

11/12/2019

Pana Community Unit School District 8
PO Box 377
14 E Main St
Pana, IL 62557

Re: Bleacher Inspection for Pana CUSD #8
BLDD Project No.: 196EX38.200

On Tuesday, November 1, 2019, BLDD Architects conducted an inspection of the Pana Junior High School and Pana High School indoor and outdoor bleachers, twenty-five (25) total sets. The following information is based on the conditions at the time of inspection and is subject to change. This Bleacher inspection includes the inspection of all indoor and outdoor bleachers, the operation of the indoor telescoping bleachers (from storage to fully extended), checking the conditions of the substructure (angle iron, fasteners and attachments, rollers and operators, the condition of the seat boards, footboards, supports, connections, handrails, and steps. The results of the inspection are as follows:

Pana Junior High School – Indoor Gymnasium Bleachers

1. East Side: The bleachers consist of five (5) sections, nine (9) rows high. Bleachers are electrically operated telescoping bleachers. The structure is steel with plastic seats and wood foot boards. (Picture 1)
 - a. It is recommended that all moving parts be cleaned and lubricated.
 - b. Install missing bolt in structural bracket. Location is near first joint from south on underside. (Picture 1b)
 - c. Fasten wood nailer tight to back wall surface. Various loose anchors were found and some had pulled out of the CMU. (Picture 1c)
 - d. It is recommended that blocking be added at the steel column location along the back wall in addition to anchoring the suspended bracket leg to the blocking. (Picture 1d)
 - e. During observation of opening and closing major racking of bleacher and rows buckling was witnessed. There is damage to the structure from repeated attempts to close in the past. There were at least three issues noted that may be the cause which only compounded issues; drive wheels were dirty, slipping, and unevenly worn, row lock levers were not operating properly, and bent steel/damage from previous attempts to close. The structural members were tilted from vertical position and only the release of locks allowed the bleachers to return to a normal position. The owner notes that pushing the ADA retractable section into the bleachers while closing prevented the buckling. It is recommended that the wheels be inspected for wear and replace as needed and bent parts be replaced. The previous inspection report indicated that the row lock levers are not free moving. It is unclear if this also contributed to issues. (Picture 1e1, 1e2, 1e3, 1e4, 1e5, 1e6, 1e7)
 - f. Install missing bolts in front skirt. (Picture 1f)

2. West Side: The bleachers consist of five (5) sections, nine (9) rows high. Bleachers are electrically operated telescoping bleachers. The structure is steel with plastic seats and wood foot boards. (Picture 2)
 - a. It is recommended that all moving parts be cleaned and lubricated.
 - b. Fasten wood nailer tight to back wall surface. Various loose anchors were found and some had pulled out of the CMU. (Picture 2b)
 - c. It is recommended that blocking be added at the steel column location along the back wall in addition to anchoring the suspended bracket leg to the blocking. (Picture 2c)
 - d. During observation of opening and closing racking of bleachers was witnessed. Drive wheels should be cleaned and inspected for wear. Due to the similar construction at the east side bleachers, it is recommended that if remediation to fix the issues noted above on the east side is successful that those steps should also be taken on this set to prevent similar failure. (Picture 2d)
 - e. Install missing bolts in front skirt.

Pana Junior High School – Outdoor Baseball Field Bleachers

3. Baseball Bleachers A (far north): The bleachers consist of one (1) section, five (5) rows high. Bleachers are permanently mounted to wood sleepers on gravel pad. The structure is steel with wood seats and wood foot boards. (Picture 3)
 - a. The addition of intermediate supports/stiffeners to the wood seats and foot boards are recommended. (Picture 3b)
 - b. Although boards are new some edges are rough and sanding of them is recommended.
 - c. Repair/straighten bent X-brace. (Picture 3c1, 3c2)
4. Baseball Bleachers B: The bleachers consist of one (1) section, five (5) rows high. Bleachers are permanently mounted to wood sleepers on gravel pad. The structure is steel with wood seats and wood foot boards. (Picture 4 5)
 - a. The addition of intermediate supports/stiffeners to the wood seats and foot boards are recommended.
 - b. Replace cracked or damaged seats or foot boards. (Picture 4b)
5. Baseball Bleachers C: The bleachers consist of one (1) section, five (5) rows high. Bleachers are permanently mounted to wood sleepers on gravel pad. The structure is steel with wood seats and wood foot boards. (Picture 4 5)
 - a. The addition of intermediate supports/stiffeners to the wood seats and foot boards are recommended.
 - b. Replace cracked or damaged seats or foot boards. (Picture 5b)
 - c. Repair/straighten bent seat support (Picture 5c)

