BUILDING STRUCTURAL INSPECTION

BUILDING NAME OR NUMBER

Unit Name & Number:

Sales and Manufacturing.

Number of Usable or Rentable Store Fronts in Building:

2 structures. Building #1 is the showroom, parts room and repair shop. Building #2 is a Pole Barn behind and to the West of the main structure.

Current or Most Recent Usage:

Warehouse.

Front View #1

Building #1 faces South.



Front View #2

Building #2 faces East.



FOUNDATION

Type of Foundation:

Slab on grade refers to a concrete slab poured on a prepared gravel or sand base at grade level. With stem wall to footer.



Foundation Materials:

Poured in place concrete. 6 inch or more thick.

Visible Portions of Exterior Foundation Walls:

Satisfactory - The exposed portions of the perimeter foundation walls appears to be adequate.

Visible Foundation Wall Cracks Noted From Exterior:

No visible cracking in the vertical foundation walls were noted from an exterior examination.

Evidence of Recent Movement:

No - There is no evidence of any recent movement.

Perimeter Foundation Drainage Surface:

Immediate Action - The drainage around the foundation needs immediate adjustment in order to divert the water runoff away from the foundation. Ground slope should be adjusted to a rate of at least 1/2 inch per foot for 6 feet away from the foundation. Noted at Northwest corner.



FOUNDATION & UNFINISHED BASEMENT

Foundation Materials:

Poured in place concrete. 8 inch or more thick.

Visible Foundation Wall Cracks Noted From Exterior:

No visible cracking in the vertical foundation walls were noted from an exterior examination.

Evidence of Recent Movement:

No - There is no evidence of any recent movement.

Exterior Hose Bibbs Functional:

No water is turned off to the structure.

SLAB FLOORS

Slab Foundation Floor Type:

Slab floor sitting on grade with perimeter on a stem wall with footer.

The Listed Units Are on This Slab Floor:

All

These Slab Penetrations Were Noted:

Plumbing stack lines pass through the slab floor.

Floor Cracks Noted:

No - There were no cracks noted in the visible portions of the slab floor.

ROOFING

Type Roof:

Gable, low slope.

Roof Covering Materials:

Metal Roofing. Raised rib steel. Usually installed in vertical panels with some fashion of overlapped seams.

Roof Covering Material Condition:

Evidence of some leakage. Unable to determine if current leakage. There are two locations noted in the shop area that show evidence of leakage. I was unable to determine if current or prior. Further investigation needed to determine what repairs are needed.





Estimated Life Expectancy of Roof:

Future Deferred - The roof covering material will need to be replaced in the future. The roof covering material appears to have a remaining life expectancy of 8 to 11 years. Assuming proper maintenance is completed as needed.

Slope:

Low slope is considered 3 in 12 or less.

Flashing:

Satisfactory - The flashing around openings in the roof covering appear to be water tight caulked as needed.

Means of Roof Inspection:

Roof edge was the location of the inspection of the roof covering. The surface of the roof was not walked on. Weather too windy.

Sky lights:

Satisfactory - The sky light(s) as installed appear to be satisfactory and show no signs of leaking. The sky light is a fixed type meaning it does not open. Unable to verify potential leakage.

Ridges:

Satisfactory - The ridge covering material appears to be in satisfactory condition.

Roof gutter system:

The gutter system on the roof edge appears to be functional and adequately sloped to carry the water to the downspouts. The splash blocks as installed appear to be able to carry the runoff water far enough away from the foundation to be considered satisfactory. Action Necessary - The splash blocks as installed appear to be in need of repair or replacement. At least one of the splash blocks are missing. Alignment of the splash block will not direct water away from foundation.

Roof Penetrations Noted:

At least one plumbing vent stack passes through the roof.

Roof Penetration Conditions:

Satisfactory - The penetrations appear to be adequately installed in relation to the roof membrane.

STRUCTURAL

Type of Construction:

Steel Frame.

Exterior Siding:

Action Necessary - There is considerable damage noted to the West side of building #1Metal siding.



