



TELECOMMUNICATIONS CONDITIONS OF APPROVAL REQUIREMENTS

City of Olympia
Community Planning and Development
Building Division Bulletin (Bulletin #07-2017)

Subject: TELECOMMUNICATIONS CONDITIONS OF APPROVAL REQUIREMENTS

All telecommunications facility “Conditions of Approval” will comply with the following sections of the Engineering, Design and Development Standards, with attention to Chapter 6 and the sections of Chapter 6, Appendix 2: City of Olympia Standards for Telecommunications Equipment at Drinking Water Utility Sites that have a **check box**.

Part 1 - Introduction and Review Procedures

1.0 Introduction

The purpose of this document is to describe the standards for locating and mounting privately-owned telecommunications equipment on City-Owned Drinking Water [Utility](#) Sites. The standards described herein are the minimum required. The City reserves the right to impose additional requirements beyond those specifically listed herein. Wireless Telecommunication facilities are also regulated under Olympia Municipal Code (OMC) Title 11 and [OMC](#) Chapters 18.44 and 18.46.

All telecommunications equipment located on City-Owned Drinking Water [Utility](#) Sites shall be governed by these standards and by the terms of the lease between the City and the Owner of the telecommunications equipment (Lessee).

1.1 Review Procedures

All proposals for installation of new telecommunications equipment or modifications to existing telecommunications equipment on City-Owned Drinking Water [Utility](#) Sites (herein after called Sites) shall be submitted to the City Community Planning and [Development](#) (CPD) for review and [permit](#) approval from CPD prior to beginning any work on the property. (Note that modifications to existing equipment type or location may also require lease modifications).

A. Submittal Format

All submittals shall be in the following format:

1. Plan sheets – 22” x 34” (3 copies)
2. Design calculations – 8 ½” x 11” (3 copies)
3. Reports or studies – 8 ½” x 11” (3 copies)
4. 1 electronic .pdf format file or all submitted items.

B. Submittal Content

All submittals shall include the following information:

1. Plan sheets

- a. Cover sheet including the following information:
 - i. Project title
 - ii. Name of the site
 - iii. Vicinity map
 - iv. Owner and contact information
 - v. Engineer and Surveyor's contact information
 - vi. Sheet index
 - vii. List of proposed radio frequencies to be utilized
 - viii. City of Olympia signature block
- b. Site [plans](#) including the following information:
 - i. Survey date, datum, and control points. Horizontal datum shall be NAD 83/2011 (2010 Epoch) Washington South Zone (US Survey Feet). Vertical Datum shall be NAVD88 (US Survey Feet).
 - ii. Location of existing site [improvements](#), existing underground utilities, and existing lease boundaries
 - iii. Location of the lease boundary for the proposed [improvements](#)
 - iv. Location of any proposed [improvements](#) including:
 1. Ground based support equipment
 2. Conduits
 3. Vaults
 4. Pull boxes
 5. Utility services
 6. Fencing, gates and [access](#) points
 7. Gravel surfacing or paving necessary for site and equipment [access](#)
 - v. Elevation view of ground based equipment
 - vi. Details for trenching and [utility](#) installation
- c. Plans, elevations, and sections showing locations and details for any structure or water storage tank mounted equipment including:
 - i. Location of existing antennas, conduits, and other telecommunications appurtenances
 - ii. Proposed antennas and repeaters
 - iii. Proposed conduits, junction boxes, and conduit chases
 - iv. Proposed mounting attachments and brackets
 - v. Unwrapped elevations of existing and proposed antennas on the structure or water storage tank.
 - vi. Any areas where RF protection monitoring and protection is required shall be indicated on the [plans](#) along with a description of the protection/monitoring required and necessary signage. (If no areas require monitoring and protection a note stating that shall be include on the plans)
- d. All plan sheets shall be stamped and signed by a Professional [Engineer](#) licensed in the State of Washington.

2. Design Calculations

- a. Design calculations shall be submitted for attachment of all items to the structure or water storage tank. Design calculations shall be stamped and signed by a Professional [Engineer](#) licensed in the State of Washington.

