HEDDERMAN SERVICES
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MECHANICAL INSPECTION

16230 Jersey Dr
Jersey Village TX 77040

David Mladenka & c/o Sandy Mladenka
FEBRUARY 8, 2021

Inspector
Daniel Koteles
TREC #21157
281-355-9911
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PROPERTY INSPECTION REPORT

Prepared For: David Mladenka & c/o Sandy Mladenka
(Name of Client)

Concerning: 16230 Jersey Dr, Jersey Village TX 77040
(Address or Other Identification of Inspected Property)

By: Daniel Koteles - TREC #21157 02/08/2021 1:00 pm
(Name and License Number of Inspector) (Date)

PURPOSE, LIMITATIONS AND INSPECTOR / CLIENT RESPONSIBILITIES

This property inspection report may include an inspection agreement (contract), addenda, and other information related to property conditions. If any item or comment is unclear, you should ask the inspector to clarify the findings. It is important that you carefully read ALL of this information.

This inspection is subject to the rules ("Rules") of the Texas Real Estate Commission ("TREC"), which can be found at www.trec.texas.gov.

The TREC Standards of Practice (Sections 535.227-535.233 of the Rules) are the minimum standards for inspections by TREC-licensed inspectors. An inspection addresses only those components and conditions that are present, visible, and accessible at the time of the inspection. While there may be other parts, components or systems present, only those items specifically noted as being inspected were inspected. The inspector is NOT required to turn on decommissioned equipment, systems, utility services or apply an open flame or light a pilot to operate any appliance. The inspector is NOT required to climb over obstacles, move furnishings or stored items. The inspection report may address issues that are code-based or may refer to a particular code; however, this is NOT a code compliance inspection and does NOT verify compliance with manufacturer's installation instructions. The inspection does NOT imply insurability or warrantability of the structure or its components. Although some safety issues may be addressed in this report, this inspection is NOT a safety/code inspection, and the inspector is NOT required to identify all potential hazards.

In this report, the inspector shall indicate, by checking the appropriate boxes on the form, whether each item was inspected, not inspected, not present or deficient and explain the findings in the corresponding section in the body of the report form. The inspector must check the Deficient (D) box if a condition exists that adversely and materially affects the performance of a system or component or constitutes a hazard to life, limb or property as specified by the TREC Standards of Practice. General deficiencies include inoperability, material distress, water penetration, damage, deterioration, missing components, and unsuitable installation. Comments may be provided by the inspector whether or not an item is deemed deficient. The inspector is not required to prioritize or emphasize the importance of one deficiency over another.

Some items reported may be considered life-safety upgrades to the property. For more information, refer to Texas Real Estate Consumer Notice Concerning Recognized Hazards or Deficiencies below.

THIS PROPERTY INSPECTION IS NOT A TECHNICALLY EXHAUSTIVE INSPECTION OF THE STRUCTURE, SYSTEMS OR COMPONENTS. This inspection may not reveal all deficiencies. A real estate inspection helps to reduce some of the risk involved in purchasing a home, but it cannot eliminate these risks, nor can the inspection anticipate future events or changes in performance due to changes in use or occupancy. If is recommended that you obtain as much information as is available about this property, including seller's disclosures, previous inspection reports, engineering reports, building/remodeling permits, and reports performed for and by relocation companies, municipal inspection departments, lenders, insurers, and appraisers. You should also attempt to determine whether repairs, renovation, remodeling, additions, or other such activities have taken place at this property. It is not the inspector's responsibility to confirm that information obtained from these sources is complete or accurate or that this inspection is consistent with the opinions expressed in previous or future reports.

ITEMS IDENTIFIED IN THE REPORT DO NOT OBLIGATE ANY PARTY TO MAKE REPAIRS OR TAKE OTHER ACTIONS, NOR IS THE PURCHASER REQUIRED TO REQUEST THAT THE SELLER TAKE ANY ACTION. When a deficiency is reported, it is the client's responsibility to obtain further evaluations and/or cost estimates from qualified service professionals. Any such follow-up should take place prior to the expiration of any time limitations such as option periods.

Evaluations by qualified tradesmen may lead to the discovery of additional deficiencies which may involve additional repair costs. Failure to address deficiencies or comments noted in this report may lead to further damage of the structure or systems and add to the original repair costs. The inspector is not required to provide follow-up services to verify that proper repairs have been made.

Property conditions change with time and use. For example, mechanical devices can fail at any time, plumbing gaskets and seals may crack if the appliance or plumbing fixture is not used often, roof leaks can occur at any time regardless of the apparent condition of the roof, and the performance of the structure and the systems may change due to changes in use or occupancy, effects of weather, etc. These changes or repairs made to the structure after the inspection may render information contained herein obsolete or invalid. This report is provided for the specific benefit of the client named above and is based on observations at the time of the inspection. If you did not hire the inspector yourself, reliance on this report may provide incomplete or outdated information. Repairs, professional opinions or additional inspection reports may affect the meaning of the information in this report. It is recommended that you hire a licensed inspector to perform an inspection to meet your specific needs and to provide you with current information concerning this property.

