

Staff Report

Infill Housing Design Review Committee

File Number: 5-B-24-IH

Meeting:	7/17/2024
Applicant:	Dawn Irion Beit Development LLC
Owner:	Dawn Irion Beit Development LLC

Property Information

Location:	3430 Gap Rd.	
Zoning:	RN-2 (Single-Family Residential Neighborhood)	
District:	Lonsdale Infill Housing Overlay District	

Parcel ID 81 | S 02803

Description of Work

Level III New Primary Structure

New primary structure fronting Gap Road. The house is proposed to be set 25' from the front property line. Onestory residence features a front-gable roof (7/12 pitch), an exterior of board-and-batten siding (no material specified), and a slab foundation. A lower front-gable massing projects from the left side of the façade. An entry stoop (4'-5" on site plans, 8' on floor plans) is recessed below the primary roofline, on the right half of the façade. Parking is proposed for a concrete driveway with a turnaround in front of the house.

The façade (west) features paired double-hung windows on the projecting front-gable massing, with a door and another bay of paired windows recessed under the stoop. A fixed window is located in the gable field. The right side (south) elevation features two bays of windows, with one window on the left (north) elevation. A secondary entry and three windows are located on the rear elevation.

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.

- 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. Housing Orientation

- 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.

- Garages which are perpendicular to the alley should be about 18 feet from the center line of the alley pavement, allowing a comfortable turning radius for a driver to enter a garage.

- 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.

- On corner lots, a driveway to the garage may be provided off the side street.

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 columns and other materials that were not used in the early 1900's should not be used.

- Small stoops centered on entry and no more than 5 feet deep are appropriate on blocks where porches were not traditional.

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 Material

- 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. In 1930-1950 era neighborhoods, faced stone may be appropriate (see Section 12).

11. Landscape and Other Considerations

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

Comments

1. The house is proposed to be set 25' from the front property line. The block to receive new construction is relatively undeveloped; however, the existing houses on the block are set 15' and 18' from the front property line. The revised proposal has been aligned to align the four new houses on the block.

2. The block to receive new construction is characterized by modified Craftsman bungalows and is primarily vacant. The proposed one-story residence is proportional to the dimensions of the lot and the other houses on the block. The site plan features large side setbacks.

3. The application proposes a concrete driveway in the front of the house. Infill Housing guidelines recommend that on streets without alleys, parking areas should be at least 20' behind the front façade of the house with access limited to one lane between the street and the front façade. The turnaround may be required based on the site's topography and the conditions of Gap Road, but should be omitted if possible. Final site plans should meet City Engineering standards.

4. Overall, the one-story, three-bay façade is similar in scale and width to the context. The house is proposed for a concrete slab foundation; the foundation should be at least 12" tall to be compatible with the broader neighborhood. Topography of the site may also affect the house's foundation; the drawings depict a concrete slab.

5. The revised application includes a 4'-5" deep entry stoop on the site plan and an 8' deep front porch on the floor plans. While an 8' deep porch meets the guidelines, the final site plan should include an accurate porch measurement.

6. Guidelines recommend window and door styles be similar, with similar proportions and ratio of solid to void, to historic houses on the block and in the neighborhood. The revised application includes two windows on the left elevation and three on the right elevation.

7. The proposed roof pitch (7/12) meets the design guidelines.

8. The application does not include information on siding materials. Guidelines recommend that clapboard-like materials be used in new houses and discourages vertical siding; the houses should feature horizontal lap siding instead of board-and-batten. Final drawings should accurately show the siding to be installed.

9. Final site plans should include one native or naturalized shade tree in the front and rear yards. The lots currently feature a substantial amount of trees and other vegetation; existing trees should be retained if at all possible.

10. The proposed new construction should be differentiated in design from the three other new houses proposed on Gap Road at the same time. Design tactics can include roofline modifications, different porch designs, or other methods. In response to the previous staff report and DRB decision (which was to postpone to allow the applicant to present revised drawings), the applicant has stated they will vary the houses via siding color and porch railings. The porch details are not shown on the drawings.

