

This report is prepared exclusively for **Any Client**  
Inspected On: **2022-12-06**

## Company Information

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[Published Report](#)

This inspection was a Property Condition Assessment of a 15 year old 40 unit condominium building. There have been a number of problems occurring since the building was built and there have been significant expenditures to rectify some of the problems. The building is at a critical juncture as the reserve funds are low and there are still a number of concerning issues to address. This PCA will be used to drive a Reserve Study that will look at upcoming expenditure needs and the need to adjust the monthly assessment to cover the needed upcoming improvements.

### Inspected By:



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# The Scope and Purpose of a Property Condition Assessment

## Basis and Limitations of Inspection

This inspection is a visual examination of the interior and exterior common elements that would be the responsibility of the Condominium Association. The inspection is being performed to determine the condition of these elements and the anticipated work and that may be needed immediately and in the future. The findings will attempt to provide guidance on maintenance and construction work that is needed on the structure.

## The inspection is visual and not destructive

The descriptions and observations in this report are based on a visual inspection of the structure. We inspect the aspects of the structure that can be viewed without dismantling, damaging or disfiguring the structure and without moving objects. Areas that are concealed, hidden or inaccessible to view cannot be examined and the inspector can always return to gather more information if obstructions are removed at some point in the future.

## This is not an inspection for code compliance

This inspection and report are not intended for city / local code compliance. During the construction process structures are inspected for code compliance by municipal inspectors. Framing is open at this time and conditions can be fully viewed. Framing is not open during inspections of finished structures, and this limits the inspection. All structures fall out of code compliance shortly after they are built, as the codes continually change. National codes are augmented at least every three years for all of the varying disciplines. Municipalities can choose to adopt and phase in sections of the codes on their own timetables. There are generally no requirements to bring older structures into compliance unless substantial renovation is being done.

## This is just our opinion

Construction techniques and standards vary. There is no one way to build a structure or install systems in a structure. The observations in this report are the opinions of the inspector. Other inspectors and contractors are likely to have some differing opinions. You are welcome to seek opinions from other professionals, however, make sure they can clearly explain the purpose behind their actions and any industry based standards that they may be using as guides for their work.

## Your expectations and participation in the solution

The overall goal of this inspection is to identify the critical elements that need to be addressed in the

structure. The near and long term maintenance and restoration items will be identified and prioritize.

# How to Read This Report

## Getting the Information to You

This report is designed to deliver important and technical information in a way that is easy for anyone to access and understand. If you are in a hurry, you can take a quick look at our ["Summary Page"](#) and quickly get critical information for important decision making. However, we strongly recommend that you take the time to read the full [Report](#), which includes digital photographs, captions, diagrams, descriptions, videos and hot links to additional information.

The best way to get the layers of information that are presented in this report is to read your report online (the HTML version), which will allow you to expand your learning about your house. You will notice some words or series of words highlighted in blue and underlined – clicking on these will provide you with a link to additional information. The HTML version of this report also contains streaming videos. Short video clips often contain important information and critical context and sounds that can be difficult to capture in words and still pictures.

For the most reliable viewing experience, I recommend viewing the report on as large a screen as practical, as much detail can be lost on small devices like smart phones. For similar reasons, reports should only be printed in color to retain as much detail as possible and minimize misinterpretation of photographs.

This report can also be [printed on paper or to a PDF document](#).


## Chapters and Sections


This report is divided into chapters that parcel the structure into logical inspection components. Each chapter is broken into sections that relate to a specific system or component of the structure. You can navigate between chapters with the click of a button on the left side margin.


Most sections will contain some descriptive information done in black font. Observation narrative, done in colored boxes, will be included if a system or component is found to be significantly deficient in some way or if we wish to provide helpful additional information about the system or the scope of our inspection. If a system or component of the home was deemed to be in satisfactory or serviceable condition, there may be no narrative observation comments in that section and it may simply say "tested," or "inspected."


## Observation Labels


All narrative observations are colored, numbered and labeled to help you find, refer to, and understand the severity of the observation. Observation colors and labels used in this report are:


 **Repair:** Repair and maintenance items noted during inspection. Please note that some repair items can be expensive to correct such as re-finishing hardwood floors, but are considered simply repair items due to their cosmetic nature.

 **Recommended Maintenance:** These are repair items that should be considered "routine home ownership items," such as servicing the furnace, cleaning the gutters or changing the air filters in the furnace.

 **Monitor:** Items that should be watched to see if correction may be needed in the future.

 **Due Diligence:** Observation such as a buried oil tank that may require further investigation to determine the severity and / or urgency of repair.

 **Future Project:** A repair that may be deferred for some time but should be on the radar for repair or replacement in the near future.

 **Note:** Refers to aside information and /or any comments elaborating on descriptions of systems in the home or limitations to the home inspection.

# Summary

## Repairs

🔧 **EWGCE-1 EXTERIOR WALLS< GROUNDS, CHIMNEYS. ETC:** The existing wooden roof deck is weathered and deteriorating. In many cases there are rugs or other objects on the roof that are trapping moisture against the deck and deteriorating the existing deck boards. There are also planters that are deteriorating and the dirt from the planters is spilling onto the deck boards and getting into the roof deck and drainage piping. **Since the deck needs to be removed to replace the roof, it is vitally important that the deck and roof membrane be on the same replacement cycle.** In order to extend the service life of the deck materials, all materials that trap moisture should be removed from the deck and be banned from future use. If planters are desired, they should be appropriately designed and installed in a manner that does not affect deck surfaces, like wall mounted planters. Once the deck is clear the exterior wooden deck surfaces should be professionally cleaned and sealed against weather. Any deteriorated boards should be replaced prior to the sealing.

Here is a link to some potentially useful information regarding deck sealing: [How to Seal Your Deck & Best Deck Sealers](#)

**NOTE:** Because of the rooftop exposure and maintenance costs of a wood deck, when the deck is replaced, consideration should be given to using composite decking materials. These materials are not affected by moisture like wood is and the reduced maintenance costs and extended life will typically offset the higher initial purchase cost of the composite materials.

In order to make an informed choice regarding deck replacement materials, here is a link to a webpage that appears to have a fairly comprehensive discussion of deck materials: [Wood Deck vs. Composite Deck: Which One Is Right for You?](#)

**FINAL NOTE:** When the deck is replaced the level of the deck should meet the rooftop door access thresholds. The existing sloped transitions should be avoided as they present trip hazards that can result in injury and drive moisture into the door openings.

🔧 **EWGCE-2 EXTERIOR WALLS< GROUNDS, CHIMNEYS. ETC:** The existing caulking around the perimeter of the structure is missing, cracked and sloppy and/or improper. Exterior sealant performance is **directly related to the joint preparation and application.** For increased service life, performance and aesthetics, the exterior of the structure should be carefully examined and old deteriorated and/or improper caulking should be removed and the exterior of the structure caulked via appropriate means and materials. Proper joint preparation and the use of compliant exterior rated sealants of good quality is recommended .

All caulk joints should then be inspected annually and be repaired as needed. **ALL** exterior wall penetrations such as: piping, conduit, vent caps, exterior light fixtures and receptacles should be sealed against moisture intrusion through the use of the appropriate caulking methods and materials. An intentional opening/gap at the base of electrical fixtures should remain open to allow any moisture penetration an avenue of escape.

Several sources regarding caulking preparation can be found online, here is a link to one source: [Caulking Basics](#)

**EWGCE-3 EXTERIOR WALLS< GROUNDS, CHIMNEYS. ETC:** Some of the masonry joints on this relatively new structure are poorly formed, especially at the head joint. Proper masonry installation requires a skilled brick layer that can properly fill and finish the head joints on each course of masonry and failure to achieve this results in openings that may allow excessive moisture to enter the structure. In order to reduce the potential for moisture related damage, it is recommended that a qualified masonry contractor evaluate the entire structure and re-point the joints as needed.

There are also numerous cracked mortar joints throughout the structure with many related to improper stone cap details or joint details that can allow the entry of moisture. In order to reduce the potential for moisture related damage, it is recommended that a qualified masonry contractor evaluate and re-point the structure as needed.

**NOTE:** Displaced block was observed in several locations which suggests that moisture entered into the spaces behind the block and frozen conditions pushed the blocks outward. These blocks cannot simply be re-pointed and it will be necessary to remove the affected blocks, evaluate the space behind the blocks for additional concerns and replace the blocks so they are flush with the exterior face.

**EWGCE-4 EXTERIOR WALLS< GROUNDS, CHIMNEYS. ETC:** Some of the exterior window lintels have been sealed and can no longer drain moisture which increases the potential for corrosion of the lintels. Over time the corroding steel will expand which can damage the adjacent masonry walls and allow moisture to penetrate to the interior of the living space. In some cases inappropriate or improper weep ropes have been installed, if these are to be utilized they should be proper weep tubes that extend back into the wall cavity. In order to reduce the potential for moisture related damage, the lintel drainage space should be repaired by a qualified masonry restoration contractor.

**EWGCE-5 EXTERIOR WALLS< GROUNDS, CHIMNEYS. ETC:** The stone capping above the parapet walls and its ancillary flashing are improperly configured and present a significant risk for moisture penetration, moisture saturation and damage to the adjacent brick masonry. It appears that the capstones have been removed and replaced, with flashing, however, the workmanship and materials varies on portions of the roof. In some cases proper stainless steel drip edge has been utilized, however in other areas, poor quality thin membrane was used and there is no drip edge and there is deteriorated mortar and openings below the cap that can allow the entry of moisture. Ideally, parapet wall capstones should be sloped inward toward the roof surface so that runoff is properly channeled to the roof drains and should have sufficient overhang and drip grooves so that the amount of moisture running onto the exterior masonry walls is limited. Stainless steel drip edge and thick elastomeric flashing are vastly superior to the thin vinyl flashing that is typically used. It is recommended that the existing stone capping without the drip edges be removed; stainless steel drip edge be set into a thick bed of high-quality caulking along both the inner and outer top masonry courses; that heavy, self-adhesive, elastomeric flashing be installed as a waterproof bridge across the entire depth of the masonry wall; that the existing stone capping or new stone capping be set into place and secured with stainless steel pins; and that properly configured caulked joints be used at the butt joints of the stone capping slabs.

**EWGCE-6 EXTERIOR WALLS< GROUNDS, CHIMNEYS. ETC:** The through-wall drainage scupper details are improperly configured and are prone to allowing moisture penetration and damage to take place. The installations conform with neither the National Roofing Contractors

Association (NRCA) standards nor those of the Sheet-Metal and Air-Conditioning Contractors National Association (SMACNA). In order to reduce the risk for moisture penetration, saturation and freeze/thaw damage, it is strongly recommended that the through-wall scupper openings be repaired by a qualified sheet-metal contractor.

Also, debris was found in several of the scuppers that could reduce or block flow. In order to reduce the potential for moisture related damage it is recommended that debris screens be added to the scuppers and they be checked and cleaned regularly

**EWGCE-7 EXTERIOR WALLS< GROUNDS, CHIMNEYS. ETC:** This structure has an exterior cladding of EIFS (Exterior Insulation and Finishing Systems) and cracks were observed in the exterior walls. This wall cladding system may allow unseen moisture penetration, rot and damage to occur and progress to critical levels before being noticed. No representation is made in this report regarding the suitability or performance of this product. Obvious defects will be noted but a final determination on the existing condition of the EIFS system should be made by a licensed and competent contractor specializing in the review and repair of these systems.

As use of this product declines, it may become increasingly more difficult to locate contractors who are able to evaluate and repair this product, here is a link to one local contractor that may be able to evaluate and repair this product: [Royal Falcon Enterprises](#)

**EWGCE-8 EXTERIOR WALLS< GROUNDS, CHIMNEYS. ETC:** The galvanized steel chimney crowns/caps are not properly configured to shed moisture, as a result, the sheet metal crowns are at risk for allowing moisture into the chimney chase and to premature corrosion and failure of the cap. It is strongly recommended that the sheet metal crown be replaced by a qualified sheet-metal specialty contractor.

