

Structural Narrative – Ramona

Life Safety Items. Refer to Schemmer Structural Assessment dated 11-10-2023 and Field Observation Report dated 11-2-2023.

1. Life Safety Recommendation #1: Per recommendations made in the Schemmer report, additional structural steel framing is required on the inside face of the multi-wythe wall in Room 205 where the exterior fire escape is anchored to the wall and wall deformation is present. The steel framing will likely include constructing vertical steel channels at each jamb of the windows in Room 205. These channels would extend from the 2nd floor up into the roof truss system where they would need to be horizontally braced back into the existing truss system. Additionally, horizontal channels would be required where the fire escape currently anchors to the existing wall. The steel channel system would be designed to resist the lateral and vertical loads from the fire escape as well as lateral wind loads to reinforce the existing wall system. See photos 16-19.
 - a. Cost Range: \$7,500 – 10,000
2. Life Safety Recommendation #2: The recommendation provided in the Schemmer report is a procedural recommendation to avoid potential future roof collapse. It would seem that the only reasonable long-term solution would be to completely replace the existing roof structure of the main building. There would be an option to reinforce or “sister” framing to the existing roof structure from above and install new membrane roofing OR install new pitched trusses to span the existing roof and install metal roofing.
 - a. Cost Range: \$440,000 - \$500,000
3. Life Safety Recommendation #3: Per recommendations made in the Schemmer report, masonry tuckpointing is required at the interior corridor bearing wall on the 2nd floor within the truss space to restrain the trusses from lateral movement. It should be noted, that if recommendation #2 is followed and the roof would be replaced in it’s entirety, this recommendation would need to be revised. It’s likely that tuckpointing of the wall would still be required but may not need to be performed while the roof trusses were still in place.
 - a. Cost Range: \$7,500 - \$10,000
4. Life Safety Recommendation #4: Per recommendations made in the Schemmer report, interior masonry tuckpointing is required in it’s entirety on the east, south and west walls. Special attention would need to be made to the vertical masonry piers as they are acting as lateral resisting columns for the walls. Thus, any damaged masonry observed within these piers would also need to be replaced. See photos 1-6
 - a. Cost Range: \$80,000 - \$100,000

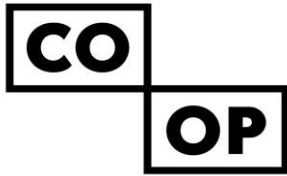
5. Life Safety Recommendation #5: Per recommendations made in the Schemmer report, additional light-gage floor tension straps are required at 24" o.c. at all exterior walls along the 2nd floor. The straps are required according to the Schemmer report in order to confirm an acceptable wall connection through the 2nd floor between the wall above and below. See photos 41-44.
 - a. Cost Range: \$20,000 – 40,000*
 - Extent of ceiling finish and repair desired is unknown.
6. Life Safety Recommendation #6: Per recommendations made in the Schemmer report, the LVL beam in Room 103 will need be replaced or reinforced. Based on the size of the penetrations, it's likely that the LVL beam will need to be replaced from existing column to column where the two pipe penetrations are located. See photo 59.
 - a. Cost Range: \$1,500 - \$3,000
7. Life Safety Recommendation #7: The recommendation provided in the Schemmer report is a procedural recommendation in order to monitor and document stress cracking present above door and window openings. It would seem that the only reasonable long-term solution would be to remove wall finishes where stress cracking is present to expose the structural wall framing and repair the structural elements that are causing the cracking to take place. See photos 62-63.
 - a. Cost Range: \$25,000 – 30,000

Structural Narrative – Rutland

Life Safety Items. Refer to Schemmer Structural Assessment dated 11-10-2023 and Field Observation Report dated 11-2-2023.