Recommendation

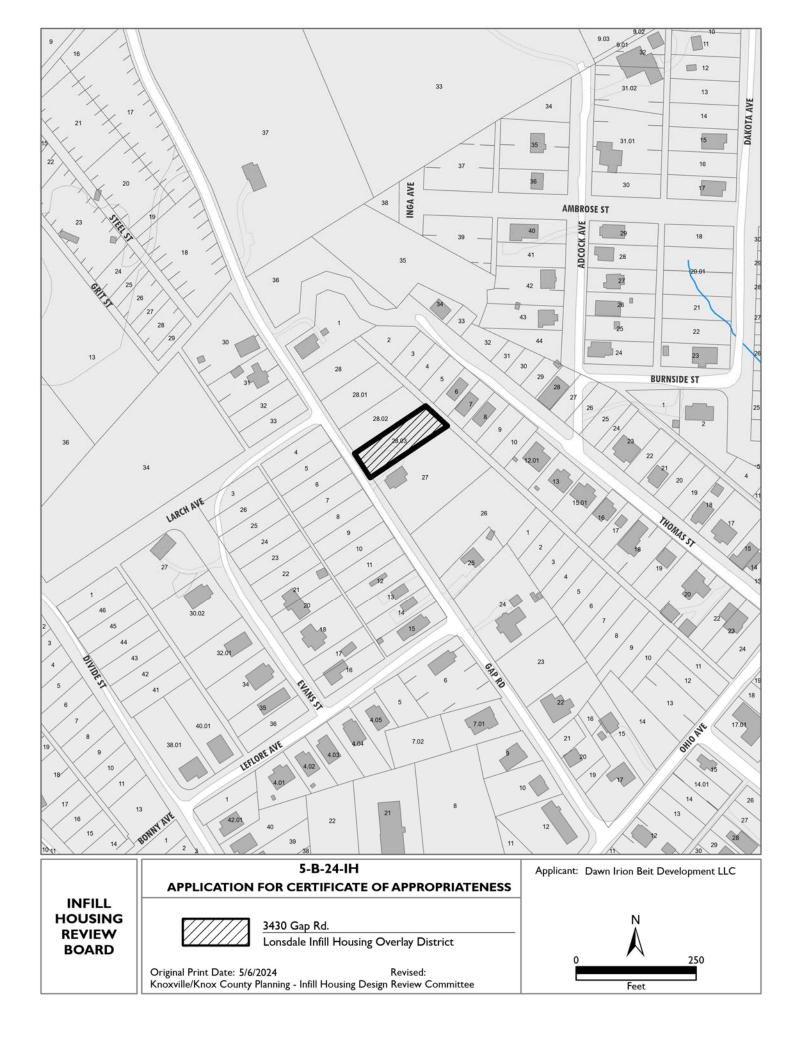
Staff recommends approval of Certificate 5-B-24-IH, subject to the following conditions:

1) final site plan to meet City Engineering standards, omitting front yard turnaround if possible;

2) foundation to be elevated at least 12 inches to reflect historic houses in the neighborhood, with a site-specific foundation profile submitted to staff;

- 3) revised front porch design to measure at least 8 feet deep;
- 4) siding to be horizontal lap siding instead of board-and-batten;

5) design be revised to differentiate from other adjacent new construction on Gap Road, with approval by staff.



