



**JAV
ESTIMATING
SERVICES, INC**

SUMMARIZED INSPECTION REPORT

AUGUST 1, 2009

REPORT NUMBER- 090800

FOR- YOUR NAME HERE

FOR THE PROPERTY LOCATED AT-
YOUR ADDRESS HERE
RENO, NEVADA



THIS IS A INSPECTION REPORT OF A 4 BEDROOM, 4 FULL BATH AND 2
½ BATH HOME AT THE ADDRESS NOTED ABOVE. THIS UNIT IS
APPROXIMATELY 4 YEARS OF AGE.

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SCOPE 1.0

I was contacted by _____ and was asked to complete a physical review of the property located at _____, Reno, Nevada, due to concerns the current home owners has regarding suspect construction defects, code violations and failure of the builder to comply with industry standards or manufactures specifications while constructing this residence. This was to be a visual inspection only and there was no destructive testing completed. Note: There may be items that are concealed that could not be observed. These items may become visible while effecting repairs to the items noted below. Any estimate for repairs should include a contingency figure for those concealed items that may become known through completing repairs.

Upon completion of the physical review of the property, I was to generate a written report of the general observed conditions or defects. In addition, I was to complete a proposed course of repair or plan of investigation for those observed defects or conditions.

GENERAL INFORMATION 2.0

This is a single family residence. I was provided with a copy of the construction drawings completed by _____. The plans were identified as “_____, Lot 0000000”. The cover page of the drawings indicated that the home was completed under the 1997 Uniform Building Codes (UBC), 1997 Uniform Plumbing Code (UPC), 1997 Uniform Mechanical Code (UMC). It is assumed the home also would have been completed under the 1999 National Electric Code (NEC) and the 1995 Model Energy Code (MEC) that were in force by Washoe County when the 1997 UBC Codes were adopted.

I was told by the home owner that there has been some past water accumulations under the home that caused subsequent mold formations on framing in the crawl area. I was also told that there had been several attempts to remove water from the crawl area, encapsulate the mold formations with foam insulation as well as some fungal treatments by a pest inspector where Tim-Bor (fungicide) had been applied. Note: no treatment sticker was observed at the entry to the crawl area indicating that a fungicide treatment had occurred as required by NRS 555.

At the time of this inspection I observed some general roof damage. All insulation and conditioned air distribution ducting had been removed from the crawl area.

The conditions during this inspection were as follows:

Temperature 58 degrees

Partial clouds

No measurable precipitation in the last 7 days

The Defect or Suspect condition section (3.0) below, will list the defect or condition and a location in the applicable building code that has been violated, indicate non-compliance with the design drawings/blue prints, or request that an engineer or specialist review the condition. If requested, the complete code statements or language can be provided. The specific code statements or language were not included in this report to reduce the cost and time associated with generating the report.

The proposed repairs and executive summary section below (4.0) will list additional information and a narrative about each condition. Additional investigations or observations by additional experts may be recommended in this section.

DEFECT OR SUSPECT CONDITIONS 3.0

- 3.7 ELECTRICAL
- 3.11- Dedicated outlet at garage- No ground fault protection or dedicated outlet by water heater at garage- NEC 210-8 (2)
 - 3.12- Disposal wires- Wires not secured to either garbage disposal- NEC 370-17
 - 3.13- Smoke detectors- Chirping
 - 3.14- Bushing at sub panel- No bushing where romex wires enter the bottom of the sub panel located in the pantry- NEC 370-17
 - 3.15- Abandoned wires attic and crawl area- Multiple romex wires are abandoned in the crawl area and attic. NEC 110-12
 - 3.16- Support wires- Wires are not supported at several areas throughout the crawl area- NEC 336-18
 - 3.17- Incomplete receptacle installation at crawl area- The power supply for one of the sump pumps being installed was not complete- crawl area west under entry- NEC 110-12
 - 3.18- Other
 - 3.19- Other
 - 3.20- Other
- 3.8 PLUMBING/HVAC
- 3.21- TP elbow at exterior- No elbow installed on the water heater pressure relief drain line to direct scalding water to the ground. UPC 608.5
 - 3.22- Drip leg at water heaters- No drip legs are installed in the gas lines at the water heaters in the garage – UPC 1211.4
 - 3.23- Heater service/activate- units are deactivated. Units are dirty. Units have water marks within indicating past condensation leaks from exhaust. UBC 310-11
 - 3.24- AC power conduits- conduits are loose and separated at the condensing units at the exterior south- NEC 370-17
 - 3.25- Water softener air gap- No air gap or back flow device was visible at the water softener unit in the garage. UPC 603
 - 3.26- Master fire place gas line- The gas line rubs on the rigid support at the left side under the master bedroom fire place unit. – UPC 1203
 - 3.27- Master fire place make up air- Consult the manufacture or installing contractor due to possible back drafting or loss of make up air in a sleeping room.
 - 3.28- Mr. Steam operation- water exits the steam vent in the shower. No steam exits the vent. Consult the manufacture of the equipment.
 - 3.29- Mr. Steam TP- No drain line is installed on the pressure relief valve at the steam unit in the crawl area. UPC 608.5
 - 3.210- Leak toilet supply- west bath has leak at the supply line – UPC 310
 - 3.211- Plumbing support crawl area- Several support straps are missing or broken at both supply and waste lines throughout the crawl area- UPC 314
 - 3.212- Waste line slope at crawl area- Negative slope on waste lines under the Kitchen east and entry ½ bath at crawl area- UPC 708
 - 3.213- Sump installation + no back flow device- sump installations are not complete. Proper power supply, drain lines and back flow device are not installed. UPC 603
 - 3.214- Suspect tap into waste line from wine cooler- no visible air gap or back flow device on waste line UPC 603
 - 3.215- Other
 - 3.216- Other

