FINEGAN INSPECTION SERVICES, INC. TERRY FINEGAN 27 LAURELWOOD DRIVE MILFORD, OHIO 45150 683-0733-PHONE

#### **CLIENT:**

#### **BUILDING LOCATION**



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As in all inspections, this report is based on visual observations of the buildings. The inspection was made without removing any existing covering surfaces or materials. If an area of the building is inaccessible, it will not be inspected. There is no warranty implied as to the value, life expectancy, fitness for particular function, usefulness, or merchantability, and therefore, *FINEGAN INSPECTION SERVICES, INC.* assumes no liability on those items.

NOTE: This inspection was conducted as a visual inspection. There were no invasive tests on any part of the building or building components. The items listed were noted at the time of the inspection using only a visual inspection approach. There may be items concealed inside walls or inside mechanical equipment that were not observed. The inspector and the Inspection Company have no liability for these items. All observations are noted as the inspector faces the front of the building for purposes of mutual orientation. This inspection was accomplished on \_\_\_\_\_\_ between \_\_\_\_\_\_p.m.

### **GENERAL:**

The inspections will detail the conditions of the building at the time of the inspection and any items that are noted to need modifications or repair. The inspection was conducted to review the structure and components of the building using visual based approach. No finished materials were removed from the walls or ceilings.

The building is a steel beam and double masonry structure over a slab on grade with brick and EIFS exterior and interior steel stud walls. The roof structure is composed of wood and steel truss structural components with EPDM and rock ballast. The building is approximately 100 years old but was renovated about 15 years ago. There are no structural items that appear to be problematic at this time. The floor, wall and roof systems are in good condition with an average volume of wear on the surfaces.

## This report will be divided into the following sections:

- 1). Exterior Walls and roof
- 2). Site Conditions
- 3). Interior
- 4). HVAC, Plumbing & Electrical systems

Each section will attempt to detail the condition of the components that make up the section as well as provide repair techniques if any are needed. Any recommendations for the visually inspected section that will improve its existing condition, and/or bring it into a safety or building code compliance will be mentioned in a bold and highlighted narrative.

# **1). EXTERIOR WALL SURFACE**

### A). Brick Wall Surfaces

There was no observed settlement cracking at any corners of the building but there are vertical expansion cracks that run between the various windows on the left and front of the building. These are caused by the expansion and contraction of the steel lintels that are above the windows. When water rusts the steel, it expands and c racks the mortar in the surrounding brick. **The best repair would be to grind down the rusted steel and seal it, then tuck point the mortar on those walls that have these cracks. Painting all exposed steel with a rust inhibiting paint is also advised.** 



There are many locations on the front of the building where the **mortar has deteriorated and needs to be ground out and tuck pointed**. This is not unusual in an older brick and mortar building and has been recommended on several old buildings by this inspector in the past. This building needs tuck pointing at this time in multiple locations along the front wall.



### **B). EIFS façade materials**

There is **EIFS** on the front, right and rear walls. While these exterior surfaces were noted without problems or significant damage to the finish. There are a few items that should be modified.

**1).** At the **right wall there are locations where the caulking has failed where the EIFS touches different material**. Have all these areas cut out and the caulking replaced with new closed cell backer rod behind the caulking.



The EIFS appears to be in good condition on the wall surfaces and there are only a few dents and impact cracks in the finish. These can be easily repaired and re-coated. The EIFS poses no issues at this time.



A siloxane coating on these EIFS finishes is advised for ascetics and for extension of the life of the EIFS system. Sto and Dow Corning make very good silicone based paints.

### **C). Other Exterior Items**

1). The electrical outlet on the right rear wall does not function and the cover plate is missing at this time.



**2).** The front door and re rear door need to be adjusted and lubricated. New locking systems are advised

### **D). Roof surfaces**

**1). The main roof is made up of EPDM material** with rock ballast on top of the EPDM. The roof material appears to be functional on the upper most roofs but there are a few modifications necessary.

There are large skylights on the roof surface and at the base of these skylights there has been built a curb. At the outside corners of the curb the EPDM has been doubled as is the requirement for the installation due to the natural expansion and contraction of this material. Where the corners have been doubled the EPDM has pulled apart. This needs to be corrected by a professional in this type of work



**2).** At the rear and near a few of the HVAC units there were noted **screws and debris mixed in with the rocks.** It these locations a strong magnet

should be run over the stones to pull out all material that might be stepped on and penetrate the rubber.



**3). There is loose underlayment on the roof next to the rear left skylight**. The underlayment is buckled upward in this area. Resecure this area is advised.

**4).** There is **failed sealant at the joints of some parapet caps**. Have these joints re-sealed with the proper type of sealant.



## **2). SITE CONDITIONS**

**a).** There was moderate **slope of the soil** away from the foundation of each side of the building. The drainage conditions on the exterior of the building appear to have proper drainage of the surface water away from the structure.