**EWGCE-9 EXTERIOR WALLS< GROUNDS, CHIMNEYS. ETC:** The butt joints between the individual sections of clay tile coping have been sealed with cement mortar. The mortar is cracking and the joints are open which creates a risk for moisture saturation/damage to the masonry walls below. The coping tiles serve to protect the underlying brick masonry walls from wetting/drying and freezing/thawing damage and should be neatly joined and properly sealed in order to perform this function. In order to reduce the potential for moisture related damage, the coping tiles should be repaired or replaced as needed by a qualified masonry or roofing contractor. Ideally it is recommended that the individual clay tiles be removed and reinstalled using backer rod and polyurethane caulk to seal the joints, however, this may be cost prohibitive at this point and it may be possible to smear the cap joints with tar until such time when they can be properly sealed or replaced with a neatly cut and properly sealed kyner coping cap.

**EWGCE-10 EXTERIOR WALLS< GROUNDS, CHIMNEYS. ETC:** Caulk appears to have been smeared over the joints between the stone copings and/or sills and cracks were noted on the sides of the caulked joints. All of the exterior caulk joints should be configured and applied according to appropriate standards. A thin smear of caulk over a brittle substrate such as cement mortar, does not constitute an appropriate caulk or sealant joint. In order to reduce the risk for moisture penetration, drafts and energy losses, it is recommended that all of the exterior caulking on the building be evaluated and repaired or replaced as needed by a qualified handyman or masonry restoration contractor.

**EWGCE-11 EXTERIOR WALLS< GROUNDS, CHIMNEYS. ETC:** Spalling and deteriorated

concrete were observed on the sides of several of the retaining walls which can allow moisture to enter the wall resulting in further corrosion of the reinforcing steel which can deteriorate the wall further. In order to reduce the potential for moisture related damage It is recommended that a qualified concrete repair contractor evaluate and repair the wall as needed.

**EWGCE-12 EXTERIOR WALLS< GROUNDS, CHIMNEYS. ETC:** Settlement of some of the front walk areas was noted and the rainwater runoff may further exacerbate settlement of the walk and stairs. There was also potential settlement of at least one of the stairs and walls. It's highly likely that these areas were adjacent to the large excavation needed for the foundation of the structure. Typically this void is backfilled with material that is difficult to compact and there may be some settlement over time. In some cases the slabs can be raised via various methods, however, some of the slabs are cracked and eventual replacement may be needed as it appears to have already been done on several other walk areas.

Also, the grade adjacent to the front steps and walks does not drain away from the structure and ponding areas were noted adjacent to some of the walks that further exacerbates the walk settlement. All areas adjacent to the structure should drain away from the structure and once the walks are raised or replaced the landscape areas should be re-graded by a qualified landscaping contractor.

**EWGCE-13 EXTERIOR WALLS< GROUNDS, CHIMNEYS. ETC:** Corrosion was noted in mid wall areas in at least one of the front stairway walls. Based on the thickness of the walls and presence of brick on both faces, the walls do not appear to have a concrete core so the source of the corrosion is most likely an improper tie used on the masonry Courses. In order to reduce the potential for further corrosion, it may be necessary to remove the affected bricks and restore the affected areas.

**EWGCE-14 EXTERIOR WALLS< GROUNDS, CHIMNEYS. ETC:** There were several trench drains on the property, a large one is present by the main underground garage entrance and there are several by the garages on the rear of the property. These drains appeared to be clogged with debris that would affect their ability to provide critical drainage and reduce the potential for water to enter the garages. In order to reduce the potential for moisture related damage It is recommended that the drains be regularly cleaned and maintained.

**EWGCE-15 EXTERIOR WALLS< GROUNDS, CHIMNEYS. ETC:** The movement joints on the long walls of this structure are incomplete. In order to reduce the risk for random cracking from the motion inherent in masonry walls that are 40' or longer, movement joints are recommended by masonry industry associations. These joints can be retro-fitted by a qualified masonry contractor and in order to determine if this building would benefit from the installation of movement joints, further review of the exterior masonry walls is recommended.

**EWGCE-16 EXTERIOR WALLS< GROUNDS, CHIMNEYS. ETC:** There were metal planter edgings in several locations and there are sharp exposed edges that create potential trip and/or injury hazards. In order to reduce the potential for injury, it is recommended that a qualified landscaping contractor evaluate and remove or repair the edging as needed.

**GAO-1 GARAGES AND OUTBUILDINGS:** The concrete floor in interior the parking garage is cracked spalled and uncoated. Concrete typically contains reinforcement in order to provide the needed strength, however, this reinforcement is extremely susceptible to deterioration from exposure to moisture and de-icing salts. Over time this exposure can result in deterioration of the



concrete resulting in costly replacement of the parking garage concrete. Unless a waterproofing membrane system was installed as a part of the initial construction, the parking deck surface may be unprotected. In order to reduce the potential for moisture related damage, It is recommended that a qualified waterproofing contractor clean the floor and apply an appropriate waterproofing membrane that is suitable for vehicular traffic.

In order to understand the various concerns regarding applying a waterproofing coating in a parking garage, here is a link to an article from a Concrete Trade Association Magazine that appears to provide a fairly comprehensive discussion: [Don't Seal Your Fate: Considerations for parking garage surface treatments](#)

**NOTE:** If a membrane system has been installed this may be providing adequate protection as the deterioration may be present on a wearing surface. It may be possible to review the building plans in order to determine if a wearing surface and membrane system was included. If no such information is available, a core sample could be taken and the core examined for the layers that are present.

Here is a link to an article from a concrete trade magazine that describes such a system: [Protecting Parking Deck Systems](#)

**🔧 RCRFRD-1 ROOF COVERINGS, ROOF FLASHING, ROOF DRAINAGE:** Termination bar flashing should be installed at all areas where the modified bitumen roof covering is terminated. Failure to install the appropriate flashing at these areas can result in delamination, breaching, moisture intrusion and extensive damage. Evaluation and repair of the roof covering by a licensed and competent roofing contractor is recommended.

**🔧 RCRFRD-2 ROOF COVERINGS, ROOF FLASHING, ROOF DRAINAGE:** Many of the downspouts on the roof discharge onto the roof deck. While the deck does have exterior exposure, the concentrated runoff from the downspouts may accelerate deck board deterioration and should most likely discharge directly onto the roof membrane and repair by a qualified gutter installation contractor is recommended.

**🔧 RCRFRD-3 ROOF COVERINGS, ROOF FLASHING, ROOF DRAINAGE:** Exposed areas of roof membrane are being damaged by furniture or other objects and the gashes may allow for the entry of moisture. Any areas that are open should be repaired by a qualified roofing contractor and in order to reduce the potential for future moisture related damage, protective material should be installed wherever exposed roofing is adjacent to deck areas

**🔧 RCRFRD-4 ROOF COVERINGS, ROOF FLASHING, ROOF DRAINAGE:** There are several satellite dishes on various roofs on the structure. The metal frame that the satellite dish is anchored to is weighted with concrete block and has sharp corners that can cut into and damage the roof surface which creates the potential for moisture intrusion. In order to reduce the potential for damaging moisture to enter the structure, it is recommended that protective pads be placed beneath the satellite dish framework.

**🔧 RCRFRD-5 ROOF COVERINGS, ROOF FLASHING, ROOF DRAINAGE:** The lower portions of the relatively thin and weak aluminum downspouts should be protected against impact damage by the use of cast-iron transition pieces or the equivalent. In order to allow for proper control of roof runoff, repair by a qualified gutter installation contractor or handyman is recommended. Also, the downspout termination should take place above grade and the hub of the downspout-to-subsurface drain connection should be clearly visible and accessible. In order to reduce the risk for

soil washout, repair of the subsurface drain system by a qualified plumber, handyman or gutter installation contractor is recommended.

🔧 **RCRFRD-6 ROOF COVERINGS, ROOF FLASHING, ROOF DRAINAGE:** The penetrations through the modified bitumen roof covering are sealed with caulk and/or roofing tar which is a high maintenance, unapproved, high risk means of sealing a hole in the roof. When the roof is replaced, in order to reduce the potential for damaging and mold causing moisture to enter the structure, the installation of rubber boots flashings or pitch pocket flashings by a qualified roofing contractor is recommended.

🔧 **ESGCDAF-1 ELECTRICAL SYSTEM, GROUNDING, CONNECTED DEVICES AND FIXTURES:** Exposed wires were observed in at least one location in the structure. In order to reduce the risk for electrical shock from inadvertent contact with exposed current carrying equipment and in order to contain molten copper created by high temperature arcing and sparking of energized wiring, it is recommended that all electrical connections be concealed inside covered metal junction boxes by a qualified electrician.

🔧 **ESGCDAF-2 ELECTRICAL SYSTEM, GROUNDING, CONNECTED DEVICES AND FIXTURES:** The grounding electrode conductor is not properly secured to the water piping system and grounding clamp. The stranded copper grounding conductor has been squeezed between the clamp and the piping which is not allowed and is unsafe since it makes the clamp prone to loosening. This can reduce the safety and effectiveness of the bonding and grounding system and the existing clamp should be replaced with one that can properly secure the grounding electrode conductor into a screw terminal. Further evaluation and repair by a licensed and competent electrical contractor is recommended.

🔧 **ESGCDAF-3 ELECTRICAL SYSTEM, GROUNDING, CONNECTED DEVICES AND FIXTURES:** At least one of the exterior light fixtures are loose. Loose electrical fixtures can result in arcing/sparking during use and present an increased risk of fire. Any loose electrical fixture on the structure should be evaluated and repaired as needed by a licensed electrician.

🔧 **PSDFAV-2 PLUMBING SUPPLY, DRAINS, FIXTURES AND VENTS:** A booster pump system has been installed on this multi-story structure. At the time of the inspection it was noted that the pump system was running constantly and that the pressure tank was completely full of water. Based on the number of units in the structure, the tank for this building would appear to be grossly undersized. These systems are typically required to be installed in order to ensure that there is adequate water pressure to upper level units and the pump will typically pressurize the holding tank and then shut off until the pressure is depleted. In this case the bladder in the pressure tank may have been compromised resulting in continuous operation of the pump. In order to reduce the potential for pressure loss to the upper level units, It is recommended that a qualified plumber evaluate the tank and repair the system as needed.

Here is a link to an article that discusses quiet options for booster pump replacements: [Which Water Booster Pumps are the most silent?](#)

🔧 **PSDFAV-3 PLUMBING SUPPLY, DRAINS, FIXTURES AND VENTS:** The plumbing vent pipes on the roof are flush with the roof deck. This can allow occupants of the rooftop decks to be exposed to noxious sewer gases. Residential building codes require these vent pipes to extend at least seven feet above the deck. In order to reduce the potential for sewer gases to affect rooftop

residents, the vent pipes should be extended and properly supported.

Also, at least one of the narrower diameter plumbing vent pipes has material stuffed into the pipe that was most likely intended to eliminate the potential to drop objects into the pipes, however, they can restrict airflow. During extreme freezing temperatures in the winter this restriction can allow venting air to freeze and hoar frost formations can occur that can block the vent piping. Blocked plumbing vent pipes increase the risk for noxious sewer gas intrusion into the occupied spaces and a qualified plumbing and/or roofing contractor should repair the vent pipes.

**PSDFAV-4 PLUMBING SUPPLY, DRAINS, FIXTURES AND VENTS:** Given the size of this structure, the water supply piping in the mechanical room is subjected to considerable flow which increases the likelihood of the formation of condensation on the exterior of the water supply piping. The piping in the mechanical room was sweating profusely and there was considerable moisture present in the room that was corroding any exposed steel elements. In order to reduce the risk for condensation, mold growth and moisture damage, all of the accessible water supply piping in the mechanical room should be insulated.

