



CITY OF RAPID CITY

RAPID CITY, SOUTH DAKOTA 57701-2724

PLANNING DEPARTMENT

300 Sixth Street

Blaise Emerson
Assistant Planning Director
city web: www.ci.rapid-city.sd.us

Phone: 605-394-4120
Fax: 605-394-6636
e-mail: blaise.emerson@ci.rapid-city.sd.us

MEMORANDUM

TO: Planning Commission

FROM: Blaise Emerson, Assistant Planning Director

DATE: August 29, 2001

RE: Sight Triangles

A sight triangle is a term used to define a window of visibility on a street corner that allows for the safe operation of vehicles, bicycles, and pedestrians through the intersection. In reviewing the Rapid City Municipal Code, Staff has noted that there are a number of different references relating to sight triangles. Many of the references have different standards for calculating a sight triangle. These differences have caused confusion on which sight triangle is applicable depending on the situation.

Throughout the Code, a sight triangle is defined by two equal length legs of a triangle (i.e. seventy foot by seventy foot). This type of sight triangle requirement does not take into specific consideration many of the factors impacting sight distance including the type of intersection (controlled or uncontrolled), the speed of traffic, or the type of road design. The American Association of State Highway and Transportation Officials (AASHTO) has developed sight triangle standards that are based on the type of intersection, road configuration, and speed of traffic. The Zoning Board of Adjustment has routinely granted variances to the sight triangle requirements in the parking and landscaping regulations when the American Association of State Highway and Transportation Officials (AASHTO) standards for sight triangles was being maintained.

To eliminate the duplication and varying requirements throughout the Rapid City Municipal Code, Staff is recommending that an Ordinance Amendment be authorized to revise the Rapid City Municipal Code to place the requirements for sight triangles in a single location within the ordinance. Staff is requesting the Planning Commission to authorize Staff to advertise for an ordinance amendment to revise the sight triangles standards in the Rapid City Municipal Code.



EQUAL HOUSING
OPPORTUNITY

EQUAL OPPORTUNITY EMPLOYER

ORDINANCE

AN ORDINANCE AMENDING SECTION 17.50 OF CHAPTER 17 OF THE RAPID CITY MUNICIPAL CODE BY ADDING SECTIONS 17.50.335.A through I.

BE IT ORDAINED BY the City of Rapid City that Section 17.50.335.A through I be added to the Rapid City Municipal Code to read as follows:

17.50.335 - SIGHT TRIANGLES

A. DEFINITIONS:

1. Sight Triangle

Sight triangle is defined as the area of visibility required on a corner to allow for the safe operation of vehicles, trains, pedestrians, and cyclists in the proximity of intersecting streets, rail lines, sidewalks and bicycle paths.

2. Uncontrolled Intersection

An intersection with no traffic control signs (i.e., stop and yield signs)

3. Stop-Controlled Intersection

An intersection with traffic control stop signs. Alleys, private roads, and driveways intersections are considered as a stop-controlled intersections for the purpose of sight triangle requirements.

4. Yield-Controlled Intersections

An intersection with traffic control yield signs.

5. Signalized Intersections

An intersection with traffic controlled by an automated traffic signal.

6. Pedestrian Sight Triangle

A pedestrian sight triangle is the area of visibility to allow for the safe passage of a pedestrian.

7. Railroad Crossing

That area formed by the intersection of a railroad track with any street, highway, private road, driveway or alley.

B. Restrictions.

1. No obstructions to vision shall be allowed within the applicable sight triangle(s). Any object shall be deemed as an obstruction if it is located within any applicable sight triangle and the object is between two and one-half feet and ten feet above the edge of the roadway.

2. When more than one sight triangle applies to the same corner all applicable sight triangle requirements must be satisfied.

3. Set back requirements found elsewhere in this Code shall not be decreased by this Chapter.

C. Point of Measurement.

All distances herein shall be measured from the curb or, where there is no curb, from the end of the pavement or gravel, unless otherwise specified.

D. Uncontrolled Intersections.

Each uncontrolled intersection shall have a sight triangle of seventy (70) feet on each leg.

E. Stop-Controlled Intersections.

Each stop-controlled intersection shall have a sight triangle based on the speed limits of the adjoining access-ways. These distances are shown in Figure 1

F. Yield-Controlled Intersections.

Each yield-controlled intersection shall have a sight triangle of seventy (70) feet on each leg.

G. Signalized Intersections.

Signalized intersections should be considered as stop-controlled for the purpose of sight triangle requirements.

H. Pedestrian Sight Triangle.

At intersecting sidewalks or bicycle paths, and at any intersection of a sidewalk or bicycle path with a street, alley, or driveway, a ten (10) foot pedestrian sight triangle shall be maintained. Pedestrian sight triangle legs are to be measured from the intersecting edges of sidewalks or bicycle paths, and the paved or unpaved edge of a street, alley, or driveway

I. Railroad Crossings.

Each railroad crossing shall have a sight triangle and distance according to Table 15.44.040 as amended.

BE IT FURTHER ORDAINED that Sections 12.20.030 of Chapter 12.20 of the Rapid City Municipal Code be amended to read as follows:

12.20.030 Public rights-of-way--Structures prohibited--Exceptions.

No person shall erect or maintain any building, fence, sign or structure upon any public right-of-way or upon any public property. This section shall not apply to:

A. Structures erected or maintained for public purposes by the city or under its authority;

B. Mailboxes, when erected and maintained in accordance with the following standards;

1. The mailbox and supporting structure shall be set back twenty-five feet from every point of intersection of two street rights-of-way,

2. The mailbox and supporting structure shall be set at the back of the curb if there is a curb and shall be set back five feet from the nearest edge of the traveled portion of the roadway if there is no curb,

3. The mailbox and supporting structure shall not exceed five feet in height,

4. No supporting structure shall exceed three feet in greatest horizontal dimension at any point and no supporting structure shall exceed eight inches in greatest horizontal dimension at any point more than two and one-half feet above the ground; provided, however, when authorized in writing by the city engineer, the three-foot limitation may be exceeded for structures supporting clustered mailboxes, subject to all other provisions of this section,

5. The mailbox and supporting structure shall be so located that it does not create a traffic hazard, sight hindrance or other safety hazard,

