FACILITY CONDITION ASSESSMENT

WILDWOOD TOWNHOMES

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Prepared by

SGM

118 West Sixth Street, Suite 200
Glenwood Springs, CO 81601
970.945.1004
970.945.5948 fax

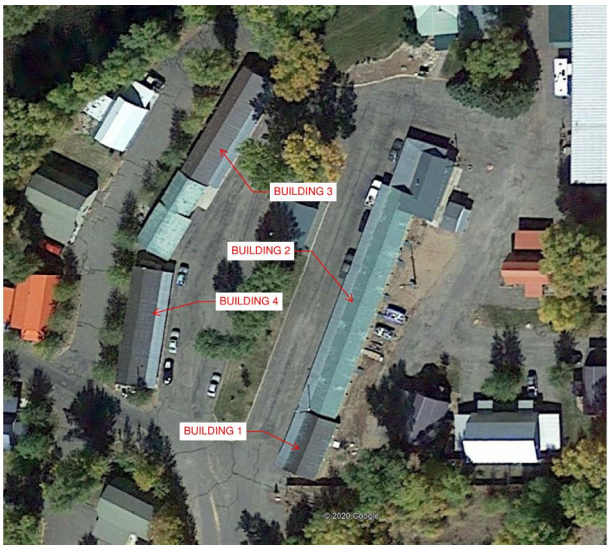
SGM Project #2020-295

TABLE OF CONTENTS

1.0 Executive Summary

This report details the findings from condition assessment site visits to Wildwood Townhomes completed by SGM at the request of the Wildwood Homeowners Association. The condition assessment was limited to observations from the exterior and crawlspaces of each of the four buildings SGM was tasked with assessing. The buildings were assessed in four main areas: the site surrounding the buildings, the building structures, the mechanical and plumbing systems, and the electrical systems.

The goal of this condition assessment was to provide the HOA with a broad overview of the condition of each building in the four main areas so that informed decisions can be made as to the next steps, if any, for rehabilitation of them. This report will refer to each of the four buildings as buildings one, two, three and four per the below diagram:



2.0 Site Assessment

2.1 Exterior Concrete

Exterior concrete that was part of the scope of work for this project consisted of walkways in front of each of the four buildings. While there is cracking in the concrete ranging from moderate to extensive in different areas it is in reasonably good condition considering its age. To reduce the amount of future cracking and spalling and to minimize the potential for further damage from freeze-thaw cycles the concrete could be treated with an epoxy covering, or at minimum crack sealed. There is nothing to suggest any major issues with settlement in the concrete, although there are several areas with some settlement, particularly in front of unit 18.

2.2 Grading and Drainage

The areas directly surrounding the buildings is relatively flat and does not slope away from the buildings. The asphalt at the front of the buildings has some grade away from the

buildings but could be improved the next time the asphalt is replaced by implementing a new engineered drainage plan as part of the asphalt improvements. Buildings three and four have permeable soils and grass behind them so, while not ideal, water can infiltrate to below the foundations in these areas instead of pooling. Buildings one and two primarily have compacted parking areas behind them that does not appear to allow for very much stormwater infiltration. This can be problematic for the siding as discussed in section 3.3 of this report and can also lead to water finding its way into the crawlspaces or damaging the concrete foundations by pooling and then freezing and thawing. Improving site drainage in these areas would be beneficial.

3.0 Building Structure Assessment

3.1 Foundation

Each building appears to have a concrete spread footing with stem wall foundation. Concrete is in good condition without any signs of major settlement or cracking where observable. Building one (unit 18) is one exception to this evaluation; the crawlspace is inaccessible and therefore the foundation can not be accurately assessed. There are signs of settlement in the exterior concrete in front of this biulding and the roof exhibits some undulation in roof lines, as noted in section 3.3 of this report. To do a full evaluation of that foundation and its overall condition the interior of the building would need to be inspected and/or the foundation would need to be exposed from either the outside or the crawlspace.