**PSDFAV-5 PLUMBING SUPPLY, DRAINS, FIXTURES AND VENTS:** In order to reduce the risk for excess water vapor, radon gas, pests, etc. to enter the structure from the open sump pits, it is strongly recommended that properly sealed sump pit covers be furnished and installed by a qualified contractor or handyman.

**NOTE:** Prior to sealing the sump pit they should be cleaned and the the pump equipment should be evaluated and serviced or replaced if needed. The typical service life of a sump pump is approximately 7 to 10 years and if no battery back-up system is present, it is advisable to install a moisture detection device above the pump and below the lid that may be able to provide an alert regarding an elevated water level that could occur in the event of pump failure.

**FINAL NOTE:** One of the sump pumps was unplugged and obviously not operational at the time of the inspection. It is unknown if there is insufficient flow to require a sump pump or if the pump is broken. For proper removal of excess water from the foundation, the need for two pumps should be evaluated and adjusted if needed.

**PSDFAV-6 PLUMBING SUPPLY, DRAINS, FIXTURES AND VENTS:** The lid for the watermain shut-off for the building is well below grade and adjacent to a walk which creates a possible trip hazard. In order to reduce the potential for injury, it is recommended that a qualified underground contractor or plumber adjust the lid to grade and that the surrounding area be backfilled and the grade is level.

**PSDFAV-7 PLUMBING SUPPLY, DRAINS, FIXTURES AND VENTS:** There are small drains adjacent to the lower level exterior entry doors that are easily clogged or overwhelmed by heavy rains. In order to reduce the potential for moisture related damage, it is recommended that a qualified plumber or concrete repair contractor install a larger drainage grate in the walk areas.

**PSDFAV-8 PLUMBING SUPPLY, DRAINS, FIXTURES AND VENTS:** The lids for the triple basin drainage structures in the garage have lightweight metal lids that do not appear to be rated for vehicular traffic and the lids are near one of the parking spaces in the garage. In order to reduce the potential for damage to a vehicle, It is recommended that a qualified plumber or underground contractor install heavy duty manhole castings with appropriate traffic rated lids on the triple basins.

**PSDFAV-10 PLUMBING SUPPLY, DRAINS, FIXTURES AND VENTS:** There were several

plumbing connections in the home that utilized non-reinforced mission style couplings. In order to reduce the potential for moisture related damage, It is recommended that a qualified plumber install non-shear reinforced mission style couplings at all splice locations.

#### **🔧 HACVAGAS-2 HEATING, AIR CONDITIONING, VENTILATION, AND GAS APPLIANCE**

**SYSTEMS:** The vents for many of the gas appliances in the units discharge adjacent to some of the A/C condensers. It was noted that nearly every A/C condenser next to a vent pipe has been replaced, while many of the A/C condensers away from the vent piping are original. It appears that the heated exhaust gases may be shortening the life of some of these A/C condensers and in order to prolong the life of these units the vent pipes should be raised an appropriate height above the A/C condensers.

#### **🔧 HACVAGAS-3 HEATING, AIR CONDITIONING, VENTILATION, AND GAS APPLIANCE**

**SYSTEMS:** The A/C condensers are installed on energy absorbing bases that sit on metal brackets extending from the walls. The bases are not secured and there is nothing to keep the condensers from moving. In some cases it appears the bases have slid and the A/C condenser is balanced precariously on the edge and in one case the unit is exerting pressure on the flexible conduit for the power feed to the condenser. In order to reduce the potential for damage to the A/C units, the bases should be leveled and secured to the brackets by a qualified service technician or handyman.

#### **🔧 HACVAGAS-4 HEATING, AIR CONDITIONING, VENTILATION, AND GAS APPLIANCE**

**SYSTEMS:** There are two large gas fired heaters for the below ground parking garage. According to the manufacturers installation instructions the heaters should be inspected annually and the burners cleaned periodically. Given the build-up of dust on the interior of the units, it does not appear as if they have been inspected, cleaned and serviced recently if at all. For proper and continued operation of the heaters, it is recommended that a qualified service technician evaluate and service the units as needed.

For more information on these heaters, here is a link to a webpage from the installation instructions from the manufacturer: [Advanced Distributor Products Installation Instructions 150,000 to 300,000 BTU Series](#)

**🔧 FWE-1 FIREPLACES, WOODSTOVES, ETC.:** There are several clusters of fireplace vents on the roof, however, many are directly adjacent to other vents and have the potential to backdraft into other units. In order to reduce the potential for noxious gases to enter units from the fireplaces, it is recommended that the vents be re-configured so they are not adjacent to another vent.

**🔧 IVAE-1 INSULATION, VENTILATION, ATTICS, ETC.:** Based on observations during an earlier moisture intrusion investigation it appears that there is rapid snow melt on the roof that is resulting in ice damming at the drainage scuppers on the roof. This rapid snow melt is most likely a result of inadequate insulation and/or heat loss into the attic plenum space from unsealed lights and openings in the upper level units. The ability to ventilate the plenum space is key to the reducing the heat build-up in the attic plenum space.

The aluminum breathers noted on this roof are not intended to serve as venting devices for the roof plenum and there are a minimal number of these vents on the roof. These devices have very little net free vent area and are incapable of venting the potentially large volumes of trapped heat and moisture inside the roof plenum and the limited number of vents exacerbates the problem. Inadequate ventilation of the roof plenum can not only result in rapid snow melt, it can result in condensation, mold growth, excess energy usage and reduced indoor air comfort during the cooling

season. It is recommended that the existing undersized and inappropriate breathers be replaced with high-quality roof vents designed for low slope roof applications.

**NOTE:** When the vents are installed, the existing insulation in the attic plenum space should be evaluated by a specialty insulation contractor and if the insulation is found to be deficient, improvements to the insulation should be made. **Important - Increasing the ventilation rate inside the roof/ceiling plenum without first performing guided air-sealing to stop the free flow of interior air into the plenum can result in condensation, mold growth, etc. where little or none has occurred in the past.**

🔧 **IVAE-2 INSULATION, VENTILATION, ATTICS, ETC.:** The existing cheap plastic vent and/or dryer dampers are warped and are open to the exterior which creates the potential for cold air to enter and condense on warmer interior components and for flying pests to enter the open dryer venting. In order to reduce the potential for corrosion and moisture related damage and unwanted visitors, all dryer and exhaust vent dampers on the exterior walls should be replaced with high-quality, gasketed, vent dampers.

**NOTE:** In order to ensure proper performance of the dryer vents, regular examination and cleaning of dryer vents is recommended.

🔧 **IVAE-3 INSULATION, VENTILATION, ATTICS, ETC.:** Gaps and openings were noted around numerous ceiling and wall penetrations in the below grade parking garage. Significant air leakage can occur in these openings which could allow reduced indoor air quality; introduce potentially dangerous and noxious odors; allow drafts and energy losses; and, in the event of a fire; allow smoke and carbon monoxide into the living unit's in the structure. It is recommended that the subject living unit and all of the living units in the building undergo an air-sealing regime to reduce these risks and to save energy. Some of the typical areas that require air-sealing include: pipe chases (both vertical and horizontal).

For suggestions on air sealing the structure, here is a link to a webpage from the US Dept of Energy with some excellent suggestions: [Air Sealing Your Home](#)

🔧 **WDS-1 WINDOWS, DOORS, SKYLIGHTS:** Flooring has been removed near the threshold of several of the elevator doghouse rooftop access doors. The existing threshold at the rooftop access doors are poorly sealed. In order to reduce the potential for the entry of moisture and pests and to conserve energy, reduce cold drafts and reduce noise levels inside the living spaces, it is recommended that a improved weatherstripped thresholds be installed at the bottom of the rooftop access doors by a qualified carpenter or handyman.

🔧 **WDS-2 WINDOWS, DOORS, SKYLIGHTS:** Moisture related staining and elevated moisture levels were noted in the doorframe on the sliding door in at least one upper level unit. Given that the sliding doors are now 15 years old, the seals are beginning to become compromised and leakage is developing and will more than likely progress further. In order to reduce the potential for moisture related damage, it is recommended that consideration be given to replacing the sliding doors in the not too distant future. Some of the sliding doors that are in lower or more protected balconies may have less deterioration and replacement of those doors can wait, however, the more deteriorated ones should be replaced with doors that are made from materials that are less affected by moisture.

The doorframes should be monitored and if excessive deterioration is noted, especially on the bottom portion of the doorframe, the bottom portion should be replaced with materials that are less

affected by moisture like PVC lumber.

For recommendations on more energy efficient sliding doors, here is a link to a webpage from the US Dept of Energy that discusses energy efficient doorframes: [ENERGY STAR Most Efficient 2022 — Sliding Glass \(Patio\) Doors](#)

**🔧 WDS-3 WINDOWS, DOORS, SKYLIGHTS:** Moisture related damage was observed on the drywall adjacent to many of the rooftop entry doors. The rooftop access doors are exposed to extreme weather conditions that have resulted in deterioration of the door and door seals which can result in potential leakage to the interior. The doors also appear to be leaking by the thresholds and some flashing and other devices have been added as stop-gap measures. In order to reduce the potential for moisture related damage and prolong the life of the door materials, it is recommended that a qualified carpenter or handyman install high quality well sealing storm doors on the exterior of the rooftop access door openings.

**🔧 WDS-4 WINDOWS, DOORS, SKYLIGHTS:** Corrosion was noted at the base of many of the exterior metal entry doors. It does not appear as if these doors have been painted and may still be just primer. In order to reduce the potential for continued moisture related damage and the entry of moisture and pests, It is recommended that the bottom of the affected doors be repaired by a qualified welder or iron worker and that the doors be painted with a high quality paint formulated for exterior metal applications.

**NOTE:** The cracked and open caulk joints by many of the doors exacerbates runoff entering the joints and deteriorating the metal and the caulk joints should be replaced as noted elsewhere in this report.

**🔧 WDS-5 WINDOWS, DOORS, SKYLIGHTS:** Damaged finishes were noted on the walls adjacent to many of the doors. In order to protect the adjacent finishes and components from damage, door stops (hinge mounted, floor mounted, or wall mounted) should be installed by a qualified handyman.

**🔧 O-2 OTHER:** The structure has a fire door in the garage that is intended to reduce the spread of fire in the structure. This door has fusible links that are intended to melt during conditions where a fire would be present. The door has a chain for manual operation and the chain has been tied off in order to prevent movement of the door, however, this also would prevent it from closing in the event of a fire. In order to maintain fire protection in the structure, the chain must be kept in a freed position. If the door is closing automatically, the door may need to be balanced/adjusted so it does not close improperly.

For more information on the door, here is a link to a webpage from the manufacturer: [Guidelines for Installation of Rolling Fire Door Release Assembly](#)

## Recommended Maintenance Items

**🔧 O-3 OTHER:** The structure has a fire suppression system that most likely has components that require annual inspections and/or servicing. In order to ensure proper operation of the fire suppression system, it is recommended that the regular servicing that appears to be occurring be continued.

**🔧 O-5 OTHER: RESERVE STUDY -** A reserve study was performed as a part of this Property Condition Assessment (PCA). The reserve study analyzes the current contributions and future

expenditures in order to ensure that proper maintenance can be performed on the structure. Certain expenditures are more critical and the reserve study prioritizes repairs and many improvements like roof and roof deck replacement should be coordinated to occur at the same time or concurrently. **There are numerous variables in the assessment that can affect the assessment and they can be changed if desired in order to gauge the various effects. These range from the rates of inflation to the percentage of increases in reserve contributions and the current model assumes an inflation rate of 3% and an increasing contribution of 2%.** The reserve study should be reviewed periodically in order to determine if there are new needs that develop or if costs vary wildly from the anticipated expenditures.

