## City of Encinitas, California Facility Condition Assessment – 2014



Section Three - Systems Description

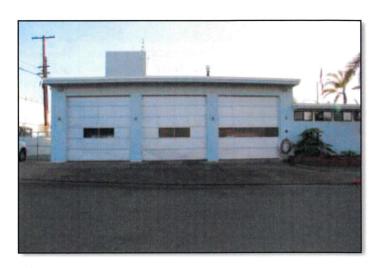
**Building Information** 

Building Name: Fire Station 1

Gross Square Footage: 3,360

**Construction Date: 1957** 

**Construction/Renovation History:** 



System	System Description	Deficiencies	Condition Code
SITE	A concrete perimeter is present at the fire station along with masonry brick planters and vegetation.	The site work is in poor to fair condition. There is significant cracking at concrete pavements in areas such as the driveway and walks, which displays loss of structural support beneath the concrete. Concrete and pavements show aging and deterioration. Planting beds as well are in poor to fair condition.	2.5
STRUC	The structure is a slab on grade with concrete block construction.	The overall structural condition of the fire station is poor-fair. The structure exhibits signs of aging and fatigue. The hose tower is in poor condition with rusting of structural elements, corrosion, wood deterioration, stair material decay and defects that compromise the integrity and useful life of the hose tower. Some settling is noted at the south east end of the building. No plans are available to determine whether this may potentially impact the sewage line.	2.5





## City of Encinitas, California Facility Condition Assessment – 2014



System	System Description	Deficiencies	Condition Code
EXT	The exterior of the Fire Station consists of plastered painted stucco finishes and louvered, wood-framed windows.	There is noticeable surface finish deterioration on the exterior surfaces due to age of materials and finishes. Exterior wood trim displays cavitations. Extremely outdated window louvers with rotting wooden frames allow for heavy air and moisture leakage.	3.0
ROOF	Flat structure built up bituminous composite with stone aggregate.	Caulking joints on the roof flashings are deteriorated and separating. The built up roof with gravel aggregate and hot mop displays minor defects and flashing repairs but is in fair overall condition given its age. The roof should be budgeted for replacement in 7-10 years.	3.0
HVAC	The HVAC system includes three (3) exhaust fans and a split system with gas furnace.	The condensing section of the split system exhibits heavy degradation at the coil. Exhaust Fan GEF-6 is a vehicle exhaust and requires sealing at the duct and a metal shroud. GEF-4 and 5 appear to be out of service and abandoned.	3.0
ELEC	Small branch circuit panel boards appear original to building. T-8 and T-12 fluorescent wall lighting is present throughout the facility, along with CFL accent lights.	No significant defects were noted at the time of the inspection other than aging.	3.0







System	System Description	Deficiencies	Condition Code
PLUMB	The plumbing lines and system represent original construction with under-floor lines providing no easy access. Fixtures are typical restroom toilets, sinks and faucets, showers, as well as kitchen sinks and faucets.	The plumbing system is generally functional but poses heavy impact fees and resource consumption due to the outdated under-floor system that should be retrofitted to overhead plumbing for efficiency, convenience, and quality.	2.5
CONV	No conveyance systems are present within the facility.	Not applicable.	N/A
INTF	Flooring consists of VCT, concrete, carpeting, and ceramic tiles. Walls are plastered and painted gypsum partitions along with façade. Wood veneer and laminate cabinetry is also present throughout the living quarters.	The interior finishes were in poor to fair condition with outdated paneling, damaged finishes, deteriorated wood, and soiled carpets and floor surfaces.	2.5
BUSE	Kitchen equipment comprises various commercial appliances, such as a commercial grade range, coffee maker and refrigerator.	The kitchen equipment was in fair-good condition with no significant deficiencies noted at the time of the inspection.	3.5









**Photo 1 – Fire Station #1** The fire station exhibits a flat structure built up roof with gravel aggregate.



**Photo 2 – Fire Station #1** Caulk repairs are needed at the termination flashing on the roof.



**Photo 3 – Fire Station #1** Wood louvers present at the roof are deteriorating and need to be repainted.



**Photo 4 – Fire Station #1** The hose tower roof requires a new roof hatch and curb.







**Photo 5 – Fire Station #1** A corner area of the roof needs the coping joints sealed, trash removed, and all penetrations sealed as a maintenance activity.