DEFECT OR SUSPECT CONDITIONS 3.0- continued

3.9 INTERIOR

- 3.31- Fire wall- hole behind water heater. No fire tape or fire caulking- UBC 703
- 3.32- Fire wall- duct- open duct through ceiling of garage. No fire damper. UBC 703
- 3.33- Fire wall- flue flanges are loose and fire wall is not maintained. UBC 703
- 3.34- Doors/windows- frames are out of square. Windows and doors do not properly seal. MEC 502.3
- 3.35- Shower door swing- west bath shower door swings in only. Door needs to swing out. UBC 2407
- 3.36- Gaps at cabinet bases- no escutcheons or insulation installed where pipes penetrate the sub floor and cabinet base- wet bar at master bedroom. MEC 502.3
- 3.37- Egress window- west bedroom windows do not open to provide 20" minimum width as required- UBC 310.4
- 3.38- Water damage master bedroom- damage is present from roof leak at east side of master bedroom.
- 3.39- Other
- 3.310- Other
- 3.311- Other

3.10 EXTERIOR

- 3.41- Hand Rails missing- there are several stairs at the exterior with 4 risers and no hand rails installed. West- UBC 1003.3.3.1
- 3.42- Hand rail location north east- the hand rail does not run along side the stairs treads. – UBC 1003.3.3.1
- 3.43- Seal around doors/windows/penetrations- gaps are present where water and air may infiltrate at exterior wall penetrations. MEC 502.3
- 3.44- Openings at eaves- holes are present into the attic where animals and birds may access the attic throughout the perimeter of the building. UBC 1505.3
- 3.45- animal damage at eaves- several locations north, east and south
- 3.46- Weep screed clearance south- the required 2" clearance is not provided at base of wall UBC 2506.5
- 3.47- Over hang at mud sill- west- the wall framing is cantilevered over the stem wall. Suspect support, air infiltration probable- no sealant installed- Consult engineer, MEC 502.3
- 3.48- Diverters- improper installation around perimeter of building at wall to roof unions.
- 3.49- Other
- 3.410- Other

3.11 ROOF- The specific violations for this section are numerous. Refer to UBC Chapter 15, 16, 23 and, Tile Roof Institute "installation manual for cold and snow regions" as well as the inspections and reports provided by Joseph T Lyons II. Consultant, Roofing and Water proofing.

- 3.51- Damaged tile – broken, shifted and loose
- 3.52- Field nailing- random check revealed areas of missing nails at field tile
- 3.53- Wind clips- random check revealed areas of missing wind clips at edge tiles
- 3.54- Loose valley, rake, hip tiles- missing nails, fasteners or adhesive. Tiles are loose and shifted
- 3.55- 1" valley flashing projection- flashing does not project to required over hang- west
- 3.56- 1" felt projection at eave- felt does not project to required over hang. Water enters soffit.

DEFECT OR SUSPECT CONDITIONS 3.0- continued

- 3.57- Damage to felt- missing tiles from snow damage revealed damaged felt repaired with mastic only. Inadequate repair.
- 3.58- Improper installation of ice dam protection- ice shield does not project over fascia/soffit. Water enters eave
- 3.59- Missing nailers- support is not fully installed at hips to support hip caps- throughout
- 3.510- Visible nailers – nailers were visible throughout. Improper wrap installations-
- 3.511- Improper weather blocking- Improper blocking installations throughout
- 3.512- Lifted flashing – several areas at roof jacks, wall to roof unions, etc
- 3.513- Damaged flashing - roof jacks and flashing are damaged from snow sliding.
- 3.514- Missing storm collar- collar is missing at water heater exhaust.
- 3.515- Truss hangers- missing nailing at many hangers. Gaps are present in framing preventing installation of fasteners
- 3.516- Truss to rafter connections- no nails or fasteners installed at hip trusses and rafter unions
- 3.517- Missing A34 clips- plans show on detail 4/S5 that A34 clips are installed where trusses attach at base to roof shed. Clips are not installed
- 3.518- Separated exhaust- damage to exhaust from baths- south
- 3.519- Fire draft stop - missing draft stop, open chase by dining room – UBC 708.3.1.3
- 3.520- Nailers for rake tile- missing support under rake edge tiles. Nails are installed in stucco only.
- 3.521- Other
- 3.522- Other
- 3.523- Other

3.12 CRAWL AREA

- 3.61- Missing screens at foundation vents – 2 vents are removed at east- UBC 2306.7
- 3.62- Obstructed foundation vents – floor joists block vents at west- UBC 2306.7, Title 100
- 3.63- Foundation vents below grade/blocked- pavers were installed above foundation vents at east. Ventilation is reduced. UBC 2306.7
- 3.64- Mold investigation/remediation- consult specialist
- 3.65- Conditioned air ducting- ducting removed- UBC 310.11
- 3.66- Insulation- insulation removed – MEC 502.2.3
- 3.67- Water intrusion- water accumulates in crawl area- UBC 1804.7
- 3.68- Vapor barrier – barrier is damaged or incomplete- UBC 2306.7, Title 100
- 3.69- Wood deterioration investigation- Consult engineer or specialist
- 3.610- notched joist west bath- joist is notched at west bath shower – UBC 2320.8 + I Joist manufacture
- 3.611- nut/washer- nut and washer are missing on anchor bolt by center 6X10 post- non compliance with design drawings/blue prints
- 3.612- 6x10 post- plans show 6X10 post, 6x6 post is installed- non-compliance with design drawings/blue prints
- 3.613- Spliced 6x10 post- post is spliced with single MST60 strap. Consult engineer- non-compliance with design drawings/blue prints
- 3.614- 6x8 post- plans show 6x8 post, 6x6 post installed- north of center- non-compliance with design drawings/blue prints
- 3.615- Omitted posts- plans show 6x6 posts north and south. Posts are not installed. non-compliance with design drawings/blue prints