TEXAS REAL ESTATE CONSUMER NOTICE CONCERNING HAZARDS OR DEFICIENCIES

Each year, Texans sustain property damage and are injured by accidents in the home. While some accidents may not be avoidable, many other accidents, injuries, and deaths may be avoided through the identification and repair of certain hazardous conditions. Examples of such hazards include:

- malfunctioning, improperly installed, or missing ground fault circuit protection (GFCI) devices for electrical receptacles in garages, bathrooms, kitchens, and exterior areas;
- malfunctioning arc fault protection (AFCI) devices;
- ordinary glass in locations where modern construction techniques call for safety glass;
- malfunctioning or lack of fire safety features such as smoke alarms, fire-rated doors in certain locations, and functional emergency escape and rescue openings in bedrooms;
- malfunctioning carbon monoxide alarms;
- excessive spacing between balusters on stairways and porches;
- improperly installed appliances;
- improperly installed or defective safety devices;
- lack of electrical bonding and grounding; and
- lack of bonding on gas piping, including corrugated stainless steel tubing (CSST).

To ensure that consumers are informed of hazards such as these, the Texas Real Estate Commission (TREC) has adopted Standards of Practice requiring licensed inspectors to report these conditions as "Deficient" when performing an inspection for a buyer or seller, if they can be reasonably determined.

These conditions may not have violated building codes or common practices at the time of the construction of the home, or they may have been "grandfathered" because they were present prior to the adoption of codes prohibiting such conditions. While the TREC Standards of Practice do not require inspectors to perform a code compliance inspection, TREC considers the potential for injury or property loss from the hazards addressed in the Standards of Practice to be significant enough to warrant this notice.

Contract forms developed by TREC for use by its real estate license holders also inform the buyer of the right to have the home inspected and can provide an option clause permitting the buyer to terminate the contract within a specified time. Neither the Standards of Practice nor the TREC contract forms require a seller to remedy conditions revealed by an inspection. The decision to correct a hazard or any deficiency identified in an inspection report is left to the parties to the contract for the sale or purchase of the home.

INFORMATION INCLUDED UNDER "ADDITIONAL INFORMATION PROVIDED BY INSPECTOR", OR PROVIDED AS AN ATTACHMENT WITH THE STANDARD FORM, IS NOT REQUIRED BY THE COMMISSION AND MAY CONTAIN CONTRACTUAL TERMS BETWEEN THE INSPECTOR AND YOU, AS THE CLIENT. THE COMMISSION DOES NOT REGULATE CONTRACTUAL TERMS BETWEEN PARTIES. IF YOU DO NOT UNDERSTAND THE EFFECT OF ANY CONTRACTUAL TERM CONTAINED IN THIS SECTION OR ANY ATTACHMENTS, CONSULT AN ATTORNEY.

ADDITIONAL INFORMATION PROVIDED BY INSPECTOR

Hedderman Engineering Inc.:
>It is the purpose of this report to give our client my educated and experienced opinion of the condition and function of the stated property as visually inspected by Hedderman Engineering Inc. The inspection performed on this property is of a general nature and includes the following systems: electrical, mechanical, and plumbing. This does not include any specialized inspections and/or inspections of any hazardous materials (such as done in environmental inspections) or any of the following; structural systems, mold, audio/visual components, hazardous materials and gases, rated walls, led paint, destructive insects or pest, security items, water or air treatment systems, etc. This inspection is limited to those components which were visible and accessible at the time of the inspection. It is noted that this report contains the opinions of this inspector of the stated property as it appeared on the day of the inspection and is in no way a warranty of any component in the days and future following the inspection. All mechanical

components are judged on the basis of age, condition, and the function of those items as they appeared on the day of the inspection and are not guaranteed to continue functioning in that manner in the future. It is recommended that the our client purchase a home warranty policy to protect oneself from both unexpected and anticipated problems that may occur in the future.
>It is noted that Hedderman Engineering Inc. is not responsible for any problems found in the house during or after components are opened up, disassembled, uncovered, made visible, or made accessible by another entity after the inspection is completed.
>If a builder or service contractor examines an area of question and comes to the conclusion that there is no repair needed, have them present to you in writing that the item is in compliance with a prevailing code and is functioning properly, not in need of repair.
>It is the intent of this inspector to work in compliance with the Standards Of Practice For Real Estate Inspectors. It is not required of this company to exceed these standards. You may obtain a copy of the document referred to above by contacting the Texas Real Estate Commission. It is also noted that this inspection is not a "code inspection", but rather an inspection of the condition and function of the stated property.
>Although this report may include observations of some building code violations, total compliance with mechanical, plumbing, electrical codes, specifications, and/or legal requirements are specifically excluded. We do not perform "code" inspections, and since building codes change every few years, our inspections are not performed with the intention of bringing every item in the property into compliance with current code requirements. Rather, the standard of our inspections is a performance standard to determine if the items inspected are functioning at the time of the inspection, or are in need of repair. This is particularly applicable to Home Warranty policies, where the standards of the Home Warranty service company are often different than our stated performance standard for judging whether a piece of equipment is functional or in need of repair. If you intend to rely on a Home Warranty policy, then it is recommended that you contact the appropriate service companies for a more in-depth analysis of what may be required to meet their standards should a claim be made against the policy.
>If there are any questions or concerns please contact Hedderman Engineering, Inc. at 281-355-9911 or Office@HeddermanEngineering.com.