Everywhere else (buildings 2, 3, and 4) the majority of the foundation was observable from the crawlspace and exhibited minor cracking, which is to be expected for foundations of this age. In general, they are in good condition. In building 4 the actual concrete has been insulated with spray foam and was therefore unable to be observed directly, but there are no indications of issue with it on the outside of the building or on the spray foam. Ideally, as discussed in the Mechanical and Plumbing Systems Assesment section, all of the concrete foundation walls should be insulated similarly to those in building 4 to prevent the freezing of water and sewer lines in the crawlspaces.

Because the foundations are old and the concrete is still in good to fair shape there is no immediate action that needs to be taken in regards to them. It is actually advantageous to leave them alone because due to their age any consolidation of the soils below them, which is what normally causes differential settlement in foundations, has likely already occurred so the foundations should be stable at this point in time.

Foundation wall - Cracked but in reasonably good condition

The only exception to the aforementioned statement may be unit 18, depending on what further investigation determines. The foundation may have settled prior to the most recent

interior renovation of the unit, in which case it would make sense to leave the foundations as is. If the foundation has settled after the most recent interior renovation of the unit then that will be apparent from inside the unit due to items like cracking of the drywall, doors not closing properly, and several other easily observable clues. If that is the case then there may be work required on the foundation to re-level and/or stabilize it.

It is recommended that the items discussed in this section continue to be monitored every five years to ensure that no new problems arrise.

3.2 Framing

The primary framing members that were able to be evaluated as part of the scope of work of this project were the floor joists and subfloor sheeting. The majority of the floor joists are rough sawn lumber approximately the size of 2x8s with a few exception where it has been replaced by typical (milled) 2x8s. The subfloor is typically rough sawn planking.

Typical floor framing

Both the floor joists and the subfloor are in good condition despite their age. There were very few signs of rotting or water damage. There were also very few signs of distress in them from loading on the floors above. Many of the floor systems also have mid-span knee walls that vary from newer post and beam systems to old concrete walls. These walls are in fair to good condition and still have useful life remaining. There were several areas that appeared to have previously been wet that are currently dry. It is likely the source of that water has been identified and fixed so there is no current issue. However, when crawlspaces are monitored in the future any spot that is currently wet should be immediately noted and the source of the water identified and fixed.

One area of the framing that needs to be addressed is the fire walls between units in buildings 2, 3, and 4. Fire walls between units are a code requirement and many of the walls in the crawlspaces have been knocked down over time, presumably to create easier access for repairs between units. In other areas there are pipes penetrating or running inside the fire walls. The attics spaces were unaccessible at the time of inspection, but fire walls should also extend into the attic space for the full height between the ceiling and the roof.

Sewer pipe running through fire wall.

3.3 Exterior Finishes

Louvers and vents: Attic vents appear to be present on Buildings one, two, thre and four. Mechanical intake or exhaust louvers did not appear to be present, as noted in the mechanical section and this supports our opion that there is no mechanical ventilation. Building two attic vents are intentionally blocked. The reasons for this are unknown. Assuming a typical construction in which the thermal envelope is above the ceiling (as opposed to the roof level) and the attic cavity is outside the thermal envelope, an unvented attic could lead to moisture problems and possibly ice damning. The next time a unit is being remodeled, or when available, the attic spaces should be assessed.

Attic vent blocked off on Building 2.

The crawlspaces have several items of concern. Insulation was not present below the floor but appears to have been added to the foundation perimeter in some areas, and some of the access covers were vented. Collectively, this implies that the crawlspace is indirectly heated from the space above. A vapor barrier is present in some of the crawlspaces, but in many cases is “hidge podged” together and is therefore ineffective due to its poor installation. The absence of perimeter insulation combined with indirect heat source results in freezing pipes, which is the current condition of many of the units. A proper crawlspace would have continuous insulation along the perimeter of the foundation, a robust and continuous vapor barrier, and a small amount of code required ventilation to prevent moisture build up. Other options exist but the presence of distribution piping and lack of floor insulation imply the above is the appropriate corrective approach and consistent with currently adopted codes.

Another area of concern is the unsanitary state of some of the crawlspaces implies that maintenance is probably not occuring or would be difficult/dangerous to maintenance staff when it does occur. Accesses were typically in very poor condition and filled with trash.

Trash blocking crawlspace access.

Damaged/uneven insulation.

