parking lot:	\$ 44,470.00
b. Front Entry and Parking:	\$ 10,500.00
c. North Lot and Shops:	\$ 115,255.00
d. South east concrete and drainage system:	\$ 11,632.00
Total cost all 4 groups:	\$ 181,857.00
Total for all items as presented:	\$ 498,984.00

Effingham Elementary Costs

Item #1 Exterior Brick North and West sides	
1. Clean , tuck point and water proof brick in this area	\$ 1,500.00
Item #2 Clean, tuck point and water proof brick remainder of building	\$ 12,300.00
Item #3 Seal boiler room add drainage	\$ 13,140.00
Item #4 Replace Boiler Room Exterior Door	\$ 750.00
Item #5 Replace Front Entry Walk and Ramp	\$ 4,500.00
Item #6 Restrooms Replace floor urinals update other fixtures:	\$ 5,600.00
Item #7 Replacement of South playground asphalt area	\$ 10,925.00
Item #8 Replacement of concrete parking on alley	\$ 2,560.00
Item #9 Budget to update electrical for Technology	\$ 14,500.00
Budget to update lighting	\$ 12,500.00
Item # 10 Budget to replace worn floor tile and carpet	\$ 15,000.00
Total for all projects as outlined:	\$ 93,275.00

Costs For Lancaster Elementary

Item #1 Front Entry Door Replacement	\$ 2,500.00
Item #2 Ceiling tiles	\$ 12,235.00
Item #3 Floor Repairs Title I Area	\$ 750.00
Item #4 Attic Ventilation and Window Trim	\$ 1,340.00
Item #5 Front Asphalt Repairs	\$ 3,650.00

Item #6 South Playground Asphalt	\$ 4,276.00
Item #7 Replace/repair Ft. ramp	\$ 1,200.00
Item #8 Replace Ft. Concrete by window well	\$ 800.00
Item #9 Add sidewalks to rear exiting	\$ 1,500.00
Item #10 Add protective screens to Basement	\$ 2,740.00
Item #11 Water problems basement	\$ 2,000.00
Item #12 Electrical Upgrades to classrooms	\$ 14,500.00
Upgrade lighting in building	\$ 12,500.00
Item # 13 Floor tile replacement	\$ 12,000.00
Total for all as outlined: \$ 71,991.00	

JU-4 Cummings Elementary School Costs

Item #1 Replace front entry to ADA requirements	\$ 4,750.00
Item #2 Remodel Restrooms	\$ 5,200.00
Item #3 Cafeteria/ Gym	
a. Repair crack in wall repaint	\$ 200.00
b. New exterior flashing on upper gymnasium roof	\$ 2,200.00
c. Install new door seal consider milling new concrete	\$ 450.00
Item #4 North Corridor door New Door seal mill concrete	\$ 450.00
Item #5 Replace ceiling tiles	\$ 8,000.00
Item #6 Budget to replace worn floor tile	\$ 7,500.00
Item #7 Window replacement for 28 units	\$ 22,400.00
Item #8 Budget for electrical upgrades to classrooms	\$ 14,400.00
Budget for lighting upgrades to building	\$ 10,500.00
Item #9 North playground and west side walk asphalt repairs	\$ 9,000.00
Total for all as outlined: \$76,050.00	