DEFECT OR SUSPECT CONDITIONS 3.0- continued

3.616- Post base investigation- posts are sitting on 2x6 mud sill. Some compression is observed from post above. No post base bracket is installed-

3.617- Other

3.618- Other

3.619- Other

PROPOSED REPAIRS/EXECUTIVE SUMMARY 4.0

4.1 ELECTRICAL- See photo #1-6

4.11- **Dedicated outlet at garage**- There is a duplex type outlet in the garage that is not a single dedicated receptacle or does not have ground fault protection as required for garage general use outlets. Remove this duplex outlet. Install either a single dedicated outlet or ground fault protection as required. Above water heater

4.12- **Disposal wires**- Secure the wires at the base of the disposal to prevent loosening of connections. Under both garbage disposal units.

4.13- **Smoke detectors**- The smoke detectors are chirping. Replace the back up batteries as needed throughout the home.

4.14- **Bushing at sub panel**-there is no knock out bushing at the bottom of the pantry sub panel where wires enter the panel. Install the proper knock out bushing as required.

4.15- **Abandoned wires attic and crawl area**- - Properly terminate the abandoned or cut wires within permanently mounted, covered junction boxes as needed: attic above kitchen, throughout crawl area

4.16- **Support wires**- Properly support electrical wiring to permanent framing as needed: in attic above kitchen, throughout crawl area.

4.17- **Incomplete receptacle installation at crawl area**- The power supply is not complete for one sump pumps in the crawl area. Complete the installation of the outlet, cover, ground fault protection, etc. West under entry.

4.18- other

4.19- other

4.20- other

4.2 PLUMBING/HVAC- See photo #7-20

4.21- **TP elbow at exterior**- The water heater pressure relief drain line does not have the required elbow directing scalding water toward the ground. Install the required elbow as needed. South by ac condensing units.

4.22- **Drip leg at water heaters**- there are no drip legs in the gas lines prior to the fuel regulators at either of the water heater units. Install proper drip legs as needed.

4.23- **Heater service/activate**- the heaters have been deactivated due to all ducting having been removed. Once the ducting is installed, clean/check/service the heaters. There are water marks at the interior of the heaters from condensation leaks.

4.24- **AC power conduits**- The power supply conduits are separated from the ac condensing units. Water may enter the exposed conduit ends and the wires may be damaged from rubbing over the sidewall of the condensing units frame. Align and secure the loose conduits as needed: 2 each south.

4.25- **Water softener air gap** – There is a water softener installed in the garage. The over flow for this unit is drained directly into a sewer waste line. No air gap or back flow device was visible to prevent a possible cross contamination of supply and waste. Install proper air gap or back flow device as needed.

4.26- **Master fire place gas line**- the flex gas line is rubbing against a main support under the fire place unit. This may cause damage to the gas line. Provide proper clearance from the flex line to sharp metal supports that can damage the connector pipe.

4.27- **Master fire place make up air**- The owners indicated having headaches when using the fire place as the only heat source in the bedroom. Have the system checked to see if the combustion air or make up air is obstructed or if there is a malfunction in the fire place unit/installation.

PROPOSED REPAIRS/EXECUTIVE SUMMARY 4.0- cont

4.28- **Mr. Steam operation-** Water exits the shower vents when the steam unit is activated. No steam exits the vents. Make the steam unit operable.

4.29- **Mr. Steam TP-** The pressure relief valve on the steam unit has no drain line installed to direct scalding water and steam to an approved location. Properly drain the over flow as needed to prevent the crawl area from flooding if the valve opens.

4.210- **Leak toilet supply-** west bath- repair the leak at the supply line/angle stop at the west bath toilet.

4.211- **Plumbing support crawl area-** there are several supply and waste lines that are not supported or have broken supports in the crawl area. Install proper supports at both supply and waste lines as required.

4.212- **Waste line slope at crawl area-** there are two areas of waste lines that have negative slope. Alter the waste line installations to provide the required 1/4"/foot slope. Under the kitchen east and at 1/2 bath by entry hall.

4.213- **Sump installation + no back flow device-** water has been accumulating under the home on a regular basis. Even now after, water is accumulating at pockets. An investigation as to the source of the water should be made. Repairs should be made, after the water source is identified, to prevent water accumulations under the home. It is recommended that repairs occur at the exterior of the home, prior to water accessing the crawl area. However, if the method of extracting water under the home is to be completed by sump pumps, proper installations of the components should be installed. Including, but not limited to: installing sumps, installing proper channels to direct water to the pumps, installation of drain rock, installation of ground fault protected receptacles, proper draining of the water to an approved location. (it is not recommended that the water be drained into the sewer waste line) if the water is drained into the sewer waste line, proper back flow devices are needed to prevent sewage back ups into the crawl area. Consult a specialist. Repair as needed.

