



# CITY OF COVINGTON

## Permit Services

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### Subdivision Density and Dimension Calculations

Permit Number : \_\_\_\_\_

Application Date : \_\_\_\_\_

## PRELIMINARY SUBDIVISION WORKSHEET RELATING TO DENSITY AND DIMENSIONS

Several development regulations play a role in the creation of a subdivision within the City of Covington. Determining the allowable density, minimum density and a lot width on a piece of property can be confusing. This worksheet will assist you in correctly applying specific portions of the code and will be used to determine if a proposed subdivision or short subdivision meets the density and dimensions provisions of the Covington Municipal Code (Title 18). This worksheet is designed to assist applicants and does not replace compliance with adopted local, state and federal laws.

Worksheet prepared by: \_\_\_\_\_ Date: \_\_\_\_\_  
(print name)

Subdivision Name: \_\_\_\_\_

Comprehensive Plan Land Use Designation: \_\_\_\_\_

Zoning: \_\_\_\_\_

If more than one Comprehensive Plan Land Use designation or zone classification exists for the property, show the boundary between the land uses or zones and the area within each on the preliminary plat map. If a single lot is divided by a zone boundary, transferring density across zones on that lot may be permitted subject to the provisions of CMC 18.30.230.

### Please complete only the applicable portions of this form

#### I. Site Area (CMC 18.20.1172) also see (CMC 18.30.080):

Site area (in square feet) is the gross horizontal area of the project site, less submerged lands as defined by CMC 18.20.1265, and less areas which are required to be dedicated on the perimeter of a project site for the public rights-of-way.

\_\_\_\_\_ sq/ft in submerged land (any land below the ordinary high water mark  
see CMC 18.20.825)

+ \_\_\_\_\_ square feet in perimeter rights-of-way which will be required to be dedicated

= \_\_\_\_\_ Total

Calculation: \_\_\_\_\_ Gross horizontal area of the project site

- \_\_\_\_\_ Total submerged lands and rights-of-way

\_\_\_\_\_ Site area in square feet

NOTE: To continue calculations, convert site area in square feet to acres by dividing by 43,560

\_\_\_\_\_ Site area in acres

NOTE: When calculating the site area for parcels in the US Zone, if the site area should result in a fraction of an acre, the following shall apply: Fractions of .50 or above shall be rounded up to the next whole number and fractions below .50 shall be rounded down. Example: If the site area in acres is 19.5 acres (less the submerged land and less the area that is required to be dedicated on the perimeter of a project site for public right-of-way) the site area can be rounded up to 20 acres. No further rounding is allowed. (See CMC 18.30.080)

## **II. Base Density (CMC 18.30.030 - .040 tables):**

The base density is determined by the zone designations(s) for the lot. \_\_\_\_\_ du/acre

## **III. Allowable Dwelling Units and Rounding (CMC 18.30.070):**

The base number of dwelling units is calculated by multiplying the site area by the base density in dwelling units per acre (from CMC 18.30.030 - .040 tables).

\_\_\_\_\_ site area in acres (see Section 1.) X \_\_\_\_\_ base density (see Section II)

= \_\_\_\_\_ allowable dwelling units

Except as noted below, when calculations result in a fraction, the fraction is rounded to the nearest whole number as follows:

A. Fractions of .50 or above shall be rounded up; and

B. Fractions below .50 shall be rounded down.

NOTE: For parcels in the US Zone, no rounding is allowed when calculating the allowable number of dwelling units. For example, if the calculation of the number of dwelling units equaled 2.75, the result would be 2 dwelling units. Rounding up to 3 is not allowed. (See CMC 18.30.070(E)).

**IV. Required On-site Recreation Space (CMC 18.35.150):**

This section must be completed only if the proposal is a residential development if more than four dwelling units in the US and R zones, stand-alone townhouses in the NB zone on property designated Commercial Outside of Center if more than four units, or any mixed use development if more than four units. Recreation space must be computed by multiplying the recreation space requirement per unit type by the proposed number of such dwelling units (CMC 18.35.150). Note: The City of Covington has the discretion to accept a fee in lieu of all or a portion of the required recreation space per CMC 18.35.160.

