



Staff Report

Infill Housing Design Review Committee

File Number: 8-D-23-IH

Meeting: 8/16/2023
Applicant: Mike Ballinger Rock Creek Construction, Inc.
Owner: Charles Gregory Obenschain

Property Information

Location: 1723 Texas Ave. **Parcel ID** 81 P D 032
Zoning: RN-2 (Single-Family Residential Neighborhood)
District: Lonsdale Infill Housing Overlay District

Description of Work

Level III New Primary Structure

New primary residence fronting Texas Avenue. The one-story house is 25' wide by 50' long, with a front gable roof (8/12 pitch, clad in an unspecified material) and a centrally located porch projecting 8' covered by a smaller front gable roof (8/12 pitch). The house will be clad in vinyl lap siding and feature six 6/6 double-hung windows and one 4/4 double hung window. The house is proposed to be set 25' from the front property line, on a concrete foundation. Parking is proposed to be a 22' wide (483 square feet) concrete parking pad located behind the house and accessed via the alley.

The façade (north) features a centrally located door flanked by two 6/6 double-hung windows on each side. The left elevation features one 6/6 double-hung window and one smaller 4/4 double-hung window. The right elevation features paired 6/6 double-hung windows and one smaller 6/6 double-hung window. The rear elevation features a centrally located door opening to an uncovered landing, flanked by one 6/6 double-hung window on the right.

The proposed house is identical to the proposed new construction at 1719 Texas Avenue (8-C-23-IH).

Applicable Design Guidelines

Heart of Knoxville Infill Housing Design Guidelines

1. Front Yards

- Consistent front yard space should be created along the street with the setback of a new house matching the older houses on the block.
- When several infill houses are sited, porches and the habitable portion of each house should be about the same distance from the street as the original houses.
- A walkway should be provided from the sidewalk or street to the front door. Along grid streets, the walk should be perpendicular to the street.
- Healthy trees that are outside the building footprint should be preserved. The root area should be marked and protected during construction.

2. House Orientation and Side Lots

- New housing should be proportional to the dimensions of the lot and other houses on the block.
-

- On corner lots, side yard setbacks should be handled traditionally (that is, closer to the side street). The zoning requirement to treat corner lots as having two frontages should not apply in Heart of Knoxville neighborhoods.
- Side yard setbacks should be similar to older houses on the block, keeping the rhythm of spacing between houses consistent.

3. Alleys, Parking, and Services

- Parking should not be in front yards.
- Alley access should be used for garage or parking pad locations. On level ground, pea gravel or similar material may be used as a parking pad off alleys.
- Alley-oriented parking pads, garbage collection points, and utility boxes should be screened with a combination of landscaping and fencing.
- On those streets which have alleys, driveways should not be permitted from the front of the house.

4. Scale, Mass, and Foundation Height

- The front elevation should be designed to be similar in scale to other houses along the street.
- The front façade of new houses should be about the same width as original houses on the block.
- New foundations should be about the same height as the original houses in the neighborhood.
- If greater height is to be created (with new construction or an addition), that portion of the house should be located toward the side or rear of the property.

5. Porches and Stoops

- Porches should be part of the housing design in those neighborhoods where porches were commonplace.
- Porches should be proportional to original porches on the block, extending about 8-12 feet toward the street from the habitable portion of the house.
- Porches should extend into the front yard setback, if necessary, to maintain consistency with similarly sited porches along the street.
- Porch posts and railings should be like those used in the historic era of the neighborhood's development. Wrought iron, antebellum columns and other materials that were not used in the early 1900's should not be used.

6. Windows and Doors

- When constructing new houses, the window and door styles should be similar to the original or historic houses on the block.
- To respect the privacy of adjacent properties, consider the placement of side windows and doors.
- The windows and doors on the front facade of an infill house should be located in similar proportion and position as the original houses on the block.
- Attention should be paid to window placement and the ratio of solid (the wall) to void (the window and door openings).
- Contemporary windows such as picture windows should not be used in pre-World War II neighborhoods.

7. Roof Shapes and Materials

- New roofs should be designed to have a similar pitch to original housing on the block.
- More complex roofs, such as hipped roofs and dormers, should be part of new housing designs when such forms were historically used on the block.
- Darker shades of shingle were often used and should be chosen in roofing houses in Heart of Knoxville neighborhoods.

8. Siding Materials

- Clapboard-like materials (such as cement fiberboard) should be used in constructing new housing where painted wood siding was traditionally used.
- Brick, wood shingle, and other less common material may be appropriate in some older neighborhoods, particularly those with a mix of architectural styles.

- Faced stone, vertical siding, and other non-historic materials should not be used in building new houses.

11. Landscape and Other Considerations

- One native or naturalized shade tree should be planted in the front and rear yards of infill lots with 25 feet or more in depth to front of house.

Comments

1. The edge of the front porch is proposed to be set 25' from the front property line, so the main massing of the house will be set 33' from the front property line. The average front setback of the block is 24.5', also measuring to full-length front porches on the houses. The new house's front setback will maintain a consistent streetscape pattern with houses on the block. The final site plan should include a walkway to the street.
2. The block to receive new construction is characterized by one-story modified Craftsman houses. The one-story, three-bay residence is proportional to the dimensions of the lot and the context of the block. The side yard setbacks are consistent with the block.
3. The proposed parking meets Infill Housing design guidelines as the parking pad is accessed from the alley and located to the rear of the house. Final revisions to the site plan may be necessary to meet City Engineering standards.
4. Overall, the one-story, three-bay façade is similar in scale to the context. The foundation height should be confirmed to be compatible with the neighborhood.
5. The site plan includes an 8' deep front porch with a front-gable roof, centered on the facade. The porch is compatible with the design of the house and the surrounding block. The 10" square framed columns contribute to the overall design.
6. Guidelines recommend window and door styles be similar, with similar proportions and ratio of solid to void, to historic houses on the block. The proportions of windows and door on the façade meet the guidelines. Revisions are necessary to side elevation window placement to avoid large swaths of siding with no transparency.
7. The proposed roof pitch and material are appropriate within the guidelines.
8. The elevation drawings do not specify a siding material. The applicant should specify siding materials, referring to page 13 of the Infill Housing Design Guidelines.
9. The final site plan should indicate one new native or naturalized shade tree to be planted in both front and rear yards.
10. The house is proposed to be identical to the adjacent new construction house at 1719 Texas Ave (8-C-23-IH). Revisions should be made to the two houses to introduce differentiation in design; options include revised rooflines, porch design and placement, or house massing.