4.214- **Suspect tap into waste line from wine cooler-** There is a flexible waste line tapped into the main waste trunk at the center of the home. This appears to be a drain line from the wine closet cooling unit. Sewer gases may flow freely from the waste line to the wine cooling unit. Properly drain the indirect waste to an approved location.

4.215- Other

4.216- Other

4.217- Other

4.3 INTERIOR- See photo #21-26

4.31- **Fire wall-** hole- repair the hole in the garage fire wall behind the heater unit. Install fire tape, fire caulking or other approved materials.

4.32- **Fire wall-** duct- There is a metal duct penetration in the ceiling above the water heater. This opening vents directly into the attic. This is an opening in the fire wall of the garage. Install proper fire damper or other approved methods of slowing the spread of fire from the garage to the attic above the living space.

4.33- **Fire wall-** flue flanges- The metal flanges around the exhaust flues for the water heater and heater need repair. The flanges are loose at the ceiling. Align and secure the loose flanges as needed

4.34- **Doors/windows-** door frames are out of square. Doors and windows will not seat securely to prevent air loss. Consult a specialist. Repair or replace the windows, doors and frames as needed to provide proper operation and proper weather sealing of the units.

4.35- **Shower door swing-** the west bath shower door swings into the shower only. Alter the door installation to allow the shower door to swing out as required.

PROPOSED REPAIRS/EXECUTIVE SUMMARY 4.0- cont

4.36- **Gaps at cabinet bases**- there are gaps at the base of the wet bar cabinet where cold air from the crawl area may freely flow to the interior. Install proper insulation and escutcheon plates as needed to prevent air infiltration

4.37- **Egress window**- west bedroom- the west bedroom windows are not of adequate size to meet the egress requirements. The windows are 20" wide but only provide approx 15.5" of free space when the window is open. Provide proper egress window at this bedroom as required.

4.38- **Water damage master bedroom**- remove and replace the water damaged components in the wall above the master bedroom fire place. Invasive examinations will need to occur to determine the extent of the water damage and possible environmental conditions that may be present.

4.39- Other

4.310- Other

4.311- Other

4.4 EXTERIOR- See photo #27-39

4.41- **Hand Rails missing**- There are several sets of stairs at the entry walk that do not have hand rails installed. Install proper hand rails at these stairs as required.

4.42- **Hand rail location north east**- There is a hand rail installed along the stairs at the north east corner of the home. The railing is not aligned with the stairs. One must walk off of the stair treads, onto rocks in order to use the hand rail for support. Relocate the hand rail or extend the stairs along side of the hand rail.

4.43- **Seal around doors/windows/penetrations**- There are cracks, gaps and separations at windows, doors, conduit penetrations, wire penetrations, etc. throughout the exterior of the home. Install proper sealant to prevent air or water intrusion.

4.44- **Openings at eaves**- The soffit installations were not completed throughout the exterior. There are gaps under the eaves where birds or animals have direct access to the attic areas. Complete the soffit installations as needed to prevent animal infestations.

4.45- **animal damage at eaves**- birds have been damaging the soffit foam materials at the north, south and east sides. Repair the bird damage. Note: this damage appears to be caused by woodpeckers. These birds often will attempt to extract insects that the birds can hear. The neighbors units that has the same foam soffit details do not have bird damage that is evident. Moisture leaking into the soffit may be part of the cause for this bird activity. Consult specialist. Repair as needed

4.46- **Weep screed clearance south**- The required 2" clearance between the weep screed and pavers is not present at the south side of the home. Alter the pavers or stucco installations as needed to provide the required clearance.

4.47- **Over hang at mud sill**- west- The mud sill is visible at the west side of the home, behind the stucco weep screed. The mud sill is projected 2.5" over the foundation stem wall. Consult an engineer. Determine if there is a structural issue with the cantilevered exterior wall sill plate. Repair as needed. At a minimum, there is considerable air infiltration that will occur at this location. Proper repairs should be made to caulk, seal, and insulate the exposed wood wall base.

4.48- **Diverters**- there are sheet metal diverters installed at wall to roof unions. These diverters are not projecting beyond the wall face. Water from the roof is draining over the stone veneer and stucco walls due to the improper diverter installations. Extend the diverters 1" beyond the face of the siding and stone veneers as needed.

4.49- Other

4.410- Other

4.411- Other

PROPOSED REPAIRS/EXECUTIVE SUMMARY 4.0- cont

4.5 ROOF- See photo #40-58 The roof was viewed from the ground and from a ladder against the eave. A contractor or specialist should view the entire roof. Repairs should be made based on the complete review of the roof tiles and components. Repairs will include, but are not limited to:

4.51- **Damaged tile**- repair and replace all damaged field tile, rake tile, valley tile, etc.

4.52- **Field nailing**- a random check revealed field tiles that did not have any nails installed.

Install proper fasteners as required

4.53- **Wind clips**- a random check revealed some edge tiles are missing the required wind clips.

Install wind clips where missing

4.54- **Loose valley, rake, hip tiles**- cut tiles that can not be secured by nails are required to be secured by adhesive. Install proper adhesive where needed to secure cut tiles.

4.55- **1" valley flashing projection**- some of the valley sheet metal flashing does not project 1" beyond the face of the soffit/fascia. Water has been running back into the soffit areas. Investigations are warranted throughout the perimeter of the building as environment conditions may exist as well as water damage. Extend the flashing to the required 1" over hang.