6. The mailbox and supporting structure shall be removed by the owner at his sole expense at the direction of the city engineer when reasonably necessary to expedite use of the public right-of-way by the city, other governmental agencies or franchised utilities. Upon failure of the owner to remove the mailbox and supporting structure, the mailbox and supporting structure may be removed by the city or its agents and the owner shall pay the costs therefor including costs of collection;

C. Bus Stop Benches and Shelters. Bus stop benches and shelters may be installed in the public right-of-way by the city or by a person operating under contract with the Rapid City rapid transit system and in compliance with the following requirements:

1. Clear Sight Triangles. a. Bus stop benches and/or shelters may not be placed in a manner which obstructs the clear sight triangle as provided in Chapter 17.50.335. ~~zone for any street or driveway. The clear sight zone for two intersecting streets is defined as a seventy-foot triangle formed by measuring along the edge of each roadway or curb from a point identified by extending the curb or edge of roadway. Within said triangle, obstructions to vision that are between two and one-half and ten feet above the edge of the roadway shall not be permitted.~~ Shelters may be constructed within this zone if they are designed of clear plastic or glass and do not block the vision of motorists.

~~b. The clear sight zone for an intersecting street and driveway is defined as a twenty-five foot triangle formed by measuring along the edge of the driveway and the roadway or curb from a point identified by extending the driveway and curb or edge of roadway. Within said triangle, obstructions to vision that are between two and one-half and ten feet above the edge of the roadway shall not be permitted. Shelters may be constructed within this zone if they are designed of clear plastic or glass and do not block the vision of motorists.~~

2. Maintenance. Bus stop benches and shelters must be placed upon a hard surface so as to prevent sinking and unsightliness. The owner/distributor of bus stop benches must maintain the benches in a safe, attractive and repaired condition. The area around the benches or shelters must be mowed and kept free of litter.

3. Advertising. Advertising may be placed on benches commissioned by the Rapid City rapid transit system in accordance with Section 15.28.020 of this code when the proposed benches are not in or immediately adjacent to a residential, central business, park forest or general agricultural zoning district.

BE IT FURTHER ORDAINED BY the City of Rapid City that Section 15.40.080 (a) (b) (c) of the Rapid City Municipal Code be amended to read as follows:

15.40.080 Visibility at street intersections and alley and driveway entrances.

~~_____ A. _____ Visibility at any Corner Lot Where a Front and Side Yard is Required. A twenty-five foot sight triangle is required at a corner formed by the intersection of two or more public rights of way. No fence, wall, plant material or earthen berm shall be placed or maintained within the above defined clear vision zone which exceeds two and one half feet in height above the crown of the adjacent roadway.~~

~~_____ B. _____ Visibility at Alley and Private Drive Approaches. On the street side of all lots where an alley or driveway enters the street right of way, a ten foot sight triangle is required on both sides of an accessway formed by the intersection of the accessway and the public right of way. No fence, wall, plant material or earthen berm shall be placed or maintained within the above defined clear vision zone which exceeds two and one half feet in height above the crown of the adjacent roadway.~~

~~_____ C. _____ Regardless of other provisions of this chapter, no fence, wall, plant material or earthen berm shall be erected or maintained in any yard which impedes the vision of vehicles entering an abutting street.~~

No fence, wall, plant material, or earthen berm shall be placed or maintained which obstructs the required sight triangle as provided in Chapter 17.50.335 except as follows:

A fence may be allowed in the required site triangle if the fence is not more than thirty percent solid.

Trees may be allowed in the required site triangle if the tree is located more than thirty feet from the intersection of the curb lines and the trees shall have a minimum of forty feet spacing between trees; provided that the canopy of the tree is ten (10) feet or more above grade.

BE IT FURTHER ORDAINED BY the City of Rapid City that Section 17.50.230, 17.50.250, 17.50.270(F) (2), 17.50.280, and 17.50.300 of the Rapid City Municipal Code be amended to read as follows:

17.50.230 Designated.

The following uses are deemed to be temporary uses and shall also be subject to the specific regulations and time limits which follow and to the regulations of any district in which such use is located:

A. Carnival, circus, or tent that exceeds size requirements in subsections H, I, and J of this section. In any nonresidential district, a temporary use permit may be issued for a carnival, circus, or tent but such permit shall be issued for a period not longer than fourteen days. Such a use shall set back from all residential districts a distance of not less than one hundred feet.

B. Christmas Tree Sale. In any district, a temporary use permit may be issued for the display and open-lot sales of Christmas Trees, but such permit shall be issued for a period of time commencing no earlier than November 1st and ending prior to January 10th of the following year.

C. Temporary Contractor's Buildings. In any district, a temporary use permit may be issued for a contractor's temporary office and equipment sheds incidental to a construction project. Such office or shed shall not contain sleeping or cooking accommodations. Such permit shall be valid for the duration of the construction period. Such office or shed shall be removed upon completion of the construction of the structure(s).

D. Real Estate Sales Office. In any district, a temporary use permit may be issued for a temporary real estate sales office in any new subdivision which has been approved in accordance with the regulations of Rapid City. Such office shall contain no sleeping or cooking accommodations. Such permit shall be valid for that specific office only and any change in temporary office structure shall require a new permit. Such permit shall be otherwise valid for two years, but may be renewed upon expiration thereof. Such temporary sales office shall be required to maintain a twenty-foot clear zone on all sides of the office free from any structure, temporary or permanent.

E. Mobile Home Sales Office. In any district permitting mobile home sales, a temporary use permit may be used for a temporary sales office on such sales area. Such office shall contain no sleeping or cooking accommodations. Such permit shall be valid for that specific office only and any change in temporary office structure shall require a new permit. Such permit shall be otherwise valid for two years, but may be renewed upon expiration thereof. Such temporary sales office shall be required to maintain a twenty-foot clear zone on all sides of the office free from any structure, temporary or permanent.

F. Temporary Trailer Parks or Campgrounds.

1. In any nonresidential or general agricultural district, a temporary use permit may be issued for a period not to exceed thirty days for a temporary trailer park or campground provided such use is required to serve a special event and the following requirements are met:

- a. A minimum area of one thousand square feet of area per campsite will be provided;
- b. Sanitary facilities will be provided at a ratio of one toilet for every ten campsites;
- c. Approved dumpsters or trash receptacles for the collection and removal of trash shall be provided;
- d. There will be no open fires;
- e. Full emergency vehicle access to all portions of the campground or trailer park shall be maintained;
- f. One twenty-four hour security guard shall be provided for every fifty campsites, or fraction thereof, in campgrounds or trailer parks which exceed twenty-five campsites.