Apartments and town houses developed at a density greater than eight units per acre, and mixed use must provide recreational space as follows:

200 square feet X _____	proposed number of studio and one bedroom units	_____
350 square feet X _____	proposed number of two bedroom units	_____ +
400 square feet X _____	proposed number of three or more bedroom units	_____ +
_____	Recreation space requirement (sq/ft)	_____ =
_____	Recreation land value at \$ _____ per sq/ft=	\$ _____
_____	Recreation play equipment (market value)	\$ _____
_____	Total	\$ _____

Residential subdivisions, townhouses and apartments developed at a density of eight units or less per acre must provide recreational space as follows:

450 square feet X \_\_\_\_\_ proposed number of units= \_\_\_\_\_

Mobile home parks shall provide recreational space as follows:

260 square feet X \_\_\_\_\_ proposed number of units= \_\_\_\_\_

**V. Net Buildable Area (CMC 18.20.797):**

This section is used for computing minimum density except in the Urban Separator zone. The net buildable area is the site area (see Section I) less the following areas:

- \_\_\_\_\_ areas within a project site which are required to be dedicated for public rights-of-way in excess of sixty (60') of width
- + \_\_\_\_\_ sensitive areas and their buffers, to the extent they are required by the City to remain undeveloped
- + \_\_\_\_\_ areas required for above ground stormwater control facilities including, but not limited to, retention/detention ponds, biofiltration swales and setbacks from such ponds and swales
- + \_\_\_\_\_ areas required by City to be dedicated or reserved as on-site recreation areas.  
Deduct area within stormwater control facility if requesting recreation space credit as allowed by CMC 18.35.150 (see Section IV)
- + \_\_\_\_\_ regional utility corridors, and
- + \_\_\_\_\_ other areas, excluding setbacks, required by the City to remain undeveloped
- = \_\_\_\_\_ Total reductions

Calculation:

$$\begin{aligned}
& \text{_____ Site area in square feet (see Section 1)} \\
- & \text{_____ Total reductions} \\
= & \text{_____ Net buildable area in square feet NOTE: Convert site area in square feet} \\
& \text{to acres by dividing by 43,560} \\
= & \text{_____ Net buildable area in acres}
\end{aligned}$$

**VI. Minimum Urban Residential Density (CMC 18.30.060):**

The minimum density requirement applies only to the R-4 through R-8 zones. Minimum density is determined by multiplying the base density in dwelling units per acre (see Section II) by the net buildable area of the site in acres (see Section V) and then multiplying the resulting product by the minimum density percentage from the CMC 18.30.030 table. The minimum density requirements may be phased or waived by the City in certain cases. (See CMC 18.30.060.)

Calculation:

$$\begin{aligned}
& \text{_____ base density in du/ac (see Section II) X Net buildable area in acres (see Section V)} \\
= & \text{_____ X minimum density \% set forth in CMC 18.30.030 or as adjusted in Section VII} \\
= & \text{_____ minimum dwelling units required}
\end{aligned}$$

**VII. Minimum Density Adjustments for Moderate Slopes (CMC 18.30.100):**

Residential developments in the R-4, R-6 and R-8 zones may modify the minimum density factor in CMC 18.30.030 based on the weighted average slope of the net buildable area of the site (see Section V). To determine the weighted average slope, a topographic survey is required to calculate the net buildable area(s) within each of the following slope increments and then multiplying the number of square feet in each slope increment by the median slope value of each slope increment as follows:

$$\begin{aligned}
& \text{_____ sq. ft 0-5% slope increment X 2.5% median slope value = _____} \\
+ & \text{_____ sq. ft 5-10% slope increment X 7.5% median slope value = _____} + \\
+ & \text{_____ sq. ft 10-15% slope increment X 12.5% median slope value = _____} + \\
+ & \text{_____ sq. ft 15-20% slope increment X 17.5% median slope value = _____} + \\
+ & \text{_____ sq. ft 20-25% slope increment X 22.5% median slope value = _____} + \\
+ & \text{_____ sq. ft 25-30% slope increment X 27.5% median slope value = _____} + \\
+ & \text{_____ sq. ft 30-35% slope increment X 32.5% median slope value = _____} + \\
+ & \text{_____ sq. ft 35-40% slope increment X 37.5% median slope value = _____} + \\
& \text{_____ Total sq/ft in _____ Total sq/ft} \\
& \text{net buildable area adjusted for slope}
\end{aligned}$$

Calculation:

$$\begin{aligned} & \text{_____ total square feet adjusted for slope divided by _____ total square feet in net buildable area} \\ = & \text{_____ weighted average slope of net buildable area} \\ = & \text{_____ \% (Note: multiply by 100 to convert to percent \& round up to nearest whole percent)} \end{aligned}$$

Use the table below to determine the minimum density factor. This density is substituted for the minimum density factor in CMC 18.30.030 table when calculating the minimum density as shown in Section VI of this worksheet.