**Photo 6 – Fire Station #1** An exhaust fan (GEF-1) is corroded, in poor condition, and may have been abandoned. Abandoned fans should be removed and their penetrations capped.



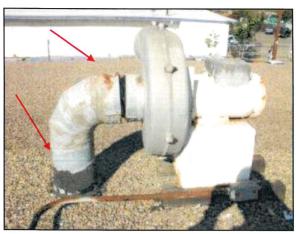
**Photo 7 – Fire Station #1** A newly-installed exhaust fan (GEF-2) is present at the roof and is in good overall condition.



Photo 8 – Fire Station #1 Another exhaust fan (GEF-4) appears to be abandoned. Abandoned exhaust fans should be removed and permanently capped. Note GEF-5 in the background is also apparently abandoned in place.







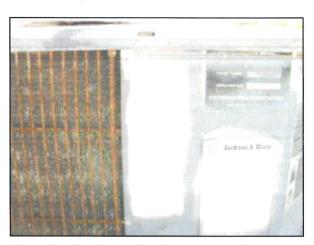
**Photo 9 – Fire Station #1** The outside component of the vehicle exhaust system (GEF-6) is heavily corroded. The ducting requires sealant, and the flex joint requires a sheet metal shroud.



**Photo 10 – Fire Station #1** A belt-driven, centrifugal type exhaust fan (GEF-3) requires sealant at the ducting.



**Photo 11 – Fire Station #1** The condenser portion of the split-system HVAC system located on the roof exhibits a rusted platform cap. The insulation for the refrigeration lines needs replacement.



**Photo 12 – Fire Station #1** The condenser coils of the split system condenser unit are heavily corroded.







*Photo 13 – Fire Station #1* The inside gas furnace component of the split-system HVAC system requires cleaning and the base of the unit needs caulking.



Photo 14 – Fire Station #1 The gas-fired water heater is located in the closet in the rest room.



**Photo 15 – Fire Station #1** The John Deere engine portion of the emergency generator system is equipped with a 120-gallon diesel fuel tank. It is in fair overall condition.



**Photo 16 – Fire Station #1** The Kohler portion of the emergency generator system is also in fair condition.



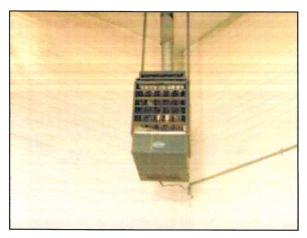




**Photo 17 – Fire Station #1** Acoustical tiles located near the generator exhibit signs of degradation.



**Photo 18 – Fire Station #1** Acoustical tiles located near the generator show signs of degradation.



**Photo 19 – Fire Station #1** A gas-powered space heater mounted on the wall of the garage is reported to be out of service, although it appears operational.



*Photo 20 – Fire Station #1* The Ingersoll-Rand air compressor is in fair overall condition.







Photo 21 – Fire Station #1 The commercial-grade gas range and oven unit requires a thorough cleaning. The ceramic tile underneath requires repair in order to address sanitation.



*Photo 22 – Fire Station #1* The commercial-style range hood exhibits poor original construction and poor appearance.



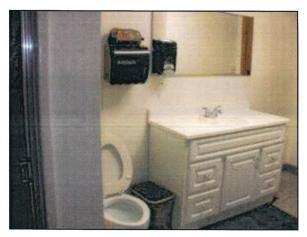
*Photo 23 – Fire Station #1* The kitchen has a domestic refrigerator, double sink, and garbage disposal.



