

SECTION 10 MINIMUM DESIGN STANDARDS

No subdivision plat shall be approved unless it conforms to the following minimum requirements.

10.1 General:

Land which the Planning Commission and the County Board have found to be unsuitable for subdividing due to flooding, bad drainage, steep slopes, rock formation, or other features likely to be harmful to the safety, welfare or health of the future residents, shall not be subdivided unless adequate methods for subdivision are formulated by the developer and approved by the Planning Commission and County Board.

10.2 Streets and Alleys:

10.2.1 The arrangements, classification, extent, width, grade and location of all streets and roads shall conform to the Comprehensive Plan and shall be designated in relation to existing and planned streets, topographic conditions, public convenience and safety, and the proposed uses of the land to be served by such streets.

10.2.2 Where such is not shown in the Comprehensive Plan, the arrangement of streets in a subdivision shall either:

10.2.2.1 Provide for the continuation or appropriate projection of existing principal streets in surrounding areas; or

10.2.2.2 Conform to a plan for the neighborhood approved or adopted by the Board to meet a particular situation where topographical or other conditions make continuance or conformance to existing streets impracticable.

10.2.3 Minor streets shall be so laid out that their use by through traffic will be discouraged.

10.2.4 Where a subdivision abuts or contains an existing or proposed major street or highway, the Board may require reverse frontage lots with rear service alleys abutting the major street or highway, or such other treatment as may be necessary for adequate protection of residential properties and for separation of through and local traffic.

10.2.5 Where a subdivision borders on or contains a railroad right-of-way, the Board may require a street approximately parallel to and on each side of such right-of-way, at a distance suitable for the appropriate use of the intervening land. Such land would be approximately used for park purposes in residential districts, or for commercial or industrial purposes in nonresidential districts. Such distances shall be determined with due regard for the requirements of approach grades or future grade separations.

10.2.6 Reserve strips in private ownership controlling access to streets shall be prohibited.

10.2.7 Intersections with centerline offsets of less than one hundred and fifty (150) feet shall be avoided.

- 10.2.8 A tangent of at least one hundred (100) feet long shall be introduced between reverse curves on major and collector streets.
- 10.2.9 When connecting street lines deflect from each other at any one point by more than ten (10) degrees, they shall be connected by a curve with a radius adequate to insure a sight distance of not less than four hundred (400) feet for collector streets, and of such greater or lesser radius as the Planning Commission shall determine for special cases.
- 10.2.10 Streets and roads shall be laid out so as to intersect as nearly as possible at right angles and no street shall intersect any other street at less than sixty (60) degrees.
- 10.2.11 Curb radius on all block corners shall be sixteen (16) feet and a ten (10) foot radius shall be used at intersections of driveways and alleys.
- 10.2.12 Half streets shall be approved only by Board .
- 10.2.13 The right-of-way widths, pavement widths (back to back of curb), street grades, and the sight-distances for streets and alleys in any subdivision shall not be less than the minimum dimensions nor more than the maximum grades as on the minimum design standard table at the end of this section (Table 10-1).

10.2.14 The horizontal alignment on all streets except in unusual cases shall be as follows:

Other Arterial Streets	700' Minimum
Collector Streets	300' Minimum
Local Streets	100' Minimum
Cul-de-sacs	100' Minimum

- 10.2.15 No road or street grade shall be less than one-half (½) of one (1) percent.
- 10.2.16 Flatter grades are preferred from fifty (50) to one hundred (100) feet from an intersection, but in no case shall grades exceed four (4) percent for a distance of at least fifty (50) feet from an intersection.
- 10.2.17 Dead-end roads and streets as permanent features shall be prohibited.
- 10.2.18 General Considerations:
 - 10.2.18.1 Intersection of more than two (2) roads or streets at a point shall not be permitted.
 - 10.2.18.2 Alleys shall be discouraged in residential districts but may be provided in commercial and industrial districts.
- 10.2.19 Other rights-of-way easements:

- 10.2.19.1 Easements for utility rights-of-way shall be not less than ten (10) feet in width and wherever possible shall be provided along the rear and side property lines.
- 10.2.19.2 Pedestrian walks shall be at grades no greater than the adjacent street grades.
- 10.2.19.3 Where a subdivision is traversed by a water course, coulee, drainage way, channel, or stream, there shall be provided a minimum storm water easement or drainage right-of-way of one hundred (100) feet, conforming substantially with the lines of such water course, and such further width for construction and water flow or both that will be adequate for such purpose. Parallel streets, parkways, walkways, culverts, or bridges may be required in connection with such drainage easement.

