



TELECOMMUNICATION FACILITY – Water Tower Information

The primary purpose of a city water tower is to ensure a continuous supply of safe, aesthetically-pleasing drinking water to residents and businesses in the community. The City of Minnetonka recognizes that water towers are also attractive locations for telecommunication facilities, as they are often the tallest structures in an area.

The city will consider telecommunication installations on flutes of water towers when: (1) there is space available on and within the tower; (2) installation will not negatively impact existing or future public installations; (3) installation will comply with ordinance regulations and policy standards. By policy and practice, the tops of water towers are reserved for public technologies.

This handout is intended to summarize the administrative process for review and approval of any new telecommunication installation or any change to an existing installation – including any change in the number, location, or type of antennas on associated equipment.

This is a general handout. Please contact a planner at 952-939-8290 with specific questions regarding your project.

Administrative Process

- Step #1: Availability.** Contact the planning division at 952-939-8290 to determine if space is currently available on and within the water tower.
- Step #2: Application.** Submit a Telecommunication Facility application and all required fees and escrows to the planning division.
- Step #3: Technical Review.** The submitted application will be reviewed by city planning and public works staff.
- Planning staff will review the installation for compliance with the city's telecommunications ordinance. The city's telecommunications consultant will conduct an intermodulation study. If planning approval is granted, the application will be routed to public works staff.
 - Public works staff will then review the installation for consistency with city policies regarding installations on water towers. The city's structural engineering consultant will review the proposed installation and provide the city with a structural report. If public works approval is granted, the application will be routed to legal and finance staff.
- Step #4: Lease.** Legal and finance staff will draft a lease agreement and the lease must then be executed.
- Step #5: Approval.** An approval document together with the executed lease document will sent to the applicant.

Step #6: Permits. Upon approval and execution of the lease, appropriate construction permits must be obtained.

Electrical Permit Application. This application must be submitted upon receipt of administrative approval. The application must be accompanied by construction drawings. Permit review generally takes 10 to 15 business days.

Building Permit Application. This application is necessary only if the installation would result in structural changes to the tower of an equipment shelter/enclosure. This application must be submitted upon receipt of administrative approval. The application must be accompanied by construction drawings. Permit review generally takes 10 to 15 business days.

POLICIES AND STANDARDS

Priority Policy

The City of Minnetonka has established a written priority policy for water tower use. Per this policy, only the following entities, in order of descending priority, may place antennas on a city water tower.

1. **City of Minnetonka.**
2. **Public safety agencies.** This includes law enforcement, fire, and ambulance services that are not part of the City of Minnetonka.
3. **Other governmental agencies.** This includes uses not related to public safety.
4. **Government-regulated entities.** This only includes entities whose antennas offer a service to the general public for a fee; for instance wireless telecommunication providers. This group does not include radio or television broadcasters.

If there is a conflict between potential and existing users, permission for use will be granted in the order or priority listed above.

Telecommunications Ordinance Standards

No application for installation or modification will be approved unless the following ordinance standards are met:

- **Service Provider.** The provider of wireless service must be identified.
- **Coverage and Capacity.** A coverage and capacity analysis must be provided demonstrating that the location the proposed facility is necessary to meet the coverage and capacity needs of the wireless provider's system.
- **Horizontal projection.** Antennas must not project out from the side of the tower by more than three feet.
- **Vertical Projections.** Antennas may not project more than 15 feet above the height of the structure to which they are attached.
- **Exterior surfaces.** Antennas must be constructed of a material or color that matches the exterior of the tower.
- **Ground-mounted equipment.** Ground-mounted accessory equipment or buildings must be architecturally designed or screened with suitable vegetation to blend in with the surrounding environment.
- **Lighting.** Telecommunications facilities may not be artificially illuminated unless required by law or by a governmental agency.