Soffit/Eaves:

Satisfactory - Soffit/eaves appear to be in satisfactory condition and show only signs of normal wear.

Outside Entry Doors To Common Areas, or Front Entry:

There is a glass or steel framed glass door installed at the main entrance to the building. Satisfactory - The outside entrance door(s) to entrances are satisfactory.

Windows Type:

Horizontal Sliding.

Window Condition:

Satisfactory - The window framing and glass are in a satisfactory condition.

Earth to Wood Clearance:

Satisfactory - There appears to be adequate clearance between earth and wood structural.

Exposed Wall Framing Location:

Shop area.

Framing members sizing.

6" steel framing for walls.

Exposed Wall Framing Members Condition:

Satisfactory - The exposed wall framing members were in satisfactory condition. The exposed percentages of wall framing members is minimal. Therefore no assumption should be made as to the condition of the unexposed framing members. This is only a comment on the visible portions of the wall framing.

Wall Covering Material:

Combination of paneling and drywall in the Showroom, Offices and Parts Room, Show area unfinished.

Comments:

Structural steel appears to be in satisfactory condition for both walls and ceiling.









PLUMBING

Water Source:

City/Municipal. Unable to test plumbing systems since the water is turned off and repairs to plumbing are not completed.

Plumbing Service Piping Size to Structure:

3/4" service line from the meter to the main cutoff.

Interior Supply Piping:

The interior water supply piping is 3/4" in diameter.

Supply Piping Material:

The main service line to the structure is copper.

Interior Supply Piping Material:

The predominant interior service lines in the structure are copper.

Waste Line Materials

The predominant waste line material is plastic.

Waste Piping Condition:

Unable to determine. Water off and damage noted to distribution piping.

Vent Piping Material

The vent material as it passes through the roofline is plastic.

Vent Piping Condition:

Satisfactory - The visible plumbing vent piping appears functional.

Exterior Hose Bibs Functional:

Water not on.

Sewage Disposal Type:

Public Sewer System, per Appraisal. This inspection merely identifies the type of the sewage waste disposal system. It does not comment on the adequacy or effectiveness of the system. For further evaluation, this inspection company may perform further testing under separate contract and direction.

Main Water Line Cutoff Location:

West wall of Bathroom, next to hot water tank.

Functional Drainage:

Undetermined.

HOT WATER TANK

Location:

Men's Bathroom West wall.



Brand/Age:

National Brand - 42 years. Function doubted. I have never seen one older than 27 years and functional. Typical life span is 15 years.

Model & Serial Numbers:

Model # - 5H72; Serial # - 72-039317.

Tank Capacity:

40 gallons.

Fuel Source of Hot Water Tank:

The hot water tank is gas-fired.

Exposed Tank Condition:

Satisfactory - It shows some age, but it appears sound.

Firebox Condition:

There is rust noted from the underside of the tank as seen from the firebox.

Drip Leg Installed:

Yes - There is a drip leg installed on the incoming gas line to the hot water tank.

Flue/Exhaust Pipe Condition:

Satisfactory - The exhaust flue appears to be correctly installed.

Drain Valve:

Yes - There is a drain valve installed on the lower side of the hot water tank.

PRIMARY POWER SOURCE

Service Voltage:

120/240 3 phase.

Service/Entrance/Meter:

Exterior on back of the transformer.

Location of the Main Electric Transformers on Site:

North of the building.

MAIN POWER PANEL & CIRCUITRY

Main Power Distribution Panel Location:

Shop wall. There are 2 downstream panels.

Main Power Panel Size:

Main panel is 400 amps. with 2 downstream 200 amp panels.

Service Cable to Panel Type:

Copper.

Is Panel Accessible:

Yes - The electrical panel is in a location that makes it readily accessible.

Panel Condition:

Satisfactory - The power panel as a container for safely covering electrical circuitry and components is functioning as intended, minimizing the risk of electrical shock.