Roofs are standing metal seam for all buidlings, and all (except one building outside the scope of this report) lacked a gutter system. The roof of building one was in poor condition with significantly sag and peeling paint. Because the crawlspace of building one is inaccecible, we can't currently say whether that sag is due to foundation issues or an issue in the attic. As noted below, the lack of gutters or a longer rof eave is likely causing damage to other areas of the building envelope and accumulation of moisture in unwanted areas.

There also appears to be an old shingle roof beneath the current metal roofing. The metal roofing was installed directly on top of the shingles. It is possible that the old shingle roof contains asbestos due to the age of the buildings. This should be tested if/when the building roof is replaced.

Sagging roof and peeling paint on Building 1.

Stucco siding on the back of buildings one and two extend down to, and in some cases below, grade level. Cracking has occurred at the interface between the concrete foundation and building framing. This is likely exacerbated by the roof draining directly down the side of the buidling and moisture migrating up from the surface of the ground that it is in contact with. Additional cracking was observed below the tenant window sill, likely due to insufficient draining and sealing downd the side of the building. Overall the stucco is in poor condition.


Cracked stucco at crawlspace and window sill or foundation

3.4 Windows and Doors

Window and door inspection was limited to observation from the exterior of the units, so the interior and functionality of them was unable to be assessed. In general the windows appear to be in fair condition, but the weather proofing and energy efficiency appears to be questionable. The greatest issue with the windows is moisture getting into the siding surrounding the windows. This issue can be improved by either improving the roofs with a new eave and drip edge that will better direct water running off of it away from the building or installing a gutter system, however a downside of gutter systems is snow damage. It is also recommended that the siding around a window be removed so that any damage the penetrating water is doing can be assessed, so there is more information to determine whether all the windows need to be properly sealed and flashed. This will provide a better idea of what is happening at the windows as well as the condition of the wall framing.

4.0 Mechanical and Plumbing Systems Assessment

4.1 System Overview

The mechanical and plumbing systems assessment was limited to what was observable in the crawlspace and exterior, as well as items indicated by HOA board members. No dwelling units were accessible to the interior by the assessment team.

Electrical resistance heating were indicated to be the sole source of heating for the spaces. This is supported by the asbence of other key system components such as flue terminations, condensing untis, or central hydronic systems. Crawlspaces appeared to lack conditioning of any kind.

Mechanical ventilation was not present in the crawlspace, nor was any form of central ventilation observed. Further, while the dwelling units were not accessed, signs of mechanical exhaust that would normally be required for toilet rooms were not apparent.

Domestic water distribution piping consisted of hard drawn copper tubing with sweat joints, and threaded galvanized tubing. Insulation ranged from exposed, to elastomeric, to a thin fiberglass tape wrap. Domestic water heating is presumed to be electric due to lack gas utility presence.

Drain/waste/vent (DWV) piping appears to have been cast iron at some point as abandoned branch piping was observed. Functioning DWV pipe appears to be concealed so the material was unable to be determined. A few roof vents present suggest PVC construction but could not be observed up close to confirm.

Roof drains were not present except for building two, where an exterior gutter system was present. All other buildings roofs appeared to drain directly from the roof edge to the space below.

4.2 Equipment Age and Life Expectancy

Under typical conditions, typical life expectancy for electric resistance heating appliances is around 15 years. Assuming the most of the mechanical and domestic water heating systems were installed during the condominiumization (ca. 2003) of the site, it would be reasonable to assume the original systems are approaching their end of useful life. The domestic water distribution piping lifespan can be expected to exceed the equipment, though occasional upkeep should be expected.

4.3 Code / Safety Concerns

The City of Gunnison has currently adopted the 2015 International Code Council series of model codes (with local provisions), of which the International Building Code (IBC) with subsequent residential occupancy classication (likely R-2) would be the pertinent governing code for this site. Generally speaking, the code does not require legally existing structures designed to previously adopted codes to maintain compliance with the current iteration, unless some sort of new work or modification is performed. However, this is not to say that the current systems are “up to code.”