Structural and Operational Guidelines

No application for installation modification will be approved unless the following structural and operational standards are met:

- **Structural Modification.** Antennas will be permitted only on water towers that have been sufficiently modified, as determined by the public works director, to adequately accommodate the proposed antennas. The user is responsible for all costs associated with any necessary modification.
- **Technology Interference.** The proposed use must not interfere with other users who have a higher priority under the priority policy.
- **Operation.** Either by design, function, or installation, proposed equipment must not interfere with the facility's normal operation or maintenance and its ability to deliver safe, potable water at sufficient pressure to customers.
- **Design plans.** Drawings and specifications detailing equipment installation, cable runs, supports, penetrations, fastening methods, foundations, panels, electrical power connections, grounding, and all other required details for a complete installation must be submitted for review and approval. A drawing depicting the final appearance of the tank must also be included. A certified professional engineer in Minnesota must stamp all drawings and specifications.
- **Appearance.** The equipment must have minimal detrimental effect on the facility's aesthetic appearance. The design must not significantly alter the appearance of the tank. The use of permanently installed false overflow pipes as cable conduits is not allowed. Wherever possible, tank cable runs must be internal to the tank's structure. No exposed exterior cable runs will be allowed without the written approval of the public works director. Color for cables, antennas, and any other visible appurtenances must match the tank colors and be submitted for approval.
- **Coatings.** Existing tank interior and exterior coating systems must be protected or repaired with new equivalent coating systems during the work of antenna company equipment installation. Coating repairs must be subject to approval. Existing tank coating specifications are available on request.
- **Enclosures.** Proposed communication equipment to be installed at ground level outside a tank's structure must be enclosed in approved, aesthetically pleasing enclosures. All ground structures must be contained within the city owned parcel subject to planning approval. Unsupervised access into the water storage facility is not permitted. Supervised access shall be granted based on the Lease agreement. Wherever possible, a private access to the antenna company's designated area must be provided by the antenna company. The antenna company will have unlimited access to its designated area through this access point.
- **Exclusion zone.** An exclusion perimeter zone of 10 ft (minimum) beyond the outermost tank component (i.e., catwalk or widest tank diameter) must exist (outermost structure from the tank center plus 10 ft). No aboveground appurtenance is permitted within the exclusion zone without the utility's written approval.
- **Installation.** All cable runs between the antenna company's designated area and the tank must be buried. No ice bridges or other exposed (above grade) cable support systems may be installed without written approval of the public works director. All cable tank penetrations must be sealed. The penetration sealing method and/or detail must be submitted for approval. The city may request a structural analysis be performed, at antenna company expense, if the number of wall penetrations is a structural concern. No proposed

appurtenance may interfere with the periodic maintenance of the site grounds. The antenna company must maintain the grounds inside its designated equipment area.

- **Maintenance.** Presence and operation of proposed equipment must have minimal impact on the tank's periodic maintenance work (e.g., tank inspections and painting). Antennas may be required to be out of service for a period of time during periodic tank maintenance work.
- **Safety.** Any and all proposed equipment, installation work, maintenance work, or any other work performed on the premises by the antenna company, or agents of the antenna company, must not result in any safety hazards or OSHA violations. Such hazards and violations may include, but are not limited to, ladder cage/riser clearance, toe-rung clearance, hatch interference, and vent interference.
- **Security.** No antenna company property or activities, including the operation and maintenance of antenna company equipment and appurtenances, may, in any way, impinge on the ability of the city to provide security for its facility.
- **Regulations.** The proposed communication system design must comply with all federal, state, and local standards regulations, whether identified by the city in its review or not. The antenna company must correct any design deficiencies discovered subsequent to approval of the installation at its expense and with the approval of the utility. Communication equipment must not interfere with any city communication or control signals. If interference between the antenna company and other communication equipment is discovered, it must be corrected at the antenna company's expense.

General Requirements

- **Security.** The user is responsible for the security of its own equipment.
- **Equipment and Connections.** The user must comply all minimum equipment and site standards prepared by the city and must have its own sources of electrical power and telephone service.
- **Cost.** As outlined in a lease agreement, the telecommunication company must reimburse the city for any cost that incurs due to the company's location on city property. In addition, the user must agree to pay a fee for each time it wants admittance into the tower structure, if required by the city.

Revocation

The city council may revoke permission to use a city water tower if it determines that any one of the following situations exist:

- A potential user with a higher priority cannot find another adequate location and the potential use would be incompatible with an existing use;
- A user's antennas unreasonably interfere with other users with higher priority, regardless of whether or not this was adequately predicted in the technical analysis;
- A user violates any of the standards in this policy or the conditions attached to the city's permission; or
- The city council decides to dismantle the water tower.

Before taking action, the city will provide notice to the user of the intended revocation and the reasons for it, and provide an opportunity for the user to address the city council regarding the proposed action. This procedure need not be followed in emergency situations.