

Dear Mr. and Mrs. Home Buyer,

The pages to follow contain your TOTAL HOME INSPECTION report, which is based on observations made while conducting an inspection of Any Address, Anywhere, Fairfield County.

The purpose of this inspection was to assess and report the condition of the dwelling through visual inspection and when possible an operational check of its unconcealed, observable and accessible major components. Our inspection and this report do not identify, nor are they intended to identify, every minute or latent defect. The inspection and report do identify, in general accordance with the State of Connecticut's Home Inspection Standards of Practice, the systems and components that are near the end of their serviceable lives and the significant defects or deficiencies of the systems and components our inspector identified at the time of your inspection.

Your inspection and this report will provide you with enhanced general insight and useful information about the house, and will contain comments that should help you better maintain it should you become its owner. As one example, because water and moisture are the root cause of many problems in dwellings of all kinds, any and all references to water or moisture, no matter how small, should be taken seriously and acted upon.

You were issued a copy of relevant sections of the State of Connecticut Regulation Concerning Home Inspectors (the "Standards of Practice & Code of Ethics"). We recommend that you retain this copy of the Standards of Practice & Code of Ethics in the event that you need to better understand the scope and purpose of your home inspection.

As you read our report, know that we frequently reference specific locations inside or outside the house. For clarity's sake, please keep in mind that locations are frequently expressed as if from a vantage point at the front of the house, as if we are facing it. If we write, "the rear left bedroom", rear means the section of the house farthest from the vantage point, and left means the part of the house to the left of the vantage point.

Performing a TOTAL HOME INSPECTION for you and providing this report has been our privilege. Should you have any questions concerning this report or if we can be of further assistance in any way, please do not hesitate to contact our office.

**LANDSCAPING**

At this time of year, non-coniferous trees are seasonally dormant. As a result we cannot offer an evaluation of their condition. We suggest that you examine the trees on the property, in the spring, to determine if any dead trees or branches are overhanging or in a position to harm the building structure and grounds or cause injuries should they fall.

The plantings appeared to be in generally acceptable condition. Going forward, no vegetation should be allowed to touch the exterior cladding or foundation or to obstruct a window view. Ideally, a minimum of twelve inches of clearance should be maintained between shrubs and exterior cladding and windows to prevent moisture from being trapped against the building structure, which may promote rot on and beneath vulnerable exterior components.

Although our inspector did not inspect the building, it should be noted that the tendrils of the vines clinging to the potting shed can damage vulnerable exterior cladding, materials beneath the siding and trim components. The foliage can also provide an inviting environment for moisture and insects. Consider removing the offending vines.

The lawn was in generally acceptable condition, although spotty areas were observed. With an open tree canopy and proper, consistent maintenance, the lawn's appearance would likely improve over the next year or two.

Most of the perimeter grading around the foundation was only marginally pitched, which could result in water collecting against the foundation. At least six feet of pitch must be maintained, with a minimum of 1 inch per foot, for all soil grading away from the foundation. This will aid in proper drainage of roof and surface water, which will help minimize pressure on the foundation walls and help minimize the chance of water seepage into the lower level of the building.

It may be necessary to install window wells around the rear basement windows in order to build up the soil level as recommended above. Keeping the wells clean will help avoid an inviting environment for insects or rot and help permit the at-grade or sub-grade levels to be properly ventilated when necessary. We recommend that the wells be protected with clear plastic covers to prevent water accumulations in the wells and to help minimize pressure on the foundation walls and possible seepage into the at-grade or sub-grade levels.

## **DRIVEWAY & ENTRANCE**

The driveway approach, drainage, surface, lighting, turnaround area and walks were in acceptable condition.

It is important that your house number be displayed on the surface of the house. Consider installing the number so that it may be seen from Good Hill Road, or at least from the driveway by day or night, which would be beneficial in the event of an emergency.

To help keep the driveway gravel from running onto the surrounding surfaces, define the perimeters of the driveway with materials such as stones and/or landscaping beams.

The property's driveway and left side entrance to the basement area are equipped with drains, which should be kept clean and free flowing at all times to permit them to perform their designed function.

We recommend that a qualified person install suitable railings where there are three or more steps, for example at the rear patio-to-rear yard steps, at the left side patio steps and at the rear left side entrance to the basement steps, for your safety, to reduce the potential for falls and for ease of passage.

We recommend that you replace the missing storm/screen doors at the two front entrances and at the right side entrance for your comfort and convenience.

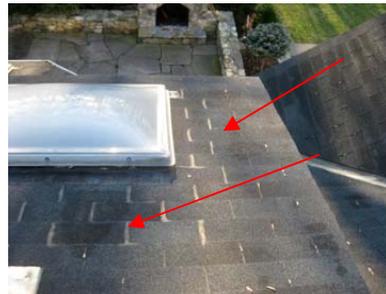
Keeping the entrances clear of leaves, debris and snow accumulations will help prevent water intrusion into the lower levels and living areas, and will help reduce the likelihood of rot development at vulnerable wood components.

## **BUILDING EXTERIOR**

The roofs are gable and shed styles. The roofs are clad with asphalt, tab shingles and asphalt roll roofing. The main house roof was inspected from its surfaces. Because of the excessive pitch of the detached garage roof, our inspector was unable to safely gain access the roof surfaces. The garage roof was inspected from the ground with binoculars. Our inspection and reported evaluation are based on what we could see from this perspective.



The roof surfaces were showing normal wear and they were generally in acceptable



condition. The loose shingles over the main house's front entrance area (see photo - above left) should be secured and the tarred shingles (see photo - above right for example) on the main house should be maintained as required to help ensure a weather tight roof surface.

Some of the roof flashing needs to be refastened and caulked to help keep it water tight. We recommend that the offending flashing area be replaced when the roof surface is replaced.

Portions of the roof and chimney flashings were inaccessible for inspection. Where visible, some of the visible roof flashings and chimney flashings have been tarred which possibly indicates past leakage. Some of the roof flashing on the upper rear center shed roof needs to be resealed. Keep the tar in good condition to help ensure a weather tight surface. They should be re-coated at least every couple of years. You should consider replacing the offending flashing when the roof surface is replaced.