2. For purposes of this subsection, a special event shall be defined as any event occurring within the city, county or a neighboring county which the city council recognizes as such by resolution.

3. A permit shall be required whenever a gathering of fifteen or more persons for a period exceeding thirty-six hours is proposed. The permit fee shall equal seventy-five dollars.

4. A campsite shall contain a maximum of ten persons.

G. Seasonal Greenhouse or Garden Shop. In any nonresidential zoning district, a temporary use permit may be issued for a seasonal greenhouse or garden shop, but such permit shall be issued for a period of not longer than ninety days. Seasonal greenhouses and garden shops are exempt from any maximum floor area requirement. Seasonal greenhouses or garden shops shall conform to the clear sight triangle, setback and parking requirements of subsection I of this section.

H. Other Temporary Retail Business or Structure. In shopping center 1 (SC-1), shopping center 2 (SC-2), general commercial (GC) and neighborhood commercial (NC) zoning districts licenses may be issued to the operator of a fourteen-day temporary business in accordance with the following provisions:

1. Temporary structures may not exceed two hundred square feet in floor area nor exceed fifteen feet in height.

2. All temporary businesses or structures must provide proof that the requirements of the Rapid City Municipal Code, South Dakota Department of Revenue, South Dakota Department of Health, South Dakota Electrical Code and the South Dakota State Plumbing Code for licensing, plumbing and electrical are being met.

3. A temporary use or structure may occupy a development lot for not more than fourteen days and shall vacate the lot for a period of one hundred and eighty days.

4. The fee for a temporary business or use permit is fifty dollars.

Businesses participating in a craft fair or festival or a flea market regulated under Chapter 5.32 of this code are exempt from the temporary use license fee.

5. All temporary structures shall contain approved toilet facilities or shall have contracted with the owners of permanent toilet facilities within three hundred feet for employee access to the facilities. Operations that include prepared foods or beverages shall provide or have contracted for access to approved toilet facilities by customers of the business.

6. All temporary structures and displays shall be located outside of clear sight triangles ~~as provided in Chapter 17.50.335. at streets, alleys and driveways. The leg of a clear sight triangle along a public street shall be seventy feet in length. The leg of a clear sight triangle along an alley or driveway shall be twenty-five feet in length.~~

7. All temporary structures and displays shall be located outside of the front yard setbacks.

8. All temporary business operators shall provide a minimum of two off-street parking spaces. Additional parking may be required upon review by the planning director in accordance with Section 17.50.270(E) of this code. Access to and circulation upon the site shall be subject to review. The temporary use or parking may not occupy an area required for parking for another use.

9. Each temporary business may display one sign to advertise the business. The sign shall be in compliance with the Rapid City sign code, except that the sign may be no larger than eight square feet.

I. Other Seasonal Retail Business or Structure. In shopping center 1 (SC-1) and shopping center 2 (SC-2) zoning districts and on general commercial (GC) zoned developmental lots with a minimum of twenty-five thousand square feet of paved parking, licenses may be issued to the operator of a seasonal retail business or structure following the approval of a use on review. A seasonal retail business or structure may occupy a developmental lot for not more than three months in accordance with the following provisions:

1. Seasonal retail structures may not exceed two hundred square feet in floor area nor exceed fifteen feet in height.

2. All seasonal retail businesses or structures must provide proof that the requirements of the Rapid City Municipal Code, South Dakota Department of Revenue, South Dakota Department of Health, South Dakota Electrical Code and the South Dakota State Plumbing Code for licensing, plumbing and electrical are being met.

3. A seasonal retail business or structure shall occupy a developmental lot for not more than ninety days and shall vacate the lot for a period of one hundred eighty days.

4. The fee for a seasonal retail business or structure permit is fifty dollars.

5. All seasonal retail businesses or structures shall contain approved toilet facilities or shall have contracted with the owners of permanent toilet facilities within three hundred feet

for employee access to the facilities. Operations that include prepared food or beverages shall provide or have contracted for access to approved toilet facilities by customers of the business.

6. All seasonal retail structures and displays shall be located outside of clear sight triangles ~~as provided in Chapter 17.50.335. at streets, alleys and driveways. The leg of a clear sight triangle along a public street shall be seventy feet in length. The leg of a clear sight triangle along an alley or driveway shall be twenty-five feet in length.~~

7. All seasonal retail structures and displays shall be located outside of the front yard setbacks.

8. All seasonal retail business or structure operators shall provide a minimum of two off-street parking spaces. Additional parking may be required upon review by the planning director in accordance with Section 17.50.270(E) of this code. Access to and circulation upon the site shall be subject to review. The seasonal retail business or structure or parking may not occupy an area required for parking for another use.

9. Each seasonal retail business or structure may display one sign to advertise the business. The sign shall be in compliance with the Rapid City sign code, except that the sign may be no larger than eight square feet.

J. Other Continuous Retail Business or Structure. In shopping center 1 (SC-1) and shopping center 2 (SC-2) zoning districts and on general commercial (GC) zoned developmental lots with a minimum of twenty-five thousand square feet of paved parking, licenses may be issued to the operator of a year-round retail business or structure not able to meet the Uniform Building Code, as adopted, following the approval of a use on review. A continuous retail business or structure may occupy a developmental lot in accordance with the following provisions:

1. Structures may not exceed two hundred square feet in floor area nor exceed fifteen feet in height.

2. All continuous retail businesses or structures must provide proof that the requirements of the South Dakota Department of Revenue, South Dakota Department of Health, South Dakota Electrical Code and the South Dakota State Plumbing Code for licensing, plumbing and electrical are being met.

3. The fee for a continuous retail business or structure permit is fifty dollars.

4. All continuous retail businesses or structures shall contain approved toilet facilities or shall have contracted with the owners of permanent toilet facilities within three hundred feet for employee access to the facilities. Operations that include prepared food or beverages shall provide or have contracted for access to approved toilet facilities by customers of the business.