6. Baseball Bleachers D (far west): The bleachers consist of one (1) section, five (5) rows high. Bleachers are permanently mounted to wood sleepers on gravel pad. The structure is steel with wood seats and wood foot boards. (Picture 6)
 - a. The addition of intermediate supports/stiffeners to the wood seats and foot boards are recommended.
 - b. Replace cracked or damaged seats or foot boards.
 - c. Install additional rock base or shift rock to support wood blocking. (Picture 6c)

Pana High School – Indoor Gymnasium Bleachers

7. North Side: The bleachers consist of five (5) sections, eighteen (18) rows high. Bleachers are electrically operated telescoping bleachers. The structure is steel with plastic seats and wood foot boards. (Picture 7)
 - a. It is recommended that all moving parts be cleaned and lubricated.
 - b. Replace two missing endcaps on seats. (Picture 7b1, 7b2)
 - c. Attach two loose/open end caps on seats. (Picture 7c1, 7c2)
 - d. Tighten loose handrails
8. South Side: The bleachers consist of five (5) sections, seventeen (17) rows high. Bleachers are electrically operated telescoping bleachers. The structure is steel with plastic seats and wood foot boards. (Picture 8)
 - a. It is recommended that all moving parts be cleaned and lubricated.
 - b. The gap between the bleacher and the wall (left side) exceeds the 4" allowed gap. It is not consistent and narrows from row 1 to row 12, which may be the result of the bleacher not tracking straight as it is extended out. The bleachers need to be adjusted for consistent operation to maintain no more than a 4" gap between the end of the bleacher and the wall at all times that the bleachers are in use. Racking of the bleachers was noted upon operation of the bleachers.
 - c. Tighten loose handrails
 - d. Install missing handrails (Picture 8d)
 - e. Properly attached end cap on seat. (Picture 8e)

Pana High School – Indoor Practice Gymnasium Bleachers

9. North Side: The bleachers consist one (1) section, four-rows high. Bleachers are portable with wheels for ease of transport. The structure is aluminum with aluminum seats and aluminum foot boards. (Picture 9)
 - a. No issues were found.

Pana High School – Outdoor Football Bleachers

10. Football Bleachers East Home Side: The bleachers consist of six (6) sections, seven (7) rows high. Bleachers are elevated with access from stairs on both ends in addition to a ramp on the north end. Bleachers are permanently mounted on concrete pad. The structure is aluminum with aluminum seats and aluminum foot boards. A guardrail with chain link fence mesh surrounds the perimeter on three sides and a guard rail is in front of the elevated platform. (Picture 10)
 - a. Install missing bolt on handrail joint. (Picture 10a)
 - b. Install missing plate of back of footboard (orange section) (Picture 10b)
11. Football Bleachers North End Zone A (far west): The bleachers consist of two (2) sections, five (5) rows high. Bleachers are permanently mounted on concrete pad. The structure is aluminum with aluminum seats and aluminum foot boards. A guardrail with chain link fence mesh surrounds the perimeter on three sides of the upper three rows. (Picture 11)
 - a. No issues were found.
12. Football Bleachers North End Zone B: The bleachers consist of one (1) section, five (5) rows high. Bleachers are permanently mounted to wood sleepers on gravel pad. The structure is steel with wood seats and wood foot boards. (Picture 12)
 - a. The addition of intermediate supports/stiffeners to the wood seats and foot boards are recommended.
 - b. Replace cracked or damaged seats or foot boards. (Picture 12b)
 - c. Install missing bolt in first walking board at the center. (Picture 12c)
13. Football Bleachers North End Zone C: The bleachers consist one (1) section, four-rows high. Bleachers are portable with wheels for ease of transport. The structure is aluminum with aluminum seats and aluminum foot boards. It was noted that these bleachers are commonly located in the High School practice gym (Picture 13)
 - a. Install missing wheel for transport (Picture 13a)
14. Football Bleachers North End Zone D (far east): The bleachers consist of two (2) sections, five (5) rows high. Bleachers are permanently mounted on concrete pad. The structure is aluminum with aluminum seats and aluminum foot boards. A guardrail with chain link fence mesh surrounds the perimeter on three sides of the upper three rows. (Picture 14)
 - a. Install missing bolt in seat right section, left side, third row. (Picture 14a)
 - b. Screw in loose screw at same location above (Picture 14b)