The chimney is masonry. The chimney was in generally acceptable condition. The tops of the chimney flues were capped therefore the interiors of the chimney's flues could not be inspected from that vantage point.

The gutters were in generally acceptable condition and they should be maintained as required. Portions of the guttering system require cleaning now and at least every spring and multiple times in the fall in the future. If these gutters are not cleaned, you will experience ant infestation and a general rotting condition. Periodically check all joints for leaks and caulk where it is required.



The sagging sections of gutter at the front left and front right of the house should be re-pitched as required. All gutters should be pitched toward their downspouts and the leaders should terminate as far from the building as practical. Gutters and rain leaders must remain free flowing at all times.

The entire detached garage has not been fitted with gutters and portions of the house have not been fitted with gutters (e.g. lower front left corner, right side shed roof and the rear of the building). We recommend that guttering systems be installed to carry rainwater away from the structures. Again, all gutters should be pitched toward their downspouts and all rain leaders should terminate as far away from the building as practical.

All rain leaders terminating into in-ground receptacles must remain free flowing at all times. Underground systems are vulnerable to clogging and should be checked annually.

The primary windows are wood-framed, single-glazed, casement sashes; wood-framed, single-glazed, awning sashes, wood-framed, double-glazed (insulated), awning sashes and vinyl-framed, double-glazed (insulated), awning sashes. The newer wood-framed, double-glazed (insulated), awning sash and vinyl-framed, double-glazed (insulated), awning sash windows were in generally acceptable condition (see below). It is not uncommon, after a period of time, for insulated glass units to lose their seals and develop condensation between the layers of glass. This is normal and eventually happens to all insulated glass (see below). The wood-framed, single-glazed, casement sash windows and the wood-framed, single-glazed, awning sash windows appeared to be older. Some of the windows require maintenance and/or repairs, for example the windows that were stuck and require freeing for your comfort and convenience (e.g. in the front right bedroom (rear right window), in the 2<sup>nd</sup> floor hall bathroom (rear window), in the rear center bedroom (both rear windows), in the master bedroom (rear right window), in the living room (rear right window) in the right side office/bedroom (both rear windows and the right side window), in the dining room, in the breakfast nook (all three left side windows), in the front left bedroom (left side window), etc. It should be noted that some of the older, wood-framed, single-glazed, awning sash windows were covered by storm panels and they were inaccessible for inspection (e. g. front entrance area, living room (x3), etc.) therefore no evaluation of those windows, their components or their functionality will be included in this report. The missing winding handles for the windows should be replaced for your convenience. All of the windows should be maintained as required to close snugly for added energy efficiency and security. The windows' tracks should be kept clean and lubricated for ease of operation.

The insulated glass panel seals of the hinged windows (e.g. in the breakfast nook and some of the fixed windows (eg. master bedroom suite (x4) appear to have failed. Condensation and fog are evident between the layers of glass. This is not correctable without replacement.

There were some windows from which the screen and storm components were missing. Verify with the owner as to the availability and condition of storms and screens for all the windows. Remember that window screens are not designed to prevent children from falling out of the windows. We recommend that you prevent children from getting too close to any windows.

There were no storm panels on the single-glazed picture window sash (fixed windows). Installing storm panels will add to living comfort and energy savings.

There were no storm panels on the window sashes of the front entrance doors. Installing storm panels on these door windows will add to living comfort and energy savings.

The house is clad with wood clapboard and vertical, knotty wood siding and with wood trim. The garage is clad with vertical, knotty wood siding as well as with wood trim. They were in generally acceptable condition. Secure the loose trim on the right side screened in porch. Sealing all penetrations, seams, and voids in the siding, including the areas of the main



house damaged by carpenter bees and/or woodpeckers (see photo), as well as at the window and door casing perimeters, the unions between siding and trim components and the unions between exterior cladding and foundation will help to establish and maintain a weather tight envelope for the house, and will protect the siding and substrates from exposure to moisture and deterioration.

Knotty wood siding requires periodic maintenance. That maintenance would include caulking any knotholes or cracks in the wood. Any open joints should be refastened and caulked as necessary. The joints between the siding and the trim should also be caulked. This caulking should be done prior to the next refinishing.

There are areas around the house where the siding was too close to, or even in contact with the soil. This will eventually lead to a rotting condition and will invite insect activity. Cut the grade or remove lower courses of siding in these areas, so that at least 6" of foundation is exposed. This would lend itself to a healthier wood environment. Keep these areas free from debris so that it can be inspected for any rotting or insect evidence.

There were places around the house where rot or the onset of wood rot was observed, for example at the left side breakfast nook window trim, at the left side entrance to the basement door trim, at the vertical knotty wood on the rear dormers and on the rear dormer trim. This and all rotted or potentially rotted wood should be removed, and the sub-surfaces should be repaired as necessary.

When the sub-surfaces are repaired, new wood should be installed, caulked and painted. Potentially rotting wood that is not repaired remains an invitation to insect infestation. When the sub-surfaces are exposed, if any insect activity is found, it should be treated as necessary at that time.

The exterior finish was in generally acceptable condition, but it was peeling and stained in some areas. Plans should include refinishing the offending areas in the future to help ensure a weather tight seal.



Our inspector observed excessive "checking" (cracking) of the deck floorboards and other wooden components. Treating all surfaces of the wooden deck and its structural components with a quality wood preservative or stain will help prolong the deck's life.

It is recommended that all decks be inspected for signs of decay each year, especially older decks that may have been constructed prior to the popular use of pressure-treated, rot-resistant lumber approximately 25 years ago. A pocketknife or screwdriver can be used to check for decay by inserting the blade into the wood. If it easily penetrates into the wood, then further inspection is warranted. A qualified contractor should be called to conduct a more thorough inspection to determine the extent of the problem.