3. Additional Supporting Documentation

- a. The [applicant](#) shall submit information regarding the frequency and direction of the telecommunications signal to be broadcast. The [applicant](#) shall submit supporting documentation demonstrating that the proposed telecommunications equipment will not interfere with existing telecommunications equipment on the water storage tank.
- b. The [applicant](#) shall submit information describing any safety restrictions for personnel working in the vicinity of the telecommunications equipment including safe working distance, duration, and any personal protective equipment requirements.

1.2 Review and Inspection Costs

The [Applicant](#) or Lessee shall pay all costs for [permits](#) and special inspections of telecommunications equipment [projects](#) on City-Owned Drinking Water [Utility](#) Sites. All review fees must be paid by the [applicant](#) before the CPD will authorize on-site construction work to proceed.

1.3 Site [Access](#) and Security

All [access](#) to the Site shall be coordinated with the CPD and the Public Works Department (PWD). The Lessee shall provide twenty-four (24) hours' notice prior to requiring [access](#) to the site. The day of [access](#) to the Site, the Lessee or their contractors shall call the PWD phone line at 360-753-8333, Option 0 (zero), to notify the PWD Pump Station Section of the entry so PWD can acknowledge the Site intrusion alarm. The PWD may at its discretion accompany all visitors to the Site(s) or allow unsupervised [access](#) to the site(s). If the Lessee [accesses](#) a Site without PWD personnel present, the Lessee shall be responsible for securing the Site prior to leaving the Site.

1.4 Record Drawings

Within 30 days of completing any modifications to telecommunications facilities on a Site, the Lessee shall submit to the CPD [Record Drawings](#) documenting the location and type of modifications made at the site. Record Drawings shall conform to sections [3.030](#), [3.040](#), [3.045](#) and [3.065](#) of the City of Olympia Engineering Design and [Development](#) Standards (EDDS). In addition, original sealed [Record Drawings](#) shall be on 24-inch x 36-inch or 22-inch x 34-inch sheet size. Original sheets will be monochrome, no shading or color images, ink on good quality white [bond](#) paper. Along with two full size paper copies, electronic copies of final, approved [Record Drawings](#) shall also be submitted to the City, in two formats: (1) 300 dpi TIF, and (2) AutoCAD compatible file.

1.5 Supporting Utilities

All utilities (electrical, telecommunications, etc.) providing service or support to the Lessee's telecommunications facilities shall be bound by the same requirements for plan approval, site [access](#), and [Record Drawings](#) as the Lessee.

1.6 Relocation of Facilities for City Maintenance Activities

Periodically, the PWD will need to complete maintenance activities on its Sites including cleaning and painting of structures and water storage tanks. Some of these activities will impact the operation of the telecommunications equipment. At least 60 days before beginning maintenance activities, the PWD will notify the Lessees in writing to coordinate the maintenance work. If telecommunications equipment needs to be removed from the structure or

temporarily relocated, the PWD will provide additional written notice to the Lessee. Within 30 days of receiving written notice to remove or relocate telecommunications equipment, the Lessee shall remove or relocate their telecommunications equipment.

The PWD may provide the option of temporarily relocating the Lessee's telecommunications equipment onto the containment scaffolding during maintenance if such structure will be available. If the Lessee opts to temporarily relocate their equipment onto the scaffolding, the Lessee shall be responsible for the following:

- A. Providing the weight and location of each antenna to be relocated to the PWD within 30 calendar days of being notified of the maintenance activity.
- B. Providing the PWD with any requirements or restrictions for coating their antennas and cabling. If no information is provided, the PWD shall assume that all of the Lessee's equipment can be coated with the coating system selected by the PWD.
- C. Relocating all antennas and cabling from the structure or water storage tank to the scaffolding.
- D. Making any necessary adjustments during construction, coordinating activities with the PWD and the City's Contractor.
- E. Relocating all antennas and cabling from the scaffolding to the structure or water storage tank.
- F. Any and all costs associated with removal or relocation of the Lessee's telecommunications equipment.