NOTES

- SURVEYOR'S LIABILITY FOR THE DOCUMENT SHALL BE LIMITED TO THE ORIGINAL PURCHASER AND DOES NOT EXTEND TO ANY UNNAMED PERSON OR ENTITIES WITHOUT AN EXPRESSED RE-CERTIFICATION BY WHOSE SIGNATURE APPEARS UPON THE SURVEY.
- PARCELS NUMBERS SHOWN AS THUS (00) REFER TO TAX MAP 81, INSERT I, GROUP S, KNOX COUNTY, TN.
- ALL DISTANCES WERE MEASURED WITH E.D.M. EQUIPMENT AND HAVE BEEN ADJUSTED FOR TEMPERATURE.
- 3.1. FOR BOUNDARY AND TOPOGRAPHIC APECTS OF THIS SURVEY, RTK GNSS POSITIONAL DATA WAS OBSERVED ON/BETWEEN NOVEMBER 3, 2023 UTILIZING TOPCON HIPP' VR GNSS RECEIVERS. THE ROIL COORDINATES OF THE FIRST DATADION KERE DERIVED USING A VRS DETWORK OF TDOT CORS STATIONS REFERENCED TO NAD83(2011), GEDID 18
- THE PROPERTY DOES NOT LIE WITHIN THE 100 YEAR FLOOD PLAIN AND IS DETERMINED TO BE IN ZONE "X" AS FER FEDERAL EMERGENCY MANAGEMENT AGENCY FIRM PANEL NUMBER 47093(2)277G, DATED 08/05/2013.
- SURFACE DRAINAGE SHALL BE DIVERTED TO A STORM SEWER CONVEYANCE OR OTHER APPROVED POINT OF COLLECT ON THAT DOES NO CREATE A HAZARD. LOTS SHALL BE GRADED TO DRAIN SURFACE WATER AWAY FROM THE FOUNDATION WALLS. THE GRADE SHALL FALL NO FEWER THAN 6 INCHES WITHIN THE FIRST 10 FEET.
- 6. THIS SURVEYOR WAS NOT PROVIDED WITH A TITLE COMMITMENT, THEREFORE THE PROPERTY IS SUBJECT TO THE FINDINGS OF A DETAILED TITLE SEARCH.
- 7. PRIOR TO ANY CONSTRUCTION, EXCAVATION OR ANY DISTURBANCE OF THE EXISTING GROUND ELEVATION, THE OWNER AND / OR CONTRACTOR SHOULD ASSUME RESPONSIBULTY OF CONTACTING THE LOCAL UTILITY AUTHORITIES FOR EXACT LOCATION OF UNDERGROUND GAS LINES, TELEPHONE LINES, ELECTRIC CABLES, WATER LINES, ETC. TO AVOID ANY HAZARD OR CONFLICT. IN TENNESSEE, IT IS A REQUIREMENT, PER "THE UNDERGROUND UTILITY DAMAGE PREVENTION ACT," THAT ANYONE WHO ENGAGES IN EXCAVATION MUST NOTIFY ALL KNOWN UNDERGROUND UTILITY OWNERS, NO LESS THAN THREE (3) NOR MORE THAN (10) WORKING DAYS PRIOR TO THE DATE OF THEIR EXCAVATION TO AVOID ANY POSSIBLE HAZARD OR CONFLICT. JUAL 811 FOR A ONE CALL CENTER.
- UTILITIES SHOWN WERE TAKEN FROM FIELD LOCATIONS THAT WERE APPARENT AND COFED FROM APPROPRIATE GOVERNING AGENCIES MAPS AND ARE APPROXIMATE AT BEST. THERE MAY BE UTILITIES, THE EXISTENCE OF WHICH IS UNKNOWN TO THE SURVEYOR.
- TOPOGRAPHIC INFORMATION WAS DERIVED BY RANDOM SHOTS PER FIELD SURVEY AND AVAILABLE TN STATE LIDAR DATA; CON OUR INTERVAL IS TWO (2) FOOT, DATUM BASED ON NAVD 88.
- 10. ALL DEED & PLAT REFERENCES ARE MADE TO THE REGISTER'S OFFICE OF KNOX COUNTY, TN (ROKC).
- 11. SURVEY FIELD DATA COLLECTED ON NOVEMBER 3, 2023.