The spacing between the deck's railing components may be too wide to effectively prevent children from a potential fall. Modifying the railing components by adding balusters, rails or screening would be an appropriate extra measure of safety.

We were unable to gain access to the underside of the entire deck, and as a result we could not evaluate the condition of its structural components. Where visible, it appeared to be in stable condition. Our inspector was unable to determine whether flashing was installed between the deck structure and the house. Flashing should be installed between the wooden deck components and the house siding to help prevent water and moisture from being trapped in those areas and to help prevent rotting of the deck and/or siding/trim materials. Confirm with the seller or the installing contractor as to whether flashing was properly installed.

The area below the deck should be screened to prevent animals from nesting in the area.

Water was supplied to the front exterior hose bibb cock (faucet) at the time of this inspection. No water was supplied to the left side (under deck) exterior hose bibb cock (faucet) at the time of this inspection. We recommend that the water supply to all exterior water sources are turned off in the autumn and that all hoses are disconnected from the faucets, to help prevent damage caused by pipes that may freeze.

## **SEWAGE DISPOSAL**

It has been reported to our office that this house has been connected to a private septic system. This septic system was not inspected by TOTAL HOME INSPECTION. A septic contractor did evaluate this system during your home inspection. We do recommend that you acquire from that septic contractor some type of assessment of the system, which includes the tank, free flow of lines and general condition of the system. Properly sized septic systems should be cleaned and inspected every two years.

## **BASEMENT & STRUCTURE**

It was indicated to us that this house is approximately 65 years old, with apparent renovations, additions and modifications performed since its original construction. It is a two-story, farmhouse styled, traditionally wood-framed and partially post & beam built framed dwelling with a finished basement. Approximately 60 percent of the basement has been finished into a living space.

The front right side of this house has been finished on a concrete slab on grade. Such foundations vary considerably from older ones that have no moisture barrier under them and no reinforcing steel within them to newer ones that probably have both. Our inspection of slab foundations conforms to the State of Connecticut and industry standards, which is that of a generalist and not a specialist. We check the visible portion of the stem walls on the outside for any evidence of significant cracks or structural deformation, but we do not move furniture or lift carpeting and padding to look for cracks or structural deformation and we do not use any of the specialized devices that are used to establish relative elevations and confirm differential movement. Significantly, many slabs are built or move out of level, but the average person may not become aware of this until there is a difference of more than one inch per twenty (20) feet, which most authorities regard as being tolerable. Regardless, many slabs are found to contain cracks when the carpet and padding are removed, including some that contour the edge and can be quite wide. They typically result from shrinkage and usually have little structural significance. However,

there is no absolute standard for evaluation cracks, and those that are less than 1/4" and which exhibit no significant vertical or horizontal displacement are generally not regarded as a significant. They typically result from common shrinkage, but can also be caused by a deficient mixture of concrete, deterioration through time, seismic activity, adverse soil conditions, and poor drainage, and if they are not sealed they can allow moisture to enter a residence, and particularly if it is surcharged by a hill or slope, or if downspouts discharge adjacent to the slab. However, in the absence of any visible major defects, we may not recommend that you consult with a foundation contractor, a structural engineer or a geologist, but this should not deter you from seeking the opinion of any such expert.

The basement was accessed by a stairway from the first floor and it was inspected from within.

The foundation walls are concrete blocks. Settlement cracks were noted in the foundation at the time of the inspection. Settlement cracks are not uncommon and are usually the result of improper soil grading around foundations. This condition is presently not a structural problem. It must be noted that settlement cracks could develop into structural cracks. Periodic inspection of these cracks and proper care should prevent future problems. These cracks should be filled from the exterior with a suitable material to help prevent seepage and they should be monitored for any further movement.

The visible cracks in the basement concrete floor appear to have been caused by normal expansion and contraction, and in our opinion, do not pose a problem at this time. The cracks should be filled and sealed to minimize the potential of moisture and radon infiltration into the basement.

Because of the finished ceiling, we were unable to visually inspect approximately 60% of the first floor structural components. The visible main girders are built up 2" x 10" 's, while the first floor joists are 2" x 12" 's installed 16" on center. The exterior walls appear to be 2" x 4" 's installed 16" on center. The girders are supported by concrete filled, steel cased, Lally columns and by the foundation walls. Where visible these structural components were in generally acceptable condition. Installing insulation beneath the first floor sub flooring in the front-most unfinished basement area, like the insulation installed in the rear left-most unfinished basement area, will likely lead to improvements in energy efficiency and comfort. Consult an insulation reference or contractor for informative guidelines in this regard.

Watermarks were evident in the basement area (see photo for example). This indicates water has entered this area in the past. The basement was dry at the time of the inspection. Be sure that all exterior grades pitch away from the foundation and extend the guttering system as far away from the foundation as practical (see **LANDSCAPING** and **BUILDING EXTERIOR** sections of this report). It must be noted that any area below grade is susceptible to water seepage during certain weather conditions. If after performing the above recommendations, water seepage is still evident, consultation with a waterproofing specialist may be necessary.



As representative measures toward controlling general dampness in the lowest level, we recommend that the cold water lines be insulated and that you consider installing a fan to enhance airflow and a dehumidifier to actively extract moisture from the area.

No wood destroying insect report is contained in this inspection report. This house was not inspected for any type of wood destroying insects by TOTAL HOME INSPECTION, however, All County Pest Control (203-327-0259) did inspect the property for wood destroying insects and they issued an official Wood Destroying Insect Report. It must be noted that the CT Standards of Practice regulating home inspectors prevents All County Pest Control and TOTAL HOME INSPECTION from performing destructive testing/inspections or determine or confirm insect damage to areas that are not visible for inspection. Annual termite inspections are recommended.

The floor drains should be kept clean and free flowing at all times to help allow them to function as designed (see photos).



## **HEATING**

Consistent with the information provided by the Standard Oil technician who evaluated the systems, the heating plant for the majority of the house

(baseboards) is an oil-fired, cast iron, Weil McLain brand boiler (serial # CP 3963408/model # WTGO-5).

