



Design Commission & Historic Landmark Commission

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Mayor Wheeler, Portland City Council Members,

Thank you for the opportunity to address this important matter on Amending Underground Wiring Districts code to permit the attachment of wireless facilities on poles.

On March 14, 2019 the Design Commission (DC) and the Portland Historic Landmarks Commission (PHLC) held a joint hearing during which Anne Hill of PBOT gave a briefing on the Vertical Infrastructure project that the department is undertaking with the help of BDS and BPS. PHLC and DC were previously briefed in the Spring of 2018 and subsequently issued memoranda outlining concerns. A commissioner from each body took part in meetings with PBOT, BDS, BPS staff through the summer of 2018 to provide direct feedback.

The capacity requirements of a small cell system in the Central City for a population the size of Portland's could drastically change the public realm which is of utmost concern to the commissions. Portland is renowned for the quality and human scale of its streetscapes. Hence, the thoughtful deployment of small cell RF equipment into our public rights-of-way is of critical concern. In the last year, PBOT and their partner departments have undertaken an inventory mapping of existing pole infrastructure in the ROW as well as districts and areas of Central City that are particularly visually sensitive to new overhead utilities in public streets. That effort aims to create a set of goals, criteria and potential policy to guide the future accommodation of small cell RF equipment. A proposed checklist of strategies and concerns is as follows:

1. Intersections:

Prioritize intersections and existing, non-decorative poles such as signal poles and cobra head street lights.

- Begin with an evaluation of existing signal poles with mast arms to determine if they can be re-engineered to receive new small cell RF equipment; or
- If a. is not feasible, develop a new cobra street light standard that is engineered for the additional structural loads and designed with new small cell RF equipment as integral components, not tacked on.

2. Sensitive Areas:

Avoid sensitive areas like:

- Established Historic Districts, the North and South Park Blocks, and Cultural Districts.
- Light rail streets with significant high-voltage, overhead electrification infrastructure – these poles carry significant safety restriction for anyone working near them.
- If the need expands beyond Central City, other areas such as Terwilliger Boulevard should also be avoided.

3. Prohibited Infrastructure:

In no case would existing twin ornamentals, which are a Downtown Portland signature element in the Central City Fundamental Guidelines, be either adapted to receive this equipment nor replaced by a re-engineered version structurally enhanced to hang equipment on an extension. There is a precedent in Central City of a larger, twin ornamental designed to support overhead electrification for light rail. However, that pole primarily supports simple span wire that is visually unobtrusive and blends into the back drop of tree canopies successfully.

Last year PBOT executed an inventory to establish the location and number of poles of all types in the ROW, including existing ornamentals, as a tool for establishing areas of opportunity. This inventory should be updated and expanded to include the condition of historic ornamentals to be the basis of an ongoing maintenance plan. The commissions are aware that the maintenance of these poles has not been a priority for the City and as a result there has been demolition of older historic poles through neglect and inaction. Ornamental street poles lend a

consistent character to the downtown area of Portland that makes it unique and recognizable, and every effort should be made to keep them.

4. Mid-block:

Where intersection opportunities do not exist, evaluate mid-block opportunities where either an existing cobra head street light exists or an open zone with no street light or street trees occurs.

a. Map out a composite 'opportunities' map combining 1a, 1b, 2, and 3.

5. New Smart Pole:

A larger consideration would be to develop a new Central City smart pole (much like South Waterfront) that includes the following:

- 21st century lighting technology to provide higher quality, energy-efficient, long-life lighting;
- All adaptors and components for integrally accommodating all small cell RF technology equipment in a manner that is contemporary, elegant and all aspects look intentional;
- Other components like pedestrian signal heads, banner brackets, small service cabinets, digital parking pay station (Parking Kitty), etc.;
- May include a larger version that could accommodate overhead electrification for streetcar although safety restrictions for maintenance access to RF equipment would have to be carefully negotiated;
- This concept would have to be rolled out staged implementation due to the cost and may include joint funding.
- An assumption would be to utilize existing street positions, footings, anchor bolts and service conduit. Under this scenario, twin ornamentals would be salvaged for re-use in other appropriate historic areas outside of Central City.
- There is a relevant precedent for this with the Transit Mall Revitalization where a new pole was designed for intersections that accommodates overhead electrification, traffic signals, train signals, pedestrian signals, activated train warning signs and street name signs. It was designed to replace three individual poles.

6. Tree Canopy:

In no case, would the deployment of new poles be used as a reason for removal of Central City existing tree canopy (see zoning code and Urban Forestry policies) without significant mitigation effort. Is it assumed RF signals can travel through vegetated canopy without interference?

Both commissions support the efforts that the PBOT team and their partner departments are undertaking to include the commissions and ensure that our concerns are considered while balancing the heavy realities of federal requirements and technology. The DC and PHLC appreciate the opportunity to continue to work with PBOT on this program and propose to assign a small committee to work with PBOT and other involved City Departments on a frequent basis for this effort going forward through an RFQ and RFP process.

Thank you



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Portland Design Commission



Anne Mahoney,
Portland Historic Landmarks Commission