Main Panel Type:

Breakers - The structure is equipped with a breaker type main power panel. This is the desirable type. When a breaker trips off it, can easily be reset. Caution: if a breaker is reset and trips back off, this is an indication that there is a short or weakened condition in the circuit. Call a Qualified Licensed Electrician for analysis of the existing problem.

Breaker/Fuse to Wire Compatibility:

Satisfactory - The breakers/fuses in the main power panel appear to be appropriately matched to the circuit wire gauge.

Legend Available:

Yes - Identification of the breaker and the appliances or areas they control are clearly marked. This inspection does not verify the accuracy of this legend.

Condition of Wiring in Panel:

Satisfactory - Electrical circuitry wiring in the panel appears neatly arranged with no unallowable splices.



Feeder and Circuit Wiring Type:

Copper - The structure is wired using plastic insulated copper single conductor cables commonly referred to as Romex. Copper multi strand feeders are installed to deliver power to a downstream panel or power hungry appliances.

Circuit Wiring Condition:

Satisfactory - The exposed wiring appears to be in satisfactory condition including connections, routing, fasteners, and insulation.

Receptacle Grounding:

Satisfactory - A random check was made of a representative number of 3-prong outlets. All tested outlets were correctly grounded and polarized. This does not imply that all are considered correctly wired.

Main Service Ground Verified:

Yes - The main service ground wire was located by the inspector. The ground driven rod, solid conductor, and connection were located.

Wire Protection/Routing:

Satisfactory - The visible wiring appears to be installed in an acceptable manner.

COMMON AREA GAS-FIRED EQUIPMENT

Gas-fired Equipment Installed:

There is one furnace in the Parts room area for the finished areas. Action Necessary - There are two hanging furnaces in the shop area. Neither activated using normal controls.



Location of Meter:

Left side of structure.

Type of Fuel Supply:

Natural Gas.

Gas Line Primary Piping Material:

Black iron.

Piping Installation - Routing - Shutoffs - Hangers - Supports:

Satisfactory - Gas supply piping as installed appears adequate.

Gas Odors Noted:

No.

Gas-fired Appliance Flue/Vents:

Action Necessary - There is evidence of rust noted from corrosion due to leakage in the plastic venting system. This condition has rusted the interior of the furnace cabinet. Services of a licensed HVAC contractor needed to determine needed repairs. See Furnace section.

Secondary Air Adequacy:

Appears Adequate - While this is not a technologically exhaustive nor a calculated assessment of the secondary air requirements of the gas-fired appliances, currently no conditions exist which would restrict air availability.

COMMON AREAS, GROUNDS, SIDEWALK

SITE:

Primary Use of Building(s)

Show room and service. Originally horse barn with concrete floor added afterward.

Number of Buildings on Property:

2

Age of Complex

Built in '70's.

Site Drainage:

Satisfactory - The lot appears to have adequate drainage to prevent water from ponding.

PAVING & SIDEWALKS:

Sidewalks:

Satisfactory - The sidewalks on site are in satisfactory condition.

Sidewalks Materials:

Concrete.

PARKING LOT

Parking Lot Condition:

Future Deferred - The parking lot although in useable condition will need either considerable repair or resurfacing. A seal coat will be needed over the top of the existing material.



Parking Lot Drainage:

Satisfactory - The lot does not show evidence of water run-off problems.

UTILITY SERVICES:

Water Source:

City.

Water Meter Location:

Men's restroom.



Electric Service:

Underground.

Electric Meter Location:

Next to transformer.



Site Power Transformer:

The transformer is located on the North side of the building.



Telephone Service:

Action Necessary - The service is not connected to the service pole. Overhead - The overhead telephone lines are secure at the pole and are piled at the structure.



Fuel Source:

Natural Gas. Natural gas is provided by a regulated service company or utility.



Sewage Disposal System: Per appraisal, Sewers.

INTERIOR COMMON AREAS

INTERIOR COMMON AREA OF BUILDING

Outside Entry Doors To Common Areas:

There is a glass or steel framed glass door installed at the main entrance to the building. Satisfactory - The outside entrance door(s) to entrances are satisfactory. Swing type door.