I. STRUCTURAL SYSTEMS

☐ ☒ ☐ ☐ **A. Foundation**
Comments:

☐ ☒ ☐ ☐ **B. Grading and Drainage**
Comments:

☐ ☒ ☐ ☐ **C. Roof Covering Materials**
Comments:

☐ ☒ ☐ ☐ **D. Roof Structures & Attics**
Comments:

☐ ☒ ☐ ☐ **E. Walls (Interior and Exterior)**
Comments:

☐ ☒ ☐ ☐ **F. Ceilings and Floors**
Comments:

☐ ☒ ☐ ☐ **G. Doors (Interior and Exterior)**
Comments:

☐ ☒ ☐ ☐ **H. Windows**
Comments:

☐ ☒ ☐ ☐ **I. Stairways (Interior and Exterior)**
Comments:

☐ ☒ ☐ ☐ **J. Fireplaces and Chimneys**
Comments:

☐ ☒ ☐ ☐ **K. Porches, Balconies, Decks and Carports**
Comments:

The structural portions of this property were inspected by an engineer from Hedderman Engineering Inc. per the inspection agreement between this firm and our client. All comments regarding the structure and property grade are found in the structure report that is created and provided by the engineers at Hedderman Engineering Inc.

According to HAR, the house was built in 1972.
Orientation - House Facing South:
For the purpose of the inspection, North is considered to be the rear of the house.

I	NI	NP	D

II. ELECTRICAL SYSTEMS

☒ ☐ ☐ ☒ **A. Service Entrance and Panels**

Comments:

Electrical System Description :

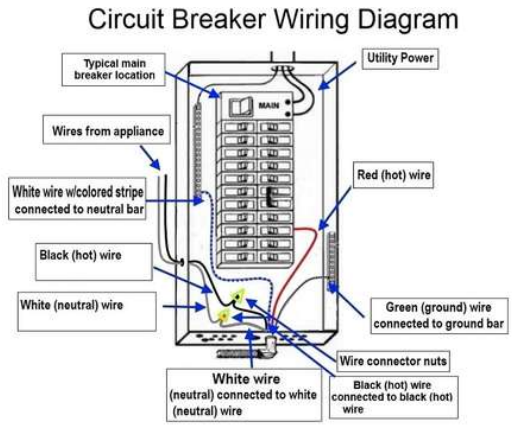
The electrical service is provided by a 120/240 volt, single-phase, 125-ampere service to an electric meter located at the east side of the house.

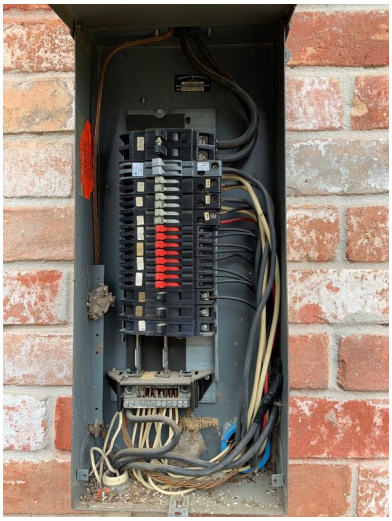
Electrical Wiring Information

Service Wires	Branch Circuit Wires	Grounded or Ungrounded System
Copper	Copper	Grounded

Breaker Panel Information

Location	Manufacturer	Rating
East	Zinsco	Not visible





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Breakers - Routine Check:
It is a general recommendation that all circuit breakers be tripped off and on at least once a year to ensure that they are still physically able to trip off. Occasionally, the points on a breaker will fuse to the main bus in the panel, preventing the breaker from tripping off, even if there is an overload on the circuit. If this condition occurs, it can be a fire hazard.

1: Zinsco/Sylvania Breaker Panels

It is a general recommendation that all circuit breakers be tripped off and on several times a year to ensure that they are still physically able to trip off. Occasionally, the points on a breaker will deteriorate at the point where it connects to the electrical bus in the panel, causing the panel/breaker to overheat. Zinsco and Sylvania panels have a reputation for this condition. Consideration should be given to replacing the breaker panel. It is recommended that you perform an online search of Zinsco breaker panels and Sylvania breaker panels.
Obtain Cost Estimate

2: Power Wire - White insulation

We observed one or more white wires that were used as a power wires, and were connected to a circuit breaker. Typically, the white wires are the grounded/neutral conductors, and if they are used as a power conductor, they must be permanently marked or wrapped with black or red tape to identify them as a “hot” ungrounded conductor.
Obtain Cost Estimate
E3407.3

3: Breaker Panel - Foreign material

Foreign material was observed in the panel box, which can be a safety hazard, and it is recommended that the panel be cleaned
Obtain Cost Estimate

4: Breakers - Not Labeled

All of the breakers were not labeled to identify the circuits they were protecting. It is recommended that an electrician be contacted to specifically identify each circuit.
Obtain Cost Estimate

5: Cover Plate - Missing knock out clip

The dead front cover plate was missing one or more knock-out clips.
Obtain Cost Estimate

6: Ground Rod - Missing

The ground rod was missing and needs to be installed.
Obtain Cost Estimate

7: Service Conductors - Below 10 feet

The service entrance conductors were observed to be too low and need to be raised so the lowest point is a minimum of 10 feet above grade.
Obtain Cost Estimate
E3504.2.2

