



Marlow’s Modifications to Mayor Kincannon’s Proposed Section 4.6 – Middle Housing Type

13 September 2023 – Version 1.1

4.6 – Middle Housing Standards

Middle Housing types are residential structures containing more than one unit, with building footprints and overall scales comparable to single-family houses. Middle Housing types may be permitted in RN-2, RN-3, ~~and~~ RN-4, ~~and~~ C-N zoning districts, located in land use areas designated Traditional Neighborhood Residential (TDR). The below dimensional, design, and parking standards apply to new construction of Middle Housing types. Standards for conversions to Middle Housing types are addressed in Section 4.6.F.

4.6.A – Middle Housing Types

1. Duplex, side-by-side: a structure containing two dwelling units next to each other with one shared wall. The type has a depth, width, and height similar to a typical single-family house. Both units may share a stoop or porch at the center of the building; or each unit may have its own stoop or porch.
2. Duplex, stacked: a structure containing two dwelling units stacked, with one on the ground floor and the other on top. The type has a depth, width, and height similar to a typical single-family house. Both entries may face the street, or one unit may face the street with another facing the side or rear yard.
3. Triplex: a structure containing three dwelling units typically stacked on top of each other. The type may be located as transitions from commercial corridors and higher-intensity areas into single-family neighborhoods. A triplex may feature another configuration to accommodate three units within two to two-and-one-half stories. **Frontage on arterial roads is required; flag lots do not qualify.**
4. Fourplex: A structure containing two units on the ground floor and two units stacked directly above them. The type is usually two stories, with a depth similar to a house.
5. Townhouse (small): a small to medium sized structure with three to four attached units. The townhouse (small) type is two stories, featuring shared side walls on one or more sides. The narrow side of the unit typically faces the street, with an entry oriented towards the street, and the larger attached side along the depth of the lot.
6. Townhouse (large): a medium-sized structure with five to eight units. The townhouse (large) type is two-and-one-half-stories, featuring shared side walls on one or more sides. The narrow side of the unit typically faces the street, with an entry oriented towards the street, and the larger attached side along the depth of the lot.
7. Multiplex (small): a small-to-medium-sized structure that consists of five to ten units arranged side-by-side and/or stacked, often with a shared entry on the ground floor.

8. Multiplex (large)¹: a large structure that consists of seven to eighteen units arranged side-by-side and/or stacked, often with a shared entry on the front, occasionally with entries on one or both sides.

9. Cottage Court²: This type consists of a series of small (one to one and a half stories and small footprint) homes that are typically detached, orientated around a small shared court that is usually perpendicular to the street.

10. Carriage House³: This type is a secondary structure, typically located at the rear of a lot, providing space for a small residential unit. This unit could be above a garage or at ground level. Carriage houses are unique in that they complement other buildings exclusively. They can be add-ons to multiple-unit buildings or single-family homes. They are only appropriate for side and rear yard placement.

11. Single Family on nonconforming (small) lot of record⁴: Lots that comply with Section 17.3, often once featured a small, typically a shotgun style, home. While these lots are too small for Opticos’ defined Missing Middle Housing forms; these lots have potential to be developed into small single-family homes that further the goal as MMH.

4.6.B

1. Middle Housing types may be permitted based on the zoning district and housing type in Table 4-3, and conformance to the standards that follow. Proposals which do not meet the dimensional standards in Table 4-4 default to the provisions of the base zoning code.
2. Recognizing that three-story triplexes are most appropriately located in areas which transition from commercial corridors or main streets and higher-intensive areas into lower-intensity residential neighborhoods, additional location criteria for triplexes are located below.
 - a. ~~Three-story triplexes are permitted on lots with frontage on arterial roads. This provision does not apply to flag lots.~~ (note: covered this above in 4.6.A.3 – Middle Housing Types).
3. Carriage Houses cannot be a principal structure and are only allowed on parcels in conjunction with certain middle housing types as delineated in Table 4-4.

Table 4-3: Middle Housing Development Types

Middle Housing Type	Permitted Use +Planning Staff Review	Condition Requiring Special Use
Duplex (side-by-side)	RN-2, RN-3, RN-4	
Duplex (stacked)	RN-2, RN-3, RN-4	
Triplex*	RN-2, RN-3, RN-4, C-N	
Fourplex	RN-2, RN-3, RN-4, C-N	
Townhouse (small)	RN-2, RN-3, RN-4, C-N	Tuck-under style requires Special Use Review
Townhouse (large)	RN-3, RN-4, C-N	Tuck-under style requires Special Use Review
Multiplex (small)	RN-3, RN-4, C-N	
Multiplex (large)	RN-3, RN-4, C-N	Requires Special Use Review
Cottage Court	RN-3, RN-4, C-N	Requires Special Use Review
Carriage House	RN-2, RN-3, RN-4, C-N	

¹ Opticos Report, *MMH Scan*™. 16 September 2022. p. 27.

