



Small Wireless Facility Guidance



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Small Wireless Facility Guidance

Information on common topics address during small wireless (SWF) planning, review and installation.

Americans with Disabilities Act

The Americans with Disabilities Act outlines federal requirements and compliance that must be met with all public facilities.

- Per the city of Bellevue's (COB) Transportation Design Manual Section 1.2: "the design of city streets shall be consistent with the current versions of the following documents. 1. American Association of State Highway and Transportation Officials (AASHTO)... 8. Americans with Disabilities Act (ADA)... 9. Public Right of Way Accessibility Guidelines (PROWAG) 10. Federal Highway Administration (FHWA), Manual on Uniform Traffic Control Devices (MUTCD) 11. National Association of City Transportation Officials (NACTO) Urban Street Design Guideline... 15. WSDOT Design Manual"
- It is the applicant's responsibility to address ADA compliance within public rights-of-way.
- Regarding linear distance (extent) of ADA compliance required by COB: This will be addressed on a case-by-case basis. However, for a typical project that involves improvement of the sidewalk facilities, COB will extend improvement through a driveway approach adjacent to the sidewalk removal/replacement that is not ADA compliant.
- If applicant finds that the requirements to address the ADA issue excessive in scope, they may submit a Maximum Extent Feasible (MEF) for review and evaluation. The MEF will be reviewed and approved by the Principal Office Engineer and shall be prepared according to their requirements.
- The request for the MEF, as well as any deviations, must be developed and submitted by the Professional Engineer of record. Information shall include relevant standards and requirements, summary of alternatives considered to meet standards and requirements, and justification for the proposed design decision.

Electrical Access

The applicant is solely responsible for providing electrical energy to their facilities. To help, the city intends to make its electrical circuits available.

- If the applicant chooses to use a city electrical circuit, there are several options for electrical access for SWF installations. The electrical access types and associated fees are listed below:
 - Type 1: Splicing into an existing COB electrical circuit (preferred option by COB).
 - Fee: COB Power Access Fee is adjusted annually and can be found at the following link: [SWF Information & Fees](#)
 - Type 2: Install carrier-owned conductor into an existing COB conduit.
 - Fee: COB Power Access Fee is adjusted annually and can be found at the following link: [SWF Information & Fees](#)
 - Type 3: Connect to breaker in an existing COB electrical service cabinet. Carrier uses privately owned facilities (conduit, boxes, etc.) to run conductor to SWF installation.
 - Fee: \$1000 per year per breaker connection.
- The fee for access Types 1-3 above applies per SWF installation. Each SWF installation pays the access fee, even if multiple SWFs are on the same circuit.
- For electrical access types that involve the use of COB's circuit, the applicant and COB shall enter into a Circuit Access Agreement (CAA).
- For electrical access types that involve the use of COB's circuit, the applicant shall submit a circuit load analysis report (CLAR) with the application.
- If the applicant proposes an alternative electrical access plan to those described above, the Transportation Director or designee will determine a lease fee consistent with the fees for Type 1-3 above. The Director may also establish new fee Types as necessary.
- In addition to the electrical access lease fee, the carrier shall pay for the electrical energy used to power the SWF installation. Power usage will be tracked using a meter installed by the carrier.
- The COB Power Access Fee is adjusted annually using the CPI-U consistent with the methodology in the SWF Master License Agreement.

Geotechnical

The minimum geotechnical investigation requirements during SWF pole foundation construction are listed below:

- A memo reviewing the strength of soil based on excavation samples or tests that is stamped by a professional engineer qualified in geotechnical work.
- The memo should include the following:
 - A statement confirming whether the soil strength assumptions used for the foundation design match the actual conditions based on an inspection during excavation.
 - In typical soil conditions, the memo should verify that a visual inspection was performed and include the results of a basic bearing probe test (e.g. a T-probe test).
 - In poor soil conditions such as wetland area, or poorer soils such as clay or silt with a high moisture content, the memo should verify soil strength using appropriate soil testing equipment, such as a Dynamic Cone Penetrometer (DCP) or similar cone penetrometer testing equipment, drill rigs with standard penetrometer test (SPT) capability, or cone penetrometer test (CPT).
 - If the engineer is not able to verify the soil strength using these types of tests, the engineer shall recommend and utilize a more appropriate test that will enable them to adequately confirm soil strength with respect to the foundation design.
- If findings from the field investigation differ from assumptions made during design, the design team must submit a Post Revision for review that includes a revised design for the foundation.

Permit Application Submission Requirements

The SWF TJ permit application will be rejected at intake by the Permit Center if the following criteria are not met:

- Must provide an actual address. Cross streets or legal description is not sufficient.
- The project name must be in the format of "Franchise Name-Street Address" (e.g. Verizon – 1234 NE 8th Street).
- Franchise Bill-To Form must be filled out and the applicant/SWF facility owner must be listed as the entity being billed.
- Site plan must be included in the submittal packet, no substitutes are acceptable.
- If a Traffic Control Plan is required, the Traffic Control Plan must be stamped by a Traffic Control Supervisor or qualified engineer.