Safety concerns are as follows:

- The lack of gutter system or longer roof eave on most buildings suggests the snow and corresponding melt/freeze likely results in ice forming on ground surfaces surrounding the building. This may include ingress/egress areas, thereby creating a slip hazzard.
- Distribution piping below crawlspaces in not labled, making troubleshooting and repair difficult.
- Crawlspaces are not conditioned, resulting in potential pipe freezing issues.
- Crawlspaces are not ventilated, creating potential for humidity and mold.
- There did not appear to be a radon mitigation system. Though radon is not know to be present at this location, the ground level bedrooms would be susceptible it its effects if it were present.
- It appears that domestic hot water piping insulation is poorly installed.
- Dwelling unit ventilaton appears to be largely absent. While natural ventilation methods may be present via operable windows, it is unlikely adequate

ventilation can be achieved during cool weather, and indoor air quality (IAQ) will be poor.

General disarry of utilities in crawlspace. Note the incomplete piping insulation, lack of labeling, and exposed piping end at branch secured only by valve closure.

5.0 Electrical Systems Assessment

5.1 System Overview

Electrical distribution for the original buildings consists of several utility services, all 120/240V single phase, with a total of 20 meters. For the purposes of this report, we will refer to them as follows:

“Service A” is a meter center located on the back of unit #3, with ten meters serving units 1-8, 18, and 19. It is supplied by a dedicated pad mounted utility transformer in a parking area immediately behind it (the “east transformer”).

“Service B” is a single meter located on a pole in the parking area behind unit #3. It appears to serve an outbuilding behind unit #19, some light poles, and possibly other buildings outside the scope of this report. It shares the east transformer with Service A.

“Service C” is a single meter located on the back of the shop building, serving the shop building. It is fed by a pad mounted transformer in a cobble landscape area immediately behind it (the “west transformer”).

“Service D” is a meter center located on the back of unit #11, with four meters serving units 9-12. It shares the west transformer with Service C.

“Service E” is a meter center located on the back of unit #14, with four meters serving units 14-17. It shares the west transformer with Services C and D.

The gazebo between the two rows of buildings appears to be fed by an overhead line originating from the pole where Service B is mounted. It is unclear how this is wired or metered.

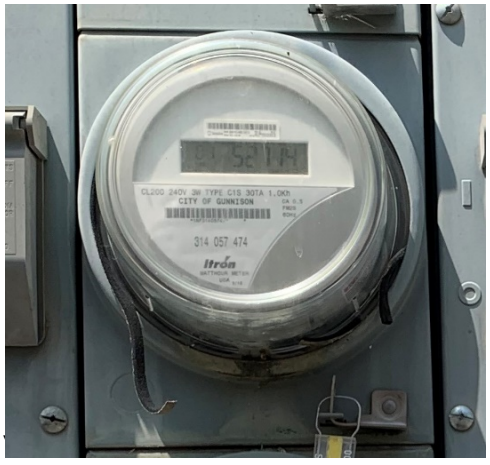
The meter centers contain 100 amp breakers for residential units. Each unit has a single branch panelboard mounted on its rear exterior wall. Interior electrical systems are not within the scope of this report and were not inspected.

5.2 Equipment Age and Life Expectancy

The lifespan of electrical equipment varies depending on the type of equipment and the conditions of use. Under typical conditions, circuit breakers can be expected to function properly for about 15-20 years, and transformers for about 20-30 years.

The manufacture dates of the residential branch panels at Wildwood are in the 2002-2003 range based on date codes written in the panel doors. The circuit breakers in the meter centers did not have any visible date labels, but they appear to be older. The outdoor locations of all these breakers shortens the expected lifespan (due to dust and heat). Therefore, the meter center breakers are probably past replacement age and the residential branch breakers are close to replacement age. While age alone does not constitute an immediate safety hazard, aged circuit breakers may fail to operate when needed and potentially result in fires or injury. We recommend replacing both sets of breakers as soon as practical, prioritizing the meter center breakers. The meter sockets themselves also show signs of age-related deterioration.

The service transformers also had no visible date labels but based on type and condition they are likely to be at or near replacement age. Refer to “transformer condition” in the next section for more discussion.



Aging Meter with Deteriorating gasket

5.3 Code / Safety Concerns

5.3.1 Service Grounding

By code, each electrical service should have a “grounding electrode” (typically a rod driven into the earth), and an electrical bond between the electrode, the grounding conductor and the neutral conductor. This feature is an important part of system safety – the electrode must be present, and the ground and neutral wires must be bonded in only one place per service.