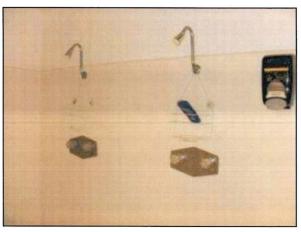
Photo 24 – Fire Station #1 The kitchen has a commercialstyle coffee maker. The remainder of the appliances are domestic in type.







*Photo 25 – Fire Station #1* A general view of the captain's restroom and general conditions.



*Photo 26 – Fire Station #1* A general view of the shower station in the locker room and general conditions.



*Photo 27 – Fire Station #1* A general view of the commodes in the locker room and general conditions.



**Photo 28 – Fire Station #1** The concrete at the garage is severely cracked and deteriorated. Loss of underlying support is also evident.







**Photo 29 – Fire Station #1** The concrete at the garage is severely cracked and deteriorated. Loss of underlying support is also evident as a result of possible washout or settling.



Photo 30 - Fire Station #1 Garage doors display evidence of impact damage.



*Photo 31 – Fire Station #1* Garage doors display evidence of impact damage.



*Photo 32 – Fire Station #1* Garage doors display evidence of impact damage.







*Photo 33 – Fire Station #1* Garage doors exhibit peeling and chipping of frame paint..



*Photo 34 – Fire Station #1* The exterior door to the hose tower is significantly rusted.



**Photo 35 – Fire Station #1** Exterior wood trim exhibits cavitations, heavy rot and peeling of paint, and possible termite damage.



**Photo 36 – Fire Station #1** Stairs in the hose tower have deteriorated and have been patched over time. Other sections require repairs.







**Photo 37 – Fire Station #1** Steel structural members of the stairways show significant rust.



**Photo 38 – Fire Station #1** Paint at the stairway shows severe peeling and flaking. Stair brackets are corroded.



*Photo 39 – Fire Station #1* The door from the hose tower interior to the exterior is heavily rusted.



**Photo 40 – Fire Station #1** The laundry room floor is completely deteriorated with missing sections and staining. The washer and dryer are not fitted with seismic straps.







Photo 41 - Fire Station #1 A general view of the gym area.



**Photo 42 – Fire Station #1** The rolled rubber gym floor is not properly adhered to the base and lacks trim guards to prevent lifting and air pockets.



*Photo 43 – Fire Station #1* Significant deterioration of window crank handles and frames is present.



Photo 44 - Fire Station #1 Faulty light ballasts were noted.







*Photo 45 – Fire Station #1* Flooring around the kitchen range is missing and debris has accumulated.



Photo 46 - Fire Station #1 Kitchen countertops are deteriorated.



*Photo 47 – Fire Station #1* Heavy debris has accumulated beside the refrigerator. The debris may attract pests.



*Photo 48 – Fire Station #1* Floor to ceiling windows exhibit deterioration of frames and water damage.







**Photo 49 – Fire Station #1** Windows show deteriorated frames. The outdated louver windows allow air and moisture intrusion.



**Photo 50 – Fire Station #1** Windows show deteriorated frames. The outdated louver windows allow air and moisture intrusion.



**Photo 51 – Fire Station #1** Rooftop vent wood is buckled and rotted. The loose wiring should be run through conduit.



*Photo 52 – Fire Station #1* Damage to the walls is present due to lack of door stoppers.







*Photo 53 – Fire Station #1* Carpet generally lacks proper adhesion.



Photo 54 - Fire Station #1 A view of an electrical box within a wall.



**Photo 55 – Fire Station #1** The wood vented door to the restroom is stained and deteriorated. The floor is mismatched as a result of previous repairs of underground plumbing.



**Photo 56 – Fire Station #1** Carpet in the living area hallway is worn and stained.







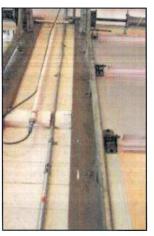
*Photo* 57 – *Fire Station #1* Sections of wall patched with tape are present in the facility.