The heating plant for the and for the master (excluding the bedroom air system. This system aforementioned, Weil one air handler unit (in bedroom closet). The water, which then flows the air handler. A fan in blows over the coil and heated air ("forced warm air").



front left bedroom bedroom suite area) is a hydro-consists of the McLain boiler and the front left boiler heats the through a coil in the air handler distributes the

The boiler fired satisfactorily at the time of this inspection but it did not function at its peak performance levels (see below). The boiler should be cleaned including its smoke pipe and chimney flue passages, and all should be technically inspected and repaired if necessary. All components should be checked and adjusted to operate at peak performance, including all safety devices and automatic valves. This service work should be performed now and on an annual basis going forward.

The boiler appears to be approximately 8 years old. Weil McLain brand, cast iron boilers, that have been properly maintained, have an average useful life expectancy of approximately 25-30 years.

We recommend that all heating supply pipes and ducts be insulated for better fuel efficiency and to protect them from the elements.

We could determine if there is antifreeze in the heat pipes. Because the heat pipes pass through an unheated space (the closet in the front left bedroom), antifreeze should be installed in the system to prevent damage to the pipes caused by freezing. The pH level of the antifreeze should be checked annually (when the system is serviced) to prevent damage to the pipes. The system should be clearly labeled that antifreeze is installed so that checking the pH level is not overlooked by the service man.

There is back-pressure from the combustion chamber of the boiler. There could be several causes for this condition. A service company should evaluate and correct this condition.

The back-flow prevention valve should be piped to within six inches of the floor to prevent anyone from being sprayed by discharging water.

The pressure reading on this boiler is lower (8 psi) than normal (12-20 psi). The cause could be a malfunctioning gauge or one of the boiler components. Have a reputable service company check and correct the cause of this condition.

The technician from Standard Oil recommends that a "spiral scoop" (turbulator") be installed on the boiler's heat pipes in such a way as to help allow the boiler to function at peak performance levels.

There were corroded fittings and valves observed at and near the boiler. We recommend that these valves and fittings be monitored for further deterioration and that they be replaced when required to prevent malfunctions and potential damage.

The heat distribution is multiple zones of baseboards and forced hot air. All heat sources were warm (not adequately though in some places), except for the baseboards in the 2<sup>nd</sup> floor hallway, in the rear right center bedroom and in the front entrance hallway. There could be several causes for this condition, the most common being trapped air. A service company should remedy this condition.

The baseboard heating zones are controlled by means of electric zone valves. This is a common, economical method of providing separate zones of heat in the house.



You might consider upgrading the non-programmable thermostats (heating and cooling) to the programmable type for better energy efficiency and for your convenience.

On a forced air system, it is as important for air to return to the heating/cooling plant for re-heating/re-cooling as it is for the air to reach the various rooms. Because each room does not have a return duct, you may find some unevenness in room temperature. As an aid to free flow of air throughout the house, all interior doors (excluding closets) should have an unobstructed minimum 1" space below them.

The main fuel (#2 heating oil) shut off valves are located in the basement at the bases of the two, 8-year old, 275-gallon oil storage tanks (see photo-right).



The visible areas of the oil storage tanks were in generally acceptable condition. Oil storage tanks have an average useful life expectancy of 30-40 years but the life expectancy can be affected significantly by the environment around the tank.

This house appears to have an abandoned or removed buried oil tank. Abandoning or removing oil tanks should be done in accordance with all local, state and E. P. A. regulations. We recommend that you obtain the appropriate documentation confirming that the tank has been abandoned or removed according to these regulations.

A small portion of the oil supply pipes are covered with concrete, preventing evaluation of the oil supply pipes. The copper pipes are likely to be adversely affected by their contact with the concrete. It should be noted that oil could leak from these pipes below the concrete. We recommend that you have your oil supplier re-route the oil lines as required to remedy this condition and that the pipes be encased in protective sleeves to help prevent damage to the pipes.



The propane gas (LPG) shut off valve is located under the top cover of the tank, at the rear of the potting shed.

## HEATING WATER

The water is heated by a Phase III brand, indirect, hot water maker (serial # I9822/model # TR60). This water heater works in conjunction with the boiler. The boiler heats water, which then passes through a jacket in the water heater and gives off its heat to the domestic water. The hot water system was evaluated and found to be in acceptable condition. This system is considered adequate to meet today's family needs. The system should be checked and maintained when the boiler is serviced.



According to our inspector's thermometer, the undiluted hot water temperature was approximately 147.2 degrees Fahrenheit. It is recommended that the undiluted hot water temperature remain between 115 degrees Fahrenheit and 125 degrees Fahrenheit to prevent scalding and for your comfort. Make the appropriate adjustments for safety purposes. The indirect water heater was in generally acceptable condition.

The indirect water heater appears to be 8 years old. Indirect water heaters that service well water supplies and that are properly maintained have an average useful life expectancy of 5 - 25 years, depending upon the properties of the well water they service. These units deteriorate from the inside out. We have no way of determining the interior condition of the indirect water heater unit.

## COOLING

The Trane (x2) and Carrier brand, electric, air conditioning systems' compressors (serial #'s G26206319, F30213552 and 3602E11384 respectively) were not activated due to the low exterior temperatures. Most manufacturers recommend, to avoid damage, that these units not be activated when exterior temperatures fall below 65 degrees Fahrenheit. Obtain some type of guarantee from the seller that these units will be in good working condition when needed. For maximum efficiency, service the equipment annually. Keep the outside compressor area clear of shrubbery, debris or restrictions. No evaluation of the air conditioning systems is contained in this report.

The exterior compressors appear to be 16 years old, 17 years old and 6 years old respectively. Compressors that have been properly maintained have an average useful life expectancy of approximately 15-18 years. Due to their apparent ages, continued trouble-free operation is questionable. Your plans should include replacing the necessary components of the older, Trane brand cooling systems when they fail.