☒ ☐ ☐ ☒ **B. Branch Circuits, Connected Devices, and Fixtures**

Comments:
Type of Wiring: Copper - Non-metallic sheathed

1: GFCIs Not present throughout property

It was observed that all of the required outlet were not equipped with Ground Fault Circuit Interrupt

devices as specified by the National Electrical Code. Have an electrician install the devices at the locations specified in the National Electric Code, including at; all of the kitchen counter tops, outlets below the kitchen sink, the bathrooms, all counter tops with sinks, the garages, and the exterior.
Obtain Cost Estimate

2: Outlet - Loose in wall
Garage
An outlet was loose on the wall and needs to be secured in a junction box.
Obtain Cost Estimate

3: Ceiling Fan - Unbalanced
South West Bedroom
The ceiling fan was unbalanced and needs to be adjusted.
Obtain Cost Estimate

4: Ceiling Fan - Nonfunctional
Master Bedroom
The ceiling fan was nonfunctional.
Obtain Cost Estimate

5: Wiring - Conduit improper
Garage
Wiring that was not properly encased in a conduit was observed.
Obtain Cost Estimate

6: Power Cord Wire - Improperly hard wired
Garage
Wiring that is not approved to be hard wired into the electrical system, including extension cord wiring or lamp cord wiring, was observed. For safety purposes, the unapproved wiring should be replaced with an approved wiring.
Obtain Cost Estimate

7: Smoke and Carbon Monoxide Detectors
We could not determine if the smoke and/or carbon monoxide detectors are connected to the security alarm system as is common practice, therefore, to avoid triggering the security alarm we did not operationally check each device. Further investigation is recommended with a service company who specializes in this field to determine if the devices are interconnected as currently required and functioning properly. For safety purposes, it is recommended that smoke detectors and carbon monoxide detectors be replaced every ten years. Further investigation is recommended.

8: Smoke detectors - Current standards not met
The house does not meet the current code concerning smoke alarms. This house is an older home and, if bringing the house into current standards is desired, it is recommended that you contact a service

contractor to make all of the needed repairs. Smoke detectors are currently required to be connected in a manner that causes one detector to engage each other detector should an alarm be tripped, They are also required to be hardwired into the electrical system and contain a battery back up. Lastly, smoke detectors are required inside each bedroom, outside of bedroom areas, hallways, stairwells, and at each level of the structure.
Obtain Cost Estimate

9: Carbon Monoxide Detectors - Currect standards not met

Carbon monoxide detectors were not installed at all of the currently required locations and it is recommended that approved carbon monoxide detectors be installed. Currently, carbon monoxide detectors are required outside each sleeping area.
Obtain Cost Estimate

10: Low Voltage Systems - Not inspected

It is pointed out that low voltage systems, low voltage wiring, and low voltage connections were not included in the scope of the inspection and were not checked, including: audio/visual systems, alarm systems, data lines, and phone lines. If further investigation is desired, it is recommended that a service company be contacted.

III. HEATING, VENTILATION & AIR CONDITIONING SYSTEMS

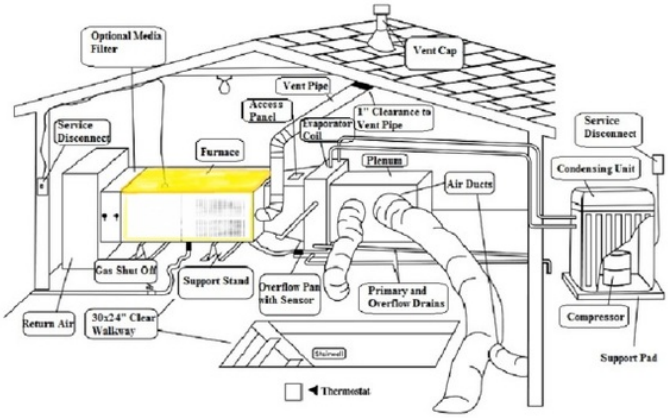
☒ ☐ ☐ ☐ **A. Heating Equipment**

Comments:
Type of System: Forced Air
Energy Sources: natural gas

Gas Furnace Description :

The heating for the property was provided the following natural gas-fired equipment:

ZONE	BRAND	BTU	DATE	LOCATION
House	American	80,000	2013	Attic



Heating Equipment - Functional:
The heating equipment was observed to be operating and functional at the time of the inspection. The heating equipment responded to the thermostat and the equipment appeared to be heating the air adequately.

Heat Exchanger - Information:
Gas furnaces are constructed in such a way that the units must be dismantled in order to view the entire heat exchanger inside. The equipment was not dismantled, and the heat exchanger was not able to be viewed for evidences of cracks. If further investigation is desired, it is recommended that a service company be contacted to dismantle the equipment. It is pointed out, for safety purposes, the heat exchanger should be inspected by an HVAC service company once a year.