² Opticos Report, *MMH Scan*™. 16 September 2022. p. 24.

³ Missing Middle Housing Close Up: Carriage Houses — Missing Middle Housing. <https://missingmiddlehousing.com/missing-middle-housing-close-up-carriage-houses/>

⁴ Article 17.3

4.6.C

1. The below dimensional standards supersede the base zoning district dimensional standards as defined in Table 4-1.
2. Table 4-4: Middle Housing Dimensional Standards establishes the dimensional standards for new construction of Middle Housing types within the permitted area.
3. Front setbacks for Middle Housing types shall be the average of the blockface, plus or minus five feet, in no case less than ~~10'~~ the distance specified in Table 4-4.
4. Minimum Rear setbacks for Middle Housing types: ~~may be between 15-215~~ feet, unless otherwise specified in Table 4-4.
5. Heights for Middle Housing types must not exceed the maximum building height of the base zoning district, or the maximum height in stories as noted in Table 4-4, whichever is less. For Middle Housing types, story and half-story are defined below:
 - a. Story: the portion of a building included between the surface of any floor and the surface of the next floor above it, or if there is no floor above, the space between the floor and the ceiling above. If the finished floor level directly above the basement or cellar is more than six feet above grade for more than 50 percent of the total perimeter, such basement or cellar shall be considered a story.
 - b. Half-story: conditioned space that rests primarily underneath the slope of the roof, usually having dormer windows. The half story is identified by the “.5” in the description of maximum height (e.g., 2.5). A half-story is considered a story when ~~its top wall plates, on at least two opposite exterior walls are~~ the roof is elevated four feet or more, ~~above measured from the floor, of such story.~~ by an exterior wall.
6. The combined width of dormers shall not exceed 50% of the width of the wall area beneath.
7. Building width for Middle Housing types is defined as follows: the length of the building façade wall that does not include permitted encroachments, as measured along the foundation that generally faces the front lot line.
8. Building depth for Middle Housing types is defined as follows: the length of the building façade wall that does not include permitted encroachments, as measured along the foundation that generally faces an interior or corner side lot line.

TABLE 4-4: Middle Housing Dimensional Standards

Middle Housing Type	Min. lot width (ft) with alley	Min. lot width (ft) without alley	Max. height (stories)	Building width (range)	Building depth (range)	Interior side setback	Corner side setback ⁵	Min. Front setback	Carriage House allowed
Single Family non-conforming lot	20'	20'	1	14'-20'	40'-60'	3' ⁶	3'	5'	Yes ⁷
Duplex (side-by-side)	45'	50'	2	30'-40'	35'-55'	5'	8' 5'	5'	Yes ⁸
Duplex (stacked)	45' 30' ⁹	50' 45' ^{10 11}	2	25'-35'	30'-50'	5'	8' 5'	5'	Yes ¹²
Triplex	45' 30' ¹³	50' 45' ¹⁴	2.5 -3	25'-40'	35'-55'	5'	10' 5'	5'	Yes ¹⁵
Fourplex	55' 45' ¹⁶	60' 50' ^{17 18}	2.5	40'-45'	50'-60'	5'	12' 5'	5'	Yes ¹⁹
Townhouse (small)	18'/du	20'/du	2	16'-25'/du	35'-50'	5'	12' 5'	0' with stoop or porch to sidewalk ²⁰	No
Townhouse (large)	18'/du	20'/du	2.5	16'-25'/du	35'-55'	5'	12' 5'	0' with stoop or porch to sidewalk ²¹	No
Multiplex (small)	80' 65' ²²	100' 70' ²³	2.5	65' 55'-75'	55'-65'	5'	12' 5'	10'	No

⁵ Neither the Opticos Report, *MMH Scan*TM. 16 September 2022; nor Parolek, Daniel, *Missing Middle Housing* (Washington: Island Press, 2020) make any distinction between interior side and corner side setbacks.

⁶ 2018 IRC §R302.1 (Minimum interior setback to allow “openings in walls” –windows).

⁷ These design guidelines and standards supersedes Article 10.3 for projects developed under this Section.

⁸ Opticos Report, *MMH Scan*TM. 16 September 2022. p. 22.

⁹ Parolek, Daniel, *Missing Middle Housing* (Washington: Island Press, 2020), p. 105.

¹⁰ Id., p. 109.

¹¹ Opticos Report, *MMH Scan*TM. 16 September 2022. p. 32.

¹² Id., p. 23

¹³ Parolek., p. 143, 145.

¹⁴ Id., p. 147.

