
Sec. 94-327. - Level IV permits (non-concealed towers).

- a. Determination of need. No new non-concealed towers shall be permitted unless the applicant demonstrates that no existing tower or alternative structure within the applicant wireless provider's geographic search area can accommodate the applicant's proposed antenna elements; or that use of such existing facilities would prohibit personal wireless services in the geographic search area to be served by the proposed antenna support structure. Accordingly, the applicant shall provide:
 1. A copy of the geographic search area of the wireless provider committed to locate on the tower and that is justifying the placement of the tower;
 2. An inventory of all existing towers and all potential alternative structures that are at least 80 percent of the height of the proposed tower within that geographic search area;
 3. A written explanation documenting why an existing tower cannot reasonably be used, instead of building a new tower.
- b. Height. All new non-broadcasting non-concealed towers shall be 130 feet or less in height.
- c. All freestanding non-concealed towers up to 130 feet in height shall be engineered and constructed to accommodate no less than four antenna arrays.
- d. Freestanding non-concealed towers shall be limited to monopole type antenna support structures, unless the applicant demonstrates that such design is not feasible to accommodate the intended uses.
- e. Setbacks. New freestanding towers and equipment compounds shall be subject to the setbacks described below for breakpoint technology:
 1. If the antenna support facility has been constructed using breakpoint design technology, the minimum setback distance shall be equal to 110 percent of the distance from the top of the structure to the breakpoint level of the structure, or the minimum side and rear yard requirements, whichever is greater. For example, on a 100-foot tall monopole with a breakpoint at 80 feet and a side and back setback of 15 feet, the minimum setback distance would be 22 feet (110 percent of 20 feet, the distance from the top of the monopole to the breakpoint). However, if the side and back setback were 30 feet, then 30 feet would be the minimum setback distance in the above example. Certification by a registered professional engineer licensed by the State of Florida of the breakpoint design and the design's fall radius must be provided together with the other information required herein from an applicant.
 2. If the antenna support facility has not been constructed using breakpoint design technology, the minimum setback distance shall be equal to 110 percent of the height of the proposed antenna support structure.
- f. Visual impact analysis; photo simulation. The applicant must demonstrate that the proposed tower does not create a significant adverse visual aesthetic impact on the surrounding landscape, adjacent properties and existing lines of sight. The application shall include a visual impact analysis, including simulated photographic evidence of the proposed tower and antenna appearance from any and all residential areas within 1,500 feet and other area vantage points approved by the planning division, including the facility types the applicant has considered. Such simulations shall demonstrate the potential visual impact on the area, including but not limited to:
 1. Overall height.
 2. Configuration.
 3. Physical location.
 4. Mass and scale.
 5. Materials and color.
 6. Illumination.
 7. Architectural design.
- g. Antenna mounts. New non-broadcast antenna mounts shall be flush-mounted, unless it is demonstrated through RF propagation analysis that flush-mounted antennas will not meet the network objectives of the desired coverage area.
- h. Balloon test. A balloon test shall be required subsequent to the receipt of the photo simulations in order to demonstrate the proposed height of the tower.

1. The applicant shall arrange to raise a colored balloon, in sharp contrast with sky blue and no less than three feet in diameter, at the maximum height of the proposed tower and within 30 horizontal feet of the center of the proposed antenna support structure.
 2. The applicant shall inform the city and abutting property owners in writing of the date and times of the test at least 14 days in advance. The date, time and location of the balloon test shall be advertised in a locally distributed paper in a display ad at least two inches in width by the applicant at least seven but no more than 14 days in advance of the test dates determined by city staff, as well as alternate dates in case of inclement weather. The balloon shall be flown for at least four consecutive hours during daylight hours on the dates chosen. The applicant shall record the weather during the balloon test. Re-advertisement will not be required if inclement weather occurs, provided the advertisement specifies the alternative date in the event of inclement weather.
- i. Equipment compound. The equipment compound shall not be used for the storage of any excess equipment or hazardous materials. No outdoor storage yards shall be allowed in a tower equipment compound. The compound shall not be used as habitable space.
 - j. Fencing. All equipment compounds shall be enclosed with an opaque fence. Alternative equivalent screening may be approved through the site plan approval process pursuant to section 94-35.
 - k. Equipment cabinets. Cabinets shall not be visible from pedestrian views. Cabinets may be provided within the principal building, behind a screen on a rooftop, or on the ground within the fenced-in and screened equipment compound.
 - l. Buffers and landscaping.
 1. In all allowable locations the equipment compound shall be landscaped and screened pursuant to section 94-434(b).
 2. Alternative landscaping plans which provide for the same average canopy and understory trees but propose alternative siting on the entire subject property on which the proposed facility is projected may be considered and approved by the planning division, provided the proposed alternative maximizes screening as provided above, and is otherwise consistent with the requirements of this section.
 - m. Signage. Commercial messages shall not be displayed on any tower. Noncommercial signage shall be subject to the following:
 1. The only signage that is permitted upon an antenna support structure, equipment cabinets, or fence shall be informational, and for the purpose of identifying the antenna support structure (such as ASR registration number), as well as the party responsible for the operation and maintenance of the facility; i.e. the address and telephone number, security or safety signs, and property manager signs (if applicable).
 2. If more than 220 volts are necessary for the operation of the facility, signs located every 20 feet and attached to the fence or wall shall display in large, bold, high contrast letters (minimum height of each letter four inches) the following: "HIGH VOLTAGE - DANGER."
 - n. Lighting. Lighting on towers shall meet and not exceed the FAA minimum standards. Any lighting required by the FAA must be of the minimum intensity and number of flashes per minute (i.e., the longest duration between flashes) allowable by the FAA. Dual lighting standards are required and strobe light standards are prohibited unless required by the FAA. The lights shall be oriented so as not to project directly onto surrounding property, consistent with FAA requirements.
 - o. Grading. Grading shall be minimized and limited only to the area necessary for the new tower and equipment.
 - p. Sounds. No unusual sound emissions such as alarms, bells, buzzers, or the like are permitted. Sound levels shall not exceed 70db as measured from the ground immediately outside of the equipment compound for the facility.
 - q. Generators. Emergency generators and their permitted fuel tanks shall be allowed at each tower site.
 - r. Parking. One parking space is required for each tower development area. The space shall be provided within the leased area, or equipment compound or the development area as defined on the site plan.

(Ord. No. 4549-15, § 2(94-337), 6-8-2015)