

## CHAPTER 17.20

### DESIGN AND CONSTRUCTION

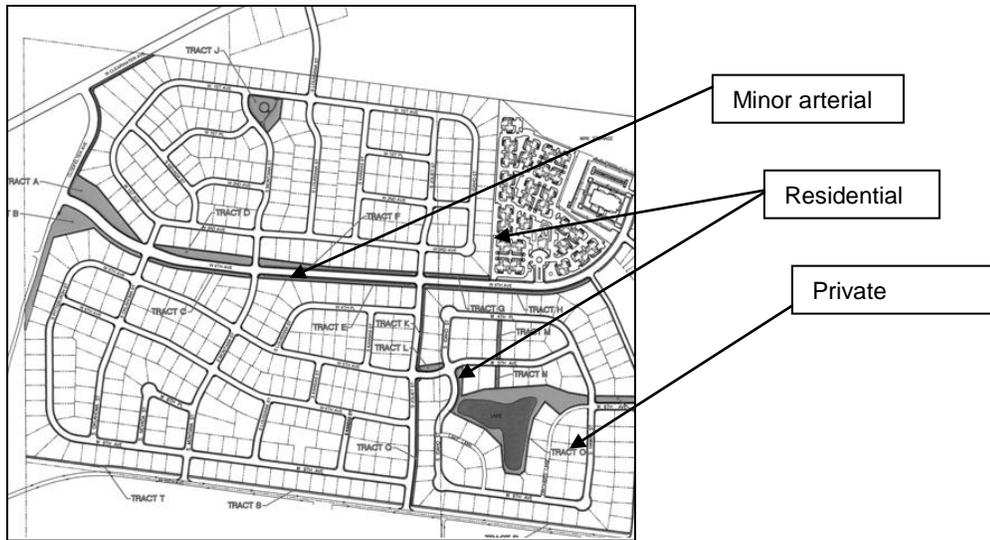
#### SECTION:

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**17.20.005: Application of Chapter:** This Chapter applies to all divisions of land unless otherwise specifically provided herein. (Ord. 5280 Sec. 1, 2010)

**17.20.010: Design and Construction Standards:**

- (1) Overall Design Aspects.
  - (a) Single-family platting and design must be in conformance with Chapter 18.75; commercial land platting and design must be in conformance with Chapter 18.78;
  - (b) The layout of a subdivision should be responsive to the topography and other natural features existing on site. It should cause as minimum an impact as possible in terms of grading and removal of existing mature vegetation.
- (2) Streets. The street layout in a subdivision shall have a hierarchical design and efficient circulation system. Street layout in a subdivision must be designed for “street connectivity between neighborhoods,” be “pedestrian friendly,” and “promote function, safety and aesthetics with minimum adverse environmental impact” as stated in the City of Kennewick Comprehensive Plan.



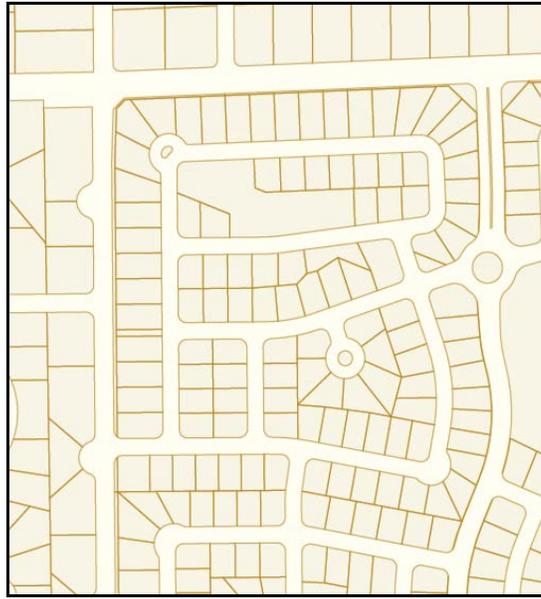
- (a) Residential streets should be less than twelve hundred feet (1200') in continuous uninterrupted length and shall be designed with curves and changes in alignment as measures for traffic calming. Street network design shall be considered in such a way as to discourage cut-through traffic. Other traffic calming measures may be required or approved by the Traffic Engineer;
- (b) The arrangement of streets in a division must conform, as nearly as possible, to the adopted Comprehensive Plan, or to any adopted street plan for the City;
- (c) Streets shall normally continue as an extension of existing streets, unless good site planning dictates a different solution. Street patterns must take into consideration access to adjacent properties. Sketches of a proposed street system for adjoining properties may be required if owned by the subdivider, or if the arrangements of the large tracts make it necessary to provide future access through the property under consideration.
  - (i) A residential development that is served by a single city standard street over six hundred feet (600') in length (as measured from the point where two required access streets are not present) must have a second city standard street.
  - (ii) All developments shall include street connections to any streets that abut, are adjacent to, or terminate at the development site.
  - (iii) When feasible, developments should include streets that extend to undeveloped or partially developed land that is adjacent to the development site, unless separated from the development site by an irrigation canal, easement, or other site condition. The streets should be in locations that will enable adjoining properties to connect to the proposed development's street system.
- (d) In lands identified in the adopted Southridge Subarea Plan, preliminary plats may be applied for containing any number of lots with only one entry-street; however, final plats will be approved only if:
  - (i) The number of lots within the final plat do not exceed three hundred (300); and