Limited visual inspection:
It is pointed out that our inspection of the air conditioning and heating system(s) is a limited, visual inspection where we check the equipment as it has been installed to determine whether or not the system(s) is cooling and/or heating at the time of the inspection. Our inspection is necessarily a

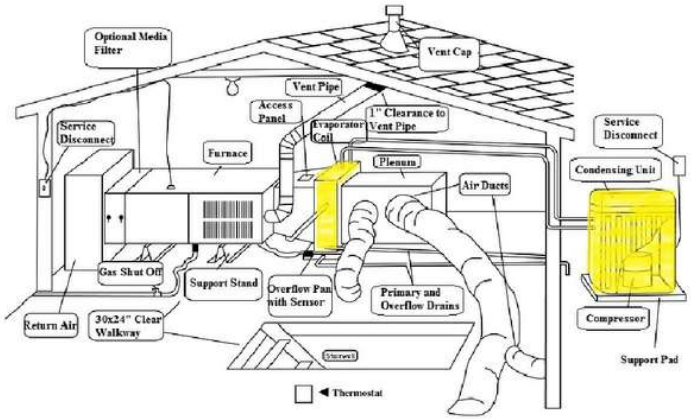
cursory inspection, as we do not determine the sizing, adequacy, or design of any component in the system, or the compatibility of the individual components, nor the installation of the system(s) to be in conformity to the latest building code requirements. If you desire an in-depth analysis of the HVAC system(s), then it is recommended that a service company be contacted to analyze the system(s). This is particularly important if the system(s) is an older system and has only a limited amount of remaining life due to its age and/or condition.

☒ ☐ ☐ ☒ **B. Cooling Equipment**

Comments:
Type of System: Split system

A/C Equipment Description :
The type of air conditioning for the property is a forced air split system. The cooling equipment for the property was as follows:

Zone	Brand	Size/Age Condenser	Size/Age Coil	Temp Drop Degrees
House	American	4-ton 2013	5-ton 2013	20



Condensing Unit Equipment - Functional:
The condensing unit equipment was functional at the time of the inspection. The equipment responded to the corresponding thermostat, and the compressor components and fan motor components were operating.

Coil Equipment - Functional:
The coil equipment was operating and was providing a degree of cooling at the time of the inspection.

Cooling Performance - Acceptable :
The cooling performance of the equipment was observed to be adequate according to industry standards. The air conditioning equipment was observed to be cooling between 16-20 degrees across the indoor coil at the time of the inspection.

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Cooling Performance:
We measure the temperature drop (ΔT) across the indoor coil(s) at the time of the inspection and our observations have been recorded in this report. It is pointed out that our measurements of the cooling performance of the equipment is only at a "point in time", and cannot reflect whether the equipment has been recently serviced, or what the future performance of the equipment will be after the day of the inspection. Further investigation with the homeowner is recommended to determine when the equipment was last serviced.

1: Coil - Dirty
The coil was dirty and needs to be cleaned and serviced at this time. Have a service company clean the coils to allow for proper operation.
Obtain Cost Estimate

☒ ☐ ☐ ☒ **C. Duct System, Chases, and Vents**
Comments:
Ductwork - Flex and Rigid ducts :
The air ducts in the attic consisted of some newer flex ducts and some older rigid ducts. Due to the age of the rigid air ducts, further investigation is recommended with the homeowner and/or a service company to determine if the ductwork has been cleaned recently. If the air ducts have not been cleaned, it is recommended that the interior of the ducts be checked by a service company.

1: Registers - Microbial growth observed
Some of the registers were covered with mildew/debris. It is recommended that a service company be contacted to check the inside a of the duct work to determine if there is a build-up of debris/mold/mildew inside, and make any needed repairs. Further investigation is recommended.
Obtain Cost Estimate

2: Return Air - Not sealed
The chase was not sealed properly and was drawing unconditioned air from the floor and/or wall cavities into the system. Have the chase sealed against air leaks.
Obtain Cost Estimate

IV. PLUMBING SYSTEMS

☒ ☐ ☐ ☒ **A. Plumbing Supply, Distribution Systems, and Fixtures**

Comments:
Location of water meter: The street curb
Location of main water supply valve: east
Static water pressure reading: 60 PSI
Water Supply Material: Galvanized steel and PEX

A plumbing system typically consists of three major components, including the potable water supply piping; the waste or drain piping; and the plumbing fixtures. The distribution piping brings the water from the public water main or a private well to the individual fixtures throughout the property. The water distribution system is under pressure, usually from 40 psi to 70 psi. The waste or drain piping carries the waste water and products underground to the sewer system or septic tank, and the waste piping is not under pressure, but operates by gravity flow. We typically run water down the drains from the sinks, tubs, showers, and toilets, but this cannot simulate the waste flow characteristics of full occupancy. There may be partial blockage of the underground waste lines from debris, broken pipes, or tree roots that cannot be detected by a visual inspection. If you desire a more in-depth inspection, it is recommended that you contact a qualified plumber.