*Photo 58 – Fire Station #1* The wall is damaged as a result of impacts from door handles.



**Photo 59 – Fire Station #1** Cracking of the block walls is present in some locations.



**Photo 60 – Fire Station #1** Overhead door frames are deteriorated and have split as a result of age.







**Photo 61 – Fire Station #1** Concrete sidewalk exhibits deterioration through scaling and spalling.



*Photo 62 – Fire Station #1* Planters show some deterioration and loose bricks.



**Photo 63 – Fire Station #1** Windows are significantly deteriorated with corrosion and peeling paint.

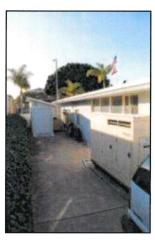


Photo 64 - Fire Station #1 An overall image of the backyard area.





Section Three - Systems Description

**Building Information** 

Building Name: Fire Station 4

**Gross Square Footage:** *3,500* 

**Construction Date: 1979** 

**Construction/Renovation History:** 



System	System Description	Deficiencies	Condition Code
SITE	The site includes concrete paved surfaces and drainage system elements. Limited landscaping is present at the front of the building.	No significant deficiencies were noted at the time of the inspection. Some minor concrete cracking is evident.	3.0
STRUC	The structure of the facility consists of a wood framed constructed on a slab on grade. The rear addition to the building is steel framed. A framed shed constructed on a concrete slab foundation is also present at the rear corner of the property. The users indicate that the floor is set on wood floor joists.	No significant deficiencies were noted at the time of the inspection.	3.5
EXT	The exterior of the fire house is sheathed in T-111 plywood siding that has been painted. The rear addition is sheathed with metal panels. The shed at the rear corner of the property is also sheathed in T-111 siding. Exterior doors are steel and aluminum, and windows are sliding aluminum units.	The T-111 siding on the fire house displays significant degradation primarily where the siding is in contact with the concrete slab. The rear metal covering appended to the fire house is improperly sealed, allowing water to infiltrate and to rust the base of the structure. Debris has accumulated at the rear of the storage shed, possibly resulting in rot to the siding.	2.5
ROOF	The roofs at this facility consist of three types. The main building is a flat built-up asphalt roof with aggregate ballast. The perimeter is a composite pitched ceramic tile roof. The metal addition to the fire house, and the storage building at the rear of the property both have corrugated metal roofs.	The composite tile roof is new but is in need of some minor, routine repairs. Cement joints are cracked and separated. Some of the roof tiles are broken, displaced, and detached. Falling tiles present a significant safety risk to pedestrians. The metal roof on the rear addition is improperly flashed to the main structure. Replacement of the flat asphalt roof should be budgeted for in 7-10 years.	3.5







System	System Description	Deficiencies	Condition Code
HVAC	The HVAC system comprises a single 3.5-ton forced air split system with a gas-fired furnace. The exterior unit dates to 2001, whereas the interior furnace dates to ca. 1989. The garage exhaust fumes are ventilated by means of a roof-top Plymovent exhaust fan, similar to that employed at Fire Station #5. The unit appears to have been installed in 2001.	Despite its age, the system is in fair overall condition with no significant deficiencies noted at the time of the inspection. It should remain functional for up to 6 additional years.	3.0
ELEC	The electric supply is standard residential style panel. The facility is equipped with a Kohler generator located at the rear of the property. Facility lighting comprises a variety of types, including exterior spot lights, interior fluorescent fixtures, canister lights, and other incandescent, residential-style fixtures. Exit signs are also present.	Damaged exterior switches and outlets are present at the rear.	3.0
PLUMB	The facility is served by domestic water and sewer lines. A 65-gallon gas-fired water heater is located in the laundry room. Standard restroom and kitchen fixtures are present. The facility is served by a sprinkler system.	No significant deficiencies were noted at the time of the inspection.	3.0
CONV	No conveyance systems are present within the facility.	Not applicable.	N/A
INTF	Interior finishes are painted gypsum board. Carpet and ceramic tiles are present. The weight room has been fit with a rubberized floor covering. Interior doors are hollow core wood units that have been painted. Kitchen counters are formica laminate.	Finishes are old and are not aesthetically pleasing. Chipped cabinets and other minor finish failures are present. Interior hardware elements also require some minor routine maintenance. No ADA restroom is present at the facility.	3.0
BUSE	The kitchen is equipped with a commercial grade cooking range and a refrigerator and residential dishwasher. An icemaker is present in the garage. A fuel farm is located at the rear of the property.	The BUSE elements are in fair overall condition with no significant deficiencies noted at the time of the inspection.	3.0









