# DRAFT SMALL CELL DESIGN GUIDELINES



The guidelines have been drafted with input from the following:











## DRAFT SMALL CELL DESIGN GUIDELINES 2/1/2019

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#### 1. Background

- 1.1. Washington, DC has a history spanning more than two centuries establishing a unique streetscape that sets it apart from any other city in the world. A crucial component of that streetscape is its extensive network of public space. The public space enhances the quality of life for our residents and visitors, and ensures that the city has the foundation to become a more walkable and sustainable city. It also serves as the city's civic, cultural, and physical framework of important views and vistas and provides the opportunity for public assembly. Washington, DC's public space is a valuable and intentional asset that requires careful stewardship to maintain its integrity and safeguard it as a legacy to future generations. This heritage is safeguarded through the work of many local and federal government agencies). Any new use made of that public space must be cognizant of and adapted