

PRO-ENGINEERED INSPECTIONS

JAMES R. SABEY, P.E. Douglas J. Burgasser, P.E. Thomas D. Wurzer, P.E. Larry H. Warren, P.E.

May 16, 2016

Ms. Michelle Stark Realty Performance Group 1800 Hudson Avenue, Suite 100 Rochester, NY 14617

RE: Brittany Commons Rochester, NY 14618

Dear Ms. Stark:

This inspection and report were done pursuant to a contract which you signed prior to the inspection. You selected our standard inspection which is a limited visual inspection and an overview as opposed to our comprehensive inspection. A copy of that contract has been provided to you, a sample of which is provided at the end of this report. This further defines the limitations of our standard inspection.

This report is furnished at your request in strict confidence by us as your agent and employee for your exclusive use as an aid in determining the physical condition of the subject premises. No reproduction or reuse of this report for the benefit of others is permitted without our expressed written consent. This report is intended to cover only such portions of the premises and the equipment therein as may be examined visually without removing surface materials and we warn you that although such premises and/or equipment may be in good condition when examined, the condition may change thereafter. Furthermore, this report is not to be used as a basis for determining the value of such premises or whether same is or is not to be purchased. This report is not to be construed as a guaranty, or warranty of the premises or equipment therein or of their fitness for use.

INTRODUCTION

Per your request, we performed a limited visual inspection of the exterior siding and roofing for 5 of the 19 buildings of the subject townhouse complex. This was to provide a professional opinion as to the condition of the siding and the roofs, along with the expected remaining life. These inspections were performed from the ground and with the use of a 14 foot telescoping ladder to view and walk many of the roofs. We did not directly walk a few of the roofs towards the center of each building, but walked the roofs on each end of the subject buildings as well as several of the adjacent accessible roofs.

OBSERVATIONS

Our visual inspection was performed the morning of Monday, May 16, 2016. We started with building "O". We then inspected building "L", building "J", building "H" and building "F". Our intention was to inspect a representative sample of the 19 buildings, including buildings that face different directions and experience different exposures to the weather.



In some brief discussions that we had with Ms. Michelle Stark the morning of our inspection, we were told that some new wood siding was installed on the west side of building "S" (unit #176), and on the south side of building "C" (the south side of unit #28). We were also told that most of the roofs were resurfaced between the year 2000 and the year 2005. We were also told that the buildings are basically on a five year cycle of staining/painting for the siding and trim.

The buildings have three basic types of exterior siding. There is some brick siding along lower walls, horizontal clapboard style wood siding, and vertical lap wood siding.



Bldg "O" (example of typical building with various types of siding)

In general, the brick siding appeared to be in good condition. We noted a few small cracks, such as one at a corner of the garage door opening of unit #63. Such cracks should be kept caulked or repointed as maintenance. The subject crack is likely due to slight sag of the garage door header, and the sag of the garage door headers is also causing some gaps between the brick siding and adjacent wood siding and wood trim. We did not find visible sag to an extent that requires structural repairs to the garage door opening headers at this time, but periodic gaps will need to be repaired because of slowly progressing, ongoing sag.



Minor cracks and gaps at garage door openings

The horizontal clapboard style wood siding is mostly in serviceable condition. We did find some deteriorated areas, mostly along chimney enclosures. Also, stain and paint on this siding is peeled and worn in several areas to varying degrees.



Bldg. "H" and Bldg. "F" worn upper horizontal siding

Chimney enclosures have deteriorated more than other wood siding and trim. This is due to the number of angles and intersections associated with these, and the resulting increase in the amount of water flowing across them and their exposure to the weather. Several chimney enclosures already have vinyl siding on them. The chimney enclosures are originally for wood burning manufactured fireplaces with metal fireboxes and metal flues, but some have been converted to gas fireplaces. It appears that almost every townhouse has a related fireplace and chimney enclosure.



Examples of worn chimney enclosures on Bldg. "O" and Bldg. "L"



Additional deteriorated chimney enclosures on buildings "J" and "H"



Example of a vinyl sided chimney enclosure of Bldg. "L"

The vertical lap wood siding is in the worst overall condition, compared to the other types of siding. This has rotted and deteriorated significantly in several areas where the siding intersects brick ledges, intersects roofs, and intersects flashing. The extent of damage is difficult to determine, since there could be rotted and deteriorated materials behind the moisture damaged siding. Also, moisture damaged siding and damp building materials can attract carpenter ant activity, and, per our discussions, some of the buildings are being treated for carpenter ant activity currently. Also, we noted what appeared to be some moisture damage where units #65 and #67 have roofing and trim that intersect at the front and we suspect that ant activity is occurring in this area at the front of building "H".