- (ii) The final plat is provided with an approved second emergency vehicle access (constructed to a standard approved by the City Engineer), or each dwelling within the final plat is equipped with an International Fire Code (IFC) or equivalent approved sprinkler system that is installed and operable prior to final occupancy of said dwelling.
- (e) Streets shall be planned to channel traffic onto major and secondary streets;
- (f) Dead-end streets and cul-de-sacs shall be permitted only where topography or other site conditions justify their use;
  - (i) Dead-end streets and cul-de-sacs shall not exceed six hundred (600) feet in length.
  - (ii) If a dead-end street is permitted, a temporary turnaround shall be provided if required by the City Engineer or Fire Marshal. If the turnaround includes some private property, the turnaround right-of-way shall be protected by an easement, until the street is extended;
  - (iii) Clearly defined and identifiable pedestrian connections shall be provided from all dead-end streets and cul-de-sacs to the nearest existing or proposed public way;

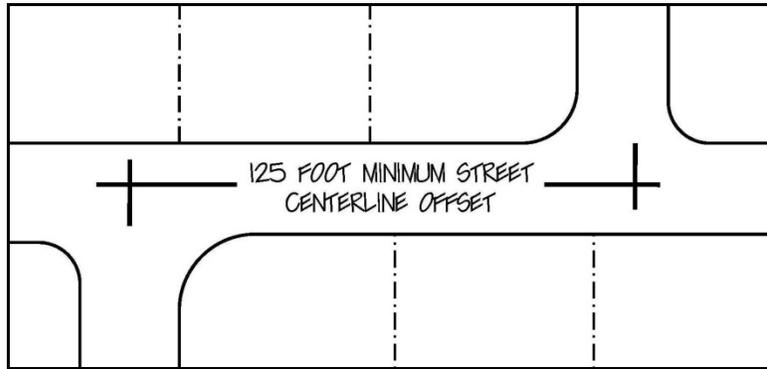
Undesired layout with cul-de-sacs



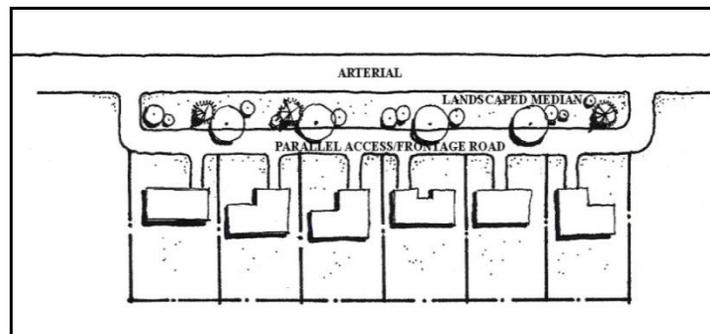
## Preferred layout with street connectivity



- (g) Half Streets: Streets lying along the boundary of a division may be one-half the required width, if it is practicable to require the dedication of the other half when the adjoining property is subdivided; and, wherever there exists a dedicated half street of an adjoining division, the other half must be dedicated on the proposed division;
- (h) If determined by the City Engineer, half street improvements will be required on existing streets where the subdivision abuts such existing street(s). Half street improvements shall be constructed per the latest City of Kennewick Standards and will include Streetlight(s), Storm System, and Traffic Control.
- (i) Sidewalks shall be provided according to the applicable City Standards. Walkways and sidewalks shall create a network of connections with nearby open space, parks, schools, and other civic and retail amenities;
- (j) Street names shall be assigned by the City in accordance with KMC 13.08 and KAC 13-56;
- (k) Under normal conditions, streets must intersect, as nearly as possible, at right angles. The minimum angle of intersection is eighty (80) degrees unless specifically allowed by the Traffic Engineer;
- (l) Residential streets shall be aligned at the centerline or be offset a minimum of one hundred twenty-five (125) feet while intersections with arterial or collector streets shall have a minimum centerline offset of three hundred (300) feet, unless specifically waived by the City Traffic Engineer;