At some point in the past, the street drain systems were not able to handle the volume of water in the surface sewer that is outside this building. Water backed up into the lower level in the front of the building as a consequence. Because a large portion of the center and rear building is BELOW STREET LEVEL, **it is strongly advised that a supplemental emergency sump** system be incorporated into the re-modeling plans for this building.

# The sump pump would have a battery backup system as well so that the system would work even in a power outage.

**b).** The **parking area and driveway** were noted to be in fair general condition. The surface sealing of the asphalt does appear to be necessary at this time. New painting on the asphalt for traffic direction may be considered because the old paint is wearing off the surfaces.

Application of a surface 1" asphalt cap in the next 2 years may be considered. There was observed only moderate levels of cracking of the asphalt surface on the parking and the drive areas but no sunken areas or potholes.

**c).** The business to the right of this building is running electrical power off an **old diesel generator that is very loud and emits a elevated level of exhaust across the rear parking area of this building.** Why the business is running a generator rather than using electrical power from the local utility is not known. This may be a nuisance that would need to be addressed.

# **3). INTERIOR**

The interior of the office area was noted to be a slab on grade floor and several partition walls with metal studs and drywall. The disassembly of the walls would be a relatively easy job. Because of the steel I beam structure, there are no interior walls that are "bearing" walls so the existing configuration of the wall system could be modified without a great deal of difficulty.

The ceiling in all areas is noted without damage or evidence of a chronic leaking. There are some water stains in the first floor ceiling near the sprinkler system. These water stains were dry at this time.



The stains are on the rear roof deck of the area above the break room/kitchen are more concerning. It appears that the lower EPDM roof has leaked in the past near the drain system that is in the center of the lower roof. The movement of the rock ballast was not attempted by the inspector but this may need to be done for a more exhaustive inspection of that lower rear roof.



There are several rooms in the building with plumbing. The bathrooms, the break room and the mop closet. All plumbing was tested in the various rooms but the **bathroom commodes were dry and not functioning**. Have all made operational and check all for function. A camera may be considered to be run through these lines.



The sinks were noted to drain and fill properly. No water leaking as detected in an interior location. There is no water leaking from the water heater tank or TPR valve in the rear service room area.



A). ATTIC

The attic was accessed at the panels on the front and rear ceilings. There is **no insulation in the attic areas at the perimeter walls. This may be considered via a spray foam application so that there is a thermal break between the double masonry exterior walls and the interior**. The drywall walls do have fiberglass insulation between the metal studs that compose the finish wall systems.



# **4). MECHANICAL EQUIPMENT**

### A). Electric Systems

The power to the building is noted at 400 ampere of service. This is a large electrical service and could be moderately extended beyond the existing electrical demand of the building. There were no errors or malfunctions of the electrical equipment or any outlets, switches or other electrical driven equipment. The electrical panel was opened and all wiring was noted to be properly installed and there were no breakers that were noted with evidence of overheating or improper wiring. The interior wiring showed no evidence of improper connections or errors in normal wiring technique.



### **B). HVAC**

All four of the **heat systems** were inspected on the roof. There is a 5<sup>th</sup> system that is a **mini-split type that heats and cools the rear left of the building. It was not functional due to the thermostat missing**. On the upper 4 units, no significant problems with any of the units were found at this time. There are a few modifications needed on the units and they will be

noted here:
 1). UNIT # \_\_\_\_\_- - Located at the rear right corner of the building
 The interior coil needs to be cleaned and the pan cleaned below the coil. The
temperature output was good and the heating system showed no problems or
monoxide.

There is a GFCI outlet at the side of this unit. It will not stay on and needs to be replaced.



# 2). Unit # \_\_\_\_\_ Located at the front right corner of the building

The burner for the furnace portion of the unit was noted to need cleaning. There was no other problems with the furnace section or the A/C section.

3). Unit # \_\_\_\_\_ Located on the rear left of the building

The furnace section was properly operational, the A/C section was low on refrigerant on one of the compressors.

### 4). Unit # \_\_\_\_\_ Located on the front left corner of the building.

Like the previous unit is has one of the compressors showing low levels of refrigerant but the furnace section is functioning properly.

## Conclusion

The building has areas where some modifications will be needed in the near future.

- 1). Repair the corners of the roof curbs on the EPDM
- 2). Make the furnace and A/C modifications
- 3). Tuck-point the mortar and repairs of the steel lintels.
- 4). Cap on the parapet sealed at the joints.
- 5). Re-Seal the failed caulking at the EIFS.

# 6). Add insulation to the exterior wall around the perimeter between the floors

- 7). Have the lower rear roof repaired at the drain area.
- 8). Consider an added surface water sump pump system.

9). Paint all exterior steel lintels with a rust inhibiting paint.

#### FINEGAN INSPECTION SERVICES INC. by Terrence P. Finegan

American Society of Home Inspectors certification # 0033511 Exterior Design Institute certification # OH-17

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