## Monitors

🕒 **SAF-1 STRUCTURE AND FOUNDATION:** At least one foundation wall crack was noted on the east side on the exterior of the foundation and there was cracking in the masonry adjacent to the crack. It's possible that there was some minor settlement along this wall and the cracks in the masonry should be monitored to see if they are getting wider. Widening cracks would be a sign of continuing foundation settlement and if additional movement is noted the foundation should be evaluate and repaired by a qualified foundation repair contractor.

## Due Diligences

🔍 **ESGCDAF-4 ELECTRICAL SYSTEM, GROUNDING, CONNECTED DEVICES AND FIXTURES:** The evaluation of the low-voltage equipment in the home: alarm, communication, audiovisual, etc., is beyond the scope of the home inspection and should be performed by a qualified low-voltage electrical contractor. In order to reduce the potential for confusion and to reduce clutter around the home, any wiring, panels, cabinets, etc. for any equipment that is no longer in use should be removed.

🔍 **PSDFAV-1 PLUMBING SUPPLY, DRAINS, FIXTURES AND VENTS: *A video camera sewer scope is recommended.*** An evaluation of the sewer line below the ground was attempted at two locations in the parking garage. One was near the NW corner of the garage and the other was by parking space G41. The pipe near the NW corner went underwater at about 12 feet and the camera was pushed to 40 feet before it wouldn't go further and was under water continuously. The pipe near space G41 hit an obstruction at about 9 feet and the camera could not be pushed further. Both pipes were full of sludge which made televising more challenging and blockage may be responsible for the back-up in the one pipe. It should be noted that there are numerous rooftop planters and significant quantities of debris were noted beneath the rooftop deck and much of the debris and dirt could be flowing into the sewers via the rooftop drainage scuppers and has the potential to be the source of the blockage.

There are two sanitary manholes on the north side of the structure, one had a significant quantity of sludge that should most likely be removed. The other was full of debris, however, it was clear that drainage was occurring in the bottom of the structure. Also, it appears that leakage has been occurring by one of the clean-out covers in the garage. In order to provide proper sanitary drainage for the structure and to ensure the condition of the drainage pipes, the manholes should be cleaned

out by a qualified sewer cleaning company. Also, any accessible sanitary/drain pipes should be flushed and televised by a qualified sewer cleaning company.

🔍 **PSDFAV-9 PLUMBING SUPPLY, DRAINS, FIXTURES AND VENTS:** There is a planter watering system that was not evaluated as part of this inspection. In order to reduce the risk for extensive frost damage, these systems must be drained of water prior to freezing winter conditions and some components require annual servicing and/or certification. Some of the components appear to be exposed and/or possibly damaged and it is unknown if these items are still actively used. Also, the backflow preventer that was found in the basement may be a part of this system and did not appear to be recently serviced and in order to continue the function of the system it should be evaluated and serviced as needed.

🔍 **HACVAGAS-1 HEATING, AIR CONDITIONING, VENTILATION, AND GAS APPLIANCE SYSTEMS:** Heavy corrosion was observed on one of the vent pipes for the gas appliances in the units. This is typically an indication that there is insufficient warm exhaust gases that allow for proper ventilation of exhaust air or backdrafting of exhaust air in the vent pipe from either use of a large ventilation fan or a fireplace damper in one of the units that is left open. In order to determine the cause of this corrosion, the vent fans and fireplaces in the units served by the vent pipe should be examined to determine if one of the conditions noted above is occurring.

## Future Projects

📄 **RCRFRD-7 ROOF COVERINGS, ROOF FLASHING, ROOF DRAINAGE:** Ponded areas were noted on the low slope roof. Ponding accelerates the rate of roof wear/deterioration and increases the risk for leaking. When a new roof covering is installed, plans should be made to re-pitch the roof using tapered roof insulation.



## GENERAL INFORMATION

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**TYPE OF STRUCTURE:** Mid-Rise Condominium

**APPROXIMATE AGE OF STRUCTURE:** Under 25 Years, Online information suggests structure was built in 2007

**STRUCTURE FACES:** North

**CLIENT PRESENT:** Yes

**WEATHER CONDITIONS:** Cloudy

**AMBIENT TEMPERATURE:** Below 60...A/C not operated due to risk of equipment damage

**NUMBER OF STORIES:** Five Story

## EXTERIOR WALLS< GROUNDS, CHIMNEYS. ETC

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**GAS SHUT-OFF LOCATION:** Common Area Meter Room

**WALKWAYS PATIOS DRIVEWAYS:** Concrete Driveway, Concrete Walks

**VEGETATION/GRADING/DRAINAGE:** Improper Downspout Terminations

**EXTERIOR STEPS/STAIRWAYS/RAILINGS:** Reinforced Concrete Stairs

**EXTERIOR WALL CONSTRUCTION:** Masonry

**PRIMARY EXTERIOR WALL CLADDING MATERIAL:** Brick, EIFS - Damaged

**🔧 (EWGCE-1) Repair:** The existing wooden roof deck is weathered and deteriorating. In many cases there are rugs or other objects on the roof that are trapping moisture against the deck and deteriorating the existing deck boards. There are also planters that are deteriorating and the dirt from the planters is spilling onto the deck boards and getting into the roof deck and drainage piping. **Since the deck needs to be removed to replace the roof, it is vitally important that the deck and roof membrane be on the same replacement cycle.** In order to extend the service life of the deck materials, all materials that trap moisture should be removed from the deck and be banned from future use. If planters are desired, they should be appropriately designed and installed in a manner that does not affect deck surfaces, like wall mounted planters. Once the deck is clear the exterior wooden deck surfaces should be professionally cleaned and sealed against weather. Any deteriorated boards should be replaced prior to the sealing.

Here is a link to some potentially useful information regarding deck sealing: [How to Seal Your Deck & Best Deck Sealers](#)

**NOTE:** Because of the rooftop exposure and maintenance costs of a wood deck, when the deck is replaced, consideration should be given to using composite decking materials. These materials are not affected by moisture like wood is and the reduced maintenance costs and extended life will typically offset the higher initial purchase cost of the composite materials.

In order to make an informed choice regarding deck replacement materials, here is a link to a webpage that appears to have a fairly comprehensive discussion of deck materials: [Wood Deck vs Composite Deck: Which One Is Right for You?](#)

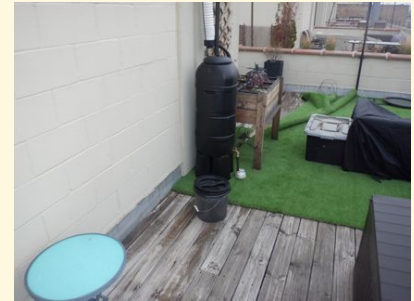
**FINAL NOTE:** When the deck is replaced the level of the deck should meet the rooftop door access thresholds. The existing sloped transitions should be avoided as they present trip hazards that can result in injury and drive moisture into the door openings.



*Deteriorated Deck Board*



*Protruding and Weathered Deck Boards*



*Deflected Deck by Rain Barrel*



*Sloped Transitions*



*Carpeting Trapping Moisture and Damaging Deck*



*Deteriorating Planters on Roof*



*Wood Rot on Deck Areas Below Carpet*



*Dirt and Debris Beneath Deck*



*Sagging and Unstable Deck Area*

**🔧 (EWGCE-2) Repair:** The existing caulking around the perimeter of the structure is missing,

cracked and sloppy and/or improper. Exterior sealant performance is **directly related to the joint preparation and application**. For increased service life, performance and aesthetics, the exterior of the structure should be carefully examined and old deteriorated and/or improper caulking should be removed and the exterior of the structure caulked via appropriate means and materials. Proper joint preparation and the use of compliant exterior rated sealants of good quality is recommended .

All caulk joints should then be inspected annually and be repaired as needed. **ALL** exterior wall penetrations such as: piping, conduit, vent caps, exterior light fixtures and receptacles should be sealed against moisture intrusion through the use of the appropriate caulking methods and materials. An intentional opening/gap at the base of electrical fixtures should remain open to allow any moisture penetration an avenue of escape.

Several sources regarding caulking preparation can be found online, here is a link to one source: [Caulking Basics](#)



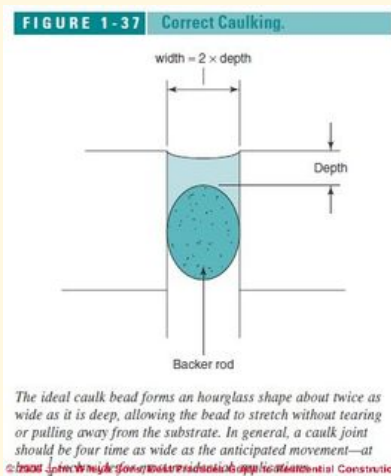
*Unsealed Edge on Balcony Light*



*Unsealed Junction Box on Upper Deck Light*



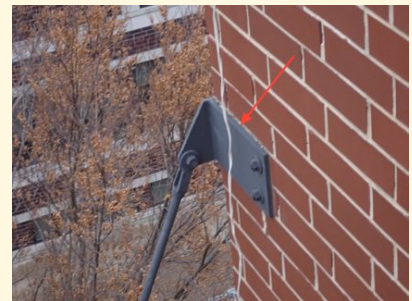
*Unsealed Wall Penetrations*



*Proper Caulk Joint Example*



*Unsealed Wall Penetrations*



*Unsealed Edges on Balcony Brackets*



*Failing Caulk Joints Noted*



*Cracks Noted on Sides of Caulk Joint*



*Cracked and Deteriorated Caulk on Edges of Stairs*

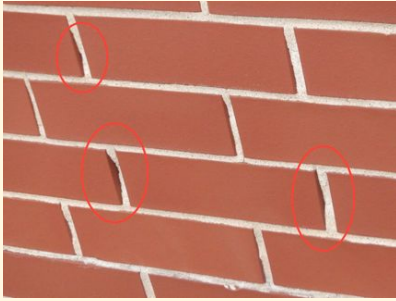


*Sloppy Caulk by Doorframes*

**🔧 (EWGCE-3) Repair:** Some of the masonry joints on this relatively new structure are poorly formed, especially at the head joint. Proper masonry installation requires a skilled brick layer that can properly fill and finish the head joints on each course of masonry and failure to achieve this results in openings that may allow excessive moisture to enter the structure. In order to reduce the potential for moisture related damage, it is recommended that a qualified masonry contractor evaluate the entire structure and re-point the joints as needed.

There are also numerous cracked mortar joints throughout the structure with many related to improper stone cap details or joint details that can allow the entry of moisture. In order to reduce the potential for moisture related damage, it is recommended that a qualified masonry contractor evaluate and re-point the structure as needed.

**NOTE:** Displaced block was observed in several locations which suggests that moisture entered into the spaces behind the block and frozen conditions pushed the blocks outward. These blocks cannot simply be re-pointed and it will be necessary to remove the affected blocks, evaluate the space behind the blocks for additional concerns and replace the blocks so they are flush with the exterior face.