5. All continuous retail structures and displays shall be located outside of clear sight triangles ~~as provided in Chapter 17.50.335. at streets, alleys and driveways. The leg of a clear sight triangle along a public street shall be seventy feet in length. The leg of a clear sight triangle along an alley or driveway shall be twenty-five feet in length.~~

6. All continuous retail businesses shall be located outside of the front yard setback.

7. All continuous retail structures shall be anchored to safeguard against movement from high winds or floodwaters in accordance with plans prepared by a professional engineer and approved by the city building official.

8. All continuous retail business or structure operators shall provide a minimum of two off-street parking spaces. Additional parking may be required upon review by the planning director in accordance with Section 17.50.270(E) of this code. Access to and circulation upon the

site shall be subject to review. The continuous retail business or structure or parking may not occupy an area required for parking for another use.

9. Each continuous retail business or structure may display one sign to advertise the business. The sign shall be in compliance with the Rapid City sign code, except that the sign may be no larger than eight square feet.

10. The use on review for a continuous retail business shall be valid for a period of two years. At the conclusion of the second year of operation the continuous retail business shall either come into full compliance with the Uniform Building Code or cease operation and vacate the developmental lot.

K. Farmer's Market. A farmer's market, as defined in Section 17.04.263 may be conducted in any nonresidential zoning district subject to such conditions and limitations as the council may direct in designating such farmer's market as a community activity.

Article IV. Development Requirements

17.50.250 Yard, building setback and open space exceptions.

The following requirements are intended to provide exceptions or qualify and supplement, as the case may be, the specific district regulations set forth in Chapters 17.08 through 17.48 of this code:

A. No yard, open space or lot area required for a building or structure shall, during its life, be occupied by any other building or structure except:

1. Awnings and canopies, as provided for in the Uniform Building Code;
2. Bay windows and chimneys, not to exceed two feet;
3. Driveways, curbs, sidewalks and steps, provided, however, steps or stairs to a dwelling, nonenclosed, not to exceed six feet;
4. Fences, walls and hedges, subject to the regulations as set forth in this section;
5. Flagpoles;
6. Garbage disposal equipment, nonpermanent;
7. Landscape features, planting boxes and recreational equipment;
8. Overhanging roof, eave, gutter, cornice or other architectural feature, not to exceed three feet. Open fire escapes may extend into any required yard not more than six feet;
9. Parking space subject to the regulations set forth in Section 17.50.270;
10. Signs, subject to the regulations set forth in Chapter 15.28 of this code;
11. Terraces (open) and porches (nonenclosed) not to exceed six feet;
12. Trees, shrubs, flowers and other plants subject to the vision requirements in this section.

B. The following regulations provide for the maximum safety of persons using sidewalks and streets, and for the maximum enjoyment of the use of property:

1. No object may intrude into the sight triangle as provided in Chapter 17.50.335.
~~On any corner lot where a front and side yard is required, no wall, fence, sign, structure, or any plant growth which obstructs sight lines at elevations between two and one-half feet and ten feet above the crown of the adjacent roadway shall be placed or maintained within a triangle formed by measuring from the point of intersection of the front and exterior side lot lines a distance of twenty-five feet along the front and side lot lines and connecting the points so established to form a sight triangle on the area of the lot adjacent to the street intersections.~~

2. In any required front yard, except as provided in subsection (B)(1) of this section, no fence, wall, hedge or yard ornament shall be permitted which materially impedes vision across such yard above the height of three and one-half feet.

C. The purpose here is to clarify certain conditions pertaining to the use of lots and access points.

1. In residential districts, if twenty-five percent or more of the lots on one side of the street between two intersecting streets are improved with buildings all of which have observed an average setback line of greater than twenty-five feet, and no building varies more than five feet from this average setback line, then no building shall be erected closer to the street line than the minimum setback so established by the existing buildings; but, this regulation shall not require a front yard of a greater depth than fifty feet.

2. Lots having frontage on more than one street shall provide the required front yards along those streets.

3. Division of a Lot. No recorded lot shall be divided into two or more lots unless such division results in the creation of lots each of which conforms to all of the applicable regulations of the district in which the property is located. No reduction in the size of a recorded lot below the minimum requirements of this title shall be permitted.

4. Dwellings on Small Lots. Where there are existing recorded lots which do not meet the minimum lot area requirement, single-family dwellings may be constructed as long as a side yard shall be not less than four feet and the sum of the side yards shall be not less than twelve feet and as long as all other requirements, except lot size, are met.

5. Principal Uses Without Buildings. Where a permitted use of land involves no structures, such use, excluding agricultural uses, shall nonetheless comply with all yards and minimum lot area requirements applicable to the district in which located, as well as obtain any other license or permit applicable to that particular use.

6. No dwelling shall be erected on a lot which does not abut on at least one street for at least twenty-five feet. A street shall form the direct and primary means of ingress and egress for all dwelling units. Alleys, where they exist, shall form only a secondary means of ingress and egress.

7. An attached garage which faces on a street shall not be located closer than twenty-five feet to the street right-of-way line. A detached private garage which faces on a street shall not be located closer than thirty-five feet to the street right-of-way line.

8. Accessory buildings shall not be located closer than thirty-five feet from the street right-of-way line.

TABLE 17.50.270 (F) (2)
 REQUIRED MINIMUM OFF-STREET
 PARKING DIMENSIONS

| Parking Angle (Degrees) | Stall Length | Stall Width | Aisle Width (One-way) | Aisle Width (Two-way) |
|-------------------------|--------------|-------------|-----------------------|-----------------------|
| 90° | 18' | 9' | 26' | 26' |
| 60° | 18' | 9' | 18' | 20' |
| 45° | 18' | 9' | 12' | 20' |
| 30° | 18' | 9' | 10' | 20' |
| 0° (parallel) | 22' | 9' | 10' | 20' |

Exception: Ninety-degree parking immediately off an alley requires ten feet by twenty feet stalls and the aisle width of twenty feet being provided by the alley.

3. Locations.

a. Off-street parking facilities shall be located outside the public right-of-way and as hereinafter specified.

b. Parking facilities shall either be provided on the same parcel as the use it is to serve or within three hundred feet from the building's primary entrance or use it is to serve, using established sidewalks and crossings. Such distance shall be the walking distance measured from the nearest point of the parking facility to the building's primary entrance that such facility is required to serve.

4. Clear Sight Triangles.

Parking spaces and areas shall not be allowed which would obstruct the required sight triangle as provided in Chapter 17.50.335 when such parking space or area is being occupied.