Potential location of carpenter ants and location of carpenter bee damage (Bldg. "H")



Damaged and rotted vertical siding (Bldgs. "O" and "L")



Damaged and rotted vertical siding (Bldgs. "J" and "H")



Rotted vertical siding of Bldg. "F"

The quality of flashing varies on the buildings. In general, there is a lack of good kick-out flashing where ends of gutters intersect roofing and siding and at chimney enclosure intersections with roofing and siding. This is allowing water to bypass gutters and to flow down and across wood siding and trim. This has led to accelerated deterioration along with moss growth and peeling stain.

The asphalt shingle roofs of the buildings examined vary in condition. This is likely due to the age of the materials, the quality of materials, and the directional/weather exposures of different roofs. The architectural style shingles installed will normally provide 20 - 25 years of service, but this can vary based on quality of materials, water flow across roofs, and exposure. In this case, we suspect that the average expected life will be closer to 17 - 20 years for the roofs.

In general, of the buildings we inspected, buildings "O" and "L" show signs of more advanced deterioration of the roof shingles, such that they are in the later years of their expected lives and we suspect that these roofs were installed closer to the year 2000. Building "H" has roofs that are older and might be one or two years newer than buildings "O" and "L" (perhaps from 2002?). Building "F" has roofs that are in better condition than most of the buildings we looked at and they are probably three to five years newer than buildings "O" and "L" (perhaps from 2003-2005?). Building "J" had roofs in the best condition of the buildings that we examined, and this might be closer to the midpoint of its average expected life, if not newer than that (perhaps installed around 2005 or more recently than that?).



Worn roofs of Bldgs. "O" and "L"



Worn roofs of Bldg. "H" and slightly chipped shingles of Bldg. "F" from ice removal at a valley/chimney



Bldg. "J" roofs are newer looking

Roof granules have significantly worn away from the older shingles that we examined. A large number of roof granules were found in the gutters because of this.



Roof granules in gutters

The type B-vent flue pipes that go up through the roofs vary in condition. In general, these are rusted and deteriorated and several are cracked and damaged. We even noted a missing weather cap from one of the vent pipes. These vent pipes typically serve water heaters and might serve older furnaces as well. The upper portions of these vent pipes should be removed, if not in use, or should be replaced, when resurfacing roofs in the future, or sooner if there are holes and cracks.



Cracked and rusty flues on Bldgs. "O" and "J"



Missing cap and cracked flues on Bldg. "H"

There are a good number of birds nesting in the eaves of the roofs in various locations due to a lack of proper flashing and damaged trim and siding. In one location, the soffit vent grills are missing at the rear of unit #28, and this should be replaced to prevent birds from entering and nesting. There are soffit vents blocks by dust and debris that should be cleaned and others painted over that should be replaced. In several areas, where roof overhangs intersect other roof surfaces, there are gaps and there is flashing missing that is allowing birds to nest.



Missing soffit vent grille of Bldg. "F" and painted over grille of Bldg. "L"



Birds nesting in eaves of Bldg. "O



Gaps in trim Bldg. "F"

ANALYSIS

The condition of the roofs varies from building to building. We suspect that this varies mostly based on the specific age of each roof. The quality of material can also have something to do with this. For example, there are some areas where shingles adjacent to each other have significant differences in the amount of wear. We suspect that this is due to the quality of each material specifically, rather than one area having been resurfaced more recently than another. For example, the front roof of #119 includes some lower shingles that look much better than upper shingles.

Some of the roofs are heavily moss covered where they do not receive sunlight. Periodically applying a solution that kills the moss and allows rain or a spray hose to wash it off is recommended as good maintenance.

In general, the roofs are still in serviceable condition and we would typically anticipate obtaining anywhere from one to four years of additional serviceable life from the older looking roofs of buildings "O" and "L". It is likely that one will obtain perhaps eight to ten years of additional serviceable life from the roofs of building "J", and perhaps four to seven years of life from the roof of building "F" and three to six years of life from building "H". These estimates can vary widely depending on rates of future wear, the severity of weather, and other factors.

