



Department Source: Community Development - BSD

To: City Council

From: City Manager & Staff

Council Meeting Date: February 17, 2020

Re: Subdivision of two-family dwellings (duplexes)

Executive Summary

City Council requested a report at the December 16, 2019 meeting regarding the possibility of allowing the subdivision of two-family dwellings, commonly referred to as duplexes, within R-2 two-family zoning districts (also permitted with greater density in R-MF districts). Currently this is not allowed by the City's adopted Unified Development Code (UDC) or the *2018 International Residential Code (IRC)*. Community Development consulted with the Utility Department and Fire Department in the development of this report and recommends that the UDC, IRC, and utility related ordinances remain as currently codified.

Discussion

Building Concerns

The Unified Development Code defines the following two terms:

1. Dwelling, One-family Attached (also known as "Zero Lot Line," "Single-family Attached," "Semi-attached," and "Semi-detached"). A building containing two (2) or more dwelling units, attached side to side at the side lot line, that each have a separate outside entrance, and that share a common party wall on one or more sides that extends from the foundation to the top of the highest habitable story and that meets the fire resistance rating requirements for attached individual dwellings.
2. Dwelling, Two-family (also known as "Duplex"). A building used primarily as living quarters containing two (2) dwelling units situated on a single lot.

The *2018 International Residential Code* requires that dwelling units in two-family dwellings "be separated from each other by wall and floor assemblies having not less than a 1-hour fire-resistance rating." One-family attached dwellings are referred to as "townhouses" in the IRC and require double walls meeting the 1-hour fire-resistance rating (1-hour exterior wall for each unit/2-hour equivalent rating) or a common wall with a 2-hour fire resistance rating.

The fire resistance rating is defined in the *International Fire Code* as "The period of time a building element, component or assembly maintains the ability to confine a fire, continues to perform a given structural function, or both, as determined by the tests, or the methods based on tests, prescribed in Section 703 of the *International Building Code*" [Fire-resistance ratings and fire tests]

The fire resistance rating requirement can be reduced by half if the structure is equipped with a fire sprinkler system throughout the dwelling.



The IRC also requires that each individual townhouse be structurally independent. This requirement does not apply to duplexes. Furthermore, townhouse common walls are constructed without plumbing, mechanical equipment, ducts, or vents in the cavity of the common wall and only allow membrane penetrations for electrical outlet boxes. Common walls in duplexes do not meet this requirement and the 1-hour resistance rating often terminates at the ceiling. Only a draft stop which restricts the movement of air between the two sides is required in the attic of a duplex.

Staff believes that none of the above provisions associated with a townhouse can be met in existing duplexes without significant alteration of the structure. Staff also believes that there are common expectations associated with home ownership (and home financing and insurance), two of which are a minimum level of fire and structural separation from a neighbor's property.

The purpose of the 2-hour wall is to provide one-family attached dwellings with the same fire protection as two single family dwellings on separate lots. The IRC requires a minimum separation of ten (10) feet between walls which are not fire-resistance rated. The minimum side yard setback in R-1 zoning districts is six (6) feet resulting in a minimum house separation of twelve (12) feet between single family structures.

Utility Concerns

Section 22-253 of the City's Code of Ordinances addresses private common collector sewers. A private common collector sewer is defined by ordinance as a "sewer line which is not owned and maintained by a public entity and which serves two (2) or more lots, tracts, or parcels of land or two (2) or more structures under separate ownership." The Sanitary Sewer Division of the Utility Department has gone to great lengths the past several years to remove many of the private common collector sewers within the City due to maintenance and public health concerns. Many duplexes are constructed with sewer taps which were done with limited regard to their location as it relates to each side of the duplex since it is all on one lot. Therefore, in those cases, splitting each side of a duplex into a separate lot essentially creates a private common collector sewer. That would seem to be counterproductive to what the sewer division has been working to eliminate. Townhouses are constructed with a physical sewer tap of the sewer main on each lot.

Water service to duplexes involves similar issues. Depending on the configuration of the duplex, splitting it into two lots would at times result in a water service line crossing one lot to get to another due to both water meters being located together on the original lot. Townhouses are constructed with a tap of the water main and meter on each lot.

Corrections of these utility concerns would require either additional construction to separate the utilities or easements/covenants to address future maintenance issues. Staff believes these necessary changes would greatly limit the number of citizens interested in the ownership of one side of a duplex. However, nothing in the IRC, UDC, or City ordinance



prohibits a duplex to be owned solely by one property owner who lives in one-half and rents out the other half to a tenant.

In summary, it is Staff's recommendation that duplexes not be allowed to be subdivided into two individually owned units.

Fiscal Impact

Short-Term Impact: Ordinance changes could result in additional revenue generated by the platting action and/or permitting in existing duplex neighborhoods.

Long-Term Impact: None.

Strategic & Comprehensive Plan Impact

Strategic Plan Impacts:

Primary Impact: Social Equity, Secondary Impact: Not Applicable, Tertiary Impact: Not Applicable

Comprehensive Plan Impacts:

Primary Impact: Livable & Sustainable Communities, Secondary Impact: Not applicable, Tertiary Impact: Not Applicable

Legislative History

Date	Action
N/A	N/A

Suggested Council Action

Acceptance of the report.