4.56- **1" felt projection at eave**- there is felt paper installed under the tile. The felt does not project 1" beyond the face of the soffit/fascia. This is allowing water to be directed back into the soffit. As noted above, an investigation is warranted to determine the extent of water damage behind the soffit, including possible environmental issues. The felt paper should be properly extended beyond the face of the soffit/fascia as required.

4.57- **Damage to felt**- some tiles were missing from snow damage. (and the fact that several had no nails or adhesive installed) There is some damaged felt paper at the eave. The paper was cut or torn during construction. A small amount of roof mastic was applied on the torn paper areas. This is not an adequate repair. Water has accessed through the torn paper as the mastic was not a proper repair. Repair the damaged felt under the tiles as needed. This will require an invasive examination.

4.58- **Improper installation of ice dam protection**- the grace ice shield materials were not installed properly. The materials stop several inches back from the soffit and fascia. This is allowing water to access the soffit. Install proper ice shield materials at the base of the roof edge as required.

4.59- **Missing nailers**- there are areas where the nailers were not completely installed. There is missing backing for the hip tiles. Install nailers where missing.

4.510- **Visible nailers** – the bare wood of the nailers are visible throughout the hip ridges. Make repairs as needed to prevent water access to the bare exposed wood.

4.511- **Improper weather blocking**- the weather blocking under the hip and ridge tiles is inadequate. It is not installed in a manor that will direct water over the surface of the tiles. Repair all the weather blocking as needed to reduce the amount of water that can access under the tiles.

4.512- **Lifted flashing** – flashing is lifted at wall to roof unions as well as at roof jacks. Properly set and secure the lifted flashing to prevent water access under the lifted metal.

4.513- **Damaged flashing** – roof jacks are damaged from sliding snow and ice. Make repairs as needed to provide proper roof jacks, capable of surviving a winter without damage from ice and snow.

4.514- **Missing storm collar**- install a storm collar where missing at the water heater exhaust flue. The sealant that is installed will fail and moisture will find its way to the attic and garage in time.

4.515- **Truss hangers**- there are many truss hangers that were visible that did not have any nails installed to secure the trusses together. In addition, the trusses have shifted or were installed apart originally. The result, it will not be possible to install nails were missing at several of the truss connections. There is a foam insulation installed in the attic. This prevents a view of the connections throughout the attic. I did dig through this insulation and found the same condition of missing nailing. Consult an engineer. Determine the method of securing the separated framing members and installing nailing were missing. Repair as needed

PROPOSED REPAIRS/EXECUTIVE SUMMARY 4.0- cont

4.516- **Truss to rafter connections**- there are no nails, hangers or means of connecting hip trusses to the rafters install above. Several of the hip trusses were not blocked to prevent shifting or movement. Consult an engineer. Determine the course of repair to secure the framing members in the attic to prevent deflection or movement. Repair as needed

4.517- **Missing A34 clips**- the provided prints indicate Simpson A34 clips are required at the base of trusses where they sit on adjacent roofs. These clips are not installed. Install proper connectors as required.

4.518- **Separated exhaust**- repair the separated bath exhausts above the south end of the attic.

4.519- **Fire draft stop** - there is a hole/open chase at one of the columns at the entry hall/dining room. Install proper fire draft stop at the top of this open chase.

4.520- **Nailers for rake tile**- there appears to be no backing behind the rake tiles. Nails installed through the rake edge tiles has caused spalling of the stucco on the sidewalls. Provide proper backing to secure the tiles as required

4.521- Other

4.522- Other

4.523- Other

4.6 CRAWL AREA- See photo #59-67

4.61- **Missing screens at foundation vents**- Two foundation vents were removed on the east side of the home. Replace the missing vents to prevent animal access to the crawl area

4.62- **Obstructed foundation vents** – there are some foundation vents that are not functional due to their proximity to floor joists at the crawl area. Install proper holes in the webs of the floor joists at these foundation vents to provide cross ventilation under the home- west side of crawl area

4.63- **Foundation vents below grade/blocked**- there are some foundation vents at the east side of the home that were installed below the pavers on the rear deck. Water from the roof entered the crawl area. These vents have been blocked off. Proper cross ventilation is required under these areas of the home. Install proper natural or mechanical ventilation as needed.

5.64- **Mold investigation/remediation**- there has been some mold formations at this home as well as some testing and some partial remediation. Consult a specialist. Complete repairs as indicated by the specialist. Note: there may be additional issues with moisture that entered the wall cavities from wicking from the crawl area or from leaking eaves and soffits. Investigations are warranted.

4.65- **Conditioned air ducting**- replace all removed conditioned air ducting in the crawl area/

4.66- **Insulation**- install insulation in the crawl area as required.

4.67- **Water intrusion**- water has been accumulating under the home on a regular basis. Even now after, water is accumulating at pockets. An investigation as to the source of the water should be made. Repairs should be made, after the water source is identified, to prevent water accumulations under the home. It is recommended that repairs occur at the exterior of the home, prior to water accessing the crawl area. However, if the method of extracting water under the home is to be completed by sump pumps, proper installations of the components should be installed. Including, but not limited to: installing sumps, installing proper channels to direct water to the pumps, installation of drain rock, installation of ground fault protected receptacles, proper draining of the water to an approved location. (it is not recommended that the water be drained into the sewer waste line) if the water is drained into the sewer waste line, proper back flow devices are needed to prevent sewage back ups into the crawl area. Consult a specialist. Repair as needed.

4.68- **Vapor barrier** – install new vapor barrier over entire crawl area as required.

