

SECTION 27A PERSONAL WIRELESS COMMUNICATION FACILITY DESIGN STANDARDS

-Section Contents-

2701A Intent ..... 27-2  
2702A General Policies ..... 27-2  
2703A Approval Standards..... 27-3  
2704A Abandonment..... 27-3  
2705A Site Improvement Plan ..... 27-3  
2706A Design Standards – A-1/LRR/RR Zone Districts ..... 27-4  
2707A Design Standards – ER/SR/MF/MH Zone Districts ..... 27-5  
2708A Design Standards – B/C Zone Districts ..... 27-7  
2709A Design Standards – LI/GI Zone Districts ..... 27-8

### 2701A Intent

To provide design standards for personal wireless communication facilities to ensure their compatibility with the surrounding development and compliance with the Douglas County Comprehensive Master Plan. Personal wireless communication services and their related facilities, constitute an important part of the overall communication network. While the zone districts provide for many locational alternatives, facilities must be appropriately designed to reduce the negative visual impacts. In siting a personal wireless communication facility, emphasis should be placed on identifying the least obtrusive form and location for the elements.

Successful site design will result in facilities that blend with existing and projected uses and preserve the environmental and aesthetic qualities of Douglas County. The unique and diverse landscapes of the County are among its most valuable assets. Protecting these assets will require that location and design of personal wireless communication facilities be sensitive to, and in scale and harmony with, the character of the community. *(Amended 4/24/02)*

### 2702A General Policies

Personal wireless communication facilities should be sited where they blend with the existing and projected development for any given vicinity. Where appropriate, antennas should be located on existing structures eliminating the need for support towers. Facilities should appear integrated, and architecturally compatible with the existing structure to promote visual harmony. Collocation of antennas on existing support towers is also encouraged; however, if other alternatives are identified as better meeting the visual design objectives, those alternatives may be allowed.

The construction of stealth or faux structures such as windmills, silos and light standards specifically intended to camouflage personal wireless communication facilities are encouraged. When antennas are not able to be sited on an existing facility or collocated in a manner that meets the intent of the design objectives referenced, new facilities may be considered. All stealth or faux structures proposed shall emulate architectural or landscape features typical of the surrounding area in terms of architectural style, height, bulk, mass, material, and color and determined by the County.

The construction of support towers will only be permitted upon demonstration that other alternatives are infeasible, and in accordance with the provisions of this Section.

Personal wireless communication facilities located on highly visible sites will only be allowed when appropriately camouflaged. *(Amended 4/24/02)*

### 2703A Approval Standards

The site improvement plan shall be approved upon the finding that:

- 2703A.01 the facility is architecturally and visually (*color, bulk, mass, size*) compatible with surrounding existing buildings, structures, vegetation, or uses in the area, or those principal uses permitted by the underlying zone district;
- 2703A.02 scenic viewsheds as discussed in the Douglas County Comprehensive Master Plan are not significantly impacted;
- 2703A.03 the facility is designed to be compatible with the surrounding uses and does not dominate the landscape;
- 2703A.04 the proposed facility is not a dominant feature on a ridgeline;
- 2703A.05 existing vegetation has been preserved or enhanced, and disturbance of the site has been minimized, unless such disturbance to vegetation and topography results in less visual enhancement to the surrounding area;
- 2703A.06 the proposed site fits into the overall network of the service provider;
- 2703A.07 the facility meets the definition of utility service facility - personal wireless communication facility, and applicable standards of the zone district in which it is located;
- 2703A.08 the facility conforms to the standards contained herein including when proposed within a PD that allows personal wireless communication facilities, but does not reference design standards; and (*Amended 4/24/02*)
- 2703A.09 the Site Improvement Plan is in compliance with Section 27, herein.

### 2704A Abandonment

Facilities that are not in use for 180 consecutive days for personal wireless communication purposes shall be removed by the facility owner. This removal shall be completed within 90 days of the end of such 180-day period. The site shall be restored to blend with the existing surrounding vegetation.

### 2705A Site Improvement Plan

A site improvement plan (SIP) is required in accordance with Section 27, herein; however, when processed concurrently with the review of a SIP for another use, a separate SIP submittal for the personal wireless communication facility will not be required. A revision to an approved SIP will be required for the installation of personal wireless communication equipment on an existing development site. Upon approval of

an SIP or SIP revision for a personal wireless communication facility, but prior to the issuance of building permits, financial surety may be required in accordance with the applicable provisions of Section 2705: Performance Requirements. *(Amended 4/24/02)*

#### 2706A Design Standards - A-1/LRR/RR Zone Districts

The following standards shall apply to facilities located in the Agricultural One (A-1), Large Rural Residential (LRR) and Rural Residential (RR) zone districts.

