

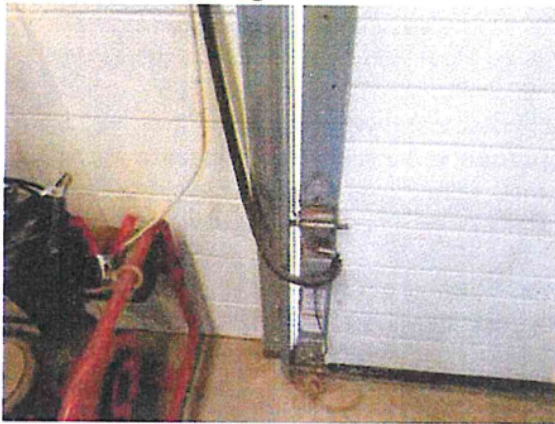
Figure P.3b



Figure P.3c



Figure P.4



Q. Health and Safety Issues

1. There is no fire suppression system or fire alarm system.
2. The overhead doors do not meet the provisions of UL325 because they do not have a photoeye within 6" of the floor.
3. There is insufficient space to fit fire apparatus comfortably within the building. The apparatus is parked very close to the side walls, very close to the rear walls, and very close to each other. This proximity increases the risk that a firefighter will be injured by moving apparatus, whether it is backing into the station or whether it is responding while firefighters are getting onto the rig.
4. Turnout gear is located directly adjacent to apparatus, increasing the risk that firefighters donning their gear could be injured by moving apparatus.
5. There is insufficient glass in the apparatus doors to be able to see what is directly outside the doors before opening them.
6. All vehicles must be backed into the station, which increases the risk that a firefighter could be injured by backing apparatus.
7. There is no safe path between firefighter parking and the entry door that does not pass directly alongside or in front of responding apparatus.

8. There is only one floor drain in the apparatus bays. This creates slip and fall hazards after returning from calls on a rainy day.
9. The Office is raised one step above the apparatus bay level, creating a trip hazard.
10. There is no exhaust extraction system in the apparatus bays, so the only way to clean the air of fireground toxins and diesel exhaust fumes is to open the apparatus doors and use fans.
11. The main electrical equipment is located directly adjacent to the apparatus where it could get wet while apparatus are washed.
12. There is no dedicated space for turnout gear lockers that can segregate them from the remainder of the building. This is a violation of NFPA 1937 and forces the firefighters to wear gear that has been exposed to diesel exhaust.
13. The nearest turnout gear washing facilities are in Slayton, reducing the likelihood that the gear will be washed as frequently as it should be.
14. The turnout lockers do not promote passive airflow in and around the gear, requiring a fan to push air through vents in the bottom of each locker.
15. There are no functional showers in the facility. To reduce the risk of cancer, firefighters exposed to fireground toxins are expected to shower within one hour of returning from a call to remove the hazardous chemicals from their skin (skin absorption of carcinogens increases 400% for each 5 degree elevation in skin temperature). If showers are not provided at the station, the firefighters are delayed in showering because they are cleaning equipment and restocking the apparatus. In addition, firefighters sit in their personal vehicles and enter their private homes, exposing everyone in their family to carcinogenic compounds until every surface they touch or sit on has been decontaminated.
16. There are no decontamination facilities for the cleaning of small tools and personal protective equipment after a call. This is a violation of NFPA 1581.
17. There are no laundry facilities for cleaning personal clothing after returning from a call.
18. There are no lockers for members to store extra clothes to wear after returning from a call.
19. There is no sink for handwashing before entering the clean areas.
20. There is poor separation between the "clean" areas of the station and the areas that are expected to have fireground toxins and diesel particulates suspended in the air. Each of these issues exposes everyone who enters the station to carcinogenic chemicals.
 1. There is no dedicated cleaning equipment for the apparatus bays. This results in the same mops being used to clean the public areas as well as fireground toxins and diesel particulates from the apparatus bay floor.
 2. There is a Pepsi machine and a refrigerator in the apparatus bay where the contents can be easily contaminated.
 3. The Boiler Room is open to the apparatus bays, creating significant cross contamination issues between clean and dirty spaces.
 4. There is insufficient space for storage of hoses, spare SCBA units, extra turnout gear, hoses, paper products, emergency cots, etc. These items are then stored in the apparatus bay where they are exposed to fireground toxins and diesel particulates.
21. There is no space for strength and cardiovascular training in the fire station. Heart attacks are a leading cause of death among firefighters due to the physical stress associated with the job. A properly equipped physical training room is a key part of compliance with NFPA 1583. This can be provided off-site.