Recommendation

Staff recommends approval of Certificate 8-D-23-IH, subject to the following conditions: 1) final site plan to meet City Engineering standards; 2) foundation to reflect foundation height of existing houses on block and be clad in stucco; 3) final siding materials to meet Infill Housing design guidelines; 4) revisions to placement of side elevation windows, with approval by staff; 5) revisions to differentiate from adjacent new house at 1719 Texas Avenue, with approval by staff.



8-D-23-IH

APPLICATION FOR CERTIFICATE OF APPROPRIATENESS

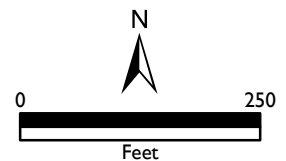
Applicant: Mike Ballinger Rock Creek Construction, Inc.

INFILL HOUSING REVIEW BOARD



1723 Texas Ave.
Lonsdale Infill Housing Overlay District

Original Print Date: 8/7/2023
Revised:
Knoxville/Knox County Planning - Infill Housing Design Review Committee





DESIGN REVIEW REQUEST

- DOWNTOWN DESIGN (DK)
- HISTORIC ZONING (H)
- INFILL HOUSING (IH)

Greg Obenschain (Charles)

Applicant	7/14/23	8/16/23	8-D-23-IH
Date Filed		Meeting Date (if applicable)	File Number(s)

CORRESPONDENCE

All correspondence related to this application should be directed to the approved contact listed below.

- Owner
- Contractor
- Engineer
- Architect/Landscape Architect

Mike Ballinger	Rock Creek Construction, Inc.		
Name	Company		
2916 Brabson Drive	knoxville	tn	37918
Address	City	State	Zip
8654058123	mballingerrc@gmail.com		
Phone	Email		

CURRENT PROPERTY INFO

Charles Gregory Obenschain	3008 Gibbs Drive, Knoxville, TN 37918	865-603-4482
Owner Name (if different from applicant)	Owner Address	Owner Phone
1723 Texas Ave	081PD032	
Property Address	Parcel ID	
Lonsdale	RN-2	
Neighborhood	Zoning	

AUTHORIZATION

<i>Lindsay Crockett</i>	Lindsay Crockett	7.20.23
Staff Signature	Please Print	Date
<i>Charles Gregory Obenschain</i>	Charles Gregory Obenschain	7/14/2023
Applicant Signature	Please Print	Date

REQUEST

DOWNTOWN DESIGN

Level 1:

- Signs Alteration of an existing building/structure

Level 2:

- Addition to an existing building/structure

Level 3:

- Construction of new building/structure Site design, parking, plazas, landscape

See required Downtown Design attachment for more details.

Brief description of work: _____

HISTORIC ZONING

Level 1:

- Signs Routine repair of siding, windows, roof, or other features, in-kind; Installation of gutters, storm windows/doors

Level 2:

- Major repair, removal, or replacement of architectural elements or materials Additions and accessory structures

Level 3:

- Construction of a new primary building

Level 4:

- Relocation of a contributing structure Demolition of a contributing structure

See required Historic Zoning attachment for more details.

Brief description of work: _____

INFILL HOUSING

Level 1:

- Driveways, parking pads, access point, garages or similar facilities Subdivisions

Level 2:

- Additions visible from the primary street Changes to porches visible from the primary street

Level 3:

- New primary structure
 Site built Modular Multi-Sectional

See required Infill Housing attachment for more details.

Brief description of work: This will be a new 1,200 sf 3 bedroom , 2 bath home. This will have windows on every side. The front porch is covered and the driveway is in the alley. We will use traditional lap vinyl siding on the home.