**Photo 1 – Fire Station #4** The 3.5-ton condensing section is located at the rear of the facility and is paired with the furnace located in the bedroom closet.



Photo 2 – Fire Station #4 The furnace located in the bedroom closet is paired with the external condensing section at the rear of the facility. The furnace appears to be aged but functional.



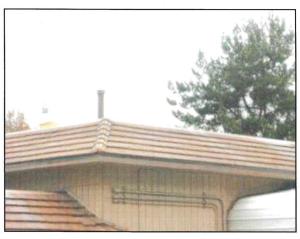
*Photo 3 – Fire Station #4* A 65-gallon gas-fired water heater is present in the laundry room. No significant deficiencies were noted at the time of the inspection.



**Photo 4 – Fire Station #4** The garage is ventilated by means of a vehicle exhaust system that is mounted on the roof. The system is similar to that present in Fire Station #5.



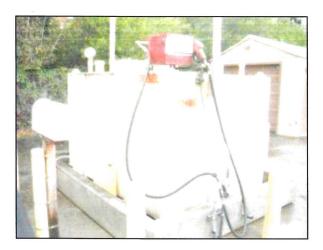




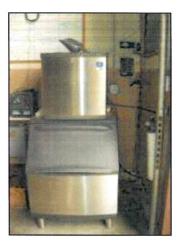
**Photo 5 – Fire Station #4** The garage is ventilated by means of a vehicle exhaust system that is mounted on the roof. The system is similar to that present in Fire Station #5.



*Photo 6 – Fire Station #4* The Koehler generator is located at the rear of the facility's site.



**Photo 7 – Fire Station #4** A 1000-gallon fuel farm and dispensing system is present at the rear of the Station's site. The tank is above-ground and curbed.



**Photo 8 – Fire Station #4** An icemaker is present in the garage. The unit required cleaning at the time of the inspection.







**Photo 9– Fire Station #4** A commercial kitchen range is located in the kitchen area. The unit was in good condition at the time of the inspection.



**Photo 10 – Fire Station #4** The garage door is aged and exhibits repairs. Replacement of the door is recommended.



*Photo 11 – Fire Station #4* The garage door is powered by an electronic Liftmaster opener.



**Photo 12 – Fire Station #4** The garage door is powered by an electronic Liftmaster opener. The unit appeared to function properly at the time of the inspection.







*Photo 13– Fire Station #4* A general view of the front entrance of the fire station.



Photo 14 - Fire Station #4 A general view of the front of the fire station.



**Photo 15 – Fire Station #4** A general view of the rear of the fire station building.



**Photo 16 – Fire Station #4** A general view of the rear of the building showing the later addition.



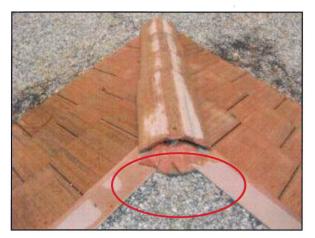




**Photo 17– Fire Station #4** The pitched roof is a clay composition tile with metal flashing, skylights, and a portion of the flat roof with gravel overlay.