Wall Covering Material:

Combination of: Drywall, peg board, paneling and Vinyl sheets.



Interior wall framing:

Steel Frame.

Walls Condition:

Satisfactory - The walls in the common areas appear to be satisfactory.

Windows:

Satisfactory - The windows and associated hardware in this unit are satisfactory.

Ceiling Covering Material:

Acoustical tile suspended.



Ceilings Condition:

Several acoustical panels need replacement now.

Floor:

Satisfactory - The flooring in the common areas is satisfactory.

Stairwell Location:

Shop area to loft. Loft usable for light storage only.



Common Staircase Condition:

Satisfactory - The stairway(s) is in functional condition.



Public Restroom #1:

Location:

Women's restroom.



Entry Door:

Immediate Action - The entry door or hardware to this restroom needs repair or replacement.

Walls:

Immediate Action - There are some cracks or deterioration in the walls in the restroom that need repair. Due to water damage.



Ceiling:

Immediate Action - The ceiling in this restroom needs immediate repair.

Floor:

Immediate Action - The flooring in this restroom is in need of repair. Due to water damage.



Electrical Outlets:

Action Necessary - None installed.

Toilet's Condition:

Immediate Action - The toilet in this restroom needs repair.

Comment:

No testing of fixtures due to prior unrepaired water leaks.

Public Restroom #2:

Location:

Men's restroom.



Entry Door:

Satisfactory - The entry door to the restroom is as expected and is functional.

Walls:

Immediate Action - There are some cracks or deterioration in the walls in the restroom that need repair. Unrepaired due to water damage.

Windows:

None.

Ceiling:

Satisfactory - The ceiling in this restroom is satisfactory.

Floor:

Immediate Action - The flooring in this restroom is in need of repair. Some tiles are loose.

Lighting:

Satisfactory - The ceiling light and fixture in this restroom are in satisfactory condition.

Ventilation Fans:

Satisfactory - There is a an exhaust fan installed in this restroom and it is performing satisfactorily.

Electrical Outlets:

None installed.

Light Switch:

Satisfactory - The light switch is satisfactory.

Faucet and Supply Lines:

Action Necessary - The faucet on the restroom vanity leaks or is deteriorated to the degree that replacement is recommended. No evidence of repairs completed from water leakage.

Toilets Condition:

Immediate Action - The toilet in this restroom needs repair. It has been removed.

Comment:

No water testing done water off due to unrepaired damage.

Restroom #3

Location:

Off Break room.

Type Restroom(s):

Both Men's and Women's Restrooms.



Entry Door:

Satisfactory - The entry door to the restroom is as expected and is functional.

Walls:

Satisfactory - The walls in this restroom are satisfactory.

Ceiling:

Satisfactory - The ceiling in this restroom is satisfactory.

Floor:

Immediate Action - The flooring in this restroom is in need of repair. Water damage.



Lighting:

Satisfactory - The ceiling light and fixture in this restroom are in satisfactory condition.

Electrical Outlets:

Action Necessary - No outlet installed.

Light Switch:

Satisfactory - The light switch is satisfactory.

Basin and Drain Fixture:

Satisfactory - The basin and drain fixture appear to be satisfactory.



Faucet and Supply Lines:

Undetermined due to water being off.

Comment:

Urinal only. Not connected to water supply.



Heating Unit:

Unit #:

Located in showroom area.



Area Serviced By This Heating Unit:

Showroom, offices and parts room.

Heating System Type:

Forced Air Natural Gas Fired furnace installed as the primary source of heat.

Fuel Source:

The fuel source is natural gas.

Flue Type:

The flue pipe is plastic from the furnace to the exterior.

Flue Condition:

Satisfactory - The furnace/boiler flue as installed appears to be in satisfactory condition.

Unit Tested:

Yes.

