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Town of McClellanville

Att: Mrs. Michelle McClellan, Town Administrator

In re: McClellanville Fire Tower
Structural Inspection

Gentlemen,

Confirming our conversations at the time of our inspection of
The McClellanville Fire Tower.

The purpose of my inspection was to offer an opinion on the
safety of the tower.

The McClellanville Fire Tower was reportedly built in 1940 by
the U.S. Fish & Wildlife Service (possibly with the Civil
Conservation Corps). It is described as a 100' tall Aermotor
Tower with a 7' x 7' cab. The Aermotor Company was a fabricator
of fire towers in the early 20th century.

The inspection included observations from the ground including
the use of binoculars, excavation at the base of one of the
tower legs, and climbing to the first landing. My opinion is
that it was unsafe for me to proceed further.

The base has two fences surrounding the tower to prevent
unauthorized access.

Foundation and Anchorage

The tower appears to be founded on a concrete base.

I dug out around one corner of the structure. And found two
(exterior) 1" anchor bolts in satisfactory condition.

No attempt was made to uncover the concrete.

Tower Framing

The tower framing appears to be primarily <4x4x¼ galvanized angle framing. The galvanized finish is beginning to wear off.

All of the readily visible bolted steel connections appear to be in satisfactory condition.

Stairs and Landings

The stair treads are wood. I am unsure of the specie. The observed boards appear to be select in that they did not contain knots. The observed treads and landing boards are in modest condition considering their age.

Boards are missing from the landings.

Portions of the handrails are missing at the landings.

Please note that my opinion is that the stair configuration - riser height, open risers, tread depth, handrail design, etc., although it may have met standards in 1940 is unsafe by today's standards.

Cab

I did not climb to the cab.

The steel exhibits rust. Several of the windows are broken.

Observing from the ground (binoculars), it appears that the roof panels may be coming loose.

Other

Recall that we discussed alternatives to observing conditions at the cab.

These alternatives were to hire a crane and basket or, possibly, use the Fire Department Ladder Truck to allow closer observation of conditions at the cab.

If you have a drone enthusiast available, have them use their drone to video conditions at the cab for our review.

Conclusions

Although it is my conclusion that the tower is presently structurally stable, it is not safe for access or use.

I do not think the structure is in danger of collapse, however it is a safety hazard for the Town.

Safety hazards include relatively easy accessibility, steep open riser stairs, missing flooring at landings, excessive openings in the handrails at stairs and landings, and no provision for safety harnesses, etc.

Effort(s) should be made to inspect the cab.

This inspection and report are done with the best of our experience and ability. However, we cannot be responsible for items that we may have overlooked, concealed conditions, or defects that may develop later.

We believe this report reflects the condition of the property at the time of the inspection, based on visual evidence.

The inspection and this report do not constitute a guarantee of any portion of the property and no warranty is implied.

Should you have any questions, please call.

Very truly yours,

Russell A. Rosen, P. E.

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