**Photo 18 – Fire Station #4** Standing water was noted on the flat portion of the roof at the time of the inspection.



**Photo 19 – Fire Station #4** Separation of the roof tiles from the cement based sealant was noted at various points.



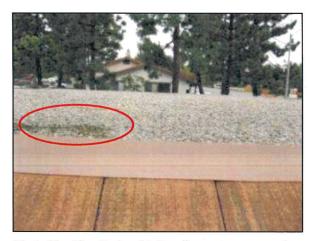
**Photo 20 – Fire Station #4** Standing water was noted on the flat portion of the roof at the time of the inspection.







**Photo 21– Fire Station #4** The condition of the roof flashing is poor and the collection of tree litter will accelerate deterioration.



**Photo 22 – Fire Station #4** Standing water was noted on the flat portion of the roof at the time of the inspection.



*Photo 23 – Fire Station #4* Breaching of the tile roof was noted.



*Photo 24 – Fire Station #4* Dislodged clay tiles were noted.



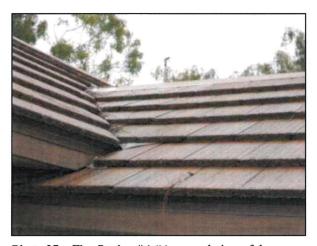




*Photo 25– Fire Station #4* Unsecured roof tiles create points of entry for water as well as safety hazards below.



**Photo 26– Fire Station #4** A general view of the rear of the fire station showing the aluminum window frames with insulated glass.



*Photo 27 – Fire Station #4* "A general view of the new clay composition tile roof valley.



**Photo 28 – Fire Station #4** The absence of a gutter system and separated fascia board was noted at the rear of the fire station.







*Photo 29– Fire Station #4* Peeling paint and loose hanging wires were noted at the rear of the fire station.



**Photo 30 – Fire Station #4** The section of roof near the front entry exhibits poor flashing.



*Photo 31 – Fire Station #4* The section of roof near the front entry exhibits poor flashing.



**Photo 32 – Fire Station #4** Sections of roof with loose clay tiles were noted. These may present a hazard to those below.







*Photo 33– Fire Station #4* The fire station structure is sheathed in 5/8" T-111 plywood siding.



*Photo 34 – Fire Station #4* The concrete sidewalk slab abuts the building sheathing.



*Photo 35 – Fire Station #4* Degraded T-111 siding is present near the base where it meets the concrete sidewalk slab.



*Photo 36 – Fire Station #4* Degraded T-111 siding is present near the base where it meets the concrete sidewalk slab.







*Photo 37– Fire Station #4* A general view of the steel metal addition attached to the rear of the building.



**Photo 38 – Fire Station #4** The steel addition is not properly sealed and flashed to the main building.



**Photo 39 – Fire Station #4** A general view of the inside of the main building where the steel addition adjoins with it, showing the significant gap between the two structures.



**Photo 40 – Fire Station #4** A general view of the exterior where the steel addition attaches to the main building showing the improper flashing.







*Photo 41– Fire Station #4* The steel addition is not properly sealed to the concrete pad.



**Photo 42 – Fire Station #4** The vent of the steel addition is poorly constructed and the wood frame needs painting.



**Photo 43 – Fire Station #4** The gasket to an exterior switch is missing.



**Photo 44 – Fire Station #4** The cover to an exterior outlet is missing and is not GFCI protected.







**Photo 45– Fire Station #4** Corrosion is present on the inside of the steel addition where it meets the slab as a result of poor sealing and lack of regular painting.



*Photo 46 – Fire Station #4* Cracked concrete is present in front of the right-side garage entrance. Cracks should be sealed to prevent additional damage.



*Photo 47 – Fire Station #4* A structural post located at the front porch is rotted at the base.



*Photo 48 – Fire Station #4* The storage shed located at the rear of yard is sheathed in T-111 masonite and has a steel roof, steel entry door, and an aluminum roll-up door.







**Photo 49– Fire Station #4** The back side of the storage shed is beginning to rot due to the presence of wet debris.



**Photo 50 – Fire Station #4** Leaks are present inside of the storage shed at the entry door and at the wall where it meets the concrete slab.