1. Life Safety Recommendation #1: Per recommendations made in the Schemmer report, a vertical channel system would be required to brace the basement wall that has cracked in Room B03. The vertical channel system would likely consist of structural channels at 6' or 8' centers spanning from basement level up to 1st floor and an additional horizontal channel framed between vertical channels at mid-height of the wall to provide additional lateral reinforcement to the cracked basement wall. See photo 1.
 - a. Cost Range: \$3,500 – 5,000
2. Life Safety Recommendation #2: Per recommendations made in the Schemmer report, a header is required to be installed above the door between Room B01 and B02 since the floor structure is bearing on the wall. Due to head height issues, it's likely the header would need to be upset into the floor joist cavity and modifications would need to be made to the bearing end of the floor joists. Additional trimmer and king studs would need to be installed at the jambs of the opening to support the header. See photo 3.
 - a. Cost Range: \$1,500 - \$3,000
3. Life Safety Recommendation #3: Due to the cracking observed at the jamb of the concrete opening in Room D01 that leads to the storage room, Schemmer recommends supplemental steel framing to solidify the bearing condition in that location. We would recommend a steel bearing post be installed at the jamb to support the cracked end of the concrete header. See photo 5.
 - a. Cost Range: \$500 - \$750
4. Life Safety Recommendation #4: Per recommendations made in the Schemmer report, the east exterior stair structure coming off Room D01 is structurally unsafe and should be demolished and replaced if the stair is still required. It appeared that the stair was no longer in service. See photo 7-9.
 - a. Leave in Place - Cost Range: No Cost
 - b. Demo and Infill - Cost Range: \$10,000 - \$15,000
5. Life Safety Recommendation #5: Per recommendations made in the Schemmer report, the west wall of the south stair needs to be tuckpointed to restore the wall to it's full capacity. The wall is comprised of a combination of clay tile and brick. Depending on the integrity of the clay tile, that portion of the wall may need to be replaced with brick if it can't be properly tuckpointed. See photo 12.
 - a. Cost Range: \$3,000 - \$5,000

6. Life Safety Recommendation #6: Per recommendations in the Schemmer report, a concrete patching material should be used to repair the spalling concrete observed at the north stair. See photo 16.
 - a. Cost Range: \$500 - \$750
7. Life Safety Recommendation #7: The Schemmer report suggested that the additional wood boards nailed to thru the ceiling in Room 302 might be additional bracing for the roof structures. After further investigation, it appeared to us that the ceiling boards were installed to reduce cracking in the plaster ceiling. It did not appear there was a structural purpose for these additional ceiling boards.
 - a. Cost Range: No cost

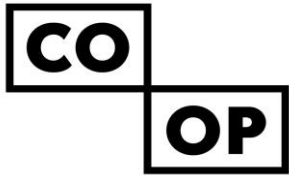


PRELIMINARY STATEMENT OF PROBABLE COST

Oldham-Ramona-Rutland School District
February 5, 2024

		Low	High
<u>Ramona Structural Assessment</u>			
General Conditions		30,000	45,000
Item #1		7,500	10,000
Item #2		440,000	500,000
Item #3		7,500	10,000
Item #4		80,000	100,000
Item #5		20,000	40,000
Item #6		1,500	3,000
Item #7		25,000	30,000
Item #8		16,000	20,000
Item #9		750	1,000
Item #10		2,500	5,000
Item #11		300	500
Item #12		100	200
Item #13		100	200
Item #14 - Re-roof existing \$180K - \$200K		0	0
Item #15		15,000	25,000
SUBTOTAL CONSTRUCTION		646,250	789,900
Overhead & Profit	10%	64,625	78,990
Excise Tax	2.041%	13,190	16,122
Construction Reserve	5%	32,313	39,495
Design Fee		60,000	75,000
TOTAL PROJECT		816,377	999,507

Oldham-Ramona-Rutland School District
Ramona Rutland, South Dakota



Rutland Structural Assessment

General Conditions		10,000	15,000
Item #1		3,500	5,000
Item #2		1,500	3,000
Item #3		500	750
Item #4		10,000	15,000
Item #5		3,000	5,000
Item #6		500	750
Item #7		0	0
Item #8		1,500	2,000
Item #9		750	1,000
Item #10		500	750
Item #11		500	750
SUBTOTAL CONSTRUCTION		32,250	49,000
Overhead & Profit	15%	4,838	7,350
Excise Tax	2.041%	658	1,000
Construction Reserve	5%	1,613	2,450
Design Fee (Add to Ramona Fee)		3,000	5,000
TOTAL PROJECT		42,358	64,800