The brick siding is in serviceable condition other than some minor caulking or pointing repairs that could be made. The brick siding should be kept in service and maintained.

The horizontal wood clapboard siding is in serviceable condition in most areas, except where exposed directly to water with some frequency, such as chimney enclosures and where flashing is lacking at intersections with roofs and gutters. Chimney enclosures should continue to be replaced with vinyl siding and flashing should be improved at intersections to direct water away from wood siding with some areas of siding that could be replaced. Yes, additional horizontal clapboard wood siding will need to be replaced due to ongoing weathering and wear as time progresses, and eventually considering complete replacement with vinyl siding will be warranted.

Overall, the vertical lap wood siding is in the worst condition of all of the siding. This has significant gaps and openings where it is rotted where it meets roofing and brick ledges. A lack of good flashing in such areas has accelerated this deterioration. Where siding meets horizontal ledges and flashing, deterioration has been more severe. If making repairs or replacements in such areas, the flashing should have a significant pitch away from the siding rather than being horizontal. Maintaining a space between roofing and siding is recommended, and flashing at these junctions can remain exposed for one or more inches above the roof surface to prevent the siding from rotting at the roof level.

In general, beginning to replace more and more of the vertical wood siding is recommended. This type of work should begin in the near-term in the most worn areas, and it is difficult to single out certain areas, since the deterioration is fairly widespread and is fairly consistent. One could obtain pricing for only replacing the vertical siding along with additional pricing to replace both the vertical and the horizontal wood siding.

In any case of repair or replacement of the siding, significant improvements to the flashing should be made. This would include proper kick-out flashing wherever roofing and siding meet at gutters. This would include additional flashing at other roofing and trim intersections as well as intersections between roofing and chimney enclosures. Attention to this flashing detail is <u>very</u> <u>important</u> to prevent future deterioration, even if installing lower maintenance vinyl or cement board siding. Otherwise, related moisture damage and deterioration can occur behind the low maintenance siding. This can then continue to attract carpenter ants and cause rot.

The availability of good wood siding has become more and more scarce over the years. As such, the quality of the wood siding has gone down, and/or the cost goes significantly up to get better quality wood. Replacement wood siding typically does not last as long as the original wood siding because of this quality difference. This is further reason to consider lower maintenance materials such as cement board or vinyl. Since vinyl has already been used on several of the chimney enclosures, we would recommend continuing this trend rather than trying to go with cement board siding, which is also more costly in most cases. Whether or not one tries to replace the vertical wood siding with a type of vertical vinyl siding, or goes to completely horizontal vinyl siding, is mostly a cosmetic choice. There might be a slightly higher cost to sticking with a type of vertical vinyl siding contractors in terms of options.

CONCLUSIONS AND RECOMMENDATIONS

As previously mentioned, in regards to the roofs, we recommend replacing roofs that are 17 - 20 years old. A schedule of replacement should be drawn up based on known ages and the information in this report about the sample buildings.

In terms of the siding, due to the continued deterioration and the desire to obtain uniformity and cost containment in terms of maintenance going forward, we would recommend exploring several basic options, and others could be considered:

- Option #1: Replace all of the wood siding with newer vinyl siding, as well as cover trim with aluminum and replace deteriorated trim. Both the vertical wood siding and the horizontal wood siding would have horizontal, standard vinyl siding. Flashing would be improved.
- Option #2: Replace all of the wood siding with newer vinyl siding, as well as cover trim with aluminum and replace deteriorated trim. The vertical wood siding would have new vertical vinyl siding and the horizontal wood siding would have matching horizontal vinyl siding. Flashing would be improved.

- Option #3: Continue to stain or paint the horizontal wood siding and related wood trim every five years, while replacing rotted and damaged pieces, improving flashing and replacing the vertical wood siding with a low maintenance vinyl siding.
- Option #4: Continue to stain or paint the existing horizontal wood siding and replace all vertical wood siding over the next one to four years with new vertical wood siding. Replace deteriorated horizontal wood siding and trim as needed.
- Option #5: Replace all wood siding and tri with new wood materials to match original materials as much as possible.

Options #1 and #2 are strongly preferred. This is because these options eliminate the wood siding and exposed wood trim and reduce the chances of other water damage, carpenter ant infestation, and related problems. A significant portion of the siding and trim is already moisture damaged and rotted, and this is further reason to consider these options as the best long-term solutions. These options also eliminate most of the ongoing staining costs, which are significant.