Furnace Cabinet Condition:

Immediate Action - Conditions exist in the exterior of the cabinet resulting in deterioration or holes which may require repair or replacement. Rust noted on interior of cabinet, due to exhaust condensate.



Heat Exchanger Inspected:

No. A condition exists which prohibited a visual inspection of the heat exchanger.

Blower Condition:

Satisfactory - The blower assembly appears to be performing as expected.

Filter Condition:

Immediate Action - Replacement of the filter is recommended since it is not functioning as intended. The filter is in a condition that may allow damage to the heat exchanger due to restricted airflow across the heat exchanger.

Ducts Condition:

Satisfactory- Ductwork appears to be properly installed and supported.

Supply / Returns:

Satisfactory - The supply and returns appear to be satisfactory.

Does each habitable room have a heat source?

Yes.

Thermostat Location:

Center hallway.

Thermostat Condition:

Satisfactory - The thermostat worked properly when tested.



Secondary Air Adequacy:

Satisfactory - Availability of secondary air for combustion and flue draft appears to be adequate; however, no calculation was performed. Heating Unit(s) Location # exterior.

Air Conditioning #1:

Cooling Unit #:

1 This unit mfg. 1989. If working, plan for replacement soon. Typical lifespan is 15 years.



Brand/Model/Serial Number/Size:

Bryant Model # 60 587SSerial #5B118904.

Refrigerator/Split System.

Unit/Condenser Location:

Side of the structure.

Unit Tested:

No - The air conditioning unit was not tested either due to ambient temperatures or because the unit was shut down. The inspector may not activate a unit that has been disconnected or does not activate using normal controls.

Insulation Wrap on the Suction Line:

Satisfactory.

Condenser Cabinet Level:

Satisfactory.

Condensing Coil Condition:

Satisfactory - The condensing coil appears to be clean, and no blockage was noted.

Heating Unit #2:

Unit #:

Some radiant heat added to the shop area.



COMMERCIAL BUILDING STRUCTURAL & ROOF

BUILDING NAME OR NUMBER

Current or Most Recent Usage:

Building #2 is a Freestanding Pole building used for storage.



ROOFING

Type Roof:

The roof is low slope.

Roof Covering Materials:

Metal Roofing. Metal may consist of copper, aluminum or steel panels. Some with a protective coat to prevent rust and deterioration. Usually installed in vertical panels with some fashion of overlapped or standing seams.

Roof Covering Material Condition:

Satisfactory - The roof covering material is in a condition that is consistent with its age and method of installation, showing no deficiency or cause for immediate concern.

Estimated Life Expectancy of Roof:

Future Deferred - The roof covering material will need to be replaced in the future. The roof covering material appears to have a remaining life expectancy of 8 to 11 years. Assuming proper maintenance is completed as needed.

Flashing:

There are no roof penetrations other than skylights.

Sky lights:

Satisfactory - The sky light(s) as installed appear to be satisfactory and show no signs of leaking. The sky light is a fixed type meaning it does not open.

Roof gutter system:

The gutter system on the roof edge appears to be functional and adequately sloped to carry the water to the downspouts. Action Necessary - The downspouts appear to be in need of repair or replacement in order to function properly. Action Necessary - The splash blocks as installed appear to be in need of repair or replacement. At least one of the splash blocks are missing. There is serious soil erosion that needs to be addressed. Water also gets into the structure due to the lack of runoff of roof water.





Roof Insulation:

Location of Roof Insulation:

Under roof decking.

Insulation noted:

Satisfactory - The attic insulation appears to be adequate and properly installed. The following type insulation was noted in the attic: Fiberglass wrapped in plastic.

STRUCTURAL:

Earth to Wood Clearance:

There is no earth to wood clearance noted around 3/4 of the structure. The lumber is treated to withstand the soil contact.

WAREHOUSE

WAREHOUSE AREA

Size of Warehouse:

Pole Barn.



Number of Overhead Doors:

There is a single overhead door on East end.

Overhead Door and Hardware Condition:

Satisfactory - The overhead door is in satisfactory condition, and it is functional.