10.3 Blocks:

- 10.3.1 Block length shall not exceed 800 feet. The length of blocks shall be considered to be the distance from street centerline to opposite street centerline and shall be measured through adjacent back lot lines or through the center of the block. In cases of irregular-shaped blocks, the requirements shown herein may be waived by the Planning Commission. This standard may be waived for rural/acreage subdivisions.
- 10.3.2 Pedestrian crosswalks not less than ten (10) feet wide may be required in blocks longer than five hundred (500) feet where such crosswalks are deemed by the Board to be essential to provide circulation, or access to schools, playgrounds, shopping centers, transportation or other community facilities.
- 10.3.3 The width of blocks shall generally be sufficient to allow two (2) tiers of lots and be at least two hundred forty (240) feet in width. In cases of irregular-shaped blocks, the minimum width may be waived by the Board .
- 10.3.4 Blocks intended for business and industrial use should be specifically designated for such purposes with adequate space set aside for off-street parking and delivery facilities. The Board may require service drives or frontage access roads along major streets for business or industry.
- 10.3.5 Where frontage is on a major or collector street, the long dimensions of the block should front thereon.

10.4 Lots:

- 10.4.1 Lot dimensions and area for lots shall conform to the requirements of the Zoning Regulations.
- 10.4.2 The platting of lots for commercial and industrial purposes should include adequate space for off-street parking and service areas.

- 10.4.3 Satisfactory access from a public street shall be provided for all lots.
- 10.4.4 Double frontage and reverse frontage lots shall be avoided where possible.
- 10.4.5 Corner lots shall be of extra width sufficient to maintain building lines on both streets.
- 10.4.6 Side lot lines shall be approximately at right angles or radial to street lines.
- 10.4.7 Excessive depth in relation to width of lots over a ratio of three-to-one shall be avoided.
- 10.4.8 Every lot shall abut and have access to a public street except where the lot or site abuts an access easement.

Table 10-1

MINIMUM DESIGN STANDARDS FOR RURAL ROADS AND HIGHWAYS (All streets and roads will meet State of Nebraska, Board of Public Roads standards)									
Roadway Classification	Design Year ADT	Design Year DHV	Design Speed (MPH) min.	Max Curve (Deg.)	Max Grade (%)	No. of Lanes Min	Lane Width Ft. – Min	Right-of-Way (feet)	Surfacing Type Min
Interstate			75	3.0	3	4 Divided	12	300'	Hard
Expressway			75	3.0	3	4 Divided	12	300'	Hard
Major Arterial		Over 750	70	3.5	4	4 Divided	12	150'	Hard
Major Arterial		350-750	70	3.5	4	2	12		Hard
Major Arterial		180-350	70	3.5	4	2	12		Hard
Major Arterial	Over 800	Under 180	70	3.5	4	2	12		Hard
Major Arterial	400-800		65	4.5	5	2	12		Hard
Major Arterial	250-400		65	4.5	6	2	12		Hard
Major Arterial	180-250		50	7.5	7	2	11		Hard
Major Arterial	Under 180		40	7.5	7	2	11		Hard
Other Arterial		Current ADT	Design Speed (MPH) min.	Max Curve (Deg.)	Max Grade (%)	No. of Lanes Min	Lane Width Ft. – Min	Right-of-Way (feet)	Surfacing Type Min
Other Arterial		401-750	50	7.5	7	2	12	100'	Agg.
Other Arterial		251-400	50	7.5	7	2	11		Agg.
Other Arterial		51-250	50	7.5	7	2	10		Agg.
Other Arterial		0-50	40	8.0	8	2	10		Agg.
Other Arterial		251-400	50	7.5	7	2	11	70'	Agg.
Other Arterial		51-250	50	7.5	7	2	10		Agg.
Other Arterial		0-50	40	10.0	9	2	10		Agg.
Other Arterial		251-400	50	7.5	7	2	11	66'	Agg.
Other Arterial		51-250	50	7.5	7	2	10		Agg.
Other Arterial		0-50	30	23.0	10	2	10		Agg.

Table 10-1

MINIMUM DESIGN STANDARDS FOR URBAN STREETS (All streets and roads will meet State of Nebraska, Board of Public Roads standards)									
Roadway Classification	Design Year ADT	Design Speed (MPH) Min.	Max Curve (Deg)	Max Grade (%)	No.of Lanes Min	Lane Width Ft. Min	Right-of Way (feet) Min	Should Width (feet) Min	Surfacing Type Min
Major Arterial *	***	50	7	7	2	12	100'	8'	Hard
Other Arterial (including all section line roads)	*** 3,000 +	30	15	8	4	11	70'	8'	Concrete w/curb & gutters
Collector *	500-2,000	25	20	10	3	12.5	70'	6'	Concrete w/curb & gutters
Local	200-500	25	30	10	2	12.5	50'	6'	Concrete w/curb & gutters
Alleys	N/A	15	30	15	1	10	20'	6'	Concrete w/curb & gutters
Cul-de-sac Street **	0-200	15	30	10	2	25	110'	4'	Concrete w/curb & gutters

* Streets in these classifications shall be designed and graded to full right-of-way widths stated.

** Cul-de-sac streets shall have a right-of-way diameter of 110 feet at their terminal end, a pavement turn around diameter of 80 feet, and a maximum length of 600 feet.

*** Design should be based on 1200 V.P.H. per lane in design year, or 250-500 V.P.H. per lane in design year where cross and turning traffic is sufficiently great to require signal control. "Design Year" shall be year of initial construction plus 20 years.

Note: "Design Year" shall be year of initial construction plus 20 years.

Source: Minimum Design Standards of the State of Nebraska Board of Public Roads.