12. PROPOSED AREA TO CLEAR: 3,200 SQ.FT. ±

- 13. SILT FENCE NOTES:
- 13.1. SILT FENCE SHALL BE PRE-ASSEMBLED AND INSTALLED IN ACCORDANCE WITH THE MANUFACTURERS SPECIFICATIONS.
- 13.2. SILT FINCE SHALL HAVE AN APPROVED BACKING OR A BUILT-IN REINFORCED STRUCTURE AS RECOMMENDED BY THE MANUFACTURER TO SUPPORT THE GEOTEXTILE FABRIC.
- SUBJECT PROPERTY IS CURRENTLY ZONED "RN-2": SINGLE-FAMILY RESIDENTIAL NEIGHBORHOOD. FOR ACCURATE INFORMATION CONCERNING ZONING REQUIREMENTS & RESTRICTIONS CONTACT KNOXVILLE/KNOX COUNTY PLANNING SERVICES: 365-215-2500.

(XX)

MAX. BUILDING HEIGHT: 35 FEET

LEGEND

PARCEI NO

PUBLIC UTILITY & DRAINAGE EASEMENT P.U.D.E.

IRON ROD CAPPED (NEW)

CONTOUR LINE

PROPERTY ADJOINER LINE

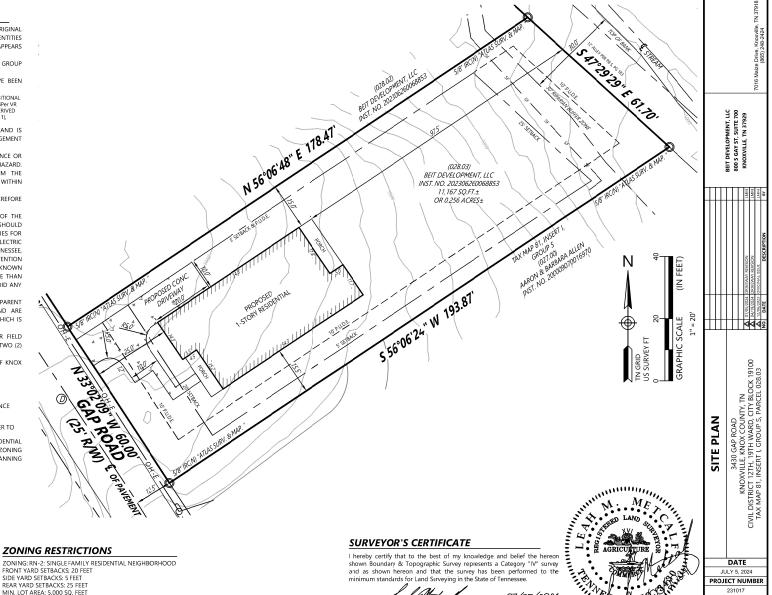
PROPERTY LINE

OVER LINE

UTILITY POLE

STORM MANHOLE

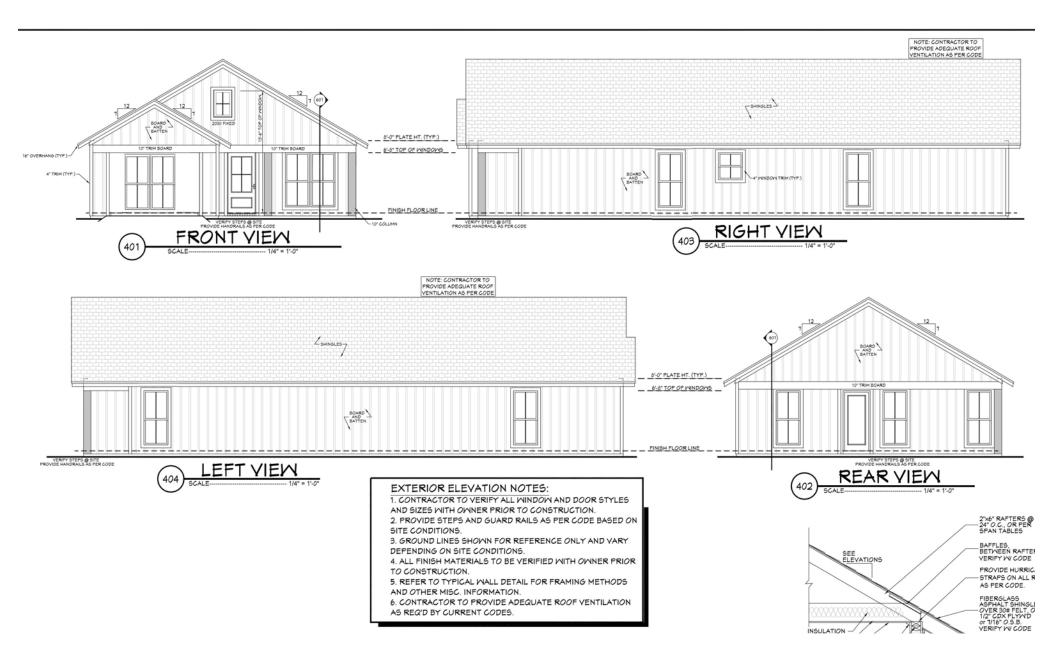
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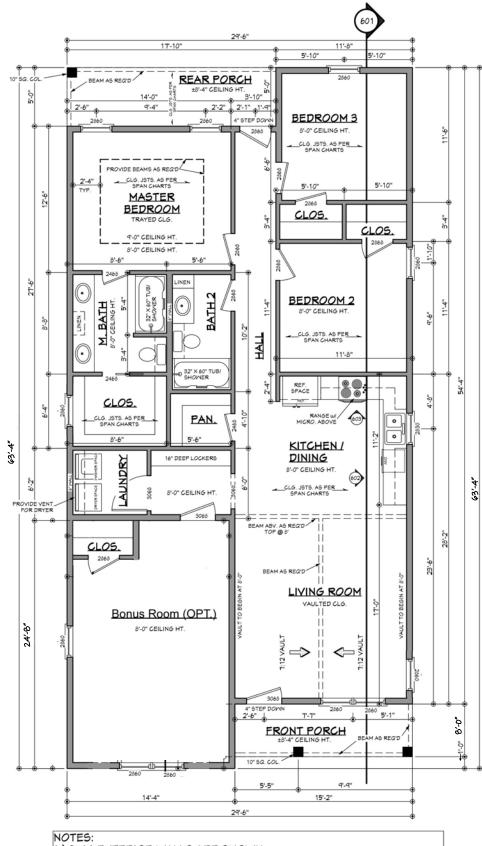


By: LEAH M. METCALF TN Registered Surveyor No. 3430

SHEET NUMBER

1 OF 1





1.) 2 X 6 EXTERIOR WALLS ARE SHOWN. 2.) CONTRACTOR TO LOCATE WATER HEATER AND HVAC UNITS AT SITE.

AREAS:	1592	S.F. HEATED
	68	S.F. UNHEATED - FRONT PORCH
	89	S.F. UNHEATED - REAR PORCH
	157	S.F. TOTAL UNHEATED
	1749	S.F. TOTAL UNDER ROOF

NOTES:

1. ALL DIMENSIONS & SITE CONDITIONS TO BE VERIFIED BY CONTRACTOR PRIOR TO CONSTRUCTION. 2. ALL FINISHES (INTERIOR & EXTERIOR) TO BE VERIFIED WITH ONNER PRIOR TO CONSTRUCTION.