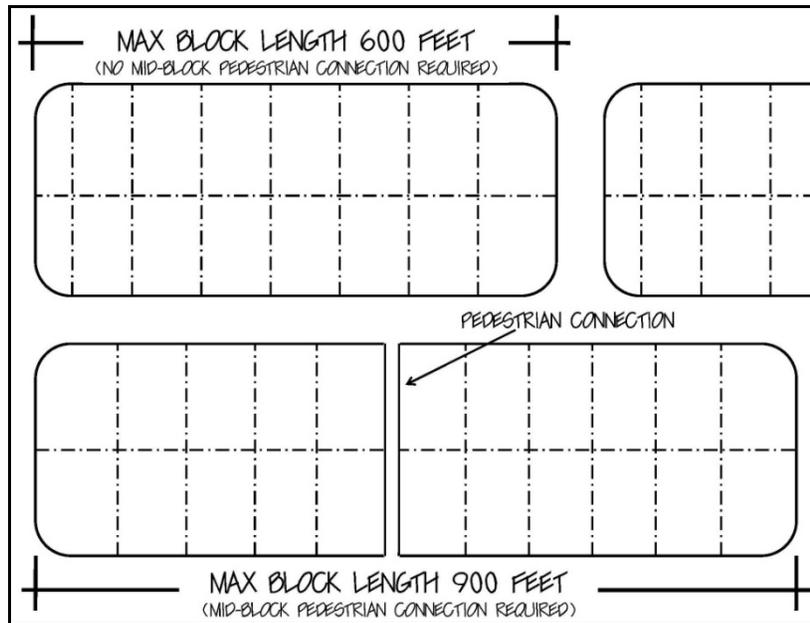


- (m) Whenever the proposed division contains, or is adjacent to, a railroad right-of-way, or the right-of-way of a limited access highway, freeway, arterial, or collector street, a frontage road at a distance appropriate for the proposed use of land between the right-of-way and the frontage road may be required. The distance shall be determined with due consideration for future grade separations and required lot depths. This frontage road needs not be a public street but must contain adequate drainage and lighting, and must be constructed to acceptable industry standards. Lots must abut and face this frontage road. An access easement may be required for the frontage road;

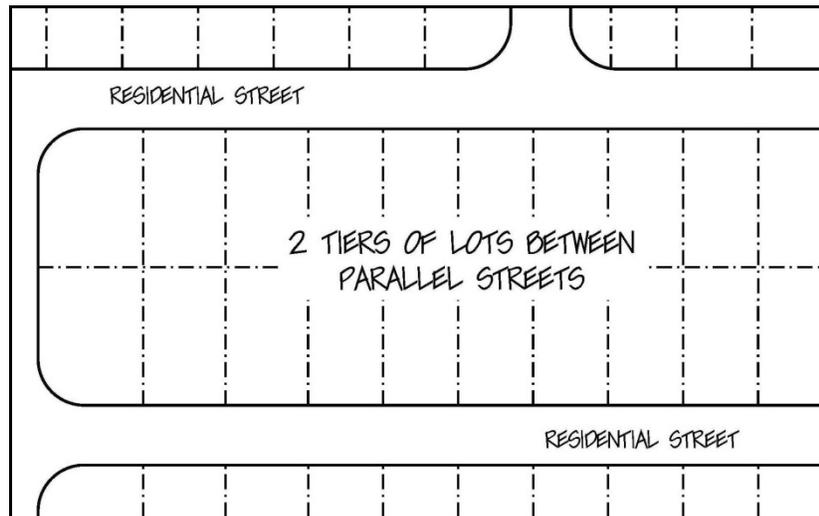


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- (n) City standard monuments shall be installed and permanently marked with the land surveyors registration number at all street centerline intersections and at all points of curvature tangency and centerline deflection, unless otherwise determined by the City Engineer.
- (3) Blocks:
- (a) Blocks shall be no longer than nine hundred (900) feet unless topography, abutting development, existence of irrigation canals, critical areas, or other site features prohibit such or the block abuts an arterial or collector street. In such cases, the proposed layout must be approved by the City;
- (b) Clearly defined and identifiable pedestrian connections shall be provided within blocks when the length of a block is more than six hundred (600) feet. Alternative designs that provide pedestrian connectivity within the subdivision may be permitted by the Plat Administrator (Administrator);



- (c) Blocks shall allow for two tiers of lots between parallel streets unless abutting an arterial or collector street. Exceptions may be allowed if site features dictate their necessity. All exceptions shall be reviewed and approved by the Administrator and Traffic Engineer.