Lessee shall have a maximum of seven (7) calendar days to relocate their antennas and cabling from the structure to the scaffolding and another seven (7) calendar days to relocate their antennas and cabling from the scaffolding to the structure. The timeframe for the relocations shall be determined by the PWD.

Lessee shall assure that the PWD is made aware of any restrictions regarding the painting or coating of antennas and cables prior to placing any equipment on a City facility. If no such restriction is provided to the PWD, it will be assumed that no such restriction exists. The City assumes no responsibility for damage to antennas, or other Lessee equipment, due to routine maintenance activities if Lessee does not provide restrictions prior to placing equipment on a City facility.

□ 1.7 Removal of Obsolete and Unused Equipment

Equipment that is obsolete or is no longer being used shall be removed from the Site(s) within 30 days of its ceasing to be used. Following equipment removal from the Site, the Site and any associated facilities shall be restored to their pre-existing condition or better.

For water storage tanks, any damage to the protective coatings on the water storage tank shall be repaired. The repairs shall be conducted using the existing coating system or an equal system approved by the PWD. Repairs shall be conducted by a contractor knowledgeable in coating repair. No sharp edges or surfaces that will be problematic for maintaining the protective coatings shall be allowed to remain. Surface preparation shall be performed to a minimum of the Society of Protective Coatings (SSPC) SP-3 Power Tool Cleaning. All repair work shall be inspected by a NACE Level 3 Coating Inspector, at the Lessee's expense.

Part 2 – Design Standards

□ 2.0 Ground Support Facilities

All ground support facilities shall be located within their allotted [easement](#). Ground support facility structures shall not be located closer than 20 feet from a structure, water storage tank shell, or foundation.

2.1 Conduits and Conductors

A. Routing on Site

All power and telecommunications conductors on the Site shall be located below ground in conduits or conduit chases. Conduits shall be grouped together to the extent feasible and shall be installed in designated corridors. Conduits shall be installed between 24 inches and 36 inches deep. Conduits shall be routed to avoid or minimize conflicts with existing utilities. Conduits shall not be installed directly above and parallel to any City water or drain pipe.

B. Routing on Structures (Including Water Storage Tanks)

Conduits and conductors running along exterior wall surfaces shall be grouped together and shall be located in designated covered conduit chases. Conduit and conductor routing on structures shall not obstruct the ability of the PWD to [access](#) and maintain the structure. Conduits shall not be attached to ladders.

C. Routing on Water Storage Tanks

Conduits shall not be surface mounted on top of water storage tank footings unless no other route is practical as determined by the PWD. If conduits are routed on top of water storage tank footings, they shall be grouped together in one location and a ramp rated for public works service vehicles shall be install over the conduits.

On water storage tanks, conduit chases shall be set off from the water storage tank a minimum of 6 inches.

2.2 Antennas

Antennas shall be of the minimum size and minimum number to effectively provide the desired function. Antennas shall be securely mounted to structures.

On water storage tanks, antennas shall be securely mounted to the water storage tank or water storage tank appurtenances such as the water storage tank perimeter handrail. Antennas shall not be mounted to ladders, vents, or [access](#) platforms.

2.3 Attachments to Structures

A. General

All antennas, conduits, chases, and appurtenances shall be securely mounted to structures.

B. Water Storage Tanks

Permanent attachments to water storage tanks shall be mounted on stand-off brackets at least 6 inches from the water storage tank. For new water storage tanks, all equipment mounts shall be welded to the water storage tank during construction at locations determined during design. For existing in-service water storage tanks, magnetic mounts shall be used to attach equipment to the water storage tank. Antennas, conduits, and appurtenances shall not be attached to existing in service water storage tanks by welding or epoxy, unless allowed by the PWD at its sole discretion due to the timing of the next water storage tank recoating. If an existing water storage tank is taken out of service, the PWD may, at its discretion, allow welding to attach to the water storage tank. For any welding to the water storage tank, the Lessee shall be required to repair water storage tank coatings and disinfect the water storage tank to the standard required by the PWD.

Design calculations shall be submitted for the attachment of all antennas, conduit chases and accessories to the water storage tank.