At Wildwood, we observed several old, disconnected grounding electrodes; some near the current service equipment and some distant from it. This is evidence of past reconfigurations that may or may not have maintained proper grounding. We could not find visible grounding electrode connections at any of the active service locations. It is possible that hidden connections exist (underground or inside equipment), but electrode connections are typically visible.

Unit #12, unit #18, and the central gazebo are physically separate from the buildings where their services are installed, which requires them to have an additional grounding electrode at their panel. We did not find any visible grounding at these locations either.

We recommend that a licensed electrician (in coordination with the electric utility) open each of the meter centers and examine the internal wiring to determine if proper service grounding exists. The residential branch panels should also be opened to ensure that the ground and neutral are isolated, and that an equipment grounding wire was pulled from the meter center. Any grounding deficiencies found should be corrected immediately.

5.3.2 Transformer Condition

The two utility transformers show evidence of settling, rust, and water ingress. The transformer on the east side is in considerably worse condition than the west. Since this equipment is owned and maintained by the electric utility, we recommend scheduling an inspection by utility personnel and requesting that the transformers be replaced and/or reset on new pads (the utility has authority on this decision).

East Transformer Water Ingress

East Transformer Settling

5.3.3 Crawl Space Wiring

A large quantity of electrical wiring has been run through the crawl spaces. Generally, the quality of the installation is very poor. Details are difficult to determine due to a lack of labeling and general visibility. We have attempted to summarize the issues below:

1. Protection
   Electrical code includes a general requirement that wiring be "protected from physical damage." This is somewhat open to interpretation by the authority having jurisdiction, but in our opinion the crawlspace wiring is not protected sufficiently. Almost none of it is enclosed in conduit (the typical means of protection), and the wires are exposed to damage due to their location in a confined space full of debris and potentially accessible by animals.

2. Support
   Electrical code requires open wiring to be supported (weight) and secured (against horizontal movement). The attachments must be made to structural members and use support devices listed for the use and the environment. In the Wildwood crawl spaces, we observed a wide variety of cable support methods, ranging from staples and hooks to jury-rigged ties made of pieces of cable used to hang one cable from another, and even some cables with no support at all. Overall, the majority of cabling is not supported properly.

3. Cable Types
   The crawl spaces are wet locations, and code requires cables to be of types listed for use in wet locations. Cable markings were difficult to read, but it did not appear that all cabling was of an appropriate type for the environment.

4. Labeling
   We did not find any labels on any of the crawl space wiring to indicate its purpose or origin. While this is not a code requirement, it is a serious obstacle for maintenance. In some cases, it was even difficult to distinguish power from communications wiring.

Given the severity and variety of issues in the crawl spaces, we recommend complete replacement with new wiring protected in conduit, supported properly, and labeled.

5.3.4 Equipment in Parking Area

Services A, Service B and the east transformer are located in a parking area. At the time of our inspection, code required access clearances were blocked by parked vehicles. We also noted that the equipment is exposed to potential vehicle impacts. We recommend installation of traffic bollards to protect equipment and delineate the required access areas to be kept clear.

5.3.5 Miscellaneous Wiring Issues

1. Conduit between Buildings
   We observed unmarked conduit spanning gaps between buildings. We could not determine what it was, but it is likely to be a code violation. Separate buildings must only be supplied by a single incoming feeder that lands on a main breaker or fused switch that serves as the disconnect for that building. Other circuits cannot enter the building elsewhere.

Conduit and Cable Between Buildings

2. Cut Feeders
   Throughout the site, the electrical system has been modified over the years. In several places, old wiring has been cut and left exposed rather than being removed. It is unknown if these wires are still connected to a power source, but they could be a safety hazard if so.

Example of Cut Feeders

3. Improper Exterior Receptacle Uses
   Exterior receptacles can have two types of weatherproof cover – the "while in use type" maintains a weatherproof rating while a cord is plugged in by closing over the cord. The less expensive standard type is only weatherproof when the receptacle is not in use. On the Wildwood site, most exterior receptacles are not weatherproof while in use but some had cords plugged in and left unattended, creating a shock hazard in the presence of any water. We recommend the replacement of all standard exterior receptacles with "while in use" types, and/or enforcing a policy of only using exterior receptacles for temporary, supervised uses.

