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PROPERTY INSPECTION REPORT

Prepared For: _____
(Name of Client)

Concerning: **, Cypress Texas in the community of Bridgeland**
(Address or Other Identification of Inspected Property)

By: **Michael Cothran, C.I.O., TREI 2995** **03/19/2015**
(Name and License Number of Inspector) (Date)

(Name, License Number and Signature of Sponsoring Inspector, if required)

This inspection is designed to inspect all components installed at this time. The inspection is of conditions which are present and visible at the time of the inspection. No equipment is operated during this inspection. Ideally this inspection is performed after shingles (dry-in) and after all mechanical 'rough-ins' are installed but before sheetrock, brick and insulation. In this manner the inspector can see 'inside the walls'.
This report is intended to provide you with information concerning the condition of the property at the time of inspection. Please read the report carefully. If any item is unclear, you should request the inspector to provide clarification.

The structure has been shingled although some openings in the wall membranes are not yet completed. This should be completed during the normal course of construction but before installation of insulation and sheetrock.

The gas and electric services were not on for this inspection, which is normal. It is advised to have the water engaged at this point, to judge pressure and leakage in the plumbing system.

No plans were available for this inspection. Comparison of plans is not within the scope of this inspection. This would encompass many details, such as wall outlet and switch placement.

This should not be considered a code based inspection, partially due to the stage of construction and in part since the inspector has not been present during the installation of the non-visible components.

It is recommended that you obtain as much history as is available concerning this property. This historical information may include copies of any seller's disclosures, previous inspection or engineering reports, reports performed for or by relocation companies, municipal inspection departments, lenders, insurers, and appraisers.

Property conditions change with time and use. Since this report is provided for the specific benefit of the client(s), secondary readers of this information should hire a licensed inspector to perform an inspection to meet their specific needs and to obtain current information concerning this property.

ADDITIONAL INFORMATION PROVIDED BY INSPECTOR
OVERVIEW

Repairs - we recommend that all repairs be performed by licensed technicians. If the technician disagrees as to the need for repair, of any item which was designated as needing repair in this report, the technician should provide a written statement to our client that the item in question is in compliance with prevailing codes, is operating and functional, and not in need of repair.

Departure provision: In compliance with the departure provisions, it is our intent here to establish the limitations of this inspection. The following items are not inspected primarily due to, but not limited to, their inaccessibility and the performance nature of this inspection:
Underground lines & piping, heat exchangers (no disassembly, flame test only), electric load analysis, environmental and microbial issues, gas lights, bar-b-ques, water softeners, alarm systems, intercoms, solar heating systems, evaporative coolers, solar energy systems, gas fired refrigeration systems, gas line pressure testing, wood destroying insect reporting, geologic anomalies, and cooling/heating calculations. Issues such as flooding, property lines and value are addressed by the appraisal. Accessible gas connections at appliances are checked by a combustible gas detector. Pressure testing of the lines must be done by a licensed plumber.
Additional limitations may apply.

Exterior and attic directions are given as the structure is viewed from the street. Interior directions are given as the component is viewed.

This inspection and report should not be considered a warranty, certification or assurance, either specific or implied, of future performance. There are several warranty companies that provide service contracts for that purpose. We suggest that you investigate these plans and make your decision as to whether or not you feel that they are in your best interest.

Most repair items (detailed in the comments sections) will be preceded by the “R - …” symbol . Other entries under the comments will be ‘for your information’ items or recommendations.

This report is the exclusive property of M.L.C. REAL ESTATE INSPECTIONS. A property condition inspection was performed on the named property and this inspection report prepared at the request of the named Client(s) pursuant to a real estate transaction. The Client is authorized to use this report and provide copies to other interested parties in the transaction. The use of this report by other parties for any purpose not related to the Client’s transaction is strictly prohibited without written permission from M.L.C. REAL ESTATE INSPECTIONS. Due to the advent of electronic and computerized information transfer and manipulation, the original inspection report, with original signature, shall take precedence over any electronically transferred document.