Some of the air handlers' "return air" is drawn from the basement area and from the attic because the filter compartment covers are missing (see photo for basement air handler). This is not a recommended practice because air contaminants in the basement and attic will be drawn into the living areas. Replace the filter compartment covers or install duct tape over the filter compartment access areas as required to help remedy this condition.



The evaporating unit (air handler) for the air conditioning system servicing the lower left side of the house and the master bedroom suite (excluding the bedroom) is located in the left side bedroom closet. These units develop leaks with age, and when this happens, damage to the floor could occur. Consider installing a secondary collection pan under the evaporating unit to prevent consequential damage. The collection pan should be separately drained to the exterior of the building or fitted with a float type shut-down switch.

Our inspector was unable to locate a cooling supply vent in the finished basement. We recommend that you inquire with the seller as to whether air conditioning is supplied to the area.

The condensation attic drains into the (photo). This is not the drain traps dry septic gases can be distributed to the re-routing the drain and sealing the gasses from entering the building.



drain for the air handler in the plumbing vent pipe (see recommended because when out during the heating season, enter the air handler and be living areas. We recommend to the exterior of the house vent pipe to prevent the

The washable filter in the attic air handler (Carrier brand) should be cleaned approximately every six-to-eight weeks during operation and the changeable filters in the basement and left side bedroom closet air handlers (Trane brand) should be changed every six-to-eight weeks during operation or as needed.

All forced air systems, including ducts should be cleaned as required to help prevent possible accumulations of dust, dirt, allergenic substances, pathogenic substances and/or toxicogenic substances. We do not test for indoor "air pollution", which the Consumer Product Safety Commission rates fifth among potential contaminants. Nevertheless, inasmuch as health is a personal responsibility, we recommend that you have the indoor air quality tested as a prudent investment in environmental hygiene, and particularly if you or any member of your family suffers from allergies or asthma.

## WATER SYSTEM

The water is supplied to this house via a private well. Water samples were drawn and sent to the lab to determine the radon in the water level, any coliform level and the chemical and physical constituents of the water supplied by the well. These results will be forwarded to you directly by JMS Environmental Services (toll free: 1-866-567-5097), under separate cover in about 7 days. TOTAL HOME INSPECTION will not receive copies of the test results. Water sampling should be tested on a regular basis as ground conditions and conditions of the aquifers can change. You may also want to check with the local health department, as to whether or not any abnormalities have been reported in the well water in your location.

This house has water treatment equipment. The water treatment equipment was by-passed for one



of the water analysis samples and included in a second sample. The results of this testing will also be forwarded to you directly by JMS Environmental Services (toll free: 1-866-567-5097) under separate cover, in approximately 7 days. TOTAL HOME INSPECTION will not receive copies of the test results. Evaluating water treatment equipment is beyond the scope of a standard home inspection. There is no evaluation of the well water treatment equipment contained in this report. The installing contractor or homeowner should instruct you on its operation and maintenance.

The backwash for the water treatment equipment empties into the septic system. This is not recommended. Eventually the deposits in the backwash water may damage the system, clog the septic fields or filter down to the aquifers. The backwash, depending on its type, should be spilled into a separate dry well, or containerized and removed from the site. Inquire with the local health department as to their requirements.

A "macro-type" filter has been installed on the water supply system to extract from the water supply. We you ask the seller or a qualified, filtration system, installer to how to maintain and remove safety and to help prevent consequential damage.



installed on the larger particles recommend that well water instruct you on the filter for your leaking and

The main water supply piping from the well is plastic. The main shut-off valve is located in the basement, near the front foundation wall of the rear left unfinished basement area (see photo right).



The exterior of the bladder/diaphragm-type, well water storage tank was in acceptable condition(see photo left). No signs of leaking or significant rust were noted on the storage tank. This type of equipment deteriorates from the inside out depending upon what effects the water has on the interior materials.

Because the interior is not visible, its condition cannot be determined.

The well pump is submersible and it was not accessible for visual inspection. After running the water for a measured period of time, there were no indications of any well pump malfunctions.

The visible water supply lines are copper, braided-metal and chromed-metal and they were in generally acceptable condition. We recommend that all water supply pipes be insulated for better energy efficiency, to prevent condensation and to protect them from the elements.

There was good water pressure and flow at all fixtures that were tested. We did not perform a capacity or yield test. It is simply a statement of water flow at various faucets at the time of inspection and over a measured period of time.

The visible waste, vent and drainage pipes are PVC plastic, ABS plastic and copper. They too were in generally acceptable condition.

Water flow and drainage were found acceptable at all plumbing locations that were tested. Note that we evaluate drain pipes by flushing every available drain that has an active fixture while observing their draw and watching for blockages or slow drains, but this is not a conclusive test and only a video camera scan of the main waste line would confirm its actual condition. However, you can be sure that blockages will occur, usually relative in severity to the age of the system, and will range from minor ones in the branch lines, or at the traps beneath sinks, tubs and showers, to major blockages in the main line. The minor ones are easily cleared, either by appropriate chemical means or by removing and cleaning the traps. However, if tree roots for example, grow into the main drain that connects the house to the septic system, repairs could become more costly. For these reasons, we recommend that you ask the seller if they have ever experienced any drainage problems, or you may wish to have the main waste line video-scanned before your closing. Failing this, we recommend that you obtain an insurance policy that covers blockages and damage to the main sewage pipe(s).

This house has been fitted with a sewage ejector pump system, servicing the basement "slop sink". The pump appeared to be operating properly. Do not use any plumbing fixtures tied into this pump system during a power outage unless it is equipped with a battery back up system.

## ELECTRICITY

The 200-ampere, 120/240-volt electrical system enters the building via underground cables. The electric meter and main service disconnect switch are located on the exterior of the building. The main distribution panel is located in the rear left unfinished basement area. There are also sub panels



located in the same basement area (see photo). The main distribution panel has been fed with aluminum feeders. The sub panels have been fed with copper. Where visible the distribution conductors (wires) are copper, armored cable (AC/BX) and copper, non-metallic sheathed cable (NM/Romex) type conductors (wires). They were in generally acceptable condition. All circuit breakers in the electrical panel should be properly labeled for your safety and for your convenience. The electrical breaker switches in the panel should be tested on an annual basis. The four existing "Ground Fault Circuit Interrupter" (GFCI) safety breakers in the main panel should be tested monthly. The system appears to have been grounded to driven rods.