##### 2706A.01 Support Towers (A-1/LRR/RR)

Support Towers shall be allowed when: *(Amended 4/24/02)*

- 2706A.01.1 visual impact to scenic viewsheds as discussed in the Douglas County Comprehensive Plan is determined to be minimal;
- 2706A.01.2 the facility is designed to be compatible with the surrounding uses and does not dominate the landscape;
- 2706A.01.3 the structure is not a dominant feature on a ridge line;
- 2706A.01.4 views of significant landforms from surrounding residential uses have not been negatively visually impacted;
- 2706A.01.5 the existing topography and vegetation provide the greatest amount of screening/backdrop possible on the site;
- 2706A.01.6 the existing vegetation has been preserved or improved and disturbance of the site has been minimized, unless such a disturbance to vegetation and topography results in less visual impact to the surrounding area;
- 2706A.01.7 the structure does not exceed 35' in height; and
- 2706A.01.8 support towers that are not engineered shall be placed no closer to the property line than the height of the tower; engineered support towers shall comply with the zone district setbacks.

##### 2706A.02 Antennas - panels, arrays, parabolic (A-1/LRR/RR) *(Amended 4/24/02)*

- 2706A.02.1 placed on or within a building or structure, such as a barn or silo, in an architecturally sensitive manner;
- 2706A.02.2 disguised as an architectural feature or design element of an existing or proposed building or structure, provided it is compatible in terms of architectural style, height, mass, scale and color;

- 2706A.02.3 disguised or camouflaged in an architecturally appropriate manner as a windmill, silo, tree or similar feature, provided it is compatible with surrounding landscape features or uses;
- 2706A.02.4 mounted on, or incorporated with, an existing telecommunication tower;
- 2706A.02.5 mounted on an existing public utility structure (*however, on monopole pole structures less than 24" in diameter the antenna must be mounted directly to the pole without stand-off brackets or sectorized platforms;*)
- 2706A.02.6 mounted at or below the tree line to the extent feasible when proposed in a forested location.

#### 2706A.03 Antennas - whip (A-1/LRR/RR)

Whip-type antennas are:

- 2706A.03.1 allowed on structures, existing support towers or utility facilities;
- 2706A.03.2 allowed to project above the roof line of structures; and
- 2706A.03.3 may exceed the height limitation of the district.

#### 2706A.04 Accessory Equipment

All accessory equipment shall be concealed below grade, or within a structure or screened by a berm, vegetation, fencing, topographic feature or in another manner approved by staff. Setbacks and height limitations of the zone district shall apply. (*Amended 4/24/02*)

#### 2706A.05 Visually Sensitive Design (*Amended 4/24/02*)

A visually sensitive design may be considered for approval when determined by the Director of Community Development to be clearly superior and better meet the intent of this Section. Any proposed increase in height above that permitted by the district regulations shall be limited to a maximum increase of 35%.

#### 2707A Design Standards - ER/SR/MF/MH Zone District

The following standards shall apply to facilities located in the Estate Residential (ER), Suburban Residential (SR) Multifamily (MF), and Mobile Home (MH) zone districts:

##### 2707A.01 Support Towers (ER/SR/MF/MH)

Support towers are not permitted.

## 2707A.02 Antennas - panels, arrays, parabolic (ER/SR/MF/MH)

Antennas are allowed as follows: *(Amended 4/24/02)*

- 2707A.02.1 placed on or within a building or structure such as a house, garage, recreation center, church, or fire station, in an architecturally sensitive manner; however, when proposed for a flat roof, antennas shall not project above the parapet unless mounted on a penthouse or completely screened by materials that are compatible with the existing building or structure; or
- 2707A.02.2 disguised as an architectural feature or element of an existing or proposed building or structure provided it is compatible in terms of architectural style, height, mass, scale, and color; or
- 2707A.02.3 disguised or camouflaged in an architecturally appropriate manner as a flagpole, light pole or similar structure, provided it is compatible with the surrounding landscape features or uses; or
- 2707A.02.4 mounted on, or incorporated with, an existing support tower; or
- 2707A.02.5 mounted on an existing public utility structure; however, on single-pole structures less than 24" in diameter the antenna must be mounted directly to the pole without stand-off brackets or sectorized platforms.

## 2707A.03 Antennas - whip (ER/SR/MF/MH)

Whip type antennas are allowed:

- 2707A.03.1 on structures, existing support towers, or utility facilities;
- 2707A.03.2 above the roof line of structures, except on pitched roofs unless on the ridge; and
- 2707A.03.3 may exceed the height limitations of the district.

## 2707A.04 Accessory Equipment

All accessory equipment shall be concealed below grade, or within a structure, or screened by a berm, vegetation, fencing, topographic feature or in another manner approved by staff. Setbacks and height limitations of the zone district shall apply. *(Amended 4/24/02)*

## 2707A.05 Visually Sensitive Design *(Amended 4/24/02)*

A visually sensitive design may be considered for approval when determined by the Director of Community Development to be clearly

superior and better meet the intent of this Section. Any proposed increase in height above that permitted by the district regulations shall be limited to a maximum increase of 35%.

#### 2708A Design Standards - B/C Zone Districts

The following standards shall apply to facilities located in the Business (B) and Commercial (C) zone districts.

##### 2708A.01 Support Towers (B/C)

Support towers are not permitted.