Shut Off Valve - Exterior location:

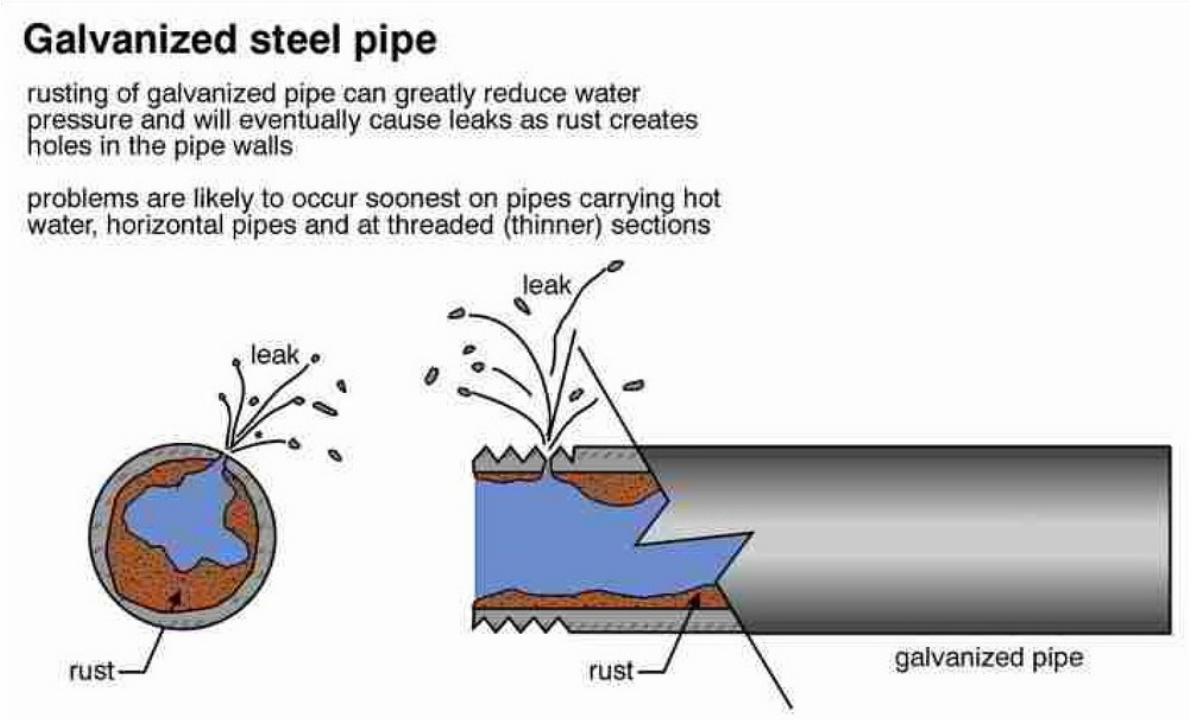
The shut-off valve for the main inlet water line was located at the exterior of the house.

East

Static Water Pressure :
The static water pressure to the house at the time of the inspection was measured with a pressure gauge at the hose bibb nearest the shut off valve, and the static pressure was observed to be 60 psi.

Water Supply Piping - Galvanized Steel:
All or portions of the water piping for the property was observed to be the original galvanized piping. It is pointed out that the galvanized piping will deteriorate with time, and will corrode on the inside of the piping, thereby reducing the inside diameter of the pipe, and restricting the flow of the water through the pipe. In addition, the piping will corrode through to the outside of the pipe and will eventually deteriorate to where the pipe will start leaking. It can be anticipated that the galvanized water piping throughout the house will need to be replaced when it is causing reduced water pressure or is corroded enough to start leaking.

I	NI	NP	D



Limited visibility of plumbing lines: limited access at attic -
Visibility of the plumbing lines was very limited at the time of the inspection and some portions of the plumbing that are typically accessible were concealed. If further investigation is desired, it is recommended that a service company be contacted.

1: Insulate Inlet Water Line

The main inlet water line needs to be insulated at the house.

Obtain Cost Estimate

2: Vacuum Breaker - Missing

The atmospheric vacuum breaker devices were missing at one or more of the hose bibbs, and it is recommended that they be installed to prevent cross connections, which can allow contaminated water to enter the potable water supply.

Obtain Cost Estimate

3: Hot & Cold Water Reversed

Kitchen, hall bathroom left sink

The hot and cold water supply were reversed, where the hot water was on the right side, and the cold water on the left side.

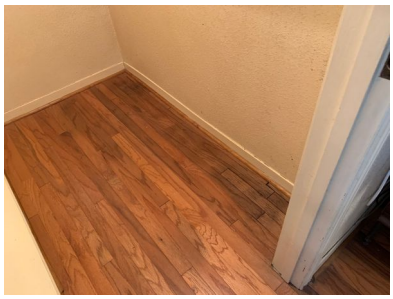
Obtain Cost Estimate

4: Drain Stopper - Nonfunctional
Master bathroom
The drain stopper was not operating properly and needs to be repaired.
Obtain cost estimate

5: Shower/Tub - Shower head leak
Master bathroom
The shower head was leaking at the connection and needs to be repaired.
Obtain Cost Estimate

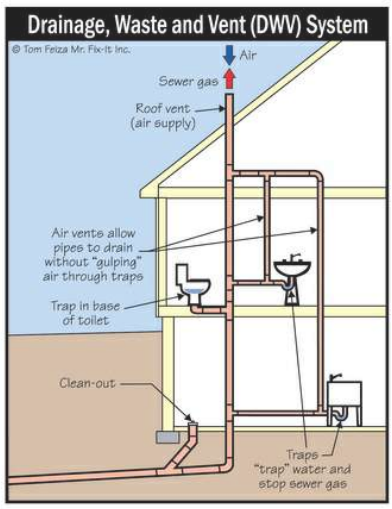
6: Shower Pan - Evidence of leak
Evidence of a shower pan leak was observed where materials in the adjacent closet of the shower were stained/damaged. it is recommended that a plumber be contacted for further investigation and to provide a cost estimate for any needed repairs. A shower pan leak test should be performed.