Weighted Average Slope of Net Buildable Area(s) of Site:	Minimum Density Factor
0% -- less than 5%	85%
5% -- less than 15%	83%, less 1.5% each 1% of average slope in excess of 5%
15% -- less than 40%	66%, less 2.0% for each 1% of average slope in excess of 15%

EXAMPLE CALCULATION FOR MINIMUM DENSITY ADJUSTMENTS FOR MODERATE SLOPES:

_____ sq. ft 0-5% slope increment X 2.5% median slope value =	_____		
+ 10,000 sq. ft 5-10% slope increment X 7.5% median slope value =	750	+	
+ 20,000 sq. ft 10-15% slope increment X 12.5% median slope value =	2,500	+	
+ _____ sq. ft 15-20% slope increment X 17.5% median slope value =	_____	+	
+ _____ sq. ft 20-25% slope increment X 22.5% median slope value =	_____	+	
+ _____ sq. ft 25-30% slope increment X 27.5% median slope value =	_____	+	
+ _____ sq. ft 30-35% slope increment X 32.5% median slope value =	_____	+	
+ _____ sq. ft. 35-40% slope increment X 37.5 % median slope value =	_____	+	
<u>30,000</u> Total square feet in net buildable area	<u>3,250</u>		Total square feet adjusted for slope

$$\begin{aligned} & \frac{3,250}{30,000} \text{ Total square feet adjusted for slope divided by } \frac{30,000}{30,000} \text{ Total square feet in net buildable area} \\ = & .108333 \text{ Weighted average slope of net buildable area} \\ = & \underline{11} \% \text{ (Note: multiply by 100 to convert to percent \& round up to nearest whole percent)} \end{aligned}$$

Using the table above, an 11% weighted average slope of net buildable area falls within the 5% -- less than 15% range which has a minimum density factor of 83%, less 1.5% for each 1% of average slope in excess of 5%. Since 11% is 6% above 5%, multiply 6 times 1.5 which would equal 9%. Subtract 9% from 83% for an adjusted minimum density factor of 74%. This replaces the minimum density factor in CMC 18.30.030 table.

**VIII. Maximum Dwelling Units Allowed (CMC 18.30.030 - .040):**

This section should be completed only if the proposal includes application of residential density incentives (CMC 18.90) or transfer of density credits CMC 18.95). Maximum density is calculated by adding the bonus or transfer units authorized to the base units calculated in Section III of this worksheet. The maximum density permitted through residential density incentives is 150 percent of the base density (see Section II) of the underlying zoning of the development or 200 percent of the base density for proposals with 100 percent affordable units. The maximum density permitted through transfer of density rights is 150 percent of the base density (see Section II) of the underlying zoning of the development.

\_\_\_\_\_ base density in dwelling units per acre see (Section II) X 150% = \_\_\_\_\_ maximum density  
\_\_\_\_\_ maximum density in dwelling units per acre X \_\_\_\_\_ site area in acres = \_\_\_\_\_  
maximum dwelling units allowed utilizing density incentives (CMC 18.90)

\_\_\_\_\_ base density in dwelling units per acre (see Section II) X 200% = \_\_\_\_\_ maximum density  
\_\_\_\_\_ maximum density in dwelling units per acre X \_\_\_\_\_ site area in acres = \_\_\_\_\_  
maximum dwelling units allowed utilizing density incentives with 100 percent affordable units (CMC 18.90)

\_\_\_\_\_ base density in dwelling units per acre (see Section II) X 150% = \_\_\_\_\_ maximum density  
\_\_\_\_\_ maximum density in dwelling units per acre X \_\_\_\_\_ site area in acres = \_\_\_\_\_  
maximum dwelling units allowed utilizing density transfers (CMC 18.95)

Calculation:

\_\_\_\_\_ base allowable dwelling units calculated in Section III  
+ \_\_\_\_\_ bonus units authorized by CMC 18.90  
+ \_\_\_\_\_ transfer units authorized by CMC 18.95  
\_\_\_\_\_ total dwelling units (cannot exceed maximum calculated above)

**IX. Minimum Lot Area For Construction (CMC 18.30.120):**

Except as provided for non-conformances in CMC 18.85:

A. In the US and R zones, no construction shall be permitted on a lot that contains an area of less than 2,500 square feet or that does not comply with the applicable minimum lot width, except for townhouse developments, zero-lot-line subdivisions, or lots created prior to February 2, 1995, in a recorded subdivision or short subdivision which complied with applicable laws.