T.R.E.I. F.H.A. Fm.H.A. C.A.B.O. S.B.C.C.I. C.A.S. N.C.D.S. H.O.M.E. R.W.C. H.B.W. B.H.W.

Additional pages may be attached to this report. Read them very carefully. This report may not be complete without the attachments. If an item is present in the property but is not inspected, the "NI" column will be checked and an explanation is necessary. Comments may be provided by the inspector whether or not an item is deemed in need of repair.

I=Inspected NI=Not Inspected NP=Not Present R=Not Functioning or In Need of Repair

I	NI	NP	R	Inspection Item

I. STRUCTURAL SYSTEMS

☑ ☐ ☐ ☑ **A. Foundations** (If all crawl space areas are not inspected, provide an explanation.)

Type of foundation: This structure rests on a monolithically placed slab on grade foundation.
Slab-on-grade Foundation reinforcement:

☐ Conventional ☑ Post tensioned ☐ Unknown

Method of inspection: The foundation was viewed at visible exterior beams and uncovered concrete floors. Other components used to judge performance were wall veneers, door/window operation, and framing. Tree proximity/location, gutter condition, grading and drainage were also evaluated.
Post tensioned cables are:

☐ Cut ☐ Grouted ☐ Wedged ☐ Tensioned

Comments (An opinion on performance is mandatory.):

The foundation appears to be performing its intended function. No evidence of significant distress was observed. Admittedly little time has passed to judge the performance of the foundation since it is best judged over time.

OBSERVATIONS

No cracking of visible foundation was observed.

R – The foundation has not been tensioned at this time yet has frame, cornice and shingle loading on it. The lack of tensioning indicates that the foundation has not yet achieved structural integrity. No further loading should be placed on the foundation under tensioning has been achieved.

I	NI	NP	R	Inspection Item

R – Three edges of the master shower have been broken out. The foundation is a monolithic foundation. Repairs which call for foundation breakout also require design engineer to plan, monitor and approve the repairs. The design engineer should deliver a letter to the client indicating the adequacy of this repair since nothing can be seen at this time. Items are;

1. Whether cables were bent, skinned or broken
2. Whether the moisture barrier has been breeched and repaired
3. The edges are not square and a concrete patch will not bond to the existing concrete

R – The shower drain has also been broken out;

1. The above applies
2. Moisture (ground water) is seeping around the drain, so the moisture has been breeched




GRADING AND DRAINAGE

Grading and drainage is not complete.

I	NI	NP	R	Inspection Item

SUMMARY

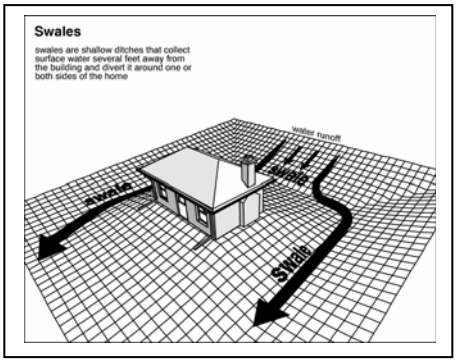
As of the time of this inspection, the subject property does not exhibit any evidence of major foundation deformities or excessive settlement distress conditions. While there may be indicators of minor to moderate movement, it is this inspector's opinion that the foundation is not suggestive of conditions requiring foundation repairs at this time.

Please note that foundations perform over time and that factors such as grading, roots, plumbing leaks, weather, guttering, watering, etc do affect the performance of the foundation. Foundations require maintenance as much as any other part of this structure.

☑ ☐ ☐ ☑ **B. Grading & Drainage**

Comments:

The grading for this lot appears to be rear to front. The plot plan was not present for confirmation.



R - The grading should be improved to promote the flow of storm water away from the house and off the lot. The ground should slope away from the house at a rate of one inch per foot for at least the first ten feet. Ideally, at least eight (8) inches of clearance should be maintained between soil level and the top of the foundation walls. See comments/recommendations under foundations. Trenching, against the foundation, is not acceptable. The target for slab exposure is 6 inches in sided areas and 4 inches in bricked veneer areas.