Some of the electrical wiring is of the armored cable (AC/BX), cloth and varnish insulation type. This wiring was commonly used during the era in which this house was constructed/renovated. As this type of branch circuit conductors gets older, it can fray and get brittle. It is common to observe some fraying at the connections where this type of wiring is in use. This is especially evident if these wires have been disturbed while performing repairs or renovations. It is common to have to repair or replace brittle and frayed cloth wiring when electrical outlets, wall switches and lighting fixtures are repaired or updated in a house using this type of wiring. Please note that we are unable to check the wiring concealed behind the walls, ceilings and in junction boxes, at the outlets, at wall switches, at electrical fixtures, etc., therefore we cannot report on the integrity of these AC/BX cables with cloth insulated wires. The integrity and safety of these wires can only be determined by specialized testing performed by a qualified, licensed electrician, therefore we recommend that the AC wires with cloth insulation be tested for your safety.

There are exposed right unfinished example). All including electrical should be properly boxes should be removable cover



electrical wires in the front basement area (see photo for electrical wire connections, wall outlets and wall switches housed in boxes and those covered with a secure for your safety.

The smoke and fire alarms throughout this house should be tested frequently and kept in good working condition. Carbon monoxide detectors, fire extinguishers and additional smoke and fire detectors should be installed as required pursuant to local regulations, for your safety and for your convenience.

The closet light fixtures that are within 18" of stored materials should be fitted with fluorescent light bulbs to reduce the possibility of fires. Install proper bulbs for your safety.

Electrical receptacles (outlets) in any bathroom or powder room, over a kitchen counter top, installed on a kitchen "island", in the garage, at the electrical distribution panel, and on the exterior of the house and grounds, should be of the safer "Ground Fault Circuit Interrupter" (GFCI) type. This safety outlet breaks the flow of electricity in the event of a short, preventing electric shock. These devices should be installed where necessary, for example in the kitchen and they should be checked monthly to insure they are performing as designed.

According to our inspector's testing device, the GFCI outlet on the exterior of the left side of the house (deck area) did not function as designed, at the time of this inspection. The outlet should be replaced for your safety, prior to additional use.

There are extension cords being used for various purposes in the front, right basement area. We consider extension cords for temporary usage only. We recommend that receptacles (outlets) be installed in such a manner that the extension cords will not be necessary.

Some of the electrical receptacles (outlets) throughout the house are the older two-pronged type receptacles. As an upgrade we recommend the two-pronged receptacles be changed to the newer three-pronged grounded receptacles (outlets). This is most important where an appliance will be used. We were unable to check the wiring in the wall, so when your electrician is replacing or rewiring receptacles, any dried or frayed internal wiring should be checked and replaced as required for your safety.

## ATTIC

The attic was accessed by a ceiling hatch in the 2nd floor hallway and it was inspected from within. The hatch to the attic space is awkward to use. For ease of access consider installing a folding set of stairs. Folding stairs installed in the ceiling should be properly fitted to the attic floor and the stair openings should be insulated for energy efficiency.

Access could not be gained to the attic area above the master bedroom due to the small portal, the lack of flooring and the "low ceiling" in the area (see photo). The area could not be inspected therefore we cannot include an evaluation of the contents, structural components, roof sheathing, insulation, ventilation, flooring or



lighting in this space, within this report. The accessibility, structure, lighting and flooring were in generally acceptable condition.

The roof structure consists primarily of 2" x 6" rafters installed 16" on center, while the attic floor components are primarily 2" x 6" boards, installed 16" on center. The roof has been sheathed with plywood.

It is virtually impossible for anyone to detect a roof leak, except as it is occurring or by specific water tests, which are beyond the scope of the standard home inspection we have performed for you. Even water stains on ceilings or on the framing within the attic will not necessarily confirm an active leaking. Naturally, the sellers or the occupants of the residence will generally have the most intimate knowledge of the roof and of its history therefore we recommend that you ask the sellers about the history of any and all leaks. We also recommend that you include comprehensive roof coverage in your home owner's insurance policy, or that you obtain a roof certification from a qualified, licensed roofing contractor.

The amount of ventilation supplied to the attic area is sparse. We suggest additional ventilation that will reduce the attic temperature during the summer months, prolong the life of the roofing and keep the house cooler. Additional ventilation will also help expel moist air during the winter months, reducing the potential for condensation. One method of providing additional ventilation would include installing a thermostatically controlled fan to the existing gable end louver. The fan's thermostatic control(s) should be set at 90 degrees in the summer months and 40 degrees in the winter months. If you find that additional ventilation is not adequate to moderate attic temperatures and control condensation, further measures should be taken to increase attic airflow and to reduce the moisture levels in the balance of the house. To be effective, all ventilation louvers should remain open year 'round.

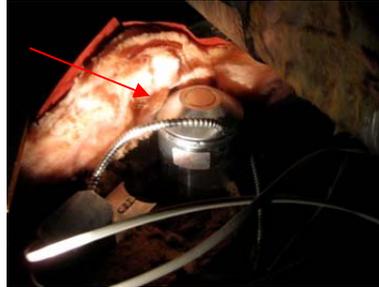
Cathedral type ceilings require a special method of ventilation. A continuous flow of unobstructed air above the insulation is recommended. Intake louvers (soffit vents) at the low end of the slope and exhaust louvers (ridge vents) at the high end of the slope will accomplish this. The existing cathedral ceilings in most of the 2<sup>nd</sup> floor have not been vented according to recommended practices and this will likely reduce the useful life of the surface roofing material.