Example of Improper Use of Exterior Receptacle
(Note that the cord is also not rated for outdoor use)

4. Conduit Damage
   The conduit feeding Unit #19 from Service A shows evidence of significant movement. There is one section completely separated, and unpainted bands have moved from behind supports where they originally were. This feeder should be replaced, and the reasons for the movement addressed.

Conduit Separation

5. Light Poles and Overhead Wiring
   Overhead lines appear to dip too close to roof lines (the required clearance is 8'-6"), and one light pole has been closed in by buildings in a way that impedes maintenance access. It is unclear whether the property owner or electric utility owns the existing pole lights and associated overhead wiring; exact requirements will differ depending on ownership. We recommend evaluation by utility personnel.

6. AFCI Protection
   The residential branch panels only contained AFCI circuit breakers for circuits marked "living outlets." This may have been to code at the time of the installation, but current code requires AFCI protection on more circuits. A complete evaluation of indoor wiring is not in the scope of this report, this note is included as a courtesy because the breakers were visible from the exterior inspection.

7. Communications Wiring Condition
   Throughout the site, exterior communications cabling was installed poorly. Cables are not consistently supported per code, and some boxes are overfilled and unable to be closed.

Overfilled Box

Improper Cable Installation

5.4 Performance Concerns

5.4.1 Site Lighting

The site has three light poles with antiquated fixtures, plus small porch lights at each residence entry. The light poles appear to predate some of the buildings. Their locations are not logical for the current layout, and don't provide good coverage for safety or security. While there are no building code requirements for exterior lighting, a partially lit site can create some pedestrian safety concerns. We recommend a lighting evaluation and fixture update (this may need to be coordinated with the City depending on ownership of the existing poles).

6.0 Conclusions and Recommendations

6.1 Conclusions

Based on the findings detailed in this report there is extensive work needed to bring the inspected building up to code. While this is the case nothing was observed that is posing an immediate threat to the health and safety of the residents. The work needed to bring the buildings up to code can therefore be completed in phase over a number of years to limit the immediate costs and instead spread them out over time to allow owners to plan for the upcoming costs. It is also recommended that the HOA plan for future costs not detailed in this report as it is reasonable to expect future issues to arise due to the age of the buildings.

6.2 Recommendations

The following recommendations are listed in order of importance in our opinion based on the findings of the condition assessment.

1. Make electrical upgrades to bring electrical system up to code. Because much of the electrical equipment is nearing the end of its useful life it is only a matter of time until more immediate issues with the equipment arise. A licensed electrician will be able to provide a detailed list of work to be done and an approximate cost to bring the electrical system up to code.
2. A section of the existing stucco should be removed to allow the interior of the walls to be inspected. This will provide a better insight into any damage that is occurring inside the walls where it appears water is infiltrating the siding. The location for this investigation should be next to a window so that the window the surrounding framing can also be inspected. During this investigation Unit 18 should also be investigated further. This could be done by doing the test siding removal on this unit.
3. The crawlspace of each of the buildings should be renovated to create a conditioned space. During this renovation water and sewer lines should be removed and replaced with new lines that are installed per current codes. The existing fire walls should be demolished and replaced with new fire walls that meet current codes. The existing walls should be replaced because the existing sewer lines run through them and will need to be accessed and the damage done to many of them will make it difficult to fix with an acceptable manner. Lastly, each crawlspace should have a robust and continuous vapor barrier installed.

4. The old shingle roof under the newer metal roof should be tested for asbestos. If the shingles contain asbestos the cost and difficulty of the roof replacement or rehabilitation increases greatly. Once this information is known an accurate cost and plan for the roofs can be made.
5. The roofing and siding should be replaced. While they are in serviceable condition currently the issues with water penetrating the siding and the siding cracking will become worse with time. Once this phase of the rehabilitation is reached the wall framing will have been inspected and it will be known whether the old roof shingles contain asbestos and a comprehensive plan for the roof and siding replacement can be made.