For more information on permit submittal requirements, please see the Franchise Utility Right of Way Permit Submittal Requirements located at this link: [Franchise Utility Right of Way Permit | City of Bellevue \(bellevuewa.gov\)](https://www.bellevuewa.gov/DocumentCenter/View/11111/Franchise-Utility-Right-of-Way-Permit-Submittal-Requirements)

Additionally, SWF TJ application materials must meet the requirements provided within the Small Wireless Facility Permit site, which is located at this link: [Small Wireless Facility Permit | City of Bellevue \(bellevuewa.gov\)](https://www.bellevuewa.gov/DocumentCenter/View/11111/Small-Wireless-Facility-Permit)

Pole Foundation

It is the city's preference that the applicant install the city's standard SWF-compatible pole foundation per the specifications outlined in SL-105-1 and SL-106-1 of the Transportation Design Manual.

If the applicant proposes a foundation that is not per the city's standard foundation, the city's preference is to install a foundation of similar size, shape and material (concrete encased rebar) to the city standard details. If the applicant proposes an alternative, non-standard foundation, the applicant must provide documented evidence that justifies and supports the proposed non-standard foundation. The city may require applicant to provide a geotechnical report, additional soils testing, or potholing and utility locates in order to obtain the necessary evidence that the proposed non-standard foundation is the most suitable foundation solution at the proposed SWF site. Depending on the site-specific conditions, the applicant has the option to adjust the location of the SWF pole and foundation up to 10 feet in each direction from the existing streetlight pole, parallel to the right of way, as described in the Small Wireless Facility Permit Checklist. Additionally, the applicant has the option to adjust the placement of the pole and foundation perpendicular to the right of way from back of curb, while considering luminaire arm length and meeting separation requirements from face of curb. This solution, if by adjusting the location of the proposed SWF the applicant can install the city's standard pole foundation, is preferred by the city over proposing a non-standard pole foundation.

In evaluation of the proposed non-standard foundation, the city will consider the likeliness of the proposed foundation inhibiting future utilities access/maintenance/installation, as well as the lifespan of the foundation and potential maintenance or upkeep issues posed by the non-standard foundation.

The following is a list of items that may be requested if the applicant proposes a non-standard foundation:

- A write up that contains reasoning behind designing and selecting the proposed non-standard foundation and any alternatives that were considered.
- A geotechnical report that supports the reasoning for the proposed non-standard foundation.
- A structural analysis report for the proposed non-standard foundation.
- The manufacturer's specifics for the proposed foundation if a foundation system is proposed.
- Potholing to locate underground utilities or to conduct soils testing.

Potholing

Potholing may be required for verification of utilities, structures, etc.

Property Rights

The applicant shall show that all proposed facilities associated with the co-location (foundation, pole, conduit, etc.) will be within the public right-of-way or within the public sidewalk and utility easement.

For proposed facilities associated with the co-location that are not located in the public right-of-way or public sidewalk and utility easement: the permit cannot be approved and issued until legal access is obtained.

If construction requires disturbance, removal/replacement of facilities, restoration, etc., on private property, a permit condition may be added for the applicant to obtain the necessary Right-of-Entry or Temporary Construction Easement document(s). The city will not verify that the Right-of-Entry and/or Temporary Construction Easement has been obtained prior to issuing the permit – this is the sole responsibility of the applicant who is solely accountable for their activities on private property.

FCC Order Timeline

The city's position is that under 47 CFR1.6002, a 90-day review period by the city applies to the replacement of an existing street light pole with a new one to accommodate the co-location of a SWF (new structure). When an existing streetlight pole is proposed to be removed and replaced with a new, SWF-compatible streetlight pole (new structure), there are certain additional criteria and factors that must be reviewed above and beyond what is required for placement of a SWF on an existing streetlight or utility pole. When reviewing a SWF application with a proposed new street light pole structure, the Transportation Department reviews compliance with the [Transportation Design Manual](#) (which includes but is not limited to WSDOT, AASHTO, PROWAG) and the [SWFs Standard for Plans and Drawings](#) (Applicable Standards).

Utilities Variance

If the proposed foundation is located within the required horizontal or vertical clearance of any city-managed utility (water, sewer, storm), the applicant must obtain approval from the city's Utilities Department to vary from the standard clearance requirements. Variance from the city's Utilities Department can be applied for and obtained in one of two ways described below:

1. During the SWF TJ permit application review, if the ROW Review Engineer finds that any portion of the proposed SWF facility comes within the clearance limits of city-owned utilities (sewer, water, storm) the ROW Review Engineer will reach out to the Utilities Department and apply for the variance. The ROW Review Engineer will provide details on the proposed facility which will be reviewed by the Utilities Department. Once variance is obtained, the approval will be included in the final permit issuance packet. Please note this process is an added step for the ROW Review Engineers and will add several business days to the review process.
2. If during the pole reservation process, when the applicant has reserved a city streetlight pole for preliminary studies of the proposed site, the applicant determines that any portion of the SWF facility comes within the clearance limits of city-owned utilities (sewer, water, storm), the applicant will submit a request for variance from the Utilities Department through the DC pole reservation permit. The applicant will provide details of the proposed facility and will be reviewed by the Utilities Department. Once variance is obtained for that site, the applicant will submit the variance as supporting documentation of the submittal packet for the SWF TJ permit application. Obtaining the variance in advance and providing approval as part of the SWF TJ permit application will save time during the permit application process.

Additionally, if the proposed facility is located within 1 foot of any non-city-managed utility, the applicant must obtain variance approval from the utility provider. The applicant must provide the city a letter of authorization or proof of approval from the utility provider.