~~a. A seventy-foot sight triangle and clear vision zone shall be maintained on each corner where a street intersects another street, other than alley or private drive. A twenty-five foot sight triangle shall be maintained on each corner where an alley or private drive intersects a street.~~

~~b. The three vertices of the sight triangle shall include the corner defined by the intersecting roadway limits, and the two points the given dimension distant from the corner, measured along the roadway edge which form the corner. The "clear vision zone" is that section of the vertical projection of the sight triangle which lies between two and one-half and ten feet above the grade at the apparent edge of the roadway along the edge of the sight triangle.~~

~~c. No fence, barn, shed, wall, hedge, tree, bush, planter or other object shall be constructed, placed, grown or otherwise located so that it obstructs clear vision through the above defined clear vision zone as defined in subsection F (4) (b) of this section.~~

~~d. A sight triangle and clear vision zone, as determined through the application of Section 15.44.040, shall be maintained where a street or roadway intersects a railroad right-of-way.~~

5. Mixed Occupancies in a Building. In the case of mixed uses in a building or on a lot, the total requirements for off-street parking facilities shall be the sum of the requirements for the various uses computed separately. Off-street parking facilities for one use shall not be considered as providing required parking facilities for any other use except as hereinafter specified for shared use.

6. Shared Parking Facilities.

a. The building inspection department upon application by the owner or lessee of any property and after review of the application by the planning director, may authorize the shared use of parking facilities under the conditions specified in this section:

i. Not more than fifty percent of the parking facilities required by this title will be provided by the shared parking facility;

ii. No substantial conflict in the operating hours of the buildings or uses for which the shared use of the parking facility is proposed will occur;

iii. The building or use utilizing the shared parking facilities is located within three hundred feet of such parking facility using established sidewalks and crosswalks where available.

b. Parking using shared off-street parking facilities shall evidence agreement for such shared use by a proper legal instrument approved by the city attorney as to form and content. Copies of such instrument, when approved as conforming to the provisions of this section, shall be filed in the building inspection department and copies thereof filed with the planning department.

G. Use and Maintenance of Off-Street Parking Area. Off-street parking space shall be maintained in accordance with the following specifications:

1. Entrances and Exits.

a. Driveways and curb cuts for ingress and egress shall be built in accordance with the engineering division's curb cut policy and as approved by the city engineer or his designee. Entrances and exits shall in no case be less than ten feet nor more than forty feet in width or fourteen feet in vertical clearance.

b. Unpaved access to parking facilities is not permitted except for single-family and duplex uses. All commercial and industrial uses intending to utilize an unimproved access for parking facilities shall bear the cost of paving the access way to city minimum construction standards. This requirement is subject to waiver by common council only in cases where paving continuity would not be achieved and gravel segments would remain.

2. Circulation. Circulation within a parking area shall be such that a vehicle entering the parking area need not enter a public right-of-way to reach another aisle and that a vehicle need not enter a public right-of-way backwards. This provision shall not apply to off-street parking required for one or two-family dwelling units.

3. Surfacing. Off-street parking areas shall be paved and maintained so as to eliminate dust or mud. Paved parking facilities shall comply with standards established in Ordinance 1976, as approved by the common council on October 9, 1980, as administered by the city engineer, and on file in the finance office.

4. Dust Palliative. All commercial, light industrial and heavy industrial uses which involve outdoor storage shall apply a dust palliative approved by the city engineer to all unpaved areas utilized for storage. An approved dust palliative shall be applied annually or as directed by the engineering division. Vehicle or equipment maneuvering areas and approaches to permanent loading docks shall be paved as set forth in "Minimum Standards for Construction of Parking Lots," June 16, 1980.

5. Drainage. Off-street parking areas shall be graded and drained as to dispose of all surface water with drainage directed toward curb cuts when possible. Parking facilities may be designed to function as metered stormwater detention facilities, when in connection with a master drainage plan and as approved by the city engineering division.

6. Markings. Except for one and two-family uses, all parking facilities shall be marked with striping paint as shown on the approved building permit. Aisles, approach lanes, stalls, handicapped stalls and designated no parking areas shall be clearly marked with direction arrows, lines and symbols to assure the safe and efficient movement of vehicles.

7. Border, Barricades, Screening and Landscaping. Off-street parking areas shall conform to the regulations set forth in the landscape ordinance, Section 17.50.300. Tree planting in the right-of-way is permitted as provided in Section 12.40.090 of this code, landscape requirements.

a. Every parking area that abuts a public or private sidewalk, public right-of-way, or building entrance or exit shall be provided with a wheel guard or curbs not less than six inches in height which shall be securely installed and maintained.

b. Every multiple-family or commercial parking area on a lot that abuts a single-family residential lot along a side lot line shall be set back a distance of not less than twelve feet. Not less than fifty percent of the required landscaping for the subject lot shall be placed within the parking lot or within twenty feet of the parking lot.

c. Every parking area on a lot which abuts the rear lot line of a lot within single-family residential district shall be set back a distance of not less than fifteen feet. Fifty percent or more of the required landscaping for the subject lot shall be located in the parking lot or within twenty feet of the parking lot.

d. Landscaping proposed to be located in the right-of-way between the property line and the street section may be applied to the requirements of the landscape ordinance in an amount not to exceed twenty-five percent of the total landscaping points required as determined pursuant to the formula in the landscape ordinance.

8. Lighting. All parking areas except single-family residential shall be provided with lighting when evening usage is anticipated. The lighting shall be arranged so as to provide security and to reflect light toward the parking area.

9. Bond for Completion. When the required off-street parking area cannot be paved at the time of issuance of the certificate of occupancy, the chief building official shall require a surety in an amount equal to the estimated cost of paving and improvements which will provide for and secure through an improvements agreement the paving completion within one paving season. All bonds and other methods of guarantee shall be approved by the city attorney.

H. Parking for Persons with Disabilities.

1. Provision of Parking. Parking spaces for use by persons with disabilities shall be provided and located as near as reasonable to a primary building entrance designated to accommodate the disabled. Each parking space for persons with disabilities shall be accessible to related facilities including curb cuts and ramps per ANSI 117.1-86.