Automatic Overhead Door Opener:

The overhead door opener appears to function appropriately.

Outside Entry Door:

There are 4 swinging wood doors, one steel skin entry door, and one horizontal slider. Action Necessary - The slider door is not functional.



Floor Condition:

Satisfactory - The warehouse floor is in satisfactory condition. Thickness of the floor is undetermined. For intended usage of anything other than as previously used you will need the services of an engineer to determine the proposed load and an analysis of the existing floor bearing capability. There are several different pours and am unable to determine thickness of individual pours.

There is one room on the Southwest corner that does not have a poured floor.



Exterior Walls Condition:

Action Necessary - From the exterior there are several panels that are damaged. Repair needed. North and East walls.





Windows:

None - There are no windows in the garage. A window is not required.

Ceiling:

Open wood framing.

Ceiling Insulation:

Satisfactory - Insulation was noted in the warehouse ceiling or roof decking. This helps keep the warehouse tempered.

Framing Condition:

Satisfactory - The warehouse framing appears to be adequate. There is no noticeable deficiency. A truss system to support the roof decking and transmit the roof load to the exterior walls is present for framing the attic cavity. The rafter spacing and wall fame spacing is 96" on center.

Evidence of Leaks on Interior of Attic:

None.

Wall Insulation Installed:

Yes - The wall insulation in the front half is vinyl covered polyisocyanurate. There are numerous holes torn through the insulation.



Posts Condition:

Satisfactory - There is a post supporting an overhead beam in the warehouse. It appears to be adequately installed.

Electric Service to Warehouse:

Satisfactory - The electrical outlets in the garage tested as correctly grounded. 100 amp panel installed. There is only minimal electric outlets and lighting.



Water Source Installed:

No.

Heating Unit:

Heating System Location:

None.

INTERIOR COMMON AREAS

Plumbing:

Water Source:

There is no plumbing noted in this building.

Primary Power Source

Service Voltage:

The incoming electrical service to this structure is 120/240 volts.

Service/Entrance/Meter:

Supplied from building #1.

Main Power Panel and Circuitry

Main Power Distribution Panel(s) Location:

Just inside the walk in door.



Main Power Panel Size:

100 amp.

Service Cable to Panel Type:

Aluminum.

Are Panels Accessible?

Yes - The electrical panel is in a location that makes it readily accessible.

Panel(s) Condition:

Immediate Action - The power panel as a container for safely covering circuitry and components requires immediate action to minimize possibility of electrical shock. There are open slots in the panel breaker cover where a breaker is missing.



Main Panel Type:

Breakers - The structure is equipped with a breaker type main power panel. This is the desirable type; because when a breaker trips off, it can easily be reset. Caution - if a breaker is reset and trips back off, this is an indication that there is a short or weakened condition in the circuit. Call a Qualified Licensed Electrician for analysis of the existing problem.

Breaker/Fuse to Wire Compatibility:

Satisfactory - The breakers/fuses in the main power panel appear to be appropriately matched to the circuit wire gauge.

Legend Available:

Yes - Identification of the breaker and the appliances or areas they control are clearly marked. This inspection does not verify the accuracy of this legend.

Condition of Wiring in Panel(s):

Satisfactory - Electrical circuitry wiring in panel appears neatly arranged with no unallowable splices.

Feeder and Circuit Wiring Type:

Copper - The structure is wired using plastic insulated copper single conductor cables commonly referred to as Romex.

Circuit Wiring Condition:

Satisfactory - The exposed wiring appears to be in satisfactory condition including connections, routing, fasteners, and insulation.

Ground Fault Protected Outlets:

Recommend all interior outlets be protected.

Receptacle Grounding:

Satisfactory - After a random check of a representative number of the 3-prong outlets, all tested outlets were correctly grounded and polarized. This does not imply that all are considered correctly wired. The grounding may either be through grounding conductors or by conduit.

Wire Protection/Routing:

Satisfactory - Visible wiring appears to be installed in an acceptable manner.