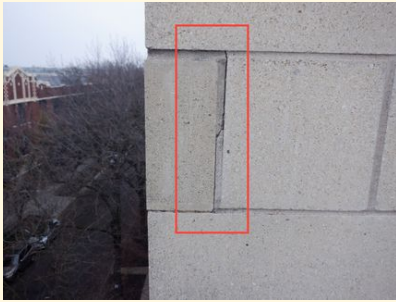
*Numerous Poorly Configured Joints*



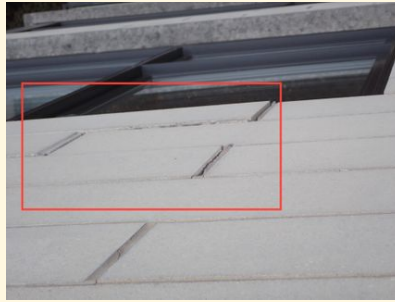
*Open Head Joint*



*Numerous Poorly Formed Joints*



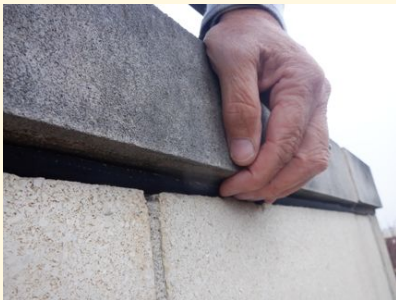
*Open Joint Exterior Block*



*Displaced Blocks on Eastern Face of Structure*



*Displaced Blocks by Steel Framing*



*Open Joints Beneath Cap Above Block*

**🔧 (EWGCE-4) Repair:** Some of the exterior window lintels have been sealed and can no longer drain moisture which increases the potential for corrosion of the lintels. Over time the corroding steel will expand which can damage the adjacent masonry walls and allow moisture to penetrate to the interior of the living space. In some cases inappropriate or improper weep ropes have been installed, if these are to be utilized they should be proper weep tubes that extend back into the wall cavity. In order to reduce the potential for moisture related damage, the lintel drainage space should be repaired by a qualified masonry restoration contractor.



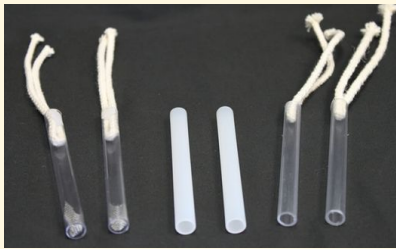
*Sealed Lintels*



*Blocked Weep Hole and Potentially Improper Weep Ropes*



*Loose and Improper Weep Ropes*



*Weep Tube Examples*



*Moisture Stains Noted in Trim Above Sliding Door in Upper Level Unit*

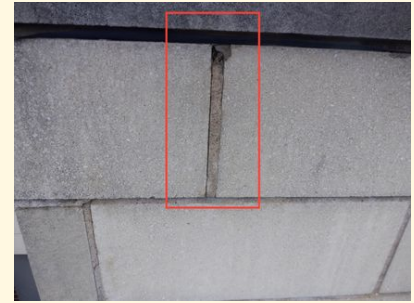
**🔧 (EWGCE-5) Repair:** The stone capping above the parapet walls and its ancillary flashing are improperly configured and present a significant risk for moisture penetration, moisture saturation and damage to the adjacent brick masonry. It appears that the capstones have been removed and replaced, with flashing, however, the workmanship and materials varies on portions of the roof. In some cases proper stainless steel drip edge has been utilized, however in other areas, poor quality thin membrane was used and there is no drip edge and there is deteriorated mortar and openings below the cap that can allow the entry of moisture. Ideally, parapet wall capstones should be sloped inward toward the roof surface so that runoff is properly channeled to the roof drains and should have sufficient overhang and drip grooves so that the amount of moisture running onto the exterior masonry walls is limited. Stainless steel drip edge and thick elastomeric flashing are vastly superior to the thin vinyl flashing that is typically used. It is recommended that the existing stone capping without the drip edges be removed; stainless steel drip edge be set into a thick bed of high-quality caulking along both the inner and outer top masonry courses; that heavy, self-adhesive, elastomeric flashing be installed as a waterproof bridge across the entire depth of the masonry wall; that the existing stone capping or new stone capping be set into place and secured with stainless steel pins; and that properly configured caulked joints be used at the butt joints of the stone capping slabs.



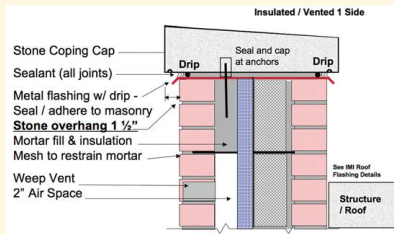
*Thin Membrane Flashing and Open Gaps on Edges of Caps*



*Cracked Mortar Joints Below Cap*



*Cracks in Joints Below Cap*



*Stone Cap Criteria*

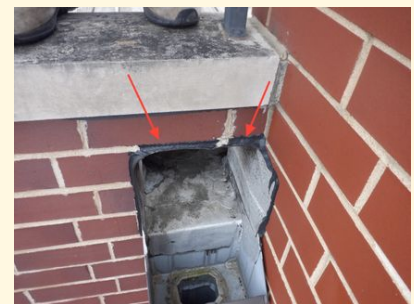
**🔧 (EWGCE-6) Repair:** The through-wall drainage scupper details are improperly configured and are prone to allowing moisture penetration and damage to take place. The installations conform with neither the National Roofing Contractors Association (NRCA) standards nor those of the Sheet-Metal and Air-Conditioning Contractors National Association (SMACNA). In order to reduce the risk for moisture penetration, saturation and freeze/thaw damage, it is strongly recommended that the through-wall scupper openings be repaired by a qualified sheet-metal contractor. Also, debris was found in several of the scuppers that could reduce or block flow. In order to reduce the potential for moisture related damage It is recommended that debris screens be added to the scuppers and they be checked and cleaned regularly



*Open Gaps Between Scuppers and Masonry Openings*



*Close-up of Large Open Gaps on Scuppers*



*Caulked Edges Prone to Failure*



*Unsealed Roof Edge on Side of Scupper*



*Drainage Scupper Example*



*Debris Noted in Scupper*

**🔧 (EWGCE-7) Repair:** This structure has an exterior cladding of EIFS (Exterior Insulation and Finishing Systems) and cracks were observed in the exterior walls. This wall cladding system may allow unseen moisture penetration, rot and damage to occur and progress to critical levels before being noticed. No representation is made in this report regarding the suitability or performance of this product. Obvious defects will be noted but a final determination on the existing condition of the EIFS system should be made by a licensed and competent contractor specializing in the review and repair of these systems.

As use of this product declines, it may become increasingly more difficult to locate contractors who are able to evaluate and repair this product, here is a link to one local contractor that may be able to evaluate and repair this product: [Royal Falcon Enterprises](#)



*Cracks in EIFS*



*Cracks in EIFS*



*Damaged EIFS*

**🔧 (EWGCE-8) Repair:** The galvanized steel chimney crowns/caps are not properly configured to shed moisture, as a result, the sheet metal crowns are at risk for allowing moisture into the chimney chase and to premature corrosion and failure of the cap. It is strongly recommended that the sheet metal crown be replaced by a qualified sheet-metal specialty contractor.





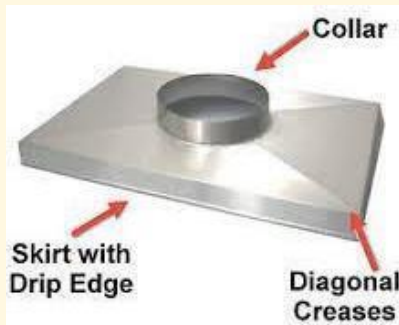
*Water Ponding on Caps*



*Open Seam Joints Prone to Leakage*



*Cracked and Damaged Masonry Below Metal Caps*

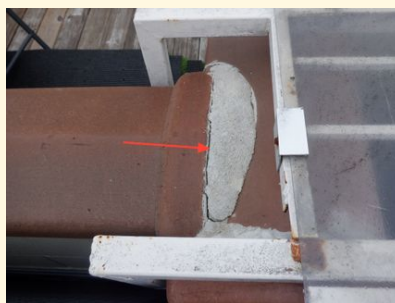


*Chimney Chase Cover Example*

**🔧 (EWGCE-9) Repair:** The butt joints between the individual sections of clay tile coping have been sealed with cement mortar. The mortar is cracking and the joints are open which creates a risk for moisture saturation/damage to the masonry walls below. The coping tiles serve to protect the underlying brick masonry walls from wetting/drying and freezing/thawing damage and should be neatly joined and properly sealed in order to perform this function. In order to reduce the potential for moisture related damage, the coping tiles should be repaired or replaced as needed by a qualified masonry or roofing contractor. Ideally it is recommended that the individual clay tiles be removed and reinstalled using backer rod and polyurethane caulk to seal the joints, however, this may be cost prohibitive at this point and it may be possible to smear the cap joints with tar until such time when they can be properly sealed or replaced with a neatly cut and properly sealed kyner coping cap.



*Cracked and Open Joints on Clay Tile Cap*



*Close-up of Large Cracks in Clay Tile Joints*



*Cracks in Masonry Below Cracked and Open Cap Joints*



*Damaged Clay Tile Cap*

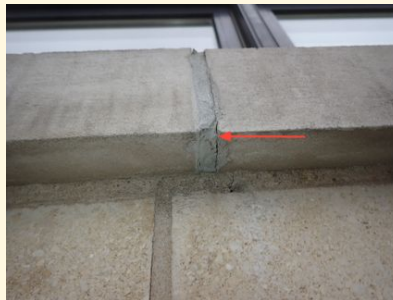


*Clay Tile Caulking Example*

**🔧 (EWGCE-10) Repair:** Caulk appears to have been smeared over the joints between the stone copings and/or sills and cracks were noted on the sides of the caulked joints. All of the exterior caulk joints should be configured and applied according to appropriate standards. A thin smear of caulk over a brittle substrate such as cement mortar, does not constitute an appropriate caulk or sealant joint. In order to reduce the risk for moisture penetration, drafts and energy losses, it is recommended that all of the exterior caulking on the building be evaluated and repaired or replaced as needed by a qualified handyman or masonry restoration contractor.



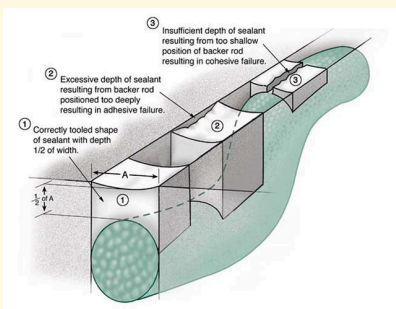
*Caulk Smeared Joint on Stone Sill*



*Crack Noted on Side of Caulk Smeared Joint*



*Gaps and Openings in Caulk Smear*



*Caulk Joint Example*

**🔧 (EWGCE-11) Repair:** Spalling and deteriorated concrete were observed on the sides of several of the retaining walls which can allow moisture to enter the wall resulting in further corrosion of the reinforcing steel which can deteriorate the wall further. In order to reduce the potential for moisture related damage It is recommended that a qualified concrete repair contractor evaluate and

repair the wall as needed.



*Deteriorated Concrete on Wall*



*Deteriorated Concrete on Retaining Wall*

**🔧 (EWGCE-12) Repair:** Settlement of some of the front walk areas was noted and the rainwater runoff may further exacerbate settlement of the walk and stairs. There was also potential settlement of at least one of the stairs and walls. It's highly likely that these areas were adjacent to the large excavation needed for the foundation of the structure. Typically this void is backfilled with material that is difficult to compact and there may be some settlement over time. In some cases the slabs can be raised via various methods, however, some of the slabs are cracked and eventual replacement may be needed as it appears to have already been done on several other walk areas. Also, the grade adjacent to the front steps and walks does not drain away from the structure and ponding areas were noted adjacent to some of the walks that further exacerbates the walk settlement. All areas adjacent to the structure should drain away from the structure and once the walks are raised or replaced the landscape areas should be re-graded by a qualified landscaping contractor.



*Reverse Sloped Walk*



*Areas of Ponding Water*

**🔧 (EWGCE-13) Repair:**

Corrosion was noted in mid wall areas in at least one of the front stairway walls. Based on the thickness of the walls and presence of brick on both faces, the walls do not appear to have a concrete core so the source of the corrosion is most likely an improper tie used on the masonry Courses. In order to reduce the potential for further corrosion, it may be necessary to remove the affected bricks and restore the affected areas.