STAFF USE ONLY

ATTACHMENTS

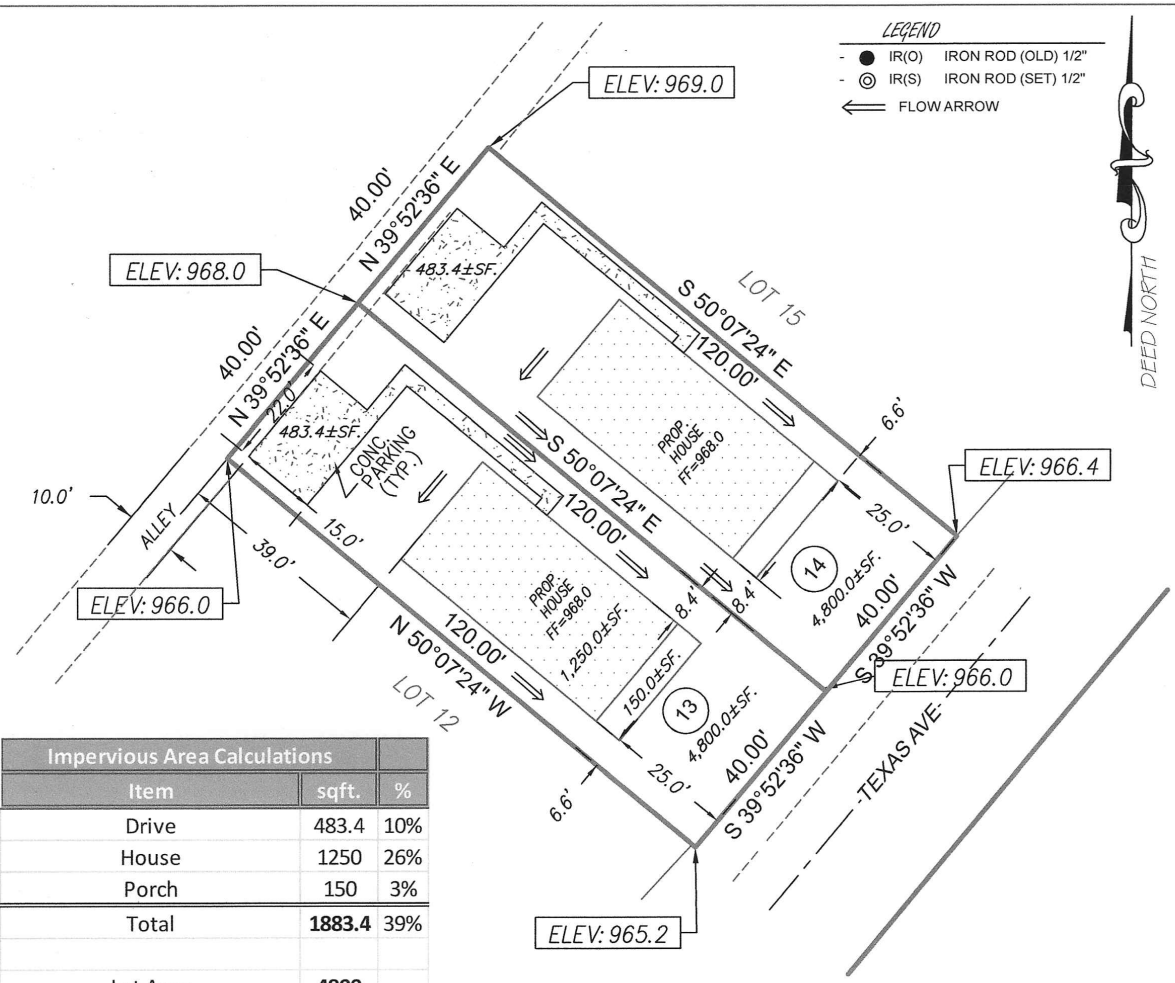
- Downtown Design Checklist
 Historic Zoning Design Checklist
 Infill Housing Design Checklist

ADDITIONAL REQUIREMENTS

- Property Owners / Option Holders

Level 1: \$50 • **Level 2:** \$100 • **Level 3:** \$250 • **Level 4:** \$500

FEE 1:		TOTAL:
250.00		
FEE 2:		
FEE 3:		250.00



LEGEND
 ● IR(O) IRON ROD (OLD) 1/2"
 ⊙ IR(S) IRON ROD (SET) 1/2"
 ← FLOW ARROW

DEED NORTH

Impervious Area Calculations		
Item	sqft.	%
Drive	483.4	10%
House	1250	26%
Porch	150	3%
Total	1883.4	39%
Lot Area	4800	
Maximum Impervious Surface	40%	
Impervious Surface	39%	
Maximum Building Coverage	30%	
Building Coverage	29%	

BUILDING SETBACKS: RN-2 ZONING

FRONT: 20', OR THE AVERAGE OF BLOCKFACE, WHICHEVER IS LESS; IN NO CASE LESS THAN 10'
 SIDES: 5' OR 15% OF LOT WIDTH, WHICHEVER IS LESS; IN NO CASE LESS THAN 15' COMBINED
 REAR: 25'

GRAPHIC SCALE

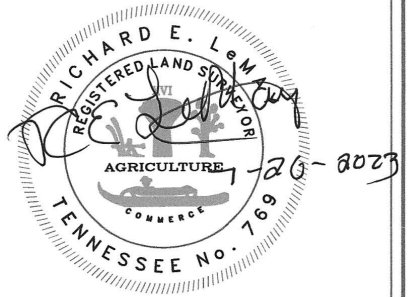


(IN FEET)

SITE NOTES

1 inch = 30 ft.

- CORNER MONUMENTS AS SHOWN HEREON
- VERIFY EXACT SIZE, DEPTH AND LOCATION OF ALL UNDERGROUND UTILITIES PRIOR TO CONSTRUCTION.
- DEED REFERENCE: INSTRUMENT # 202302150045121; PLAT CAB 5, SLIDE 183
- PROPERTY SHOWN ON MAP 81 INSERT P, GROUP D, PARCEL(S) 31 & 32
- TOTAL AREA: 9,600± SQFT.
- ZONING DISTRICT: RN-2
- NO CERTIFICATION IS MADE REGARDING ZONING CONFORMANCE.
- ALL STRUCTURES, UTILITIES AND / OR EASEMENTS THAT MAY EXIST ON OR CROSSING SURVEYED PROPERTY, NOT SHOWN THIS SURVEY.
- SURVEYED PROPERTY IS SUBJECT TO ALL APPLICABLE EASEMENTS, SETBACKS, RIGHT-OF-WAYS, & RESTRICTIONS OF RECORD OR CLAIMS OF EASEMENTS OR RIGHT-OF-WAYS, NOT SHOWN BY PUBLIC RECORDS.