VERIFY ALL DOOR AND WINDOW STYLES AND SIZES WITH 3

 VERIFY ALL DOOR AND WINDOW STYLES AND SIZES WITH OWNER FRIOR TO CONSTRUCTION. MANUFACTURER TO SUPPLY ALL ROUGH OPENING SIZES.
 CONTRACTOR TO VERIFY ALL CLEARANCES OF ALL DOORS, WINDOWS AND OTHER ITEMS THAT ARE CRITICAL, PRIOR TO CONSTRUCTION.
 CONTRACTOR TO ADAPT PLANS AS REQUIRED TO MEET ALL APPLICABLE CODES AT SITE.
 ALL BEAMS TO BE SIZED BY A LICENSED STRUCTURAL ENGINEER.
 PORCHES, BALCONEES OR RAISED FLOOR SURFACES LOCATED MORE THAN 30 INCHES ABOVE THE FLOOR OR GRADE BELOW AT ANY POINT WITHIN 36 INCHES IN A 16 INCHES IN HEIGHT. OPEN SIDES OF STARS WIT A TOTAL GRADE BELOWAT ANT POINT WITHIN 36 INCHES HORIZONTALLY SHALL HAVE GUARDS NOT LESS THAN 36 INCHES IN HEIGHT. OPEN SIDES OF STAIRS WITH A TOTAL RISE OF MORE THAN 30 INCHES ABOVE THE FLOOR OR GRADE BELOWI SHALL HAVE GUARDS NOT LESS THAN 34 INCHES IN HEIGHT MEASURED VERTICALLY FROM THE NOSING OF THE TREADS. INSECT SCREENING SHALL NOT BE CONSIDERED AS A GUARD. INSECT SCREENING SHALL NOT BE CONSIDERED AS A GUARD. INC 2018, R312.1.1 & R312.1.2 3. M1305.1.2 APPLIANCES IN ATTICS. ATTICS CONTAINING APPLIANCES SHALL BE FROVIDED WITH AN OPENING AND A CLEAR AND UNOBSTRUCTED PASSAGEWAY LARGE ENOUGH TO ALLOW REMOVAL OF THE LARGEST APPLIANCE, BUT NOT MORE THAN 20 FEET LONG MEASURED ALONG THE CENTERLINE OF THE PASSAGEWAY SHALL HAVE CONTINUOUS SOLID FLOORING IN ACCORDANCE WITH CHAPTER S NOT LESS THAN 24 INCHES WIDE. A LEVEL SERVICE SPACE AT LEAST 30 INCHES DIRED AND 30 INCHES SINCHES THAL 30 INCHES THAN 24 INCHES WIDH. CHAPTER S NOT LESS THAN 24 INCHES WIDE. A LEVEL SERVICE SPACE AT LEAST 30 INCHES DIRED AND 30 INCHES SINCLESS THAN 26 INCHES DIRED AND 30 INCHES SINCLESS THAN 24 INCHES WIDH. A LEVEL SERVICE SPACE AT LEAST 30 INCHES DIRED. A LEVEL SERVICE SPACE AT LEAST 30 INCHES DIRED. ALEVEL SERVICE SPACE AT LEAST 30 INCHES DIRED. ALEVEL SERVICE SPACE AT LEAST 30 INCHES DIRED. AND 30 INCHES SINCLESS THAN 24 INCHES WIDH. ALEVEL SERVICE SPACE AT LEAST 30 INCHES DIRED. AND 30 INCHES SINCHES DIRED ALONG ALL SIDES OF THE APPLIANCE WHERE ACCESS IS REQUIRED. THE CLEAR ACCESS OFENING DIMENSIONS SHALL BE A MINIMUM OF 20 INCHES BY 30 INCHES, AND LARGE E NOUGH TO ALLOW DEMOVING THE INDICHES, AND LARGE E NOUGH TO ALLOW DEMOVING THE INDICHES INARGEST ALONG ALL DIP.

ACCESS OPENING DIMENSIONS SHALL BE A MINIMUM OF 20 INCHES BY 30 INCHES, ND LARGE ENOUGH TO ALLOW REMOVAL OF THE LARGEST APPLIANCE. EXCEPTIONS: a. THE PASSAGEWAY AND LEVEL SERVICE SPACE ARE NOT REQUIRED WHERE THE APPLIANCE CAN BE SERVICED AND REMOVED THROUGH THE REQUIRED OPENING. b. WHERE THE PASSAGEWAY IS UNOBSTRUCTED AND NOT DEFO TUNK.