PROPOSED REPAIRS/EXECUTIVE SUMMARY 4.0- cont

4.69- **Wood deterioration investigation**- the wood framing members under the home have been saturated with moisture. Mold or fungus formed on and/or in the wood members. The wood was blasted to remove the fungal formations. Consult a specialist to determine if there is any structural damage to the wood members under the home. Repair if needed

4.610- **notched joist west bath**- there is a notched floor joist under the west bath shower. Repair the notched framing member as needed

4.611- **nut/washer**- there is a missing nut and washer at an anchor bolt near the center 6x10 post. Install proper nut/washer as needed. It may be required to install a retrofit bolt at this location as the installed anchor bolt is not aligned or centered in the sill plate. Consult an engineer. Repair as needed

4.612- **6x10 post**- the provided plans show a 6x10 post at a center supporting footing. This post goes from the footing to the roof where a post cap is installed. A 6x6 post is installed where the 6x10 post is required to be located.. The post is installed on a mud sill that is compressing under the load. Consult an engineer. Determine the course of repair and repair as needed

4.613- **Spliced 6x10 post**- the 6x6 post noted above where a 6x10 post is required is severed and spliced with a MST60 strap. Consult an engineer. Determine the course of repair and effect the repairs as needed.

4.614- **6x8 post**- the provided plans show a 6x8 post to be installed just north west of the 6x10 post noted above. A 6x6 post is installed in this location. It also is sitting on a mud sill rather than a post base or concrete. This post is eccentrically loaded on the provided pier. Consult an engineer. effect repairs as needed

4.615- **Omitted posts**- there are (2) piers installed and the provided plans show 6x6 posts to be installed. These piers are north and south of the main center 6x10 post. There are no posts installed at all at these concrete piers. Consult an engineer. effect repairs as needed

4.616- **Post base investigation**- the (4) posts noted above, where installed, are sitting on mud sills. Some are compressing. Determine if proper post base brackets should have been installed and repair as needed.

4.617- Other

4.618- Other

4.619- Other

GENERAL SUMMARY 5.0

This home was constructed with multiple building code violations as well as not complying with the design drawings, industry standards or manufactures specifications for multiple components. The Contractors and Sub Contractors lack of care when installing these components has provided the current home owner with a property that is not safe, not weather tight and is subjected to continued deterioration and damage.

Investigations need to occur to determine the source of the water entry to the crawl area. This will allow a proper repair to be designated and effected. If the water is allowed to continue to accumulate in the crawl area, it should be expected that wood members will continue to deteriorate. Mold or wood destroying fungi will continue to form causing health hazards as well as structural damage to the building components.

The soils under the home have been saturated for some time. It should be taken into consideration that the saturated soils have expanded and will retract when the water source is removed. Some movement of the building may occur when this drying cycle occurs. Consult an engineer or specialist. Make repairs if needed.

There has been some mold or fungal formations present in the crawl area. A partial abatement has occurred. There is evidence of water intrusion behind the soffits at the perimeter of the building as well as a roof leak above the master bedroom. Invasive examinations and environmental reviews should occur within the wall and soffit cavities to determine if there is structural damage or environmental mold formations that will need to be addressed. Consult a specialist and repair as needed.

The lengthy list of defects noted above should be repaired. Proper contractors and specialist should be consulted to view the individual components and systems that are installed. This list of defects was completed while being on site for 4 hours. It should be expected that there are more items and defects that will be identified with invasive examinations or a more detailed analysis of the systems and components by specific contractors.

The lack of care by the contractor and sub contractors has resulted in a residence that the current owner can not occupy and will require extensive and expensive repairs in order to make the home habitable.

James Aaron Viviano
JAV Estimating Services, Inc

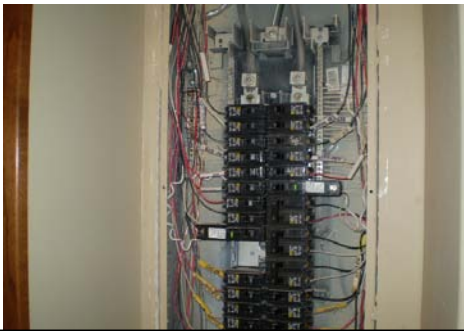
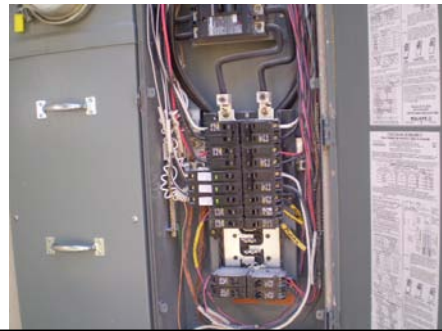


PHOTO #1 MISSING BUSHING WHERE ROMEX ENTERS BOTTOM OF SUB PANEL AT PANTRY



PHOTO#2 MAIN PANEL EXTERIOR NORTH



PHOTO #3 WIRES NOT SECURED TO DISPOSAL AT KITCHEN SINKS- (2)