¹⁵ Opticos Report, *MMH Scan*TM. 16 September 2022. p. 25

¹⁶ Id.

¹⁷ Id.

¹⁸ Parolek., p. 74,261.

¹⁹ Opticos Report, *MMH Scan*TM. 16 September 2022. p. 25

²⁰ Parolek, p. 140.

²¹ Id.

²² Opticos Report, *MMH Scan*TM. 16 September 2022. p. 26

²³ Id.

Multiplex (large)	65' ²⁴	75' ²⁵	3' ²⁶	65'-75'	55'-65'	5'	5'	10'	No
Cottage Courtyard	100' ²⁷	110' ²⁸	1.5-2' ²⁹	16'-24'	24'-32'	3' ³⁰	3'	15'	No
Carriage House	N/A	N/A	Side yard 1.5 rear yard 2	12'-32'	12'-32'	3' ³¹	3'	Rear setback 3' ³²	N/A

4.6.D

1. The parking requirements below apply to Middle Housing types. Where applicable, the below parking requirements supersede the off-street parking requirements in Table 11-2.

2. For Middle Housing types, the minimum off-street vehicle parking required is one space per dwelling unit except when the lot width is under FIFTY FEET (50') and/or the parcel is within ¼ mile of a transit stop, there shall be no parking requirement.^{33 34 35}

3. Section 11.4.B.3 does not apply to Middle Housing types.

4. Parking areas for triplex, fourplex, townhouse, and multiplex developments must be set a minimum of five feet from the interior side and rear lot lines, and may be grouped in shared parking areas per Article 11.8. When parking areas connect to a rear alley there shall be no setback from the rear lot line.

5. Parking must be located in the interior side or rear yards.

a. Where operable alleys are present, the alley must serve as the primary means of vehicular ingress and egress unless special site circumstances or conditions prohibit alley access.

~~b. Where parking is located in a side yard, the spaces must be located behind the front building façade line of the principal building. When a driveway extends through a front yard, the driveway must extend at least 20 feet behind the building façade line, to provide parking behind the street-facing elevation of the structure.~~

b. When the driveway is accessed from behind the front building façade line of the principal building the parking must remain behind the front façade line of the principal structure. When a driveway is accessed from the front, the driveway shall extend beyond the front building façade line of the principal structure at least EIGHTEEN FEET (18').

²⁴ Opticos Report, *MMH Scan*TM. 16 September 2022. p. 27

²⁵ Id.

²⁶ Parolek., p. 146-147.

²⁷ Id., p. 261.

²⁸ Opticos Report, *MMH Scan*TM. 16 September 2022. p. 24

²⁹ Parolek., p. 119.

³⁰ 2018 IRC §R302.1 (Minimum interior setback to allow “openings in walls” –windows).

³¹ 2018 IRC §R302.1 (Minimum interior setback to allow “openings in walls” –windows).

³² 2018 IRC §R302.1 (Minimum interior setback to allow “openings in walls” –windows).

³³ Parolek., p. 76.

³⁴ Id., p. 266. (“Ideally cities would remove all off-street parking requirements for residential uses, particularly in defined walkable urban contexts.”)

³⁵ Opticos Report, *MMH Scan*TM. 16 September 2022. p. 63. (“For MMH developments within ¼ mile of a transit stop ... eliminate the requirement for off-street parking entirely.”)

c. Front-facing garages are not permitted as part of the primary structure on Middle Housing types.

d. Circular driveways located in a front yard may not be used for required parking.

e. Tuck under townhome, which is three stories with the majority of the ground floor taken up by parking and two floors above, is only permitted in C-N and requires a special use permit.³⁶

4.6.E – Middle Housing Design Standards

1. The following standards apply only to new construction of Middle Housing types and are intended to promote the development of neighborhood-scale housing forms which are compatible with existing housing in the surrounding area.

2. New construction and certain expansion and alteration actions within the IH, NC, and H overlays, as described in Sections 16.6 and 16.8, are subject to review and approval by the Design Review Board or Historic Zoning Commission, per Sections 16.6 and 16.8.

3. The principal use standards for two-family, multi-family, and townhouse dwellings, as described in Sections 9.3.I and 9.3.J, apply alongside the below design standards.