15. Football Bleachers West Visitor Side A (far south): The bleachers consist of one (1) section, five (5) rows high. Bleachers are permanently mounted to wood sleepers on gravel pad. The structure is steel with wood seats and wood foot boards. (Picture 15)
 - a. The addition of intermediate supports/stiffeners to the wood seats and foot boards are recommended.
 - b. Replace cracked or damaged seats or foot boards. (Picture 15b)
 - c. Repair/straighten bent X-brace. (Picture 15c)
16. Football Bleachers West Visitor Side B: The bleachers consist of one (1) section, five (5) rows high. Bleachers are permanently mounted to wood sleepers on gravel pad. The structure is steel with wood seats and wood foot boards. (Picture 16)
 - a. The addition of intermediate supports/stiffeners to the wood seats and foot boards are recommended.
 - b. Replace cracked or damaged seats or foot boards.
 - c. Repair/straighten bent X-brace (Picture 16c)
17. Football Bleachers West Visitor Side C: The bleachers consist of one (1) section, five (5) rows high. Bleachers are permanently mounted to wood sleepers on gravel pad. The structure is steel with wood seats and wood foot boards. (Picture 17)
 - a. The addition of intermediate supports/stiffeners to the wood seats and foot boards are recommended.
 - b. Replace cracked or damaged seats or foot boards. Third seat is split between top and bottom. (Picture 17b)
 - c. Repair/straighten bent steel along second seat row. (Picture 17c1, 17c2, 17c3)
 - d. Repair/straighten bent X-brace (Picture 17d)
 - e. Repair/straighten center steel support at back row. (Picture 17e1, 17e2)
18. Football Bleachers West Visitor Side D (far north): The bleachers consist of one (1) section, ten (10) rows high. Bleachers are elevated with access from stairs on both ends. Bleachers are permanently mounted on concrete pad. The structure is aluminum with aluminum seats and aluminum foot boards. A guardrail surrounds the perimeter. (Picture 18)
 - a. Replace rusted screws on the south side adjacent to the trash can and stair. Some of these screws have worked their way out and are sharp. (Picture 18a1, 18a2, 18a3)
 - b. Repair/straighten center support.

19. Football Bleachers South End Zone A (far east): The bleachers consist one (1) section, four-rows high. Bleachers are portable with wheels for ease of transport. The structure is aluminum with aluminum seats and aluminum foot boards. It was noted that these bleachers are commonly located in the High School practice gym (Picture 19)
 - a. Seat front row appropriately. Seat is of the intended support. (Picture 19a1, 19a2)
20. Football Bleachers South End Zone B: The bleachers consist of one (1) section, five (5) rows high. Bleachers are permanently mounted to wood sleepers on gravel pad. The structure is aluminum with aluminum seats and aluminum foot boards. (Picture 20 21)
 - a. No issues were found.
21. Football Bleachers South End Zone C: The bleachers consist of one (1) section, five (5) rows high. Bleachers are permanently mounted to wood sleepers on gravel pad. The structure is aluminum with aluminum seats and aluminum foot boards. (Picture 20 21)
 - a. No issues were found.
22. Football Bleachers South End Zone D: The bleachers consist of one (1) section, five (5) rows high. Bleachers are permanently mounted to wood sleepers on gravel pad. The structure is steel with wood seats and wood foot boards. (Picture 22 23)
 - a. The addition of intermediate supports/stiffeners to the wood seats and foot boards are recommended.
 - b. Replace cracked or damaged seats or foot boards.
23. Football Bleachers South End Zone E: The bleachers consist of one (1) section, five (5) rows high. Bleachers are permanently mounted to wood sleepers on gravel pad. The structure is steel with wood seats and wood foot boards. (Picture 22 23)
 - a. The addition of intermediate supports/stiffeners to the wood seats and foot boards are recommended.
 - b. Replace cracked or damaged seats or foot boards.
 - c. Repair/straighten bent X-brace. (Picture 23c)
 - d. Repair/straighten steel support. (Picture 23d)
24. Football Bleachers South End Zone F: The bleachers consist one (1) section, four-rows high. Bleachers are portable with wheels for ease of transport. The structure is aluminum with aluminum seats and aluminum foot boards. It was noted that these bleachers are commonly located in the High School practice gym (Picture 24 25)
 - a. Repair/replace top row bent end cap. (Picture 24a)

25. Football Bleachers South End Zone G (far west): The bleachers consist one (1) section, four-rows high. Bleachers are portable with wheels for ease of transport. The structure is aluminum with aluminum seats and aluminum foot boards. It was noted that these bleachers are commonly located in the High School practice gym (Picture 24 25)

a. No issues were found.