I	NI	NP	R	Inspection Item
☑	☐	☐	☑	**C. Roof Covering** (If the roof is inaccessible, report the method used to inspect.)

Type of roof covering: Asphalt composition shingles.

Method of inspection: Viewed roofing from perimeter and accessible attic spaces.

Comments:

Visual appraisal of the number of layers of roofing: 1

The roofing life remaining, natural disasters notwithstanding, is approximately 15-20 years.
Venting is adequate: yes
Decking spacers installed: yes
Decking type: techshield
Roof jacks installed: yes
Vent caps installed: yes
Chimney cap and spark arrester installed: yes

The roofing membrane was not walked on because;

The roof pitch is excessively steep

R – Flashing should be installed around the balcony.

R - Both water heater flue storm collars are installed high and allow water entry.

I	NI	NP	R	Inspection Item

Full gutters are recommended for all eaves. They should be installed with splashblocks or the equivalent to ensure drainage away from the foundation.

☑ ☐ ☐ ☑ **D. Roof Structure & Attic** (If the attic is inaccessible, report the method used to inspect.)

Method of inspection: The attic space was viewed from the finished floor level.

Approximate depth of insulation: No insulation present

Attic venting supplied by: Soffit vents Ridge vents Passive vent

Comments:

In the accessible attic spaces, bracing appears to be adequate.

Please confirm that batted insulation has been installed under the furnace and water heater platforms prior to sheetrocking.

R – Missing joist hangers;

One angled joist near the attic stairs.

R – The engineered beam ending on the patio post is notched, this is not permitted without approval from the manufacturer.

R – The water heaters are installed above the game room where the 2x10 joists are installed and spaced 24" on center. The joists are sized to span the room but not carry approximately 1000 lbs of full water heaters and provide a continuous load path***. They would have been better been above the bath and hall walls just to the front of their present location.

***CLP definition:

Continuous Load Path will be discussed in relation to several issues in this home, the Code requirement can be found at…Load path requirements IRC 301.1 Actually the need for CLP is common sense. It is simply and adequate path to convey loading or weight from the areas above the foundation, down to the foundation.

Load path requirements are found in the IRC 301.1 code reference. IRC is the law of the land adopted by Texas in 2001.

R - Ridge board supports were observed with palm blocking (a local terminology) at tops of the vertical supports. There is no reference to palm blocking or brace in any section or Wood Frame Construction Manual under IRC R301.2.1.1 Design criteria. Palm braces appeared with production framing sub-contractors as a basic short cut and not seen in older properties. With palm braces there does not appear to be a direct connection between the brace and what it is supporting and not subject to nail withdraw and tension/lateral load. We did not observe a metal hold-down strap from the ridge board and down across the to the vertical ridge brace to exacerbate a continuous fastening or hold-down path. As such the bottom of the vertical brace should be with a hold-down strap as well to complete the continuous load path and mitigate lateral or tension loads.

IRC 802.3 Framing Details – "Rafters shall be framed to ridge board or to each other with a gusset plate as a tie. Ridge board shall be at least 1-inch (25mm) nominal thickness and not less in depth than the cut end of the rafter. At all valleys and hips there shall be a valley or hip rafter not less than 2-inch (51mm) nominal thickness and not less in depth that the cut end of the rafter. **Hip and valley rafters shall be supported at the ridge by a brace to a bearing partition or be designed to carry and distribute the specific load at that point.** Where the roof pitch is less than three units vertical in 12 units horizontal (25% slope), structural members that support rafters and ceiling joists, such as ridge beams, hips and valleys, shall be designed as beams."

I	NI	NP	R	Inspection Item

R – Air conditioning chases, which carry the ductwork from the attic to the floors of the home, must be fireblocked between floors and at the attic floor.