2. Identification. Off-street parking spaces provided for use by vehicles displaying special license plates or other handicapped permit issued pursuant to SDCL 32-5-76, 32-5-76.1 and 32-5-76.2, shall be identified by a sign displaying the international symbol of accessibility per Section 4.30 of the 1984 Uniform Federal Accessibility Standards. Said symbol shall measure not less than twelve inches by eighteen inches in size, state "Handicapped Parking Vehicle ID Required" and be permanently affixed to a supporting post or upon a wall so as to be clearly visible to the driver of a vehicle intending to utilize the parking space. If the sign is affixed to a portable supporting post, over thirty percent of the area of the parking stall shall be painted blue with a white overlay of the handicapped parking symbol. If the sign is affixed to a permanent supporting post or upon a wall, the over thirty percent of the parking space being painted blue with a white overlay of the handicapped symbol shall be optional.

3. Spaces Required.

a. The following number of off-street parking spaces, based on the total required parking, are to be reserved for exclusive use by persons with disabilities. Parking spaces for persons with disabilities may be counted toward the total number of parking spaces required for the use.

| Total Spaces | Spaces for Disabled |
|--------------|---------------------|
|--------------|---------------------|

| | |
|---------|---|
| 10 — 50 | 1 |
|---------|---|

| | |
|----------|---|
| 51 — 100 | 2 |
|----------|---|

101 — 300 3

300+ 1% of total spaces required

b. When fewer than ten stalls are required for a commercial use, at least one of the stalls shall not be less than thirteen feet by twenty feet, although it need not be marked with identifying signs denoting for use by persons with disabilities.

4. Dimension. All required and supplemental parking stalls for persons with disabilities shall be not less than thirteen feet by twenty feet, and shall be oriented to allow for either side or rear loading ramps and lifts.

I. Residential Requirements. New single-family residential off-street parking shall consist of a driveway, garage, or combination thereof. The parking areas shall be paved to accommodate at least two off-street parking spaces of nine feet by eighteen feet each. The hard surface improvements on driveways must begin at the street or curb line and either extend to the garage or parking slab or a minimum of fifty feet. All portions of the required paving for parking shall be outside of the public right-of-way.

17.50.280 Storage and parking of trailers and commercial vehicles.

A. Allowed Storage. Vehicles and trailers of all types, including commercial, travel, boat, camping, storage and hauling, shall not be parked or stored on any lot occupied by a dwelling or on any lot in any residential or commercial district except in accordance with the following provisions:

1. Number. Only one vehicle used principally for commercial purposes per family living on the premises shall be permitted.

2. Vehicle Size. Vehicles parked in residential districts shall not exceed a one-ton rating as specified by the manufacturers designated series. This shall not apply to recreational vehicles.

3. Commercial Vehicles. Commercial vehicles used for hauling explosives, gasoline, liquefied petroleum products, toxic or hazardous materials shall not be stored in or adjacent to a residential district. Parking is permitted only for the purposes of unloading or dispensing.

4. Stall Location. All recreational vehicles, travel trailers and hauling trailers shall be parked or stored behind front yard setback line(s) when they are to remain stationary for more than seventy-two hours. The vehicle(s) and trailer(s), when combined with the principal and accessory buildings, shall not occupy more of the lot than allowed for under the district lot coverage provisions. Further, vehicle and/or trailer parking/storage pads shall be graveled or hard surfaced to eliminate dust, mud or weeds. Vehicles which are to remain stationary for more than seventy-two hours shall not serve as temporary or permanent sleeping quarters for any person.

5. Parking Conflicts. Off-street parking stalls required for passenger vehicle shall not be occupied by recreational vehicle, travel trailers or hauling trailers, resulting in increased on-street parking.

6. Clear Sight Triangle. At no time shall a motor vehicle, recreational vehicle, travel trailer or hauling trailer be parked in the boulevard, across a sidewalk, or within the required ten-foot clear-sight triangle as provided described in Section 17.50.270 Chapter 17.50.335.

7. Parking of Commercial Vehicles. Any commercial truck or trailer, other than a construction trailer, used for the storage or transport of merchandise, equipment or business supplies shall be located on a commercial lot which contains an existing principal structure. Such a truck or trailer shall be screened by a six-foot opaque fence or plant materials from any abutting residential lots and public ways or housed in an enclosed building.

17.50.300 Landscape regulations.

A. Purpose. The purpose of these regulations is to provide for the orderly, safe, healthful, attractive development of the area within the city and to promote the health, safety and general welfare of the community.

B. Objective.

1. The objective of these regulations is to establish requirements for the installation and maintenance of landscape elements:

a. To aid in regulating and controlling vehicular and pedestrian circulation in parking areas;

b. To ensure that the off-street paved ground area and the adjacent right-of-way are clearly and visibly delineated;

c. To ensure that those established and acceptable ingress and egress points are clearly delineated;

d. To screen trash containers/facilities from public view;

e. To enhance the environmental and aesthetic conditions which exist in the Black Hills area;

f. To protect and conserve the value of property;

g. To reduce the amount of stormwater runoff from paved areas;

h. To reduce the level of carbon dioxide and return pure oxygen to the air;

i. To reduce heat and noise, wind and air turbulence, and the glare of automobile lights;

j. To reduce glare of sunlight from parking lot pavements;

k. To use irrigation waters in an efficient manner.

2. See general requirements, subsection F of this section, to determine minimum specifications for all plant material for which credit will be given in complying with the requirements of these regulations.

C. Definitions.

"Accessway" means a paved area intended to provide ingress and egress of vehicular traffic from a public right-of-way to an off-street parking area or loading area.

"Adjacent," for the purpose of this section, means an area where the property lines are contiguous, or are separated by a street, alley, easement or right-of-way.

"Berm" means a mound of dirt used for screening or landscaping purposes which is planted with low-lying shrubs or groundcover so as to prevent erosion.

"Buffer" means a visual screen, composed of masonry, wood or plantings, or a combination thereof, which will be a minimum of eighty percent opaque.

"Developed area" means that portion of a plot or parcel upon which a building, structure, pavement or other improvements have been placed which does not meet the definition of "undeveloped area."

"Frontage" means lineal distance measured along each street right-of-way.

"Groundcover" means low-growing plants planted in such a manner as to form a continuous cover over the ground.

"Landscape development" means trees, shrubs, groundcover, vines, grasses or earthen berms installed in planting areas for the purpose of fulfilling the requirements of these regulations. (This shall not include rock nor artificial plant materials.)