PHOTO #4 ABANDONED WIRES IN ATTIC- NEAR NOOK



PHOTO #5 UNSUPPORTED WIRES, ABANDONED WIRES- CRAWL AREA BELOW KITCHEN



PHOTO #6 LOOSE OUTLET, INCOMPLETE WIRING, MISSING COVER UNDER ENTRY

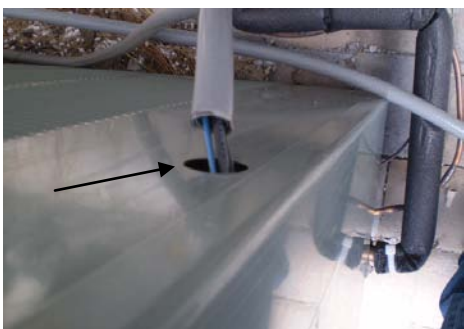


PHOTO #7 CONDUITS NOT SECURED TO BOTH AC UNITS



PHOTO #8 AC UNITS SOUTH



PHOTO #9 WATER HEATERS AT GARAGE. NO DRIP LEGS IN GAS LINES PRIOR TO REGULATORS



PHOTO#10 NO ELBOWS ON WATER HEATER TP VALVES BEHIND AC SOUTH. NO PAINT AT PVC



PHOTO #11 FLEX GAS LINE RUGS ON SUPPORT AT MASTER FIREPLACE. FOAM INSULATION BLOCKS AIR FLOW



PHOTO #12 WATER FLOWS FROM MR. STEAM, NOT STEAM



PHOTO #13 NO DRAIN LINE ON MR. STEAM TO VALVE IN CRAWL AREA



PHOTO #14 WASTE LINE FLOWS UP HILL TO EXIT UNDER KITCHEN



PHOTO #15 UP HILL SLOPE OF WASTE LINE BELOW WEST BATH



PHOTO #16 FLEX DRAIN LINE TAPS INTO WASTE LINE. POSSIBLE CROSS CONNECTION-



PHOTO #17 WATER SOFTENER DRAINS DIRECTLY TO WASTE LINE. NO ANTI-SIPHON OR BACK FLOW DEVICE VISIBLE- GARAGE



PHOTO#18 LEAK AT SOUTH BATH TOILET SUPPLY LINE



PHOTO #19 UNSUPPORTED WATER LINES.