IRC R 602.8 Fireblocking Required

I	NI	NP	R	Inspection Item
☑	☐	☐	☑	**E. Walls (Interior & Exterior)**

Comments:

Siding type: Coated Wood fiber

Wall studs: ☑2x4 ☑2x6 ☑nominal ☐finger jointed

Sheathing type: thermoply

R – Install wall vent caps prior to drywall and insulation.

R – Approximately 30 % of the studs have warped and been cut then a short scab nailed to the side of the but stud – these studs are load bearing members and should be replace – scabs are not load bearing and fastening is subject to withdrawal***.

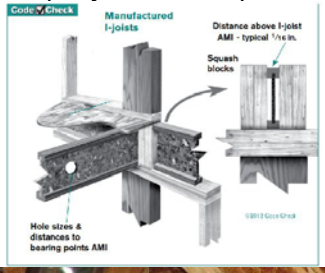
I	NI	NP	R	Inspection Item

Wind strapping viewed;

Slab to bottom plate
Bottom plate to studs
Studs to top plate
Top plate to joists
Joists to rafters

R – Some trusses are missing blocking and some are not installed property;

Properly installed squash block diagram:



I	NI	NP	R	Inspection Item

☑ ☐ ☐ ☑ **F. Ceilings & Floors**

Comments:

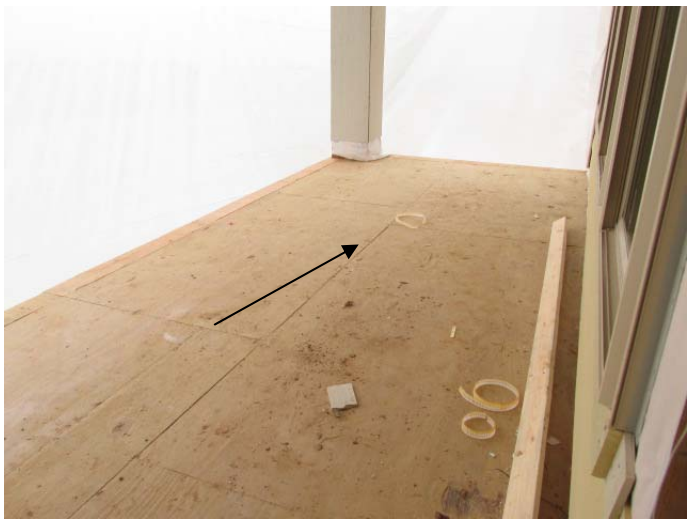
Sub floor type: OSB

No live loading was present for this inspection.

I	NI	NP	R	Inspection Item

R – stairway landing steps should have a continuous load path***via studs below the framing as the installed nailing is subject to withdrawal.

No water proofing was installed on the balcony at this time.



☑ ☐ ☐ ☐ **G. Doors (Interior & Exterior)**
Comments:

I	NI	NP	R	Inspection Item
☑	☐	☐	☑	**H. Windows**

Comments:

Glass hazards: none

R – The laundry window is hung off level.

☑	☐	☐	☐	**I. Fireplace/Chimney**

Comments:

☐ Masonry ☑ Prefabricated ☐ Free standing

I	NI	NP	R	Inspection Item

II. ELECTRICAL SYSTEMS

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

Comments:

Breaker box entrance conductor wire:

☑ Aluminum ☐ Copper ☐ Copper-clad aluminum

Sub panel wiring (if any):

☐ Aluminum ☐ Copper ☐ Copper-clad aluminum

Breaker box installed: ☑ Yes ☐ No Location: garage

Bonding visible: ☐ Yes ☑ No

The electrical system was inspected componentially today. The installation appears adequate and placement of outlets reasonable and within code. The operational check of this system will be performed at the final inspection.

R – A supplemental grounding rod is directed for this area's soil conditions where the resistance is greater than 25 ohms – No supplemental rod is present – The electrician should provide written confirmation that he has tested the soils and they are not over 25 Ohms or a secondary ground should be installed.