"Paved ground surface area" means any paved ground surface area (excepting public right-of-way) used for the purpose of driving, parking, storing, or displaying of vehicles, boats, trailers and mobile homes, including new and used care lots and other open lot uses.

"Planting area" means any area designed for landscape planting having a minimum of twenty-five square feet of actual plantable area.

"Reconstruction" means rehabilitation or replacement of a structure or structures on property which either have been damaged, altered or removed.

"Shrub" means a woody plant that usually remains low (minimum two feet in height) and produces shoots or trunks from the base. It is not usually tree-like nor single stemmed.

"Spread" means the diameter of tree foliage measured at the broadest point of the tree.

"Tree" means any self-supporting woody plant which usually produces one main trunk and which normally grows to a minimum of fifteen feet in height.

"Undeveloped area" means that portion of a plot or parcel not occupied by a building, structure, pavement or other improvements and which spans the entire length or width of the property and which is at least seventy-five feet deep. All undeveloped areas must have a sufficient cover of hardy native plant materials or grass.

"Xeriscaping" means the planting and maintenance of materials which are appropriate for the local conditions requiring little or no irrigation or maintenance.

D. Areas Where Landscaping is Required. Landscaping is required in all industrial, commercial and multiple-family zoning districts; however, landscaping is not required for single-family homes located within multifamily zoning districts. Landscaping is not required in general agricultural, park forest, mobile home residential, low density residential I and low density residential II districts. The provisions of subsection E of this section shall be followed in determining the amount of landscaping required.

E. Required Landscape Installation.

1. Landscape Requirements.

a. A minimum of fifty percent of the required landscaping shall be located in the parking lot or within twenty feet of the parking lot for all zoning districts except light industrial and heavy industrial. A maximum of twenty-five percent of the required landscaping may be within the public right-of-way. Arterial or collector street right-of-way landscaping shall be limited to shrubs, ground cover, or turf.

b. All required landscaping shall comply with the intent and purpose of these regulations and Section 12.40.010.

c. Planter islands shall be provided at a ratio of one such area for every fifty parking spaces. Each parking space shall be not less than one hundred twenty feet from the perimeter of the parking lot or a planter island. Each island planter shall contain a minimum of one hundred square feet, and provide a minimum of for one tree with shrubs, groundcover and/or mulch covering at the base.

2. Determining Required Amount of Landscape Material.

a. The amount of material shall be based on a point system. The square footage of the developed portion of the lot not covered by a building shall equal the required number of points (unless exempted under subsection (b) below.)

b. If calculation of the required landscape points in accordance with this section results in a total point requirement of fifty thousand or more, and at least twenty-five percent of the total perimeter of the developed portion of the property abuts or is within seventy-five feet of

a public roadway, and the property is located in an industrial zoning district, the property qualifies for either of the following two options:

Option No. 1: Irrigated Landscape Design.

1. A lateral zone of evenly spaced vegetation resulting in a seventy percent buffer (as measured at mature plant spread) shall be required along property lines which are within seventy-five feet of rights-of-way and residential zoning districts. All vegetation must be planted within twenty-five feet of the lot line or within twenty-five feet of easements which are adjacent to the lot line.

2. A minimum of twenty-five percent of lineal feet of the vegetation must be medium trees or larger. Medium trees must have at least a twenty-five-foot mature spread.

3. A drip irrigation system with an automated controller is required to irrigate all woody landscape material where either gravel or native grass is to be located around the vegetation.

4. The use of a water-saving sprinkler system with an automated controller is required where turf grass is to be planted around the vegetation buffer.

Option No. 2: Nonirrigated Landscape Design.

1. A lateral zone of evenly spaced vegetation resulting in a one hundred percent buffer (as measured at mature plant spread) shall be required along property lines within seventy-five feet of rights-of-way and residential zoning districts. All vegetation must be planted within twenty-five feet of the lot line or within twenty-five feet of easements adjacent to the lot line.

2. A minimum of twenty-five percent of lineal feet of the vegetation must be medium trees or larger. Medium trees must have at least a twenty-five-foot mature spread.

c. Point Values. Trees and shrubs contribute greatly to the quality of the community's environment through carbon dioxide absorption and oxygen generation, air purification by precipitation of dust particles, reduction of heat by transpiration and aesthetic qualities. The extent of the preceding positive contributions are a function of the size of the tree rather than the size of the planting area in which the tree is planted. Because of the contributions made by trees and shrubs, to the objectives of these regulations, points shall be given in accord with the schedule which follows.

LANDSCAPE MATERIAL POINTS TABLE

| | | |
|--------------|--|--------------|
| Large Trees | A minimum mature spread of 45 feet. Also, evergreen trees which reach a mature height of at least 20 feet. | 2,000 points |
| Medium Trees | A minimum mature spread of 25 feet. | 1,000 points |
| Small Trees | A minimum mature spread of 15 feet. | 500 points |

| | | |
|--------------|---|------------|
| Opaque Hedge | A lineal reach of 15 feet and height of 6 feet. | 500 points |
| Shrubs | A minimum mature height of 2 feet. | 250 points |
| Ground-cover | One square yard. | 100 points |
| Grass | One square yard. | 10 points |

F. Applicability — New Development Areas.

1. Applicability — New Development. The requirements and standards for the installation and maintenance of landscape elements and site improvements as set forth herein shall apply to all developing commercial, industrial and multifamily areas within the city as per the zoning ordinance. All new development or construction which involves the creation of a building or a parking area or the paving of a parking area shall be in full compliance with the provisions of these regulations.

2. Existing Development Areas — Nonconformance — Compliance Required. All property with existing development on the effective date of these regulations which is not in compliance with the provisions of these regulations shall be considered nonconforming and allowed to continue until such time as a building permit is granted to enlarge by twenty percent or more a structure or parking lot on the property or increase the occupant load by twenty percent or more. A plan showing existing and new development, and the existing and proposed landscaping shall be submitted in accordance with subsection G of this section.