PHOTO #20 BROKEN PLUMBING SUPPORT, CENTER. LOOSE WIRES, STANDING WATER



PHOTO #21 HOLE INTO ATTIC ABOVE WATER HEATER. NO FIRE DAMPER. HOLE IN FIRE WALL



PHOTO #22 NO FIRE CAULKING AT HOLE BEHIND HEATERS AT GARAGE



PHOTO #23 WINDOW AT WEST BEDROOM DOES NOT OPEN TO PROVIDE 20" WIDTH FOR EGRESS



PHOTO #24 HOLES IN CABINET BASE. AIR FLOWS FROM CRAWL AREA. NO INSULATION



PHOTO #25 WATER DAMAGE AT MASTER BEDROOM CEILING FROM ROOF LEAK ABOVE



PHOTO#26 DOOR FRAME IS OUT OF SQUARE AT FAMILY ROOM



PHOTO #27 HOLE IN EAVE. BIRD, ANIMAL ACCESS TO ATTIC



PHOTO #28 OPENINGS UNDER EAVES ARE OPEN TO ATTIC. ACCESS FOR BIRDS AND ANIMALS



PHOTO #29 DIVERTER DOES NOT PROJECT BEYOND FACE OF STONE VENEER- WEST



PHOTO #30 DIVERTER IS BURIED IN STONE AND MORTAR- WEST

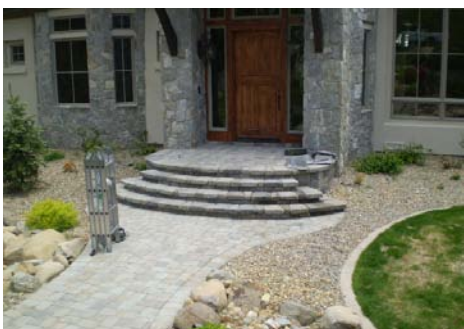


PHOTO #31 NO HAND RAILS AT ENTRY STAIRS



PHOTO #32 NO HAND RAILS AT ENTRY STAIRS, WEST



PHOTO #33 HAND RAIL IS NOT ADJACENT TO STAIRS AT NORTH EAST CORNER



PHOTO#34 SEALANT NEEDED AT WINDOWS AND DOORS TO PREVENT WATER ENTRY

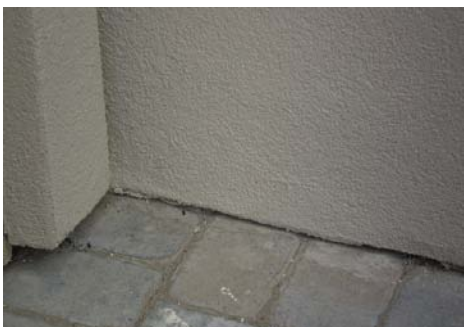


PHOTO #35 MISSING 2" CLEARANCE TO WEEP SCREED AT SOUTH



PHOTO #36 HOLES IN SOFFIT AT SEVERAL LOCATIONS

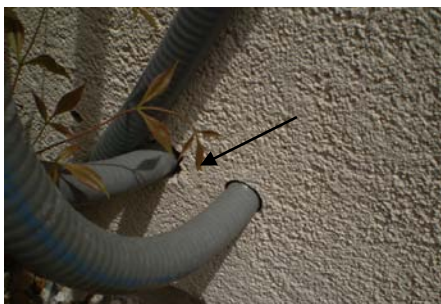


PHOTO #37 UNSEALED PENETRATIONS AT CONDUITS SOUTH

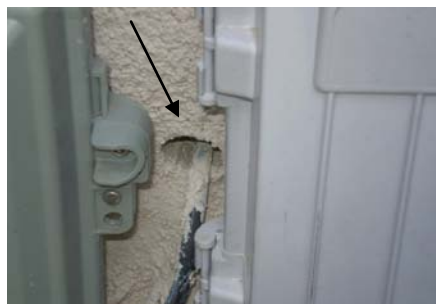


PHOTO #38 HOLES IN STUCCO AT CABLE/PHONE BOX NORTH



PHOTO #39 MUD SILL IS CANTILEVERED OVER STEM WALL AT WEST



PHOTO #40 RANDOM FIELD TILE HAS NO NAILS INSTALLED. ADHESIVE ONLY



PHOTO #41 FELT DOES NOT PROJECT OVER ROOF EDGE. BROKEN TILE



PHOTO#42 RANDOM CHECK OF EDGE TILE. MISSING WIND CLIPS



PHOTO #43 MISSING STORM COLLAR, LIFTED TILES, SOUTH



PHOTO #44 LIFTED WALL TO ROOF FLASHING

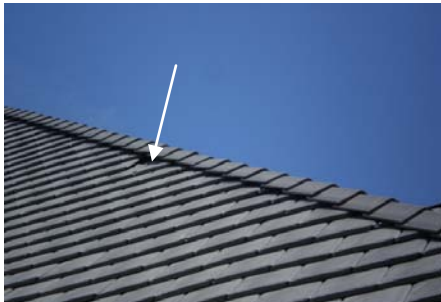


PHOTO #45 MISSING TILE



PHOTO #46 SHIFTED TILE. LOOSE TILE

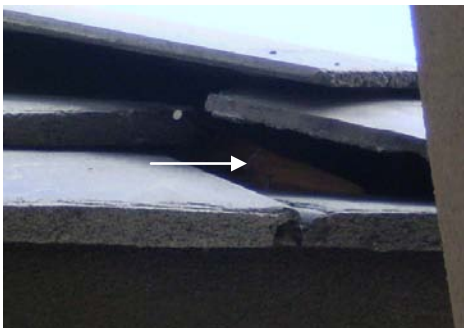


PHOTO #47 VISIBLE NAILERS. IMPROPER WEATHER BLOCKING. THIS PHOTO IS EAST



PHOTO #48 MISSING NAILER AT HIP. GAPS AT WEATHER BLOCKING WHERE WATER ENTERS



PHOTO #49 15" EXPOSURE ON SOME TILES



PHOTO#50 ORIGINAL DAMAGE TO FELT WAS PATCHED INCORRECTLY.



PHOTO #51 MISSING, DAMAGED TILE. INCORRECT WEATHER BLOCKING



PHOTO #52 VALLEY DOES NOT PROJECT 1" BEYOND ROOF EDGE. BROKEN TILE

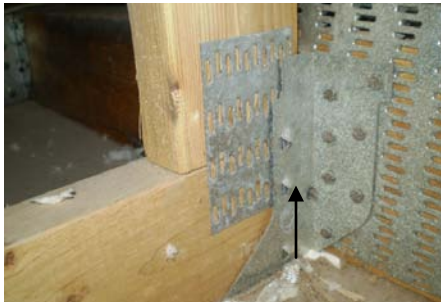


PHOTO #53 HARDWARE NOT NAILED AT MANY LOCATIONS IN ATTIC

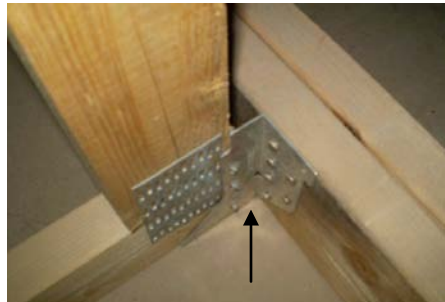


PHOTO #54 TRUSSES ARE NOT FLUSH WITH DRAG TRUSS. UNABLE TO NAIL AT BRACKET



PHOTO #55 IMPROPER HARDWARE AT SOUTH ABOVE GARAGE. NO NAILS OR FASTENERS



PHOTO #56 NO HARDWARE, NAILS OR CONNECTORS AT HIP TRUSS TO RAFTER ABOVE



PHOTO #57 DAMAGED EXHAUST DUCT SOUTH



PHOTO#58 OPEN CHASE, NO FIRE DRAFT STOP. NEAR DINING ROOM/ENTRY



PHOTO #59 FOUNDATION VENTS ARE MISSING AT 2 LOCATIONS EAST



PHOTO #60 SOME FOUNDATION VENTS ARE BLOCKED BY JOISTS AT INTERIOR- NO INSULATION



PHOTO #61 STANDING WATER, MUDDY SOILS.



PHOTO #62 STANDING WATER, UNSUPPORTED WIRES.



PHOTO #63 MISSING NUT/WASHER AT ANCHOR BOLT BY POST SHOWN IN PHOTO #64



PHOTO #64 6x6 POST IS STRAPPED AT SPLICE. PLANS SHOW 6x10 POST AT THIS LOCATION. NO PB



PHOTO #65 PLANS SHOW 6x10 POST,
POST IS 6x6- NO POST BASE
BRACKET. COMPRESSION AT SILL



PHOTO#66 CUT FLOOR JOIST
UNDER WEST BATH SHOWER



PHOTO #67 INCOMPLETE
INSTALLATION OF SUMPS. NO BACK
FLOW DEVICE IN WASTE LINE

PHOTO #68

PHOTO #69

PHOTO #70

PHOTO #71

PHOTO #72