Equipment mounted to the top of the water storage tank shall not interfere with drainage of water from the water storage tank and shall not cause ponding on the water storage tank roof.

2.4 Self-Supporting Structures and Towers

The PWD, at its sole discretion, may allow under CPD-issued [permit](#) the installation of self-supporting structures or towers at a Site provided that there is adequate room available to [access](#) and maintain existing structures and facilities. For self-supporting structures, the PWD may require specific colors, screening, or landscaping to minimize the visual impact of the structure on the surrounding area.

Part 3 – Construction Standards

3.0 Pre-Construction Meeting

Prior to beginning any work on the Site, the Lessee and its contractor shall schedule a pre-construction meeting with the CPD and PWD to coordinate the work, establish communication protocols, and define work hours.

3.1 Insurance

All contractors and subcontractors working on the Site shall maintain insurance in the types and amounts required for the Lessee as specified in the telecommunications lease. The contractor shall supply a certificate documenting such insurance prior to beginning work on the Site.

3.2 Hours of Work

All construction shall take place between the hours of 7:00 a.m. and 5:00 p.m., Monday through Friday. Emergency work or work requiring shut down of telecommunication facilities may be completed outside of these hours with 24-hour written notice to the CPD and PWD.

3.3 Construction Photos

Prior to construction, the contractor shall take comprehensive pre-construction photos of the Site. Following construction, the contractor shall take comprehensive post-construction photos of the Site. The contractor shall provide the CPD with one hard copy of photos in an indexed 3-ring binder and shall supply one digital copy of photos of a flash drive or CD-ROM.

3.4 Underground [Utility](#) Location

The contractor shall locate existing utilities on the Site prior to beginning any excavation activities.

3.5 Construction Staking

Prior to construction, the Lessee shall have the lease area boundary and [utility](#) corridors staked by a Professional Land [Surveyor](#) licensed in the State of Washington.

3.6 Traffic Control and Site [Access](#) Control

For construction activities that will impact travel in the public [right-of-way](#), the contractor shall submit a [traffic control](#) plan to the CPD for review and approval. For construction activities that will limit or restrict [access](#) to areas on the Site, the contractor shall submit a Site [access](#) plan to the CPD for review and approval.

□ 3.7 Construction

All construction work shall be completed in accordance with the approved [plans](#). All trenching shall be backfilled at the end of each day. No open excavations shall be left overnight. The Site shall be cleaned at the end of each day. All disturbed ground surfaces shall be restored to their original condition or better.

The contractor shall take special care not to damage any existing structures, facilities, equipment, piping, or protective coatings. Any damage to existing facilities shall be brought to the attention of the CPD and PWD immediately and shall be repaired by the contractor to the PWD’s specifications.

For water storage tank sites, the contractor shall take precautions to ensure that dust and debris do not enter the water storage tank vent(s); however, the contractor shall not obstruct air flow into or out of the water storage tank vent. Lead, Cadmium, and/or Chromium may be present in the existing coating systems on structures. Any work performed on any structure should assume the presence of these metals in the coating system unless determined otherwise by sampling and testing for these metals.

□ 3.8 Labeling

All equipment shall be provided with an identification tag that identifies the owner and provides a unique identifier for the equipment component. Each conduit shall be provided with a conduit ID tag that includes an abbreviation for the conduit owner and conduit number. All equipment and conduit ID tags shall be reflected on the [record drawings](#).

□ 3.9 Final Inspection

Upon completion of the work, the contractor and Lessee shall schedule a punchlist inspection with the CPD and PWD. Based on this inspection the CPD will prepare a list of any items to be corrected. The contractor shall correct any deficiencies identified by the CPD within 14 days. Following completion of any corrective work, the contractor shall request a final inspection from the CPD. When the CPD confirms that all work has been completed to its satisfaction and [record drawings](#) have been submitted and approved, the CPD will issue a notice that the [project](#) is complete and the construction [bond](#) can be released.

This form has been approved for use by the Olympia Community Planning and Development (CPD) Department.



Keith Stahley, Director,
Community Planning and Development

10/13/2017
Date