The attic insulation, where visible, is approximately 1-6 inches of a fiberglass type material, installed with a vapor barrier installed closest to the heated space below the attic. By today's standards, the amount of insulation in the attic floor can be considered minimally adequate. Adding as much insulation to this area as is practical would contribute to energy efficiency. The investment, over time, may be returned in fuel savings.

The displaced insulation and areas with missing or removed insulation should be reinstalled and/or replaced as required to help allow the insulation to perform its designed function of improving energy efficiency and comfort.

A second layer of insulation, with a vapor barrier has been added to portions of the attic floor. The vapor barrier on the added layer should be removed or slit to allow any trapped moisture to escape and to allow the insulation to perform its designed function.

Insulation should not be close proximity to heat-e.g., deficient electrical wiring or open recessed or surface mounted exhaust flues of heat-Heat-emitting objects like in contact with insulation, potential fire hazard. Remove the insulation as necessary (see photo for example in this attic).



installed over or in emitting objects, systems, exposed junction boxes, light fixtures or producing devices. these, covered by or may represent a

For added energy conservation, build an insulated cover for the ceiling hatch.

A wealth of information about making your house more energy efficient is available on the Internet @ <http://www.eere.energy.gov/>. We recommend that you read the "Energy Savers Tips on Saving Energy and Money at Home" brochure contained at that address. Information about insulation "values" can be found on our internet web site: [www.totalhomeinspection.com](http://www.totalhomeinspection.com).

Consider the addition of some lighting and more floored areas in the attic space to make the area even more suitable for storing your belongings.

We recommend that you install "collar ties" (rafter bracing) to help counteract the roof's tendency to spread at the walls attached to the rafters. These collar ties should be installed by a qualified contractor that is familiar with framing techniques.

## **GARAGE**

The detached, multi-car garage has a concrete floor. The modified, post-and-beam structure has wooden walls and a wooden ceiling.

Due to the locations of the considerable amount of stored materials/belongings in the garage, we were unable to definitively verify its condition (see photos below).



The garage has been fitted with two electrically operated, overhead doors and one, manually operated, sliding door. The doors were spot tested and found to be in proper working condition, with the safety reversing functions of the two electrically operated, overhead doors functioning adequately to help prevent entrapment. The doors' reversing actions should be tested frequently and kept in good working order for your safety.

Evidence of past (active?) leaking was observed around the sliding door (see photo). The source of the leaking should be determined and repaired to help ensure a weather tight seal and to help prevent damage to the garage structure



## INTERIOR ROOM COMMENT

The interior rooms were checked for major flaws. In addition, ceilings and walls were checked for past leak sites and for significant cracks. Floors were checked for significant humps or severe pull-aways. Windows were checked for cracked panes and a representative number of windows, doors, light switches and electrical outlets were tested for their operating characteristics. The appliances were spot tested, on a limited basis, to see that they operated at the time of this inspection. Due to the mercurial nature of household appliances, the home inspection we conducted for you does not, in any respect, warranty or guarantee their condition.

Assessing the drafting ability of fireplace and heating system flues is beyond the scope of the home inspection as defined by the governing "Standards of Practice & Code of Ethics", therefore no evaluations or representations are made as to the drafting performance of any such flues.

Please refer to following general notes and room-by-room findings for additional maintenance and repair items.

#### GENERAL NOTES

Properly refitting the rear entrance to the screened in porch door and the front right bedroom closet doors, for example, will enhance ease of use and permit them to close fully and latch closed.

Properly adjusting the striking components of the rear center bedroom closet doors will help permit them to latch closed.

To increase the energy efficiency of the front entrance door, add weather-stripping to the perimeters of the door and its frame.

Ideally, washing machines should have a drain and a pan installed under them to help prevent flooding in the event of spills, leaking or malfunction. We think it is a good idea to change the washing machine's rubber water supply hoses to the more durable, braided, steel type and to turn off the water supply to the washing machine after each use. This will help prevent damage in the event that the water supply hoses break, tear, crack or split. Further, we recommend that you install a continuous solid, smooth wall, metal dryer vent pipe because it is less vulnerable than its flexible counterparts to the lint and heat generated by the clothes dryer's exhaust. Clothes dryer exhaust hoses/pipes should be cleaned regularly for your safety.

The ceiling in the finished basement appears to have been patched. We recommend that you inquire with the seller as to the reason for the patching,

when it occurred and what measures were taken to help ensure that re-patching will not be required in the future.

We recommend installing a handrail at the basement steps for your convenience and safe passage.

We recommend installing safety glass for the window in the stairwell to the second floor for your safety, in the event of accidents involving the window.

We recommend installing an exhaust fan in the 1<sup>st</sup> floor left side, hallway bathroom to help remove moisture from its general area.

Maintain the bathroom area tiles as required to help ensure a watertight seal and to help prevent water infiltration and damage to the walls, the floors and their respective substrata.

All sink top-to-wall or splash plate joints and all counter top-to-wall or splash plate joints should be kept grouted or caulked as required to help ensure a watertight seal at these seams and to help prevent water infiltration and damage to the adjacent walls, the floors and their respective substrata.

There were light switches throughout the house that we were unable to determine purposes for, for example in the right side bedroom, in the kitchen, in the 1<sup>st</sup> floor entrance area, in the 1<sup>st</sup> floor hall bathroom. If practical, we recommend that you ask the seller to walk you through the house and familiarize you with the purpose for all wall switches and any nuances within the house to help make your transition to home ownership more pleasant and convenient.

There were lights that did not illuminate, for example in the front right office/bedroom, in the 1<sup>st</sup> floor entrance area and in the finished basement (bulbs?). We recommend that you inquire with the seller as to whether these lights and all other lights in the house, garage, on the exterior of the house and on the grounds will illuminate at the time of your pre-closing walk-through of the premises.

Due to the basement, masonry fireplace flue's configuration in the chimney structure our inspector was unable to evaluate its entire length. We recommend that you confirm the flue's condition, clearance and safety prior to using the fireplace.