Obtain Cost Estimate



☒ ☐ ☐ ☒ **B. Drains, Wastes, & Vents**
Comments:
Sewer Piping Material: ABS

Sewer System - Functional:
No evidences of a system wide problem were observed when the system was operationally checked by running water through each of the plumbing fixtures during the duration of the inspection. It is noted that most of the drain waste system in the walls, under the floors, and in the ceilings is not visible. If further investigation is desired, it is recommended that a plumber be contacted to perform an in depth survey with a camera or hydrostatic test.



I = Inspected NI = Not Inspected NP = Not Present D = Deficient

I	NI	NP	D

1: Cleanout drains to yard

The kitchen clean out was open and had a drain line running into the yard. Further investigation with a service company is recommended to determine if the drain line is clogged and to make any necessary repairs to rout the water back into the sewer system.

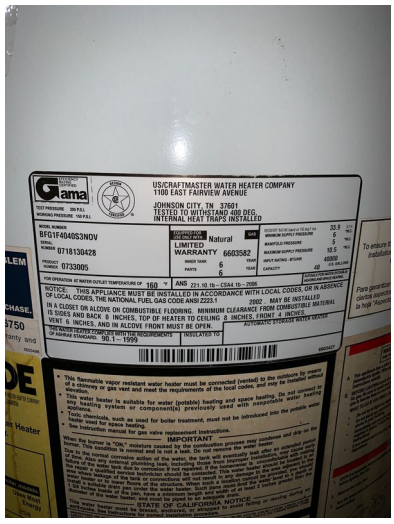
Obtain Cost Estimate

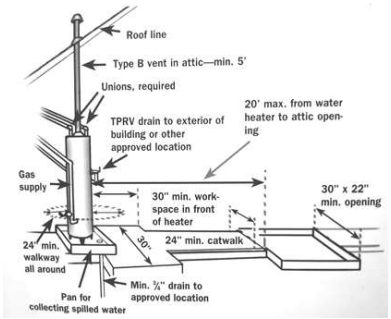
☒ ☐ ☐ ☐ **C. Water Heating Equipment**

Comments:
Energy Source: natural gas
Capacity: 40 gallon

Gas Water Heater Description:
The hot water for the property was provided by the following natural gas fired gas water heater(s):

Location	Brand	Capacity	Age	Energy Type
Garage	Whirlpool	40	2007	Gas





Water Heater Equipment - Functional:
The water heater equipment was functional at the time of the inspection and providing hot water to the applicable plumbing fixtures.

Water Heater Equipment - limited life:
Due to the age and/or condition of the equipment, it is our opinion that the equipment has only a limited amount of life remaining. Normal life expectancy for a water heater in the Houston area is approximately 10-12 years.

Temp/Pressure Relief Valve - Information :

I	NI	NP	D

Temperature/pressure relief valves are not operationally checked by this firm during the inspection. Valves typically do not reseat properly when they are operated, which causes the valves to leak. It is best to replace the temperature/pressure relief valves for water heaters every 2-3 years to prevent them from getting clogged with mineral deposits.

☐ ☐ ☒ ☐ **D. Hydro-Massage Therapy Equipment**

Comments:

Hydro - therapy equipment was not present at the time of the inspection. :

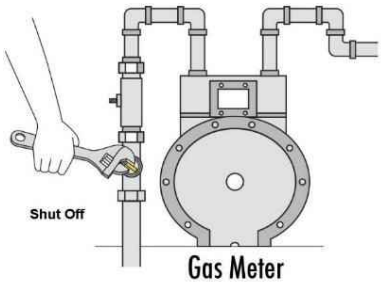
☒ ☐ ☐ ☒ **E. Gas Supply System**

Comments:

Gas Meter Location :

The main gas shut off valve was located at the inlet side of the gas service meter.

Rear



Gas System Inspection :

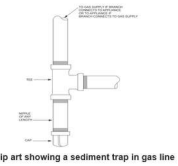
A cursory visual inspection was performed on the gas supply piping. The inspection was limited to the gas pipes that were visible and accessible at the time of the inspection. The use of specialized equipment to detect leaks is not included in the scope of this inspection, nor is determining the gas supply pressure or adequacy. If further investigation is desired, it is recommended that a plumber be contacted.

1: Sediment Trap - Missing

Sediment traps were not installed at the gas supply lines for one or more of the gas fired equipment. A sediment trap is intended to catch sediment/moisture/debris in a gas supply line before it can enter into the gas equipment.

Obtain Cost Estimate


HEI file photo showing sediment trap


Clip art showing a sediment trap in gas line

V. APPLIANCES

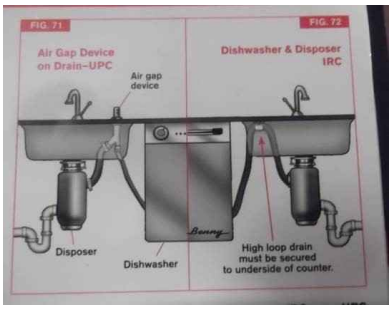
☒ ☐ ☐ ☒ **A. Dishwashers**

Comments:

Functional :

The dishwasher was functioning and responded to the controls. The unit was run through a cycle at the time of the inspection and appeared to be operating properly.