If you have any questions concerning this report, please let me know.

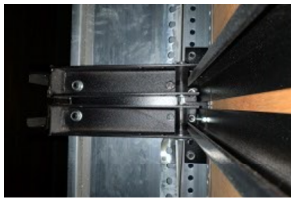
Sincerely,

A handwritten signature in black ink, appearing to read 'Kimberly A Kurtenbach', written in a cursive style.

Kimberly A Kurtenbach, AIA, LEED AP, REFP



1



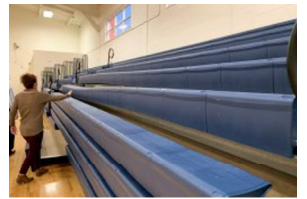
1b



1c



1d



1e1



1e2



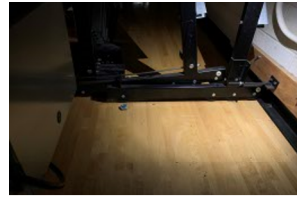
1e3



1e4



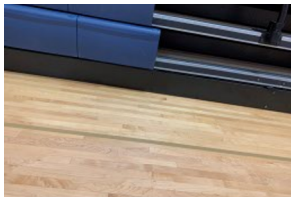
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1e6



1e7



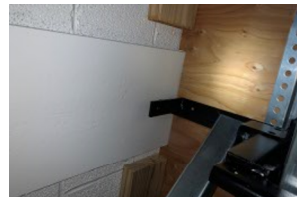
1f



2



2b



2c



2d



3



3b



3c1



3c2



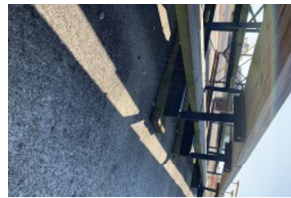
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4b



5b



5c



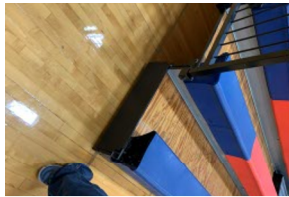
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6c



7



7b1



7b2



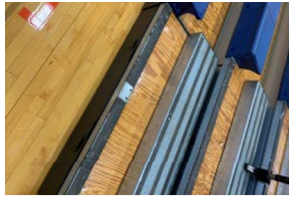
7c1



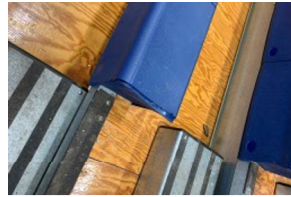
7c2



8



8d



8e



9



10



10a



10b



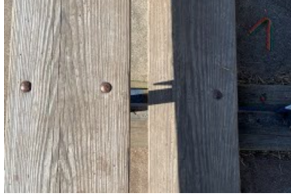
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12



12b



12c



13



13a



14



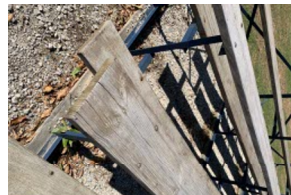
14a



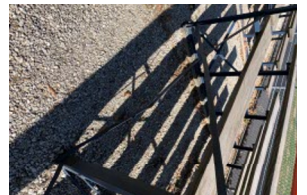
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15



15b



15c



16



16c



17



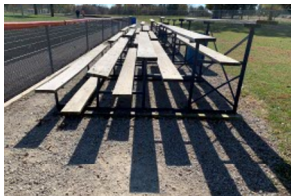
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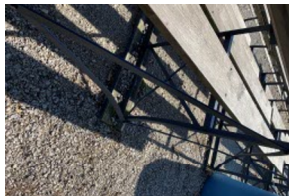
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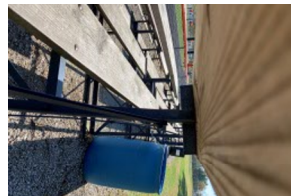
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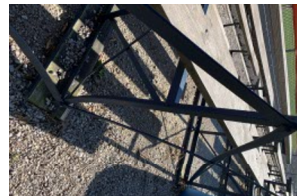
17c3



17d



17e1



17e2



18



18a1



18a2



18a3



19



19a1



19a2



20 21



22 23



23c



23d



24 25



24a