According to our inspector's testing device, the outlets master suites bedroom (right side wall and rear right wall) were mis-wired. The hot wire and neutral

wire were reversed ("reversed polarity") at the outlet connections to the electrical system. A qualified person should rewire the outlets for your safety.

Evidence of rodent activity was observed in the garage, in the attic and in the basement. From our observation of droppings and bait/traps we cannot determine if there has been an occasional rodent in the home or if there has been a rodent infestation. We recommend that you inquire with the current owner about any previous rodent infestation and what actions have been taken to control this condition. If the owner is unaware of this condition, then a rodent inspection by a qualified exterminator is recommended.

We recommend that you install doorstoppers where appropriate to help prevent damage to walls, trim and other components of the house that the doors could damage.

Due to the lack of an extension winding rod/mechanism, our inspector was unable to operate the skylights therefore no evaluation of the skylights, their components or their functionality will be included in this report.

We recommend that you install protective, waterproof curtains over the windows in the tub area of the 2<sup>nd</sup> floor hall bathroom and the stall area of the 1<sup>st</sup> floor hall bathroom to help prevent damage to the windows and their wooden components.

### 2<sup>nd</sup> FLOOR

Rear Center Bedroom: Replace the missing ceiling vent cover to help allow the forced air system to function as designed.

Master Bathroom: Our inspector was unable to operate the steam shower or the jetted tub therefore no evaluation of the jetted tub or the steam system, their components or their functionality will be included in this report. Confirm their functionality with the seller and request that he/she instruct you on how to operate them.

The toilet continued to "run" after it was flushed. A qualified person should make the necessary repairs to help prevent undue stress on the septic system and for better water conservation.

### 1<sup>st</sup> FLOOR

**Living Room:** The visible portions of the masonry fireplace and its components were in generally acceptable condition. The fireplace/chimney components require cleaning prior to further use of the fireplace for your safety.

**Right Side B/R-Office:** Rot was observed on the rear windowsills and trim in the area of the windows. The cause for this condition should be determined and repaired to help prevent further damage and possibly attracting wood destroying insects.

Replace the missing outlet cover for your safety.

**Kitchen:** Replace the missing cold water supply pipe shut-off valve handle under the sink for your safety and convenience.

Our inspector was unable to determine the purpose for the gauge on the side of the cabinetry ("LOCATOR"). Inquire with the seller as to its purpose.

**Front Left Side Bathroom:** The cause for the leaking beneath the sink should be determined and repaired to help prevent continued leaking and consequential damage (see photo of drip).



The shower stall seams should be resealed to help prevent seepage and consequential damage.

### **BASEMENT**

**Finished Area:** Repair the damper door handle as required for your safety and convenience.

The exposed heat pipes should be insulated/covered to allow the system to function at peak performance levels.

At your discretion, replace the missing closet doors.

Replace the missing outlet cover for your safety.

## **CLOSING COMMENTS**

This house visually appears to have been adequately built and maintained. It does need repairs, modifications and homeowner-type maintenance as mentioned throughout the report. The cost of repair for any of the items or conditions mentioned in this report should be estimated by local, reputable contractors, prior to closing, so that you, the buyer, are fully aware of all costs. It's a good idea to clean and polish all glass, hardware, plumbing fixtures and any tiled walls and floors prior to occupancy. Try to obtain operating instructions and guarantees for all mechanical equipment and appliances such as the cook top, ovens, fans, dishwasher, heating and cooling systems, indirect water heater, well pump, etc.

At your request, a radon monitor was placed in this home at the time of your inspection, in a closed house environment. The results of this testing will be forwarded to you in approximately three (3) days via email. It should be noted that this short-term testing was performed for screening purposes only, because future results will be affected by different weather conditions and by the seasons. We recommend testing the radon in air level on a regular basis to determine the long-term exposure to radon gas in your home. TOTAL HOME INSPECTION cannot be responsible for maintenance of E.P.A.-prescribed closed house conditions during a radon test. Should you have any questions, TOTAL HOME INSPECTION'S National Radon Safety Board (NRSB) certified, Radon Measurement Specialist can be reached by telephoning (203) 966-8801.

Determining the presence or absence of mold, pathogenic and/or toxic substances inside or outside the dwelling is also beyond the scope of the standard home inspection we have conducted for you. All references to or omissions of references to mold, pathogenic and/or toxic substances inside or outside the dwelling must not be construed as an authoritative evaluation or identification by TOTAL HOME INSPECTION. In this regard, please note that mold follows water/moisture and water follows gravity, consequently any area that is moist, wet or damp or is in proximity to or below an area that has had past leaking or exposure to moisture or water has the potential for mold growth and amplification. The determination to have a mold test or evaluation performed or to correct an identified mold condition is entirely yours, and should be done based upon the full scope of information available to you through your own due diligence. For some basic information on mold, visit the E. P. A.'s web site at [www.epa.gov/iaq/molds/moldguide.html](http://www.epa.gov/iaq/molds/moldguide.html).

TOTAL HOME INSPECTION has accepted no fee for, therefore offers no assurance and accepts no liability for, any comments and observations in, or omissions from your TOTAL HOME INSPECTION report that exceed the State of Connecticut's Home Inspection Standards of Practice. If the information, findings or disclaimers contained in this report, or the limitations of the State of Connecticut Regulation Concerning Home Inspectors (the Standards of Practice and Code of Ethics) do not address your need for information, we encourage you to contact a qualified, licensed specialist in the area of your concern for further insight and evaluation.

Thank you Mr. and Mrs. Home Buyer, for the opportunity to serve you. Should you have any questions, comments or concerns regarding your inspection or this report, or if we can help you in any way at all, please do not hesitate to contact our offices. We wish you many happy years at Any Address, Fairfield County and encourage you to visit our web site at [www.totalhomeinspection.com](http://www.totalhomeinspection.com) for helpful hints on seasonal maintenance, maintenance of the major mechanical systems in your home, tips for getting your house ready for a home inspection, information about radon, wood destroying insects/termites and many other topics that can make your homeownership easier and even more satisfying.