Figure Q.2



Figure Q.3a



Figure Q.3b



Figure Q.3c



Figure Q.3d



Figure Q.3e



Figure Q.3f



Figure Q.3g



Figure Q.4a



Figure Q.4b



Figure Q.5



Figure Q.6



Figure Q.7



Figure Q.8



Figure Q.9



Figure Q.11



Figure Q.12



Figure Q.14



Figure Q.20.2



Figure Q.20.3



Figure Q.20.4a



Figure Q.20.4b



Figure Q.20.4c



R. Functionality Issues

1. There is no dedicated educational and meeting space for the fire department. The meeting space in the City Hall is frequently in use during Department meeting nights. This may lead to problems complying with training requirements of NFPA 1720.
2. There is no dedicated parking for responding firefighters, causing them to have to run from a half a block away if an event is happening at the library or the City Hall.
3. There are no bollards protecting the building from backing apparatus.
4. Due to limited hose bib locations, washing apparatus is difficult to do.
5. The apparatus doors are 10' wide and 10' tall, which is smaller than the 14' x 14' door recommended for modern fire apparatus. This puts a severe restraint on the apparatus that can be purchased for the department.
6. The apparatus doors are not designed for heavy use with 100,000 cycle springs and 3" tracks, leading to more frequent failures.
7. The apparatus door controls are only located at the corner of the apparatus bay. There are no controls adjacent to the individual apparatus doors and there are no remote controls inside the cabs of the vehicles.
8. There are not apparatus doors on both sides of the station but apparatus are double stacked in the bays. This means that if the vehicle in front breaks down the apparatus behind it cannot respond either.
9. There is no space for a maintenance shop for maintaining the small equipment on the trucks. This may lead to problems complying with NFPA 1737, which regulates the testing and maintenance of that equipment.
10. There is no quiet place to rest for firefighters who may stay in the station on-call in preparation for an expected emergency event like a large snowfall or ice storm.
11. There is insufficient head-height and space to store the water auger in the existing building.
12. There is insufficient space for a trailer carrying a UTV in the existing building. This is necessary because the larger vehicles cannot navigate the ditches, swales, and sloughs now preferred by DNR.
13. There is no space for hose cleaning and hose drying in the current space except squeezed between rigs where it must be moved out of the way in an emergency.
14. There is no backup generator for the building, which may cause the radio equipment in the trucks to drain the batteries in the event of power failure.
15. There is no space for physical training (SCBA maze, confined space, laddering, drafting, hose stretching, etc.) at the station or in the nearby vicinity. This limits the amount of hands-on training that the firefighters can participate in.
16. There is insufficient space for a true Rescue vehicle with sufficient capacity to store a full complement of equipment. For example, the department currently does not have shoring struts for a vehicle rollover accident.

Figure R.1



Figure R.2



Figure R.3



Figure R.4



Figure R.5a



Figure R.5b



Figure R.5c



Figure R.5d



Figure R.6

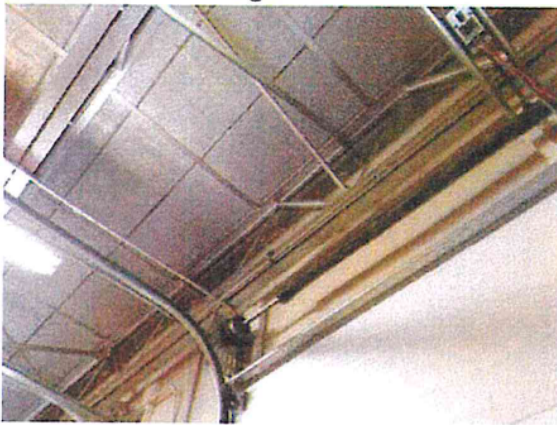


Figure R.7



Figure R.8



Figure R.13



Figure R.14