Options #3 and #4 require significant periodic, ongoing maintenance and related costs and increase the chances of related water damage within walls and roofs, as well as carpenter ant infestation. Also, the remaining life of any siding that is not replaced will be limited, which increases the ongoing costs to replace more and more horizontal wood siding over time.

Option #5 also requires significant periodic, ongoing staining maintenance and related costs and will likely have a shorter life, even with maintenance, than options #1 or #2.

Based on the sample of buildings that we looked at, and a quick cursory evaluation of the size of each building and the amount of siding, we would offer the following general budgeting information <u>per building</u> (on average). Please keep in mind that we are not contractors and we do not perform this type of work. We <u>strongly recommend</u> obtaining actual estimates and quotations from contractors for accurate budgeting and comparison purposes.

- Option #1: \$47,000 (one-time, 40+ year vinyl siding)
- Option #2: \$52,000 (one-time, 40+ year vinyl siding)
- Option #3: \$18,000 (one-time, 40+ year vertical vinyl siding), plus \$17,000 every 5 years to stain the building and replace rotted trim and damaged horizontal siding.
- Option #4: \$29,000 (one-time, 20+ year wood vertical siding), plus \$22,000 every 5 years to stain the building and replace rotted trim and wood siding.
- Option #5: \$79,000 (one-time, 20+ year wood siding and trim), plus \$20,000 every 5 years to stain the building and replace damaged materials.

Again, we <u>strongly recommend</u> obtaining actual quotations from contractors for the options that you truly wish to compare and consider. Our estimates are derived from information obtained from cost estimating manuals and on-line resources. Actual materials costs and local labor costs can vary significantly from the information we have available.

I trust that this report provides you with the information you require in regards to these matters. However, if you have additional questions, please do not hesitate to contact me.



Very truly yours,

Thomas D. Wurzer, P. E. NYS Licensed Professional Engineer #073747 NYS Licensed Home Inspector #16000012228

TDW/tlk

AGREEMENT FOR INSPECTION

This is to confirm that [Client Names] have retained Warren Engineering (the inspector) to inspect the property at [Street Address, City, State] on [Date] at [Time].

Type of inspection chosen:

<u>Standard</u>

Inspection of siding and roofing for five (5) of the nineteen (19) buildings of the townhouse complex. The five buildings will not include buildings "C" or "S". Provide professional opinion of siding and roofing condition and remaining life. Provide probable costs of maintenance to siding versus cost of replacement with other materials such as vinyl or Hardi-board materials. For the roofs give an estimated remaining life, but no probable costs.

This is a limited inspection based on visible evidence readily available during the inspection (without moving furnishings, etc.) and is the opinion of the engineer performing the inspection. It is not a guarantee or warranty regarding the condition of this building and it is agreed that inspector's liability will be limited to the amount of the fee charged.

Home inspectors are licensed by the NYS Department of State. Home Inspectors may only report on readily accessible and observed conditions as outlined in this pre-inspection agreement, Article 12 B of the Real Property Law and the regulations promulgated thereunder including, but not limited to, the Code of Ethics and Regulations and the Standards of Practice as provided in Title 19 NYCRR Subparts 197-4 and 197-5 et seq. Home inspectors are not permitted to provide engineering or architectural services. As professional engineers, we are permitted to provide engineering services, if required as part of the inspection process.

If immediate threats to health or safety are observed during the course of the inspection, the client hereby consents to allow the home inspector to disclose such immediate threats to health or safety to the property owner and/or occupants of the property.

ACCEPT	STANDARD	INSPECTION:
--------	----------	--------------------

FEE:	\$ (as	q	uoted)

Client Signature (One signature binds spouse or other related buyers)

Comprehensive Inspection

An exhaustive structural inspection to identify significant deficiencies and/or repairs needed. This inspection is <u>not</u> limited to readily visible evidence and will usually include: Much greater on site time by the inspector; invasive testing and probing as needed to determine structural condition; exploratory dismantling as needed; services provided by other contractors and consultants; other laboratory or instrument testing.

ACCEPT COMPREHENSIVE INSPECTION:	FEE	(A minimum of \$4,000 but will be
		dependent on scope agreed upon)

Client Signature (One signature binds spouse or other related buyers)

Date

Date