*Corrosion on Stairwell Walls*

**🔧 (EWGCE-14) Repair:** There were several trench drains on the property, a large one is present by the main underground garage entrance and there are several by the garages on the rear of the property. These drains appeared to be clogged with debris that would affect their ability to provide critical drainage and reduce the potential for water to enter the garages. In order to reduce the potential for moisture related damage It is recommended that the drains be regularly cleaned and maintained.



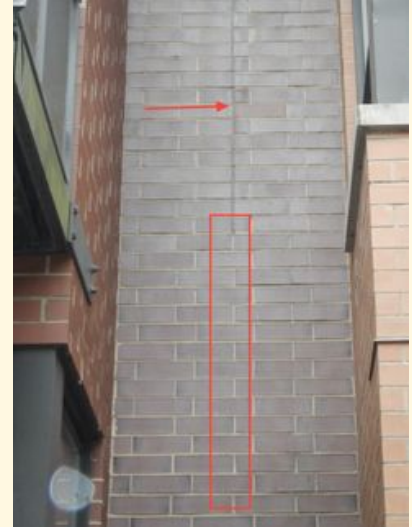
*Trench Drains by Garages*



*Trench Drain Clogged with Leaves*

### **🔧 (EWGCE-15) Repair:**

The movement joints on the long walls of this structure are incomplete. In order to reduce the risk for random cracking from the motion inherent in masonry walls that are 40' or longer, movement joints are recommended by masonry industry associations. These joints can be retro-fitted by a qualified masonry contractor and in order to determine if this building would benefit from the installation of movement joints, further review of the exterior masonry walls is recommended.



*Movement Joint (Arrow) and Incomplete Joint*

**🔧 (EWGCE-16) Repair:** There were metal planter edgings in several locations and there are sharp exposed edges that create potential trip and/or injury hazards. In order to reduce the potential for injury, it is recommended that a qualified landscaping contractor evaluate and remove or repair the edging as needed.



*Exposed Metal Edging*



*Exposed Metal Edging*

## GARAGES AND OUTBUILDINGS

**🔧 (GAO-1) Repair:** The concrete floor in interior the parking garage is cracked spalled and uncoated. Concrete typically contains reinforcement in order to provide the needed strength, however, this reinforcement is extremely susceptible to deterioration from exposure to moisture and de-icing salts. Over time this exposure can result in deterioration of the concrete resulting in costly replacement of the parking garage concrete. Unless a waterproofing membrane system was

installed as a part of the initial construction, the parking deck surface may be unprotected. In order to reduce the potential for moisture related damage, It is recommended that a qualified waterproofing contractor clean the floor and apply an appropriate waterproofing membrane that is suitable for vehicular traffic.

In order to understand the various concerns regarding applying a waterproofing coating in a parking garage, here is a link to an article from a Concrete Trade Association Magazine that appears to provide a fairly comprehensive discussion: [Don't Seal Your Fate: Considerations for parking garage surface treatments](#)

**NOTE:** If a membrane system has been installed this may be providing adequate protection as the deterioration may be present on a wearing surface. It may be possible to review the building plans in order to determine if a wearing surface and membrane system was included. If no such information is available, a core sample could be taken and the core examined for the layers that are present.

Here is a link to an article from a concrete trade magazine that describes such a system: [Protecting Parking Deck Systems](#)



*Spalled Driveway Surface*



*Cracks in Driveway*



*Standing Water in Garage*

## ROOF COVERINGS, ROOF FLASHING, ROOF DRAINAGE

**Roof Covering:** Modified Bitumen, Rooftop decking prevented a full inspection of the roof covering.

**Roof Viewed:** Roof Was Walked

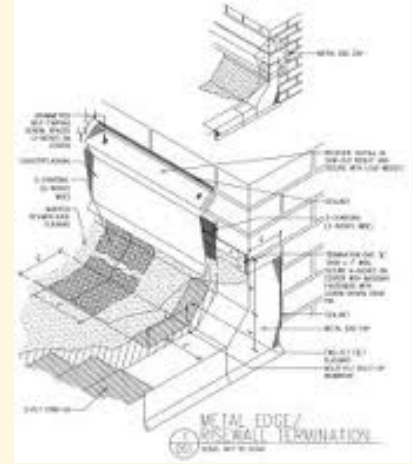
**🔧 (RCFRD-1) Repair:** Termination bar flashing should be installed at all areas where the modified bitumen roof covering is terminated. Failure to install the appropriate flashing at these areas can result in delamination, breaching, moisture intrusion and extensive damage. Evaluation and repair of the roof covering by a licensed and competent roofing contractor is recommended.



*Missing Termination Bar Flashing*



*Unsealed Edges on Vertical Roof Edges*



*Termination Bar Flashing*

**⚠️ (RCRFRD-2) Repair:** Many of the downspouts on the roof discharge onto the roof deck. While the deck does have exterior exposure, the concentrated runoff from the downspouts may accelerate deck board deterioration and should most likely discharge directly onto the roof membrane and repair by a qualified gutter installation contractor is recommended.



*Downspout Discharging onto Roof Deck*



*Damaged Noted by Downspout Discharge*

**⚠️ (RCRFRD-3) Repair:** Exposed areas of roof membrane are being damaged by furniture or other objects and the gashes may allow for the entry of moisture. Any areas that are open should be repaired by a qualified roofing contractor and in order to reduce the potential for future moisture related damage, protective material should be installed wherever exposed roofing is adjacent to deck areas



*Damaged Roofing*



*Damaged Roofing*



*Damaged Roofing*

#### **🔧 (RCRFRD-4) Repair:**

There are several satellite dishes on various roofs on the structure. The metal frame that the satellite dish is anchored to is weighted with concrete block and has sharp corners that can cut into and damage the roof surface which creates the potential for moisture intrusion. In order to reduce the potential for damaging moisture to enter the structure, it is recommended that protective pads be placed beneath the satellite dish framework.



*Metal Frames on Roofs*

**🔧 (RCRFRD-5) Repair:** The lower portions of the relatively thin and weak aluminum downspouts should be protected against impact damage by the use of cast-iron transition pieces or the equivalent. In order to allow for proper control of roof runoff, repair by a qualified gutter installation contractor or handyman is recommended.

Also, the downspout termination should take place above grade and the hub of the downspout-to-subsurface drain connection should be clearly visible and accessible. In order to reduce the risk for soil washout, repair of the subsurface drain system by a qualified plumber, handyman or gutter installation contractor is recommended.





*Damaged Downspout  
Surrounded by Sidewalk*

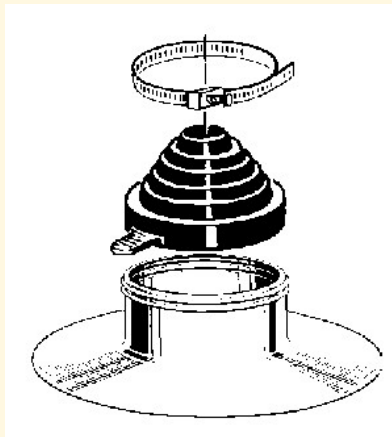


*Cast Iron Downspout Connection*

**⚠️ (RCFRD-6) Repair:** The penetrations through the modified bitumen roof covering are sealed with caulk and/or roofing tar which is a high maintenance, unapproved, high risk means of sealing a hole in the roof. When the roof is replaced, in order to reduce the potential for damaging and mold causing moisture to enter the structure, the installation of rubber boots flashings or pitch pocket flashings by a qualified roofing contractor is recommended.



*Multiple Layers of Sealant  
Materials on Rooftop  
Penetrations*



*Rubber Boot Roof Penetration  
Example*



*Pourable Sealant Example*

**📷 (RCRFRD-7) Future Project:**

Ponded areas were noted on the low slope roof. Ponding accelerates the rate of roof wear/deterioration and increases the risk for leaking. When a new roof covering is installed, plans should be made to re-pitch the roof using tapered roof insulation.



*Ponding Areas on Roof*

# STRUCTURE AND FOUNDATION

**FLOOR STRUCTURE:** Unable to Determine

**CRAWLSPACE ACCESS:** No Crawlspace

**MAIN FLOOR BEAM AND POSTS:** Reinforced Concrete Columns

**FOUNDATION:** Concrete Foundation Walls

👁️ **(SAF-1) Monitor:** At least one foundation wall crack was noted on the east side on the exterior of the foundation and there was cracking in the masonry adjacent to the crack. It's possible that there was some minor settlement along this wall and the cracks in the masonry should be monitored to see if they are getting wider. Widening cracks would be a sign of continuing foundation settlement and if additional movement is noted the foundation should be evaluate and repaired by a qualified foundation repair contractor.



*Foundation Crack*



*Cracking in Masonry by Crack*

# ELECTRICAL SYSTEM, GROUNDING, CONNECTED DEVICES AND FIXTURES

**ELECTRICAL SERVICE:** Below ground

**LOCATION OF MAIN SERVICE DISCONNECT:** Common area meter closet

**OVERCURRENT PROTECTION DEVICES:** Circuit Breakers

**SERVICE PANEL BRAND:** MURRAY

**BRANCH CIRCUIT CONDUCTORS:** Copper

**WIRING METHODS:** Electrical Metallic Tubing EMT (Conduit)

**ELECTRICAL GROUNDING CONDUCTOR/CLAMP LOCATION:** Water Pipe Grounding Clamp - GEC Improper

## 🔧 (ESGCDAF-1) Repair:

Exposed wires were observed in at least one location in the structure. In order to reduce the risk for electrical shock from inadvertent contact with exposed current carrying equipment and in order to contain molten copper created by high temperature arcing and sparking of energized wiring, it is recommended that all electrical connections be concealed inside covered metal junction boxes by a qualified electrician.



*Open Junction Box in Basement Ceiling*

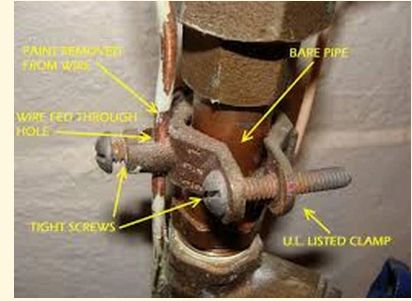
🔧 (ESGCDAF-2) Repair: The grounding electrode conductor is not properly secured to the water piping system and grounding clamp. The stranded copper grounding conductor has been squeezed between the clamp and the piping which is not allowed and is unsafe since it makes the clamp prone to loosening. This can reduce the safety and effectiveness of the bonding and grounding system and the existing clamp should be replaced with one that can properly secure the grounding electrode conductor into a screw terminal. Further evaluation and repair by a licensed and competent electrical contractor is recommended.



*Loose and Improperly Clamped Bonding Wire*



*Loose and Improperly Clamped Bonding Wire*



*Water Pipe Bonding Example*

**🔧 (ESGCDAF-3) Repair:**

At least one of the exterior light fixtures are loose. Loose electrical fixtures can result in arcing/sparking during use and present an increased risk of fire. Any loose electrical fixture on the structure should be evaluated and repaired as needed by a licensed electrician.



*Loose Light on Rooftop Deck*

**🔍 (ESGCDAF-4) Due Diligence:** The evaluation of the low-voltage equipment in the home: alarm, communication, audiovisual, etc., is beyond the scope of the home inspection and should be performed by a qualified low-voltage electrical contractor. In order to reduce the potential for confusion and to reduce clutter around the home, any wiring, panels, cabinets, etc. for any equipment that is no longer in use should be removed.