4. Design standards: to ensure compatibility with the existing neighborhood and increase visual interest, yet allow for flexibility in design, the following requirements apply to all Middle Housing types:

- a. Front elevations must be oriented to face the primary street.
 - i. At least one ground-level entrance must be oriented towards the street;
- b. Rooflines must be either:
 - i. Flat, featuring a cornice, parapet, or decorative band to serve as a building cap for the entire roof;
 - ii. Steep, with a roof pitch of 6/12 or more;
 - iii. Articulated, with at least two pitches, planes, or ridgeline directions, or displaying hips, and valleys.
- c. Breaks (recesses or projections in the building plane) measuring a minimum of two feet are required in the horizontal plane of any front or side elevation that extends a length of 50 feet.
- d. The front façade must contain at least three of the following design elements:
 - i. Dormer(s);
 - ii. Eave overhangs, a minimum of 12 inches;
 - iii. Decorative cornice;
 - iv. Covered porches at least six feet in depth, composing a minimum of 25% of the width of the street facing elevations;
 - v. A recessed or projecting entry feature of 18 inches or more in depth, and of at least six feet in width;
 - vi. Architectural columns supporting a porch roof;
 - vii. A bay window projecting a minimum of 12 inches from the front façade;
 - viii. Articulated window and door trim, a minimum of four inches in width, include projecting window sills;
 - ix. Brick masonry composing no less than 25% of any street-facing elevation.

5. Townhouses must be oriented parallel to the primary street. Townhouses should not be oriented so the fronts of units face the rear elevations of units.

6. Cottage Courtyard type has the following additional design standards:

³⁶ Parolek., p. 137.

- i. The courtyard minimum width must be 25' and no encroachments are permitted in the courtyard;
- ii. No building encroachments nor driveway/parking may exist in the courtyard;
- iii. Attached units (duplex) are allowed across the rear of the lot;
- iv. Only the rear unit(s) can be 2 stories; all other units are limited to 1.5 stories;
- v. Maximum spacing between detached units is 8 feet;
- vi. Private dooryards (distance from porch/stoop/entry to the courtyard) of no more than 8' are permitted; Dooryards cannot be fenced, nor screened with vegetation, taller than 3 feet.³⁷

7. Carriage House type has the following additional design standards:

- i. Must be located in the side or rear yard;
- ii. Minimum spacing from principal structure: 5 feet;
- iii. Can not exceed the height of the principal structure;
- vi. Must compliment the architectural style of the principal structure.

4.6.F – Missing Middle Housing Conversion Standards

1. To retain existing housing stock and neighborhood character, while facilitating the creation of additional housing units, existing buildings may be converted to Middle Housing types via interior renovation or additions.

2. Conversions to Middle Housing types must comply with Table 4-3, the dimensional standards in Section 4.6.C, and Table 4-4.

3. Middle Housing Conversion Design Standards:

a. Additions to the front façade are not permitted. Additions may be made to the rear and side elevations where setbacks permit.

b. Additions may also be made to the roofline via an additional half story (the addition of dormers **must comply with 4.6.C.6**). Roofline additions should be proportionally consistent with the existing house and should not be so large as to dramatically alter scale of the original building mass.

c. Additions to the rear and side elevations must not be taller in height than the existing building.

4.6.G – Administrative Variations

1. To increase housing options within the City, Middle Housing standards are intended to allow more flexible development of land than is possible under the base district zoning regulations. In some instances, it may be practical to vary the prescribed type. A project may receive an administrative variation during Planning Staff review based on the below criteria.

a. Allowable administrative variations are as follows:

- i. Lot width: a decrease in the minimum required lot width, up to 20 percent, provided the existing lot can be developed following the intent of Middle Housing standards, meets all other applicable dimensional standards of Section 4.6, and is compatible with the scale and placement of buildings in the vicinity;
- ii. Corner side setbacks: a decrease in minimum corner side setbacks, up to 20 percent, provided the reduction receives approval from the Department of Engineering;

³⁷ Parolek., p. 117.

- iii. Design standards: a variation on the design standards in Section 4.6.E may be permitted, provided the project meets all applicable dimensional standards of Section 4.6, and variation from the design standards is necessary to achieve a creative architectural design which is compatible with the surrounding neighborhood.
- b. No other administrative variations to Article 4.6 may be permitted. ~~In no case may a~~ A variance under Article 16.3 to the requirements in this article or otherwise ~~to be granted to~~ shall not allow Middle Housing developments to be installed ~~except by Special Use application to the Planning Commission.~~

4.6.H – Reference Materials

Instances requiring interpretation of the intent and meaning of this section shall give deference to the following materials, listed in order of most definitive:

- a. Parolek, Daniel. *Missing Middle Housing: Thinking Big and Building Small to Respond to Today's Housing Crisis*. Washington, D.C. Island Press. 2020.
- b. Opticos Report, *MMH Scan™: Analysis + Barriers to Missing Middle Housing*. Prepared for Knoxville, Tennessee. 16 September 2022.
https://archive.knoxplanning.org/plans/missing_middle_housing_scan.pdf
- c. Opticos Report, *MMH Deep Dive™ Testing + Solutions for Missing Middle Housing*. If prepared for Knoxville, Tennessee.
- e. www.missingmiddlehousing.com
- e. www.opticos.com