OWNER:

OBENSCHAIN CHARLES &
 LESLI
 3008 GIBBS DR
 KNOXVILLE, TN 37918

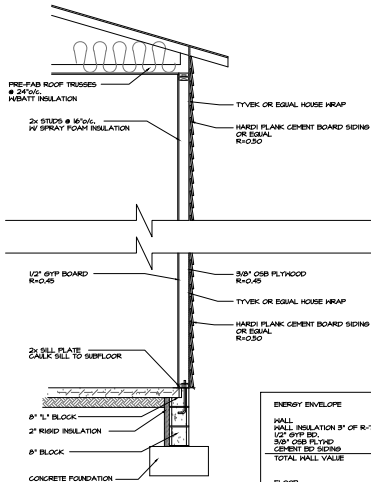
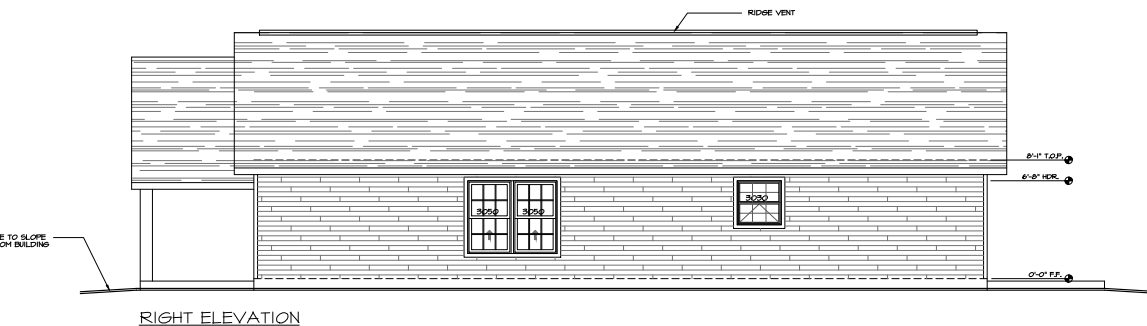
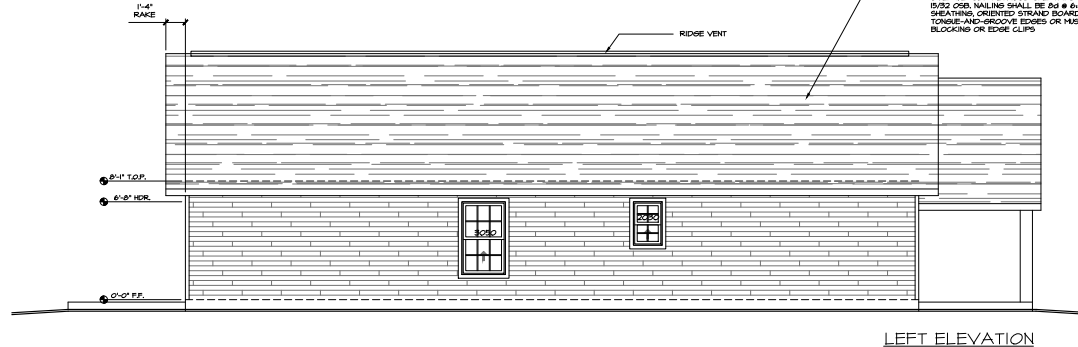
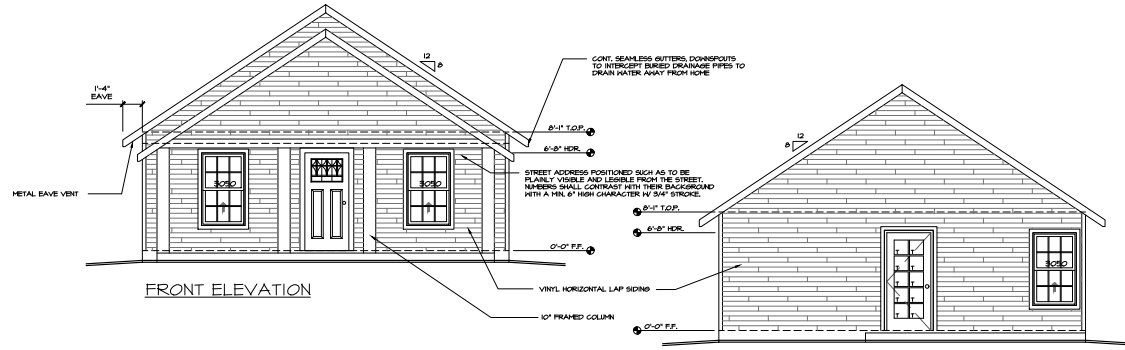
LeMAY & ASSOCIATES CONSULTING ENGINEERS 10816 KINGSTON PIKE KNOXVILLE, TN. 37934 PH: 865-671-0183	PLOT PLAN		DATE: 7-20-2023
	LOTS 13 & 14		SCALE: 1" = 30'
	<i>LONSDALE ADDITION</i>		DWG. NO. 6304
	1719-1713 TEXAS AVE. KNOXVILLE, TN 37921		DRAWN BY: RELjr.

NOTE:

1. BALLOON FRAME ALL EXTERIOR WALLS WHERE APPLICABLE TO UNDERSIDE OF TRUSS.
2. TWO (2) LAYERS OF GRADE "D" PAPER IS REQUIRED AT HOOD SHEAR PANELS
3. PROVIDE 1/2" HOOD BATTENS WHERE ROOF EXCEEDS 7:12 SEE E.R. #2656
4. EXTERIOR FINISH TO BE VERTICAL AND HORIZONTAL SIDING TO BE DETERMINED BY OWNER
5. GUTTER LOCATION AND MATERIAL AND STYLE TO BE DETERMINED BY OWNER. ALL DOWNSPOUTS TO DRAIN INTO DRAINAGE LINES (DISCHARGING) AT THE LOWEST SIDE OF THE HOUSE
6. PROVIDE ATTIC VENTILATION AS PER CURRENT IRC SECT. 1205.2 FOR EAVE VENTS PROVIDE 1" OF VENT FOR EVERY SQ. FT. OF ATTIC.
7. PROVIDE AN APPROVED WATERPROOF BUILDING PAPER UNDER HOOD SIDING