##### 2708A.02 Antennas - panels, arrays, parabolic (B/C)

Antennas are allowed as follows: *(Amended 4/24/02)*

2708A.02.1 placed on or within a building or structure, such as a rooftop, clock tower or cupola, in an architecturally sensitive manner; however, when proposed for a flat roof, antennas shall not project above the parapet unless mounted on a penthouse or totally screened by materials that are compatible with the existing building or structure;

2708A.02.2 disguised as an architectural feature or element of an existing or proposed building or structure provided it is compatible in terms of architectural style, height, mass, scale and color;

2708A.02.3 disguised or camouflaged in an architecturally appropriate manner as a flagpole or similar structure provided it is compatible with surrounding landscape features or uses;

2708A.02.4 mounted on, or incorporated with, an existing support tower; or

2708A.02.5 mounted on a light standard or an existing public utility structure; however, on light standards and single-pole structures less than 24" in diameter the antenna must be mounted directly to the pole without stand-off brackets or sectorized platforms.

##### 2708A.03 Antennas - whip (B/C)

Whip-type antennas are:

2708A.03.1 allowed on structures, existing support towers, or utility facilities;

2708A.03.2 allowed to project above the roof line of structures, except pitched roofs unless on the ridge; and

2708A.03.3 may exceed the height limitation of the district.

2708A.04 Accessory Equipment

All accessory equipment shall be concealed below grade, or within a structure, or screened by a term, vegetation, fencing, topographic feature or in another manner approved by staff. Setbacks and height limitations of the zone district shall apply. *(Amended 4/24/02)*

2708A.05 Visually Sensitive Design *(Amended 4/24/02)*

A visually sensitive design may be considered for approval when determined by the Director of Community Development to be clearly superior and better meet the intent of this Section. Any proposed increase in height above that permitted by the district regulations shall be limited to a maximum increase of 35%.

2708A.06 Limited Service Business (LSB) District

In the event a personal wireless telecommunication facility is proposed for the LSB District, an obsolete zone district, it shall be required to comply with the design standards applicable in the Business (B) District. *(Amended 4/24/02)*

2709A Design Standards - LI/GI Zone Districts

The following standards shall apply to facilities located in the Light Industrial (LI) and General Industrial (GI) zone districts.

2709A.01 Support Towers (LI/GI)

Support towers shall be allowed when:

- 2709A.01.1 located outside the scenic viewsheds as discussed in the Douglas County Comprehensive Master Plan;
- 2709A.01.2 the facility is designed to be compatible with the surrounding uses and does not dominate the landscape;
- 2709A.01.3 the structure is not a dominant silhouette on a ridge line;
- 2709A.01.4 the existing topography and vegetation provide the greatest amount of screening/backdrop possible on the site;
- 2709A.01.5 the existing vegetation has been preserved or enhanced and disturbance of the existing topography of the site has been minimized, unless such disturbances result in visual enhancement of the surrounding area;



2709A.01.6 the structure does not exceed 60' in height; and

2709A.01.7 support towers that are not engineered shall be placed no closer to the property line than the height of the tower; engineered support towers shall comply with the zone district setbacks.

2709A.02 Antennas - panels, arrays, parabolic (LI/GI)

Antennas are allowed as follows: *(Amended 4/24/02)*

2709A.02.1 placed on or within a building or structure such as a rooftop, chimney, clock tower, batch plant, or cupola, in an architecturally sensitive manner; however, when proposed for a flat roof, antennas shall not project above the parapet unless mounted on a penthouse or completely screened by materials that are compatible with the existing building or structure;

2709A.02.2 disguised as an architectural feature or element of an existing or proposed building or structure, provided it is compatible in terms of architectural style, height, mass, scale and color; or

2709A.02.3 disguised or camouflaged in an architecturally appropriate manner as a flagpole or similar structure, provided it is compatible with surrounding landscape features or uses;

2709A.02.4 mounted on, or incorporated with, an existing support tower; or

2709A.02.5 mounted on a light standard or an existing public utility structure; however, on light standards and single-pole structures less than 24" in diameter, the antenna must be mounted directly to the pole without stand-off brackets or sectorized platforms; and

2709A.03 Antennas - whip (LI/GI)

Whip-type antennas are:

2709A.03.1 allowed on structures, existing support towers, or utility facilities;

2709A.03.2 allowed to project above the roof line of structures, except on pitched roofs unless on the ridge; and

2709A.03.3 may exceed the height limitation of the district.

2709A.04 Accessory Equipment

All accessory equipment shall be concealed below grade, or within a structure, or screened by a berm, vegetation, fencing, topographic

features, or in another manner approved by staff. Setbacks and height limitations of the zone district shall apply. *(Amended 4/24/02)*

2709A.05 Visually Sensitive Design *(Amended 4/24/02)*

A visually sensitive design may be considered for approval when determined by the Director of Community Development to be clearly superior and better meet the intent of this Section. Any proposed increase in height above that permitted by the district regulations shall be limited to a maximum increase of 35%.