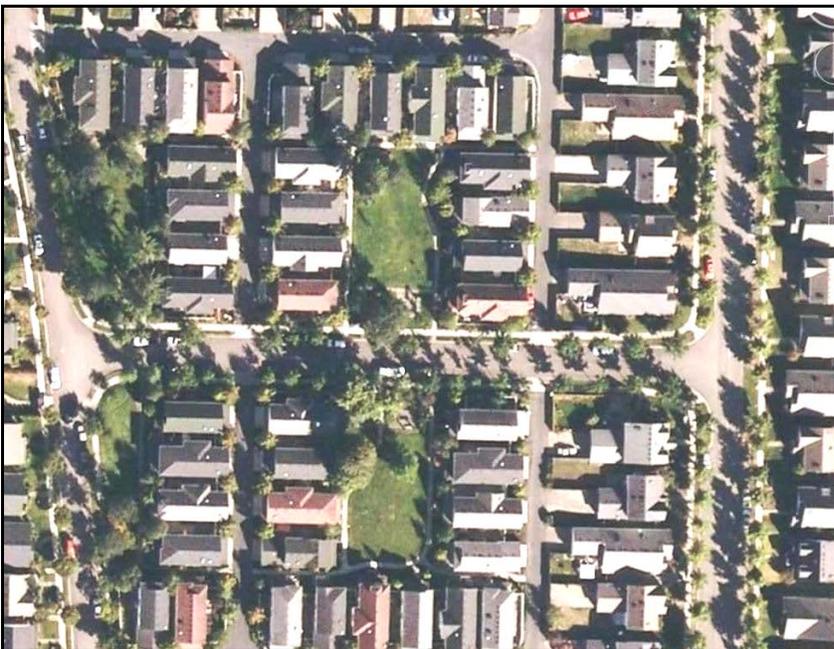
- (4) Lots:
- Residential lots having more than one abutting street shall be ten percent (10%) larger in area and wider than the minimum required by the zoning district in which located to allow for adequate setbacks;
  - Side lines of lots should be approximately at right angles or radial to the street.
  - Lots with double frontage, with the exception of corner lots, shall be avoided wherever possible;
  - Lots shall not have direct driveway access onto arterial or collector streets unless approved by the Traffic Engineer;

- (e) All residential lots shall abut a dedicated street for at least thirty feet (30') unless developed with townhomes or rowhouses, then twenty feet (20'), however, lots developed in accord with applicable sections of Chapter 18.75 or abutting a frontage road as indicated in 17.20.010(2)(l) need not abut a dedicated street;
  - (f) Prior to division approval, all lot corners shall be marked by a five-eighths inch (5/8") diameter iron rod firmly driven into the ground to a depth of at least twenty-four (24) inches. The land surveyor shall certify on the plat that the corners have been staked. Where lot corner markers are not evident, and prior to issuance of any building permit for construction within the division, a certified statement from a professional land surveyor must be submitted to the Building Inspector, stating that all corners of the property proposed for construction are marked by an iron pin firmly driven into the ground to a depth of at least twenty-four (24) inches.
- (5) Tracts:
- (a) Tracts shall be called out on the face of the plat with notes indicating their intended use and whether said tracts are to be dedicated to a municipal corporation or school;
  - (b) Tracts may be used to preserve open space and environmentally sensitive areas per KMC Chapter 17.24;
  - (c) When a tract is to be subdivided into larger than normal lots or parcels, the parcels shall be so arranged as to permit the logical re-subdivision and opening of future streets with provision for adequate utility connections.
- (6) Parks and Open Space:
- (a) Subdivisions that abut public or private parks or usable public open spaces shall have the frontage of the lots facing the park or open space. The Administrator may approve deviations from this standard if it can be shown that a different design can better promote the safety and welfare of the community;

Lots facing open space



Lots fronting open space. Vehicular access from alleys



- (b) Private parks and open spaces shall have physical and/or visual access from the public right-of-way unless restricted by the specific subdivision conditions. The Administrator may approve deviations from this standard if it can be shown that a different design can better promote the safety and welfare of the community;
- (c) Existing private and public easements of significant size and location shall be integrated into subdivisions as appropriate open space where possible. Subdivisions containing or abutting natural open spaces shall provide visual,

and in some cases, pedestrian access to the natural open space area. Specific standards applicable to natural resource areas can be found in KMC 17.24. (Ord. 5646 Sec 1, 2016: Ord. 5539 Sec. 1, 2014: Ord. 5415 Sec. 40, 2012: Ord. 5365 Sec. 1, 2011: Ord. 5280 Sec. 1, 2010)