NFPA Volume 70 National Electrical Code 2011 Edition
Chapter 2 Wiring and Protection
Article 250 - Grounding and Bonding
Part III. Grounding Electrode Systems and Grounding Electrode Conductors
Section 250.53 Grounding Electrode System Installation.
Subsection: (A) Rod, Pipe, and Plate Electrodes.
(1) Below Permanent Moisture Level.
(2) Supplemental Electrode Required.
(3) Supplemental Electrode.

Information/Maintenance: For an effective earth ground if client's electrician cannot demonstrate a resistance to ground of 25 Ohm or less then a additional grounding electrode (rod type or other) is recommended to be installed not less than 6 feet apart. [ref: 1978 NEC 250-84 to current 2011 NEC 250.53(A)] Foundations placed upon plastic sheeting or vapor barriers are not considered to be in contact with the earth. [ref: 2011 NEC 250.52(A)(3) Note]

R – A supplemental grounding rod is directed for this area's soil conditions where the resistance is greater than 25 ohms – No supplemental rod is present – The electrician should be consulted regarding this. The electrician should place in writing that there is not a need for a supplemental and that the soils have been tested at less than 25 Ohms.

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I	NI	NP	R	Inspection Item

250-84 to current 2011 NEC 250.53(A)] Foundations placed upon plastic sheeting or vapor barriers are not considered to be in contact with the earth. [ref: 2011 NEC 250.52(A)(3) Note]

R - There is a ufer or concrete encased electrode grounding installed on this home. The IRC (E3608.1.2) and the NEC (250.52(A)(5) indicate that these should not be installed when the foundation is installed with a plastic vapor barriers (as is normal in this region) which provides a barrier between the foundation and the earth. The electrician should provide written documentation and confirmation that it should be installed.

R – The following bonding wires were not visible but should be;

- Raceway to meter can
- Water heater
- Gas line
- Furnace(s)

*More information on grounding and bonding and electrical system; http://mlcinspections.com/grounding.htm

☑ ☐ ☐ ☑ **B. Branch Circuits - Connected Devices and Fixtures** (Report as in need of repair the lack of ground fault circuit protection where required.):

Type of branch circuit wiring: Copper

Comments:

R – Wiring should not be allowed to touch water lines, gas lines or any other metal surfaces since the wearing of the sheathing will expose the bare wiring to the metal, electrifying that entire system. This is a shock hazard – kitchen wall and ceiling, garage.

I	NI	NP	R	Inspection Item



III. HEATING, VENTILATION AND AIR CONDITIONING SYSTEMS

☑ ☐ ☐ ☐ **A. Heating Equipment**

Type And Energy Source:

Type of heating system: Central Forced Air System
Visible gas lines to unit:
☐ Galvanized ☑ Flex ☐ Copper ☐ Brass ☑ Black Steel
Type of combusted air venting:
☑ Double wall (type 'B') ☐ Single wall ☐ Mixed types ☐ Mixed sizes

Comments:

The heating and cooling systems were inspected componentially today. The installation appears adequate and within code. The operational check of this system will be performed at the final inspection.

I	NI	NP	R	Inspection Item
☑	☐	☐	☐	**B. Cooling Equipment**

Type And Energy Source:

Type of cooling system: Central Forced Air System

Energy source: Electricity

Comments:

I	NI	NP	R	Inspection Item
☑	☐	☐	☑	**C. Ducts and Vents**

Comments:

R – One formal living room duct box is hanging from the ducting.

IV. PLUMBING SYSTEM

I	NI	NP	R	Inspection Item
☑	☐	☐	☑	**A. Water Supply System and Fixtures**

Supply piping:

☐ Copper ☐ Ferros ☑ Plastic ☐ Other:

Water service engaged: ☐ Yes ☑ No

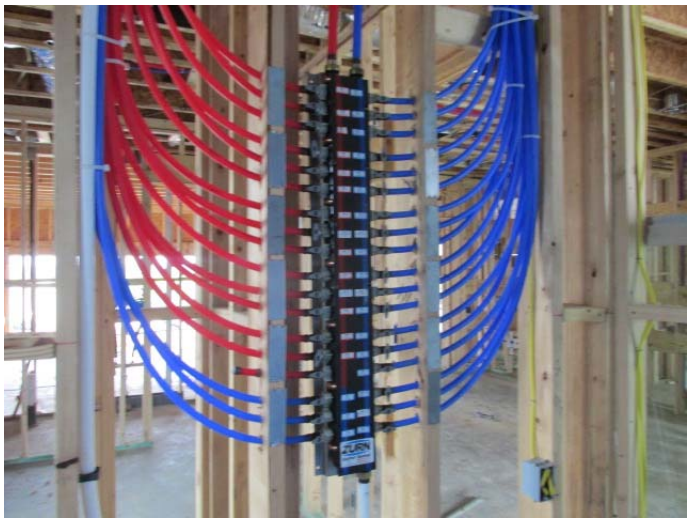
Comments:

The plumbing system was inspected componentially today. The installation appears adequate and within code. The operational check of this system will be performed at the final inspection.

R – The gas lines were under pressure test today, the gauge showed zero pressure indicating a potential leak point.

I	NI	NP	R	Inspection Item

The supply system used in this home is PEX piping with a Manabloc manifold, the ASTM numbers were not accessible. This piping is not new but is relatively new to the Houston area residential market. Its acceptance, by the International Code Council (now adopted for the entire State of Texas) is also not known. Additional information is available at http://rehau-na.com/index.html under PEX systems. This website indicates acceptability for potable water use and testing per ASTM standards but there are no indications of acceptance by code or inspection agencies. In indicates that the connections should be ***"Standard barbed fittings and hose clamps are recommended for most applications. User is responsible for testing tubing and fittings in user's application to confirm acceptable function."***



☑ ☐ ☐ ☐ **B. Drains, Wastes, Vents**

Drain piping:

☑ Plastic ☐ Iron ☐ Chrome ☐ Vinyl ☐ Other:

Comments:

☑ ☐ ☐ ☐ **C. Water Heating Equipment** (Report as in need of repair those conditions specifically listed as recognized hazards by TREC rules.)

Energy Source:

Energy source: Gas

Visible gas lines to unit:

☐ Galvanized ☑ Flex ☐ Copper ☑ Blacksteel

Type of combusted air venting:

☑ Double wall (type 'B') ☐ Single wall ☐ Mixed types ☐ Mixed sizes

Comments:

The water heating system was inspected componentially today. The installation appears adequate and within code. The operational check of this system will be performed at the final inspection.

I	NI	NP	R	Inspection Item

ADDENDUM: REPORT OVERVIEW

THE HOUSE IN PERSPECTIVE

This is an average quality 0 year old (approximate age) home. As with all homes, ongoing maintenance is required and improvements to the systems of the home will be needed over time. *The improvements that are recommended in this report are not considered unusual for a home of this age and location.* Please remember that there is no such thing as a perfect home.

NOTE: For the purpose of this report, it is assumed that the house faces south.

THE SCOPE OF THE INSPECTION

All components designated for inspection in accordance with the rules of the TEXAS REAL ESTATE COMMISSION (TREC) are inspected, except as may be noted by the "Not Inspected" or "Not Present" check boxes. Explanations for items not inspected may be in the "TREC Limitations" sections within this report.

This inspection is visual only. A representative sample of building components are viewed in areas that are accessible at the time of the inspection. No destructive testing or dismantling of building components is performed.

It is the goal of the inspection to put a home buyer in a better position to make a buying decision. Not all improvements will be identified during this inspection. Unexpected repairs should still be anticipated. The inspection should not be considered a guarantee or warranty of any kind.

WEATHER CONDITIONS DURING INSPECTION

Wet weather conditions prevailed at the time of the inspection. The estimated outside temperature was 69 degrees F. Wet weather conditions have been experienced in the days leading up to the inspection.

Selling agent; unknown

Present for inspection; buyer

Soil conditions – loamy prairie soils in general area
Property description – single family detached structure, wood framed, masonry and siding exterior veneers

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