Drain Line Loop Present :
The drain line under the sink was looped up so that the top of the loop was higher than the point where the drain line connected to the disposal. This will help to prevent garbage from running down the drain line into the dishwasher.



1: Leaking Water

Water was observed to be leaking from around the door during the running cycle. Have a service company find the source of the problem, and make any necessary repairs.

Obtain Cost Estimate

☒ ☐ ☐ ☐ **B. Food Waste Disposers**

Comments:

Limited Life:
The disposal was functional at the time of the inspection. However, the age and condition of the equipment, it is our opinion that it has only a limited amount of life remaining.

☒ ☐ ☐ ☒ **C. Range Hood and Exhaust Systems**

Comments:

1: Limited Life

The range vent equipment was functional at the time of the inspection. However, due to the age and/or condition of the equipment, it is the opinion of the inspector that it has only a limited amount of life remaining.

2: Vent Pipe - terminated in attic

The vent pipe was terminated into the attic, rather than venting to the outside.

Obtain Cost Estimate

☒ ☐ ☐ ☐ **D. Ranges, Cooktops, and Ovens**

Comments:

Electric Cooktop - Functional:
The electric cooktop was functional at the time of the inspection and responded to the controls. All of the elements and controls were operational at the time of the inspection.

I	NI	NP	D

Limited life:
Due to the age and/or condition of the equipment, it is the our opinion that the equipment has only a limited amount of life remaining.

Oven - Calibrated properly:
No repair was needed to the calibration of the oven thermostat. The thermostat was set at 350 degrees, and the oven heated to within the allowable ±25 degrees. The oven was checked with an oven thermometer and found to heat to 360 degrees.

☐ ☐ ☒ ☐ **E. Microwave Ovens**

Comments:

Portable Microwave:

The microwave was a portable unit and was not operationally checked at the time of the inspection.

☒ ☐ ☐ ☒ **F. Mechanical Exhaust Vents and Bathroom Heaters**

Comments:

1: Vents - Not terminated outside

We observed one or more bath vent fans that were not terminated outside. The most current building code requires the vent fan to be vented to the outside of the house, and it is recommended that the vent be extended to the outside of the house.

Obtain Cost Estimate

2: Exhaust Fan - Not present

Master bathroom

An exhaust vent fan was not present. Exhaust vent fans are intended to remove humidity and moisture from the air. Consideration should be given to installing an exhaust vent fan.

Obtain Cost Estimate

☒ ☐ ☐ ☐ **G. Garage Door Operators**

Comments:

Funtional - Autoreverse and sensors:

The garage door opener equipment was functional at the time of the inspection and opened/closed when the controls were operated. The auto-reverse mechanism was operational, and the sensitivity setting on the mechanism was adequate. Also, the infrared auto reverse mechanism was functional.

☒ ☐ ☐ ☐ **H. Dryer Exhaust Systems**

Comments:

Dryer vent - Dryer present :

The vent was connected to the dryer but was not tested. It is recommended that the vent be checked for an excess of lint and that it be cleaned if necessary. (Information)

☒ ☐ ☐ ☒ **I. Other**

Comments:

I	NI	NP	D

Non Built-in Equipment - Not inspected :

It is pointed out that non built-in refrigerators, wine coolers, small refrigerators, clothes washers, and clothes dryers are not included in the scope of this inspection and were not checked. If further investigation is desired, it is recommended that a service company be contacted.
Further investigation is recommended

1: Grill Gas - End of life

The grill was at the end of its normal, serviceable life, and needs to be replaced. The coal grates and meat grates were severely rusted missing, the burner was rusted, and the column supporting the grill was rusted.
Obtain Cost Estimate

INFORMATION FROM HEDDERMAN ENGINEERING INC.

Closing Comments :
Opinions and comments stated in this report are based on the apparent performance of the items included within the scope of the inspection, at the time of the inspection. Performance standards are based on the knowledge gained through the experience and professional studies of the inspector. There is no warranty or guarantee, either expressed or implied, regarding the habitability, future performance, life, merchantability, and/or need for repair of any item inspected. It is recommended that a Home Warranty Policy be provided to protect the appliances and mechanical equipment against unforeseen breakdowns during the first year. Check with your agent for details.

Items identified in the report as Deficient and our Recommendations are provided in the above report. Many, but not all, recommendations are highlighted in bold red text. It is our intention, and your responsibility, that you follow up on these deficiencies and recommendations as part of your due diligence by contacting the appropriate service contractor for **Further Investigation, Obtain cost estimate,** and/or **Contact the builder.** It is pointed out that other related and/or underlying conditions may be present, and which may not be apparent without further investigation.

As an additional service, we strongly recommend using a new tool we have on our website that can quickly turn your inspection report into an easy-to-read estimate of repairs for a nominal fee. These pricing reports from a third party company called Repair Pricer not only make the inspection report easy to understand in terms of dollars and cents, but they are also useful negotiation tools. Just visit the page below on our website and upload your report into Repair Pricer. If you have any questions when you receive your report, you can contact them at info@repairpricer.com
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