ATTIC VENTS HOUSE

NOTE FOR 1/300 OF THE AREA OF THE SPACE VENTILATED, PROVIDE A VAPOR RETARDER HAVING A TRANSMISSION RATE NOT TO EXCEED 1 PERM IN ACCORDANCE WITH ASTM E 96 IS INSTALLED ON THE WARM SIDE OF THE ATTIC INSULATION AND PROVIDED 50% OF THE REQUIRED VENTILATING AREA PROVIDED BY VENTILATORS LOCATED IN THE UPPER PORTION OF THE SPACE TO BE VENTILATED AT LEAST 9' ABOVE EAVE)



ENERGY ENVELOPE	
HALL	R-2
HALL INSULATION 3" OF R-1 PER INCH SPRAY FOAM	R-0.45
1/2" GYP BRD	R-0.45
3/8" OSB PLYWD	R-0.45
CEMENT BRD SIDING	R-0.45
TOTAL HALL VALUE	R-2.24
FLOOR	R-11
FLOOR INSULATION	R-11
ATTIC	R-44
ATTIC INSULATION	R-44

FINISH GRADE TO SLOPE 3/8" AWAY FROM BUILDING 5' MIN.

WALL SECTION

REVISIONS	BY

BAL2301a_L

CONTRACT NO. _____ AND SPECIFICATIONS
 THESE CONTRACT NO. AND SPECIFICATIONS
 OR ANY PART THEREOF SHALL BE VOID IF NOT
 SIGNED BY THE ARCHITECT OR HIS REPRESENTATIVE
 OR BY THE OWNER OR HIS REPRESENTATIVE
 OR BY THE CONTRACTOR OR HIS REPRESENTATIVE
 OR BY THE CITY OF KNOXVILLE OR HIS REPRESENTATIVE
 OR BY THE COUNTY OF KNOX OR HIS REPRESENTATIVE
 OR BY THE STATE OF TENNESSEE OR HIS REPRESENTATIVE
 OR BY THE FEDERAL GOVERNMENT OR HIS REPRESENTATIVE
 OR BY ANY OTHER PARTY TO THIS CONTRACT
 AND CONSENT OF A/R DESIGN & DRAFTING LLC.

PROJECT: **BALLINGER SPEC**
 1723 TEXAS AVE
 KNOXVILLE TN

EXTERIOR
 ELEVATIONS

A & R
 DESIGN & DRAFTING
 SERVICE
 300 N. MAIN ST.
 KNOXVILLE, TENNESSEE 37912
 (603) 999-9005 ROSETT@ARALL.COM



DATE: 5/11/2023
 SCALE: 1/4" = 1'-0"
 DRAWN: R.J.
 JOB: BAL2301b
 SHEET:

A201

GENERAL MECHANICAL NOTES:

- MECHANICAL CLOSET PROVIDE TWO VERTICAL DUCTS OR FLEMSH | 24 IN. PER 4000 BTUH INRIT EACH DUCT OR FLEMN: ONE TO TERMINATE 12" ABOVE FINISHED FLOOR ONE TO TERMINATE 6" BELOW CEILING. PROVIDE 6" MIN. EXHAUST FLEW.
- EXACT LOCATIONS & SIZE OF SUPPLY & RETURN REGISTERS TO BE DETERMINED BY THE HVAC CONTRACTOR.
- BACK DRAFT DAMPER REQUIRED ON EXHAUST FANS
- MECHANICAL VENTILATION FOR TOILET COMPARTMENTS, BATHROOMS AND LAUNDRY ROOMS SHALL BE COMPLY WITH CURRENT IRC APPENDIX (E)
- MECHANICAL VENTILATION FOR OTHER HABITABLE ROOMS SHALL COMPLY WITH CURRENT IRC APPENDIX (E)
- ALL DUCTS PENETRATING THE SEPARATION OF THE GARAGE ONE-HOUR FIRE RALL SHALL BE CONSTRUCTED OF NOT LESS THAN 30 GAUGE GALVANIZED STEEL AND BE CONTINUOUS WITHOUT OPENINGS OR NON-METALLIC CONNECTIONS.
- VENT DRYER TO EXTERIOR 25" MAX OR DESIGNED, DUCT TO BE SMOOTH HWBACKDRAFT DAMPER
- ALL HVAC DUCTS SHALL HAVE R-8 INSULATION WRAPPING AND SHALL BE CONSTRUCTED AND INSTALLED PER CURRENT IRC SECTION (E) 502.4.1
- NO GAS PIPING SHALL BE INSTALLED IN OR ON THE GROUND UNDER ANY BUILDING OR STRUCTURE AND ALL EXPOSED GAS PIPING SHALL BE KEPT 6" ABOVE THE GRADE OF STRUCTURE; GAS PIPING UNDER A CONCRETE SLAB MAY BE PERMITTED ONLY WHEN INSTALLED IN ACCORDANCE TO THE STANDARD APPROVED BY THE BUILDING OFFICIAL, THE TERM "BUILDING OR STRUCTURE SHALL INCLUDE PORCHES AND STEPS, HEATERS COVERED OR UNCOVERED, BREEZEWAYS, ROOF PORTS-COACHERS, ROOFED PATIOS, GARPORTS.
- FLEXIBLE FACTORY-MADE AIR DUCTS SHALL BE SUPPORTED AS PER IRC SECTION 603
- MECHANICAL QUICK DISCONNECTS MUST BE READILY ACCESSIBLE
- HEIGHT TO COMBUSTIBLE MATERIAL ABOVE KITCHEN RANGES 30" (UNPROTECTED), 24" (PROTECTED), 6" (NONLIGN)
- THE FOLLOM SHALL BE CERTIFIED BY THE IEC, WATER HEATERS, SHOWER HEADS AND FAUCETS, SPACE CONDITIONING EQUIPMENT.
- TERMINATION OF ALL ENVIRONMENTAL AIR DUCTS SHALL BE A MIN. OF 3' FROM THE PROPERTY LINES OR ANY OPENINGS INTO THE BUILDING (EY, TOILETS, BATH AND UTILITY FANS ETC. AND ALSO 3' FROM DOORS, WINDOWS, SKYLIGHTS OR ATTIC VENTS).
- VENTS TERMINATING IN TYPE "B" OR "B"V GAS VENTS WITH LISTED VENT CAPS SIZED 1" OR SMALLER SHALL BE REJECTED TO BE TERMINATED IN ACCORDANCE WITH TABLE 603.6.3 FOR 6" DIA ROOF 2" MIN HEIGHT
- FA & WATER HEATERS WHICH GENERATE A GLCH, FLAME OR SPARK LOCATED IN A GARAGE SHALL BE INSTALLED SUCH THAT THE IGNITION IS AT LEAST 18" ABOVE FINISHED FLOOR
- BUILDING CAVITIES AND FLEMSH REFERRED OR CONNECTED WITH MATERIALS OTHER THAN SEALED SHEET METAL DUCT BOARD OR FLEXIBLE DUCT SHALL NOT BE USED FOR CONVEYING COMBUSTIBLE AIR. BUILDING CAVITIES THAT CONTAIN DUCTS.