*Low Voltage Communication Equipment*



*Low Voltage Communication Equipment*



*Low Voltage Communication Equipment*

# PLUMBING SUPPLY, DRAINS, FIXTURES AND VENTS

**POTABLE WATER SOURCE:** Public

**WATER QUALITY TEST:** No

**WATER SERVICE PIPING MATERIAL:** Ductile Iron

**MAIN WATER SHUT-OFF LOCATION:** Exterior - In front parkway

**WATER DISTRIBUTION PIPING MATERIAL:** Copper

**WATER PRESSURE AND FLOW:** Adequate

**PLUMBING WASTE SYSTEM:** Public Sewer

**PLUMBING WASTE PIPING MATERIAL:** Cast iron, PVC, Not Fully Visible

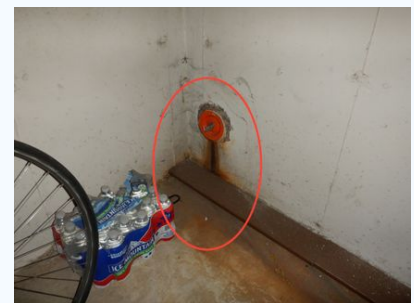
🔍 (PSDFAV-1) **Due Diligence: A video camera sewer scope is recommended.** An evaluation of the sewer line below the ground was attempted at two locations in the parking garage. One was near the NW corner of the garage and the other was by parking space G41. The pipe near the NW corner went underwater at about 12 feet and the camera was pushed to 40 feet before it wouldn't go further and was under water continuously. The pipe near space G41 hit an obstruction at about 9 feet and the camera could not be pushed further. Both pipes were full of sludge which made televising more challenging and blockage may be responsible for the back-up in the one pipe. It should be noted that there are numerous rooftop planters and significant quantities of debris were noted beneath the rooftop deck and much of the debris and dirt could be flowing into the sewers via the rooftop drainage scuppers and has the potential to be the source of the blockage. There are two sanitary manholes on the north side of the structure, one had a significant quantity of sludge that should most likely be removed. The other was full of debris, however, it was clear that drainage was occurring in the bottom of the structure. Also, it appears that leakage has been occurring by one of the clean-out covers in the garage. In order to provide proper sanitary drainage for the structure and to ensure the condition of the drainage pipes, the manholes should be cleaned out by a qualified sewer cleaning company. Also, any accessible sanitary/drain pipes should be flushed and televised by a qualified sewer cleaning company.



*Drainage Location in Manhole*



*Manhole Full of Sludge*

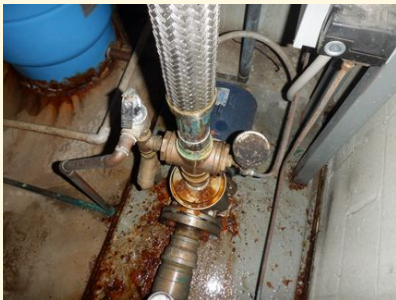


*Potential Leakage at Televising Location*



*Dirt and Debris Noted Beneath Rooftop Decks*

**🔧 (PSDFAV-2) Repair:** A booster pump system has been installed on this multi-story structure. At the time of the inspection it was noted that the pump system was running constantly and that the pressure tank was completely full of water. Based on the number of units in the structure, the tank for this building would appear to be grossly undersized. These systems are typically required to be installed in order to ensure that there is adequate water pressure to upper level units and the pump will typically pressurize the holding tank and then shut off until the pressure is depleted. In this case the bladder in the pressure tank may have been compromised resulting in continuous operation of the pump. In order to reduce the potential for pressure loss to the upper level units, it is recommended that a qualified plumber evaluate the tank and repair the system as needed. Here is a link to an article that discusses quiet options for booster pump replacements: [Which Water Booster Pumps are the most silent?](#)



*Constantly Running Pressure Pump*



*Small and Waterlogged Pressure Tank*

**🔧 (PSDFAV-3) Repair:** The plumbing vent pipes on the roof are flush with the roof deck. This can allow occupants of the rooftop decks to be exposed to noxious sewer gases. Residential building codes require these vent pipes to extend at least seven feet above the deck. In order to reduce the potential for sewer gases to affect rooftop residents, the vent pipes should be extended and properly supported.

Also, at least one of the narrower diameter plumbing vent pipes has material stuffed into the pipe that was most likely intended to eliminate the potential to drop objects into the pipes, however, they can restrict airflow. During extreme freezing temperatures in the winter this restriction can allow venting air to freeze and hoar frost formations can occur that can block the vent piping. Blocked

plumbing vent pipes increase the risk for noxious sewer gas intrusion into the occupied spaces and a qualified plumbing and/or roofing contractor should repair the vent pipes.



*Flush and Blocked Vent Pipes*

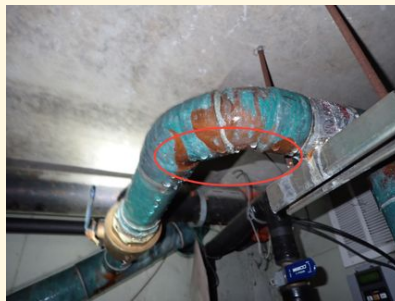


*Hoar Frost Example*

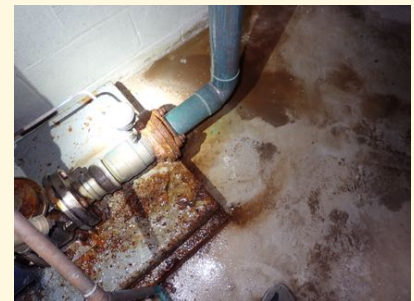
**🔧 (PSDFAV-4) Repair:** Given the size of this structure, the water supply piping in the mechanical room is subjected to considerable flow which increases the likelihood of the formation of condensation on the exterior of the water supply piping. The piping in the mechanical room was sweating profusely and there was considerable moisture present in the room that was corroding any exposed steel elements. In order to reduce the risk for condensation, mold growth and moisture damage, all of the accessible water supply piping in the mechanical room should be insulated.



*Heavily Corroded Expansion Tank*



*Significant Condensation on Supply Pipes*



*Excessive Condensation in Mechanical Room*

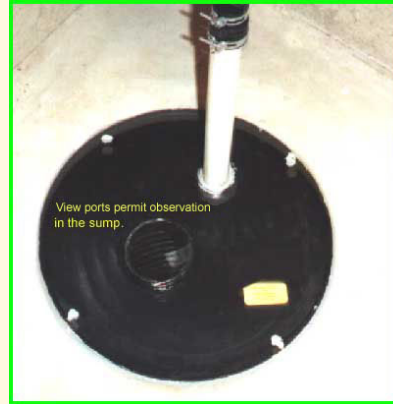
**🔧 (PSDFAV-5) Repair:** In order to reduce the risk for excess water vapor, radon gas, pests, etc. to enter the structure from the open sump pits, it is strongly recommended that properly sealed sump pit covers be furnished and installed by a qualified contractor or handyman.

**NOTE:** Prior to sealing the sump pit they should be cleaned and the the pump equipment should be evaluated and serviced or replaced if needed. The typical service life of a sump pump is approximately 7 to 10 years and if no battery back-up system is present, it is advisable to install a moisture detection device above the pump and below the lid that may be able to provide an alert regarding an elevated water level that could occur in the event of pump failure.

**FINAL NOTE:** One of the sump pumps was unplugged and obviously not operational at the time of the inspection. It is unknown if there is insufficient flow to require a sump pump or if the pump is broken. For proper removal of excess water from the foundation, the need for two pumps should be evaluated and adjusted if needed.



*Unsealed Sump Pits*



*Sump Cover Example*

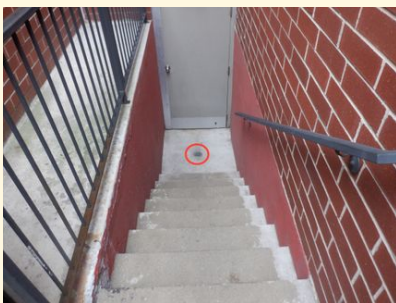
### **🔧 (PSDFAV-6) Repair:**

The lid for the watermain shut-off for the building is well below grade and adjacent to a walk which creates a possible trip hazard. In order to reduce the potential for injury, it is recommended that a qualified underground contractor or plumber adjust the lid to grade and that the surrounding area be backfilled and the grade is level.



*Below Grade Shut-off*

**🔧 (PSDFAV-7) Repair:** There are small drains adjacent to the lower level exterior entry doors that are easily clogged or overwhelmed by heavy rains. In order to reduce the potential for moisture related damage, it is recommended that a qualified plumber or concrete repair contractor install a larger drainage grate in the walk areas.



*Small Drain in Open Stairwell*



*Small Drains by Lower Level Entry Doors*



*Drainage Structures*



**🔧 (PSDFAV-8) Repair:**

The lids for the triple basin drainage structures in the garage have lightweight metal lids that do not appear to be rated for vehicular traffic and the lids are near one of the parking spaces in the garage. In order to reduce the potential for damage to a vehicle, It is recommended that a qualified plumber or underground contractor install heavy duty manhole castings with appropriate traffic rated lids on the triple basins.



*Lightweight Lids on Triple Basins*

**🔍 (PSDFAV-9) Due Diligence:** There is a planter watering system that was not evaluated as part of this inspection. In order to reduce the risk for extensive frost damage, these systems must be drained of water prior to freezing winter conditions and some components require annual servicing and/or certification. Some of the components appear to be exposed and/or possibly damaged and it is unknown if these items are still actively used. Also , the backflow preventer that was found in the basement may be a part of this system and did not appear to be recently serviced and in order to continue the function of the system it should be evaluated and serviced as needed.



*Sprinkler Controls*



*RPZ (if for sprinkler) Requires Annual Servicing*



*Exposed Irrigation Components*



*Exposed Irrigation Components*

### **🔧 (PSDFAV-10) Repair:**

There were several plumbing connections in the home that utilized non-reinforced mission style couplings. In order to reduce the potential for moisture related damage, It is recommended that a qualified plumber install non-shear reinforced mission style couplings at all splice locations.



*Non-reinforced Coupling on Sump Discharge in Garage*

## HEATING, AIR CONDITIONING, VENTILATION, AND GAS APPLIANCE SYSTEMS

**🔍 (HACVAGAS-1) Due Diligence:** Heavy corrosion was observed on one of the vent pipes for the gas appliances in the units. This is typically an indication that there is insufficient warm exhaust gases that allow for proper ventilation of exhaust air or backdrafting of exhaust air in the vent pipe from either use of a large ventilation fan or a fireplace damper in one of the units that is left open. In order to determine the cause of this corrosion, the vent fans and fireplaces in the units served by the vent pipe should be examined to determine if one of the conditions noted above is occurring.



*Heavy Corrosion on Vent Pipe*



*Close-up of Corrosion on Vent Pipe*

**🔧 (HACVAGAS-2) Repair:** The vents for many of the gas appliances in the units discharge adjacent to some of the A/C condensers. It was noted that nearly every A/C condenser next to a vent pipe has been replaced, while many of the A/C condensers away from the vent piping are original. It appears that the heated exhaust gases may be shortening the life of some of these A/C condensers and in order to prolong the life of these units the vent pipes should be raised an appropriate height above

the A/C condensers.



*Vent Pipe Discharging Next to A/C condensers*



*New A/C Condensers Noted in These Locations*



*Numerous Original Units Still Functioning*

**🔧 (HACVAGAS-3) Repair:** The A/C condensers are installed on energy absorbing bases that sit on metal brackets extending from the walls. The bases are not secured and there is nothing to keep the condensers from moving. In some cases it appears the bases have slid and the A/C condenser is balanced precariously on the edge and in one case the unit is exerting pressure on the flexible conduit for the power feed to the condenser. In order to reduce the potential for damage to the A/C units, the bases should be leveled and secured to the brackets by a qualified service technician or handyman.



*Power Feed Under Tension*



*Base Balancing on Brackets*

**🔧 (HACVAGAS-4) Repair:** There are two large gas fired heaters for the below ground parking garage. According to the manufacturers installation instructions the heaters should be inspected annually and the burners cleaned periodically. Given the build-up of dust on the interior of the units, it does not appear as if they have been inspected, cleaned and serviced recently if at all. For proper and continued operation of the heaters, it is recommended that a qualified service technician evaluate and service the units as needed.