G. General Requirements.

1. Installation. All landscaping shall be installed in a sound workmanship-like manner according to accepted good planting and xeriscaping procedures and according to the approved plan. If at the time of final inspection all the requirements of these regulations have not been completed in a satisfactory manner, a certificate of occupancy shall not be issued unless the builder or owner has provided a monetary security guarantee (see subsection J of this section, security guarantee). All required landscaping shall be installed as per plans submitted.

a. Trees used in parking lots shall be placed far enough back from the curb to accommodate the overhang of the automobile; otherwise, the front bumper of the car will hit the tree trunk.

b. The parking lot shall be screened with shrubs or other barriers. This will reduce visual clutter caused by parked cars, and will make the building more attractive.

c. When planters are used in parking lot interiors, a surface area shall be made available for aeration and water infiltration commensurate with the mature spread of the utilized tree types. This will help ensure that the tree remains healthy and vigorous.

d. Interior parking lot trees shall be deciduous shade trees. These will grow larger, be hardier, and provide greater aesthetic and environmental benefits in an interior parking lot situation. Conifers and ornamentals are of greatest value in providing fence foliage in perimeter and buffer areas.

- e. Fruit-bearing trees shall not be located where vehicular and pedestrian traffic exists. This will reduce the maintenance of these trees.
 - f. Curb stops or some form of physical barrier shall be installed around plant material located within the parking lot. This will reduce the possibility of damage to the plant material. Stormwater runoff from the parking lot area may be collected and directed in such a manner as to provide a source of water for landscaping.
 - g. Trees shall be located such that mature height and spread will not interfere with overhead power lines.
 - h. Evergreen trees shall be avoided in areas where the mature trees will create hazardous interruption of views to oncoming traffic or where they will create hazardous snow drifting on the parking area or public right-of-way.
 - i. The use of turf in and around landscaping materials is discouraged. The use of mulches or low water groundcovers can help retain moisture in the soil and reduce total water needs for the landscaped area.
 - j. Irrigation systems shall be of a drip, bubble or a low trajectory nature to maximize efficiency in water usage.
 - k. The plant types selected shall be suited to the conditions of the location to minimize maintenance and irrigation needs. A list of hardy native plant materials is available through the city planning department.
2. Sight Distance for Landscaping; Landscaping may not obstruct the required sight triangles as provided in Chapter 17.50.335. except as follows:

Trees may be allowed in the required site triangle if the tree is located more than thirty feet from the intersection of the curb lines and the trees shall have a minimum of forty foot spacing between trees; provided that the canopy of the tree is ten (10) feet or more above grade.

~~Adjacent to Public Rights of Way and Points of Access. When an accessway intersects a street or when the subject property abuts the intersection of two or more streets, all landscaping within the triangular areas described herein shall provide unobstructed cross visibility at a level between two and one-half feet and ten feet above the edge of the roadway; provided, however, that trees having limbs and foliage trimmed in such a manner that no limbs or foliage extend into the cross visibility area shall be allowed; provided, that they are so located so as not to create a traffic hazard.~~

- ~~a. A twenty five foot sight triangle is required on both sides of an accessway formed by the intersection of the accessway and the edge of the roadway.~~
- ~~b. A seventy foot sight triangle is required at a corner by the intersection of two or more streets.~~

3. Maintenance. The owner of the building or property shall be responsible for the maintenance of all landscape areas. The areas shall be maintained so as to present a healthy, neat and orderly appearance at all times and shall be kept free from refuse and debris. Maintenance shall include the replacement of all dead plant materials.

4. Planting Criteria.

a. Trees (deciduous). Planted for the required landscaping under this section shall be a minimum of one and one-half inch caliper twelve inches above grade measured immediately after planting. Trees shall be of a species having an average mature spread of crown of greater than fifteen feet.

- b. Trees (evergreen). Trees shall be a minimum height of four feet.
- c. Groundcovers. Groundcovers other than grass shall be planted in such a manner as to present a finished appearance and reasonably complete coverage within one year after planting.
- d. Shrubs. Shrubs shall be a minimum of one foot in height when measured immediately after planting.
- e. Lawn Grass. Grass areas shall be planted in species normally grown as permanent lawns in Rapid City. Native grasses may also be used.
- f. Synthetic Lawns or Plants. Synthetic or artificial lawns or plants shall not be used in lieu of plant requirements in this section.
- H. Plan Approval. It is recommended that the plan be prepared by a landscape architect, architect, landscaper or person of related profession.
 - 1. Plans Required. Two copies of the plans showing proposed landscape development and maintenance procedures, including figures to show compliance with these regulations shall be submitted to the building inspection department at the time a building permit is requested. The building inspection department shall route the proposed plans to the planning department for their approval. Such plans shall consist of:
 - a. A plot plan drawn to scale normally of not less than one inch equals thirty feet including dimensions and distances and clearly delineating any existing and proposed landscape development. Such plot plan shall also include drawings of the entire off-street parking area and the locations of the proposed building.
 - b. In addition to indicating those areas to be landscaped, the plot plan shall indicate the types, locations and sizes of all landscaping materials to be used. The irrigation system shall be detailed showing the layout of the system, system components and water delivery specifics.
 - c. These plans must be approved prior to issuance of a building permit.
 - I. Exceptions. The zoning board of adjustment shall have the power to grant variances in special cases where there are unusual and practical difficulties or unnecessary hardships created in meeting the requirements of these regulations. The guidelines to be used in determining whether a variance should be granted are as follows:
 - 1. That the hardships or difficulties of meeting the requirements of these regulations are peculiar to that property, and not general in character;
 - 2. Financial hardship due to meeting the requirements of these regulations is not sufficient to show unnecessary hardship, unless the financial difficulties amount to confiscation of property.
 - J. Security Guarantee.
 - 1. If at the time of final inspection all the requirements of the landscape regulations are not completed in a satisfactory manner and approved by the building official or his designee, a certificate of occupancy shall not be issued unless the builder or owner has entered into an agreement with the city for improvements and provided a monetary security guarantee in an amount equal to the estimated cost of installation and establishment of the required improvements whereby the improvements will be made and installed without cost to the city in the event of default of the owner.
 - 2. If a security guarantee is being used, the required improvements shall be installed within nine months from the date of issuance of an occupancy permit. All required landscaping shall be installed as per plans submitted. All bonds and other methods of guarantee shall be approved by the city attorney.

K. Enforcement. These regulations shall be a minimum standard and shall apply to the incorporated area of the city. The building official or his designated representative shall be the enforcing official. The enforcing official is charged with the duty of administering the provisions of these regulations as provided for in Chapter 17.54 of this code.

CITY OF RAPID CITY

Mayor

ATTEST:

Finance Officer

(SEAL)

First Reading:

Second Reading:

Published:

Effective