b. "WHERE THE PASSAGE/MAY 15 UNOBSTRUCTED AND NOT LESS THAN 6 FEET HIGH AND 22 INCHES WIDE FOR ITS ENTIRE LENGTH, THE PASSAGE/WAY SHALL BE NOT MORE THAN 50 FEET LONG. 9. APPLIANCE ACCESS FOR INSPECTION SERVICE, REPAIR AND REFLACEMENT, APPLIANCES SHALL BE ACCESSIBLE FOR INSPECTION, SERVICE, REPAIR AND REPLACEMENT WITHOUT REMOVING PERMANENT CONSTRUCTION, OTHER APPLIANCES, OR ANY OTHER PIPING OR DUCTS NOT CONNECTED TO THE APPLIANCE BEING INSPECTED, SERVICED, REPAIRED OR REPLACED A LEVEL NOOKNING SPACE AT LEAST 30 INCHES PIEP AND 30 INCHES WIDE SHALL BE FROVIDED IN FRONT OF THE CONTROL SIDE TO SERVICE AN APPLIANCE MI305.11 10. EMERGENCY ESCAPE AND RESCUE OPENINGS SHALL BE OPERATIONAL FROM THE INSIDE OF THE ROOM WITHOUT THE

10. ENERGENCY ESCAPE AND RESCUE OPENINGS SHALL BE OPERATIONAL FROM THE INSIDE OF THE ROOM WITHOUT THE USE OF KEYS, TOOLS OR SPECIAL KNOWLEDGE. WINDOM OPENING CONTROL DEVICES COMPLYING WITH ASTM F 2010 SHALL BE PERMITTED FOR USE ON WINDOWS SERVING AS A REQUIRED EMERGENCY ESCAPE AND RESCUE OPENING, ALL SLEEPING ROOMS TO HAVE AN EXTERIOR ACCESS THROUGH SLEEPING KOOMS TO HAVE AN EXTERIOR ACCESS THROUGH A DOOR OR WINDOW WITH A MINIMUM OF 5.1 SQUARE FEET NET CLEAR OPENING AS PER IRC 2018 R310.2.1. EXCEPTION: GRADE FLOOR OR BELOW GRADE OPENINGS SHALL HAVE A MINIMUM NET CLEAR OPENING OF 5 SQUARE FEET. MAXIMUM SILL HEIGHT TO BE 44 INCHES. MINIMUM NET CLEAR OPENING HEIGHT TO BE 24 INCHES. MINIMUM NET CLEAR OPENING WIDTH TO BE 24 INCHES.

WIDTH TO BE 20 INCHES. 11. ALL RETURN AIR GRILLS ARE TO BE LOCATED TO COMPLY WITH SECTION M1602 OF THE IRC 2018. 12. ALL SQUARE FOOTAGE MEASUREMENTS ARE APPROXIMATE AND MAY DIFFER FROM ACTUAL CONSTRUCTED RESIDENCE OR BUILDING. 13. FIRE SPRINKLER SYSTEM TO BE DESIGNED AND INSTALLED (IF REQUIRED BY LOCAL CODES) AS PER THE IRC 2018 AND BY A LICENSED PROFESSIONAL IN THE AREA OF CONSTRUCTION. 14. ALL BATHROOM EXHAUST VENTS SHALL BE VENTED DIRECTLY TO THE EXTERIOR OF THE HOME AND NOT INTO THE ATTIC. IRC 2018, M1505.2

5-B-24-IH

Please see our responses underlined below

Staff recommends approval of Certificate 5-B-24-IH, subject to the following conditions:

1) revisions to the front setback to align with adjacent new construction and create a consistent streetscape pattern;

Front set back for each home will be normalized to create a consistent streetscape pattern.

2) revisions to parking placement to meet the Infill Housing guidelines;

Parking / driveway will be altered to meet guidelines

3) foundation to be elevated at least 12 inches to reflect historic houses in the neighborhood, with a revised foundation profile submitted to staff;

Foundation plan (below) does not specify a total height. Crawl space will exceed the 12 inch requirement

4) revised front porch design to measure at least 8 feet deep;

Revised plan emailed in separately to Lindsay Crockett

5) one window each to be added to right and left elevations;

Revised plan emailed in separately to Lindsay Crockett

6) siding to be horizontal lap siding instead of board-and-batten;

Siding will be horizontal lap siding

7) design be revised to differentiate from other adjacent new construction on Gap Road, with approval by staff.

Exterior features will differ in siding color & porch railing and post types from adjacent homes