**17.20.020: Street Lights and Underground Utilities:** Street lights must be installed by the developer to the approval of the City and the Benton PUD. New electrical, telephone, cable TV, and other utility lines must be placed underground, except:

- (1) Electric utility substations, pad-mounted transformers and switching facilities, and electric service pedestals;
- (2) Electric transmission systems of a voltage of 55 KV, or more;
- (3) CATV pedestals, active and passive devices, including amplifiers and cable warning signs;
- (4) Telephone pedestals, cross-connect terminals, repeaters, and cable warning signs;
- (5) Street-lighting standard;
- (6) Traffic-control equipment;
- (7) Temporary services for construction;
- (8) Existing overhead electrical and communication lines which are not in substantial conflict with the final, approved design such that they would render lots or streets unusable;
- (9) Existing main feeder lines which are relocated; and
- (10) Future electrical and communication main feeder lines, unless congestion of overhead utility lines detract from the value of the area. Placement of above-ground pedestals and cabinets installed under these exceptions shall conform to the sight distance requirements contained under KMC 13.12.020 and 18.27.060. (Ord. 5280 Sec. 1, 2010)

**17.20.030: Utility Easements:**

- (1) All design and construction of roads and City utilities must be in accord with City standards. See KMC 5.56. Other utilities must conform to recognized standards of their respective industry;
- (2) Public easements for the construction and maintenance of utilities and public facilities shall be granted to provide and maintain adequate utility service to each lot and adjacent lands. Such easements shall not be required for lots where public right-of-ways are used for such purpose;
- (3) Land developers should submit proposed divisions to the various utilities prior to submittal to the City to rectify any easement problems and to allow time for comment. Utility distribution lines are to be located in the alleys. Where alleys are not provided, easements for public utilities shall be provided along lot lines or where franchise agreements, or license agreements provide, or in public right-of-ways. The subdivision shall reserve a strip of land along public streets according to the street standard specification drawings lying adjacent to each exterior side of all dedicated public rights-of-way included in any plat. Said lands shall be recorded as public easements and used primarily for the installation of required service utilities. Any and all franchised utilities, including City utilities, shall rightfully have access to and may use easements. Exclusive use rights shall not be granted to any single or combination of utilities. Easements can be used for landscaping and street trees as approved by the City. No construction other than those required by the utility providers shall be allowed within the easement. Easement width can be changed as approved by the City

Engineer when certain topographic constraints exist on the site. The Administrator and City Engineer may approve deviations to these requirements when circumstances require;

(4) Easements for utility mains or lines shall be held to prohibit the placement of any building on or over the easement, but shall not preclude landscaping of an appropriate variety as determined by the City. Restoration shall be required of the site following any excavation or other disturbance permitted by the easement;

(5) When there is a need to use a stream for storm water control purposes, public improvement and maintenance easements shall be provided for storm drainage. When possible, said easements shall be located along the centerlines of such facilities;

(6) Additional drainage easements for storm sewers or open-channel ditches may be required if storm drainage cannot practically be carried under the streets, in existing easements or in other rights-of-way. (Ord. 5646 Sec. 2, 2016; Ord. 5415 Sec. 41, 2012; Ord. 5280 Sec. 1, 2010)

**17.20.040: Fencing:** Fencing must conform to KMC 18.75 whenever a residential subdivision abuts a state highway or city street. Fencing in commercial zones must conform with KMC 18.78. (Ord. 5415 Sec. 42, 2012; Ord. 5280 Sec. 1, 2010)

**17.20.050: Dust Control:** Applicants must contact the Benton Clean Air Authority for approved dust control measures during construction. (Ord. 5280 Sec. 1, 2010)

**17.20.060: Provisions for Irrigation:** Irrigation facilities must be provided to every lot within any proposed division. Facilities must be installed in the same manner and time as other utilities in accord with standards approved by the City Engineer. Exceptions can be made to accommodate the public health, safety, and welfare. (Ord. 5280 Sec. 1, 2010)

**17.20.070: Control of Debris and Waste:** Debris may not collect for more than one week during construction and must be removed prior to acceptance. Debris must be kept from adjacent properties. Concrete truck washout, chemicals, litter, and sanitary waste at the construction site must not enter the City's storm drainage facilities. (Ord. 5280 Sec. 1, 2010)

**17.20.080: Installation of Traffic Control Devices and Street Name Signs:** The subdividers must construct and install traffic control devices and street name signs to City specifications and standards within the division. (Ord. 5280 Sec. 1, 2010)