**Photo 51 – Fire Station #4** No electrical sub panels are present in the storage shed. The electrical feed is from the main building. Note the fluorescent tube storage in the rafters.



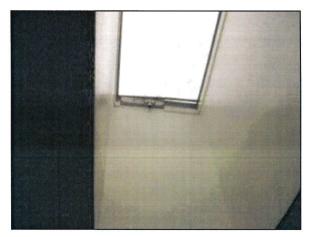
Photo 52 – Fire Station #4 Major leaks are present on the inside rear of the shed.







*Photo 53– Fire Station #4* A trailer and storage shed are present at the rear corner of the fire station lot.



**Photo 54 – Fire Station #4** A skylight in the main restroom shows a dislocated screen.



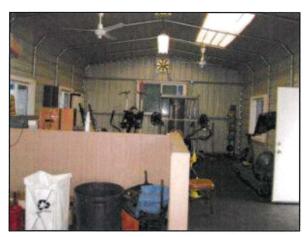
*Photo 55 – Fire Station #4* A general view of the garage with the vehicle exhaust drops.



*Photo 56 - Fire Station #4* A general view of the equipment room.



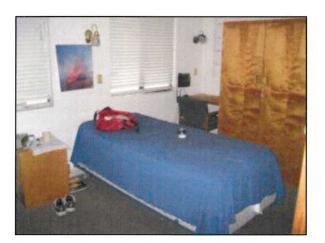




**Photo 57– Fire Station #4** The steel metal building addition, which currently serves as the exercise room. The building has a rubber, impact-absorbing flooring laid directly onto the concrete slab.



*Photo 58 – Fire Station #4* The entrance from the garage to the office area exhibits ceramic tile flooring.



*Photo 59 – Fire Station #4* A general view of a typical bedroom.



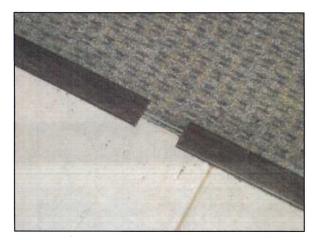
**Photo 60 – Fire Station #4** The windows in the bedrooms are fitted with drywall window sills. The drywall is drag stucco and paint.







*Photo 61– Fire Station #4* A general view of the lounge area with a damaged carpet transition strip.



*Photo 62 – Fire Station #4* The carpeting in the lounge area exhibits a damaged transition strip posing a potential trip hazard.



*Photo 63 – Fire Station #4* A general view of the kitchen showing the wood cabinets and Formica countertops.



**Photo 64 – Fire Station #4** Damage to the Formica countertops is present in the kitchen.



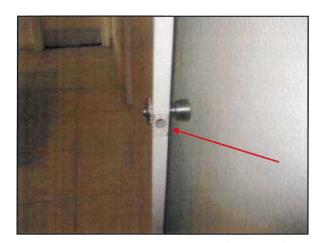




*Photo 65– Fire Station #4* Damage to the Formica countertops in the kitchen is present.



**Photo 66 – Fire Station #4** The kitchen sink is equipped with a garbage disposal and reverse osmosis water filtration system.



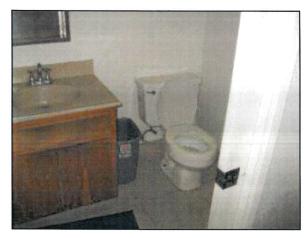
**Photo 67 – Fire Station #4** The latch and knob on the door to the game room is missing.



Photo 68 - Fire Station #4 A general view of the game room







*Photo 69– Fire Station #4* A general view of the restroom off the game room.



*Photo* 70 – *Fire Station #4* A general view of the main restroom and commode.



Photo 71- Fire Station #4 The urinal in the main restroom.



*Photo 72 - Fire Station #4* A general view of the main restroom.







*Photo 73– Fire Station #4* The shower in the main restroom.



*Photo 74 – Fire Station #4* The sink and wood storage cabinet in the main restroom.



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