For more information on these heaters, here is a link to a webpage from the installation instructions from the manufacturer: [Advanced Distributor Products Installation Instructions 150,000 to 300,000 BTU Series](#)



*Space Heaters in Garage*



*Data Plate on Heaters*

## FIREPLACES, WOODSTOVES, ETC.

### **🔧 (FWE-1) Repair:**

There are several clusters of fireplace vents on the roof, however, many are directly adjacent to other vents and have the potential to backdraft into other units. In order to reduce the potential for noxious gases to enter units from the fireplaces, it is recommended that the vents be re-configured so they are not adjacent to another vent.



*Inadequate Spacing of Fireplace Vents*

## INSULATION, VENTILATION, ATTICS, ETC.

### **ATTIC INSULATION & VAPOR RETARDERS: No Attic Access**

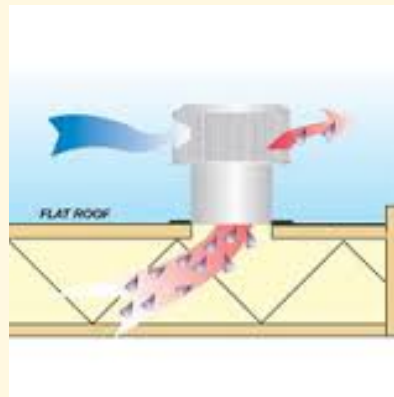
**🔧 (IVAE-1) Repair:** Based on observations during an earlier moisture intrusion investigation it appears that there is rapid snow melt on the roof that is resulting in ice damming at the drainage scuppers on the roof. This rapid snow melt is most likely a result of inadequate insulation and/or heat loss into the attic plenum space from unsealed lights and openings in the upper level units. The ability to ventilate the plenum space is key to the reducing the heat build-up in the attic plenum space. The aluminum breathers noted on this roof are not intended to serve as venting devices for the roof

plenum and there are a minimal number of these vents on the roof. These devices have very little net free vent area and are incapable of venting the potentially large volumes of trapped heat and moisture inside the roof plenum and the limited number of vents exacerbates the problem. Inadequate ventilation of the roof plenum can not only result in rapid snow melt, it can result in condensation, mold growth, excess energy usage and reduced indoor air comfort during the cooling season. It is recommended that the existing undersized and inappropriate breathers be replaced with high-quality roof vents designed for low slope roof applications.

**NOTE:** When the vents are installed, the existing insulation in the attic plenum space should be evaluated by a specialty insulation contractor and if the insulation is found to be deficient, improvements to the insulation should be made. **Important - Increasing the ventilation rate inside the roof/ceiling plenum without first performing guided air-sealing to stop the free flow of interior air into the plenum can result in condensation, mold growth, etc. where little or none has occurred in the past.**



*Rooftop Breather Vents*



*Flat Roof Vent Example*

**🔧 (IVAE-2) Repair:** The existing cheap plastic vent and/or dryer dampers are warped and are open to the exterior which creates the potential for cold air to enter and condense on warmer interior components and for flying pests to enter the open dryer venting. In order to reduce the potential for corrosion and moisture related damage and unwanted visitors, all dryer and exhaust vent dampers on the exterior walls should be replaced with high-quality, gasketed, vent dampers.

**NOTE:** In order to ensure proper performance of the dryer vents, regular examination and cleaning of dryer vents is recommended.



*Broken Vent Damper*



*Cracked Vent Damper*



*Proper Exhaust Damper Example*

**🔧 (IVAE-3) Repair:** Gaps and openings were noted around numerous ceiling and wall penetrations in the below grade parking garage. Significant air leakage can occur in these openings which could allow reduced indoor air quality; introduce potentially dangerous and noxious odors; allow drafts and energy losses; and, in the event of a fire; allow smoke and carbon monoxide into the living unit's in the structure. It is recommended that the subject living unit and all of the living units in the building undergo an air-sealing regime to reduce these risks and to save energy. Some of the typical areas that require air-sealing include: pipe chases (both vertical and horizontal). For suggestions on air sealing the structure, here is a link to a webpage from the US Dept of Energy with some excellent suggestions: [Air Sealing Your Home](#)



*Unsealed Pipe Penetrations*



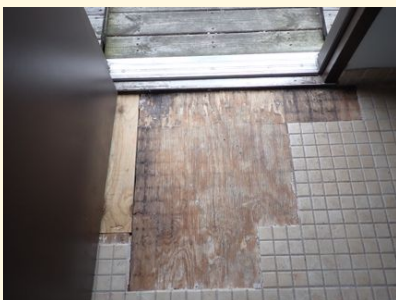
*Unsealed Pipe Penetrations*



*Unsealed Pipe Penetrations*

## WINDOWS, DOORS, SKYLIGHTS

**🔧 (WDS-1) Repair:** Flooring has been removed near the threshold of several of the elevator doghouse rooftop access doors. The existing threshold at the rooftop access doors are poorly sealed. In order to reduce the potential for the entry of moisture and pests and to conserve energy, reduce cold drafts and reduce noise levels inside the living spaces, it is recommended that a improved weatherstripped thresholds be installed at the bottom of the rooftop access doors by a qualified carpenter or handyman.



*Flooring Removed by Elevator Entrance*



*Daylight Observed Beneath Entry Doors*

**🔧 (WDS-2) Repair:** Moisture related staining and elevated moisture levels were noted in the doorframe on the sliding door in at least one upper level unit. Given that the sliding doors are now 15 years old, the seals are beginning to become compromised and leakage is developing and will more than likely progress further. In order to reduce the potential for moisture related damage, it is recommended that consideration be given to replacing the sliding doors in the not too distant future. Some of the sliding doors that are in lower or more protected balconies may have less deterioration and replacement of those doors can wait, however, the more deteriorated ones should be replaced with doors that are made from materials that are less affected by moisture. The doorframes should be monitored and if excessive deterioration is noted, especially on the bottom portion of the doorframe, the bottom portion should be replaced with materials that are less affected by moisture like PVC lumber. For recommendations on more energy efficient sliding doors, here is a link to a webpage from the US Dept of Energy that discusses energy efficient doorframes: [ENERGY STAR Most Efficient 2022 — Sliding Glass \(Patio\) Doors](#)



*Deteriorated Doorframe*



*Elevated Moisture Levels in Doorframe*

**🔧 (WDS-3) Repair:**

Moisture related damage was observed on the drywall adjacent to many of the rooftop entry doors. The rooftop access doors are exposed to extreme weather conditions that have resulted in deterioration of the door and door seals which can result in potential leakage to the interior. The doors also appear to be leaking by the thresholds and some flashing and other devices have been added as stop-gap measures. In order to reduce the potential for moisture related damage and prolong the life of the door materials, it is recommended that a qualified carpenter or handyman install high quality well sealing storm doors on the exterior of the rooftop access door openings.



*Damaged Wall Areas by Rooftop Access Doors*

### 🔧 (WDS-4) Repair:

Corrosion was noted at the base of many of the exterior metal entry doors. It does not appear as if these doors have been painted and may still be just primer. In order to reduce the potential for continued moisture related damage and the entry of moisture and pests, it is recommended that the bottom of the affected doors be repaired by a qualified welder or iron worker and that the doors be painted with a high quality paint formulated for exterior metal applications.

**NOTE:** The cracked and open caulk joints by many of the doors exacerbates runoff entering the joints and deteriorating the metal and the caulk joints should be replaced as noted elsewhere in this report.



*Corrosion on Metal Entry Doors*

🔧 (WDS-5) Repair: Damaged finishes were noted on the walls adjacent to many of the doors. In order to protect the adjacent finishes and components from damage, door stops (hinge mounted, floor mounted, or wall mounted) should be installed by a qualified handyman.



*Doorstops Missing on Some Doors*



*Damaged Walls by Doors*

## OTHER

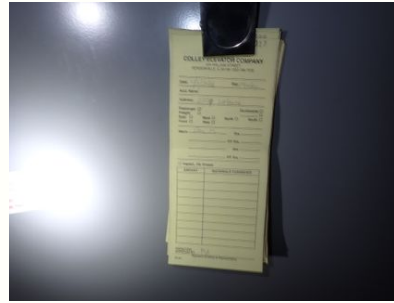
🔧 (O-1) Note: The building has five hydraulic elevators. These elevators are highly complex and are excluded from the scope of this building inspection. Elevators require periodic and/or annual inspections based on the authority having jurisdiction and while a maintenance person was on site and noted that the elevators are serviced monthly, major cost concerns may be close with these elevators. The key to the operation of these elevators are the hydraulic pumps that drive the elevator mechanism. According to the service person these pumps have a lifespan of 12 to 15 years and it appears one of the pumps had to be replaced recently and most likely the others will be needing replacement soon. Other components like the Door Equipment, Elevator Controllers and



Hydraulic Cylinders may also need to be replaced in the next 10 to 15 years.



*Elevator Controls*

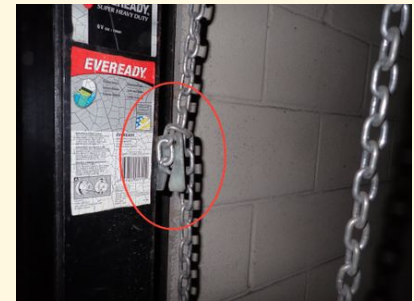


*Recent Service Tag*


### (O-2) Repair:

The structure has a fire door in the garage that is intended to reduce the spread of fire in the structure. This door has fusible links that are intended to melt during conditions where a fire would be present. The door has a chain for manual operation and the chain has been tied off in order to prevent movement of the door, however, this also would prevent it from closing in the event of a fire. In order to maintain fire protection in the structure, the chain must be kept in a freed position. If the door is closing automatically, the door may need to be balanced/adjusted so it does not close improperly.

For more information on the door, here is a link to a webpage from the manufacturer: [Guidelines for Installation of Rolling Fire Door Release Assembly](#)



*Door in Fixed Position*

 (O-3) **Recommended Maintenance:** The structure has a fire suppression system that most likely has components that require annual inspections and/or servicing. In order to ensure proper operation of the fire suppression system, it is recommended that the regular servicing that appears to be occurring be continued.



*Maintenance Tag is Current*



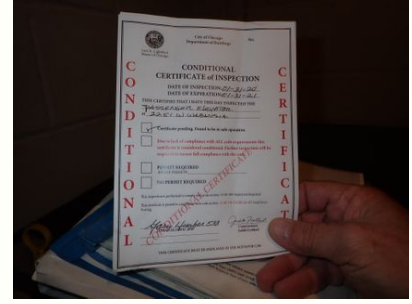
*Sprinkler Equipment Box in Mechanical Room*



*RPZ Requires Annual Servicing*

📌 (O-4) Note:

It was noted that the elevator inspection certificate does not have a date within the 12 month inspection period from the current date. The City typically requires that elevators be inspected annually and it is recommended that the potential need for the inspection be raised with the condominium association.



*Expired Elevator Certificate*

🔧 (O-5) Recommended Maintenance:

**RESERVE STUDY** - A reserve study was performed as a part of this Property Condition Assessment (PCA). The reserve study analyzes the current contributions and future expenditures in order to ensure that proper maintenance can be performed on the structure. Certain expenditures are more critical and the reserve study prioritizes repairs and many improvements like roof and roof deck replacement should be coordinated to occur at the same time or concurrently. **There are numerous variables in the assessment that can affect the assessment and they can be changed if desired in order to gauge the various effects. These range from the rates of inflation to the percentage of increases in reserve contributions and the current model assumes an inflation rate of 3% and an increasing contribution of 2%.** The reserve study should be reviewed periodically in order to determine if there are new needs that develop or if costs vary wildly from the anticipated expenditures.



*Reserve Study*

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