FLOOR PLAN NOTES:

- 2 X 4 STUDS OF 16' O.C. ALL EXTERIOR WALLS WITH R-20 INSULATION UNLO.
- 2 X 4 STUDS OF 16' O.C. ALL INTERIOR WALLS UNLO.
- 2 X 4 STUDS OF 16' O.C. ALL PLUMBING WALLS.
- ALL HARDWARE DOOR KNOBS, HANDS ETC.) AS SELECTED BY OWNER.
- WINDOWS TO BE EQUAL RAZED, SEE EXTERIOR ELEVATIONS
- FLOOR PLAN FOR WINDOWS TYPER 1 & 2.
- ALL GLASS 1/2" SINGLE PANEL GREATER THAN 6" H. AND OR WITHIN 18" OF FINISHED FLOOR (GLAZED AND HAND RAILS AT EACH END, ADJACENT TO SHOWER AND TUBS WITHIN 6" OF DRAIN) & WITHIN 24" OF DOORS AND IN DOORS) SHALL BE TEMPERED GLASS. LAMINATED SHEET GLASS OR APPROVED PLASTIC SHEET, CURRENT IBC, SECT 2603.4 SAFETY GLASS SHALL BE LOCATED AS PER INDICATED ON DRAWINGS AND AS PER CURRENT IRC
- ALL LANDINGS SHALL NOT BE MORE THAN 1/2" LOWER THAN THE THRESHOLD AT OUTWARD SWING DOORS, OR NOT TO BE MORE THAN 7/8" AT INWARD SWING DOORS.
- LANDINGS SHALL NOT BE LESS THAN 48" MIN. OR 3" HIGH EVER IS GREATER OF NOT LESS THAN 3/4"
- THE LANDINGS SHALL HAVE A LENGTH MEASURED IN THE DIRECTION OF TRAVEL
- SLOPE ALL LANDINGS AWAY FROM HOUSE 1/8" PER FOOT MIN. AND 1/4" PER FOOT MAX.
- KITCHEN APPLIANCES: MICROVAE OVER CONVENTIONAL OVENS, RANGE TOP, DISHWASHER, GARBAGE DISPOSAL, FREE STANDING REFRIGERATOR, SINKS) ETC., APPLIANCE COLOR AND STYLE TO BE DETERMINED BY OWNER.
- KITCHEN CABINETS: CENTER ISLAND TO HAVE UNDER CABINETS. ALL CABINET CONFIGURATION TO BE DETERMINED BY OWNER PRIOR TO FABRICATION AND INSTALLATION
- CABINET COLOR AND STYLE TO BE DETERMINED BY OWNER.
- WINDOWS IN BATHROOMS TO HAVE A MINIMUM NET OPERABLE AREA OF 15 sq. FT. FOR VENTILATION AND MECHANICALLY VENTED PER CURRENT IRC.
- WINDOWS IN SLEEPING ROOMS SHALL HAVE A NET CLEAR OPERABLE AREA OF 5.7 sq. FT. THE MINIMUM NET OPERABLE WITH OPENING SHALL BE 20" AND THE MINIMUM NET OPERABLE HEIGHT OPENING SHALL BE 24". THE FINISHED OPENING HEIGHT SHALL NOT BE MORE THAN 44" AFFJ, PER CURRENT IRC
- ALL FIVE FLOORING MATERIALS SHALL BE 2/4 OR 2/8 OR 3/4" TYPE 1" OPHSH ROAED PANELS.
- PROVIDE DRAFT STOPPING AROUND OPENINGS, VENTS, PIPES, CHIMNEY, FIREPLACES, DUCTS OR SIMILAR SPACES & CHIMNEY STOPPING FOR FACTORY BUILT CHIMNEYS.
- FIRE BLOCKS & DRAFT STOPS TO BE INSTALLED AT THE FOLLOWING LOCATIONS:
 A. OPENINGS AROUND VENTS, PIPES, DUCTS, CHIMNEYS, FIREPLACES AND SIMILAR OPENINGS WHICH AFFORD A PASSAGE FOR FIRE AT CEILING AND FLOOR LEVELS BY NON-COMBUSTIBLE MATERIALS.
 B. CONCEALED SPACE OF A FLOOR CEILING ASSEMBLY DRAFT STOPS SHALL BE INSTALLED SO THAT THE SPACE DOES NOT EXCEED 100 SQ FT. DRAFT STOPPING SHALL DIVIDE THE CONCEALED SPACE INTO APPROX. STOPPING SHALL DIVIDE THE CONCEALED SPACE INTO APPROX. EQUAL AREAS, DRAFT STOPPING MATLS SHOULD NOT BE LESS THEN 1/2" (1" FOR 2" DIA) 3/8" (1" FOR 2" DIA) 2" TYPE 2-4 PARTICLE BD, OR OTHER MATLS APPROVED BY THE BUILDING OFFIC AND CURRENT IRC.
 C. AT SPOFFITS AND 10" MAX VERTICAL IN WALLS.
 D. SEAL ALL DUCT AND PIPE PENETRATIONS THROUGH THE GARAGE FIRE WALL WITH AN APPROVED NON-COMBUSTIBLE MATERIAL.
- ALL PENETRATION OF THE FIRE RATED WALLS MUST COMPLY WITH IRC SECTION 714 IF THE PENETRATION CANNOT COMPLY WITH THE EXCEPTIONS THAN SUBMIT A LISTED PENETRATION FIRE STOP SYSTEM AS SPECIFIED IN 4.2 SECTIONS 714 TO THE GOVERNING MUNICIPALITY FOR APPROVAL PRIOR TO INSTALLATION.
- TYPICAL ANGLE IS 45° UNLESS NOTED OTHERWISE.
- WINDOW FRAMES TO BE NON-METALLIC
- CONTRACTOR TO VERIFY ALL DIMENSIONS PRIOR TO CONSTRUCTION.
- SPECIAL INSPECTION AS PER IRC 103 IS REQUIRED FOR THE FOLLOWING:
 A. BOLTS INSTALLED IN CONCRETE WITH ASSUMED STRESS INCREASES.
 B. SHOP AND FIELD STRUCTURAL WELDING.
 C. INSTALLATION OF EPOXY INSTALLED ANCHOR BOLTS.
 D. INSTALLATION OF HIGH-STRENGTH BOLTS.

ENERGY EFFICIENCY CERTIFICATE

A PERMANENT CERTIFICATE SHALL BE COMPLETED AND POSTED IN THE ELECTRICAL DISTRIBUTION PANEL BY THE BUILDER. THE CERTIFICATE SHALL LIST THE PREDOMINANT R-VALUES OF INSTALLED INSULATION, U-VALUES OF PENETRATION, THE CERTIFICATE SHALL ALSO LIST THE TYPES AND EFFICIENCIES OF HEATING, COOLING AND SERVICE WATER HEATER EQUIPMENT.

MECHANICAL VENTILATION

PROVIDE CONTINUOUS WHOLE-HOUSE MECHANICAL VENTILATION THAT COMPLES TO CURRENT IRC MOISTURE SECTION 408.6.4.1 WITHIN 6" BATHROOMS & TOILETS. SYSTEM TO BE EQUIPPED WITH A MANUAL SHUT-OFF SWITCH OUTDOOR AIR INTAKES AND EXHAUSTS SHALL HAVE AUTOMATIC OR GRAVITY COMPENSATES THAT CLOSE WHEN THE SYSTEM IS NOT OPERATING.

AIR LEAKAGE

THE BUILDING THERMAL ENVELOPE SHALL BE CONSTRUCTED TO LIMIT AIR LEAKAGE IN ACCORDANCE WITH THE COMMENTS, MANUFACTURERS INSTALLATION INSTRUCTIONS AND THE CRITERIA INDICATED IN TABLE 603.6.3. THE BUILDING OR DWELLING UNIT SHALL BE TESTED AND VERIFIED AS HAVING AN AIR LEAKAGE RATE OF NOT EXCEEDING 3 AIR CHANGES PER HOUR. A WRITTEN REPORT OF THE RESULTS OF THE TESTS SHALL BE SIGNED BY THE PARTY CONDUCTING THE TEST AND PROVIDED TO THE BUILDING OFFICIAL. REPORT MUST BE PROVIDED PRIOR TO FINAL INSPECTION/SIGNATURE OF A CERTIFICATE.

HVAC SIZING

HVAC DUCTS SHALL BE SIZED PER IRC SECTION 603.6.3.1 TO DETERMINE AIR LEAKAGE AND A WRITTEN REPORT OF THE RESULTS OF THE TESTS SHALL BE SIGNED BY THE PARTY CONDUCTING THE TEST AND PROVIDED TO THE BUILDING OFFICIAL. REPORT MUST BE PROVIDED PRIOR TO FINAL INSPECTION/SIGNATURE OF A CERTIFICATE.

THE TOTAL LEAKAGE OF THE HVAC DUCTS, WHEN MEASURED IN ACCORDANCE WITH SECTION 603.6.3.1 SHALL BE AS FOLLOWS:
 1. LEAKAGE RATE SHALL NOT EXCEED 0.30 L/Sq. Ft. OF CONDITIONED FLOOR AREA WHERE THE AIR LEAKAGE MEASUREMENT IS TAKEN AT THE TIME OF THE TEST AND 0.50 L/Sq. Ft. OF CONDITIONED FLOOR AREA WHERE THE AIR LEAKAGE MEASUREMENT IS TAKEN AFTER COMPLETION OF THE TEST.
 2. POST CONSTRUCTION TEST: THE TOTAL LEAKAGE SHALL BE LESS OR EQUAL TO 0.40 L/Sq. Ft. OF CONDITIONED FLOOR AREA.

HVAC SIZING

HEATING AND COOLING EQUIPMENT SHALL BE SIZED IN ACCORDANCE WITH "ACCA" MANUAL "A" BASED ON BUILDING LOADS CALCULATED IN ACCORDANCE WITH "ACCA" MANUAL "A" OR OTHER APPROVED METHOD. HEATING AND COOLING EQUIPMENT SHALL HAVE AN EFFICIENCY RATING EQUAL TO OR GREATER THAN THE MINIMUM REQUIRED BY FEDERAL LAW FOR THE GEOGRAPHIC LOCATION WHERE THE EQUIPMENT IS INSTALLED

BUILDING INSPECTOR TO FIELD VERIFY ACTUAL PENETRATION U-VALUES

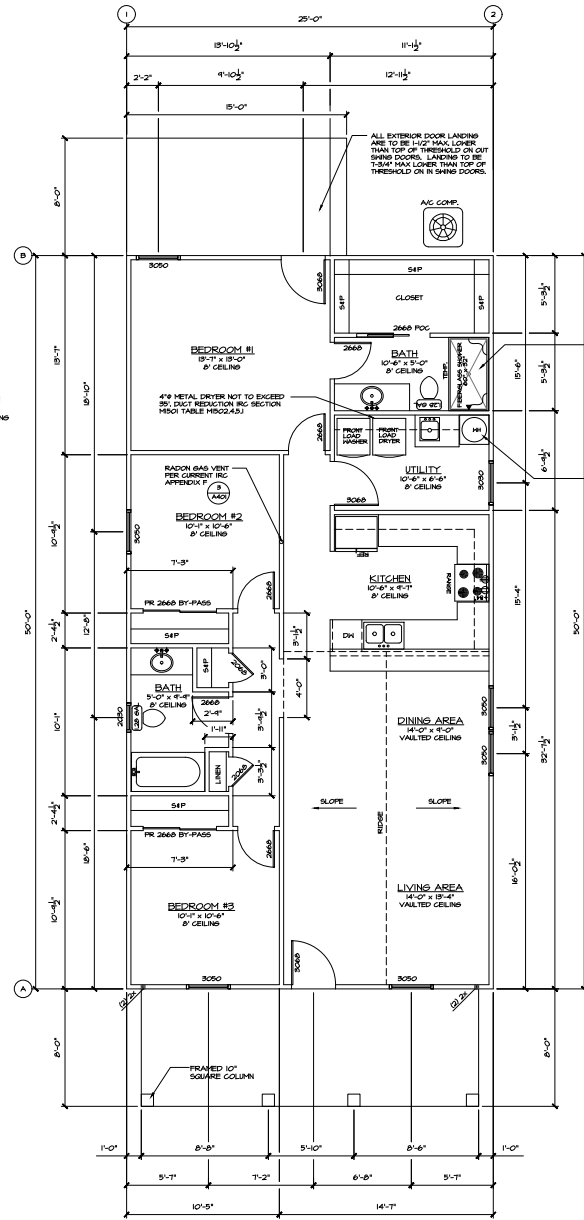
ALL EXTERIOR WALLS SHALL HAVE A R-20 INSULATION.
 ALL ATTIC AREAS TO HAVE R-48 INSULATION.
 ALL SLAB FOUNDATION SHALL HAVE R-10 INSULATION, 2" MIN. HANDBR.
 ALL WINDOWS SHALL HAVE A PENETRATION U-FACTOR OF 0.32 HANDBR. GLAZED PENETRATION 5/16" OF 0.40 HANDBR.
 ALL POISTS, BEAMS, AND WALL SUPPORTING THE FLOOR/CEILING SHALL BE PROTECTED BY ONE-HOUR CONSTRUCTION

WALL LEGEND

- 2 X 4 STUDS @ 16" O.C.
- 2 X 4 STUDS @ 16" O.C.
- BRICKSTONE VENEER
- FOUR IN PLACE CONCRETE WALL
- BLOCK WALL

NOTE:

WINDOW FALL PROTECTION - IN DWELLING UNITS, WHERE THE TOP OF THE SILL OF AN OPENING IS LOCATED LESS THAN 44" AFFJ AND GREATER THAN 12" AFFJ, OR OTHER SURFACES BELOW ON THE EXTERIOR OF THE BUILDING, THE OPERABLE WINDOW SHALL BE PROVIDED WITH A WINDOW FALL PROTECTION DEVICE. AFTER OPENING TO WITH ASH PILING AND LIMITS THE OPERABLE WINDOW OPENING SO AS TO NOT ALLOW PASSAGE OF A 4" SPHERE. THE WINDOW OPENING CONTROL DEVICE AFTER OPENING TO RELEASE THE CONTROL DEVICE ALLOWING THE WINDOW TO FULLY OPEN SHALL NOT REDUCE THE NET CLEAR OPENING AREA OF THE WINDOW UNIT TO LESS THAN THE AREA REQUIRED BY SECTION R502.2.1



1/2" RFD RFD TO BE INSTALLED PRIOR TO TUB/SHOWER INSTALL TO MAINTAIN COMPLETE THERMAL ENVELOPE. SHOWER ENCLOSURE WALLS SHALL BE TEMP. GLASS AND DOOR TO OPEN OUTWARD AND BE 24" MIN. SHOWER AREA SHALL BE RESISTANT AND HAVE A SMOOTH, HARD, NON-ABRASIVE FINISH. DRAIN TO BE INSTALLED TO A MINIMUM OF 10" ABOVE MANUFACTURERS SPECIFICATIONS.

WATER HEATER TYP TO EXT. DRAIN SHALL BE 1/2" 24" AFFJ. MAX TO BE 40 GAL. UNLO. FAU AND WATER HEATER ARE TO BE VENTED SEPARATELY (TYPE) INSTALL PRESSURE RELIEF VALVE PER IFC. IF WATER HEATER IS A GAS UNIT WATER HEATER TO BE ON A 6" RANDED FLANGE. SERVIC STRAPS & VUL PER CURRENT IFC. STRAPS UPPER 12" PROVIDE CORROSION AIR FOR WATER HEATER PER IFC.

FLOOR PLAN
12/20/24

REVISIONS	BY
BAL23016_L	

PROJECT: **BALLINGER SPEC**
1723 TEXAS AVE
KNOXVILLE TN

FLOOR PLAN

A & R DESIGN & DRAFTING SERVICE
LENOIR CITY, TENNESSEE 37112
(603) 599-9405 RCOLLETT@A&R.COM

DATE: 5/19/2023
SCALE: 1/4" = 1'-0"
DRAWN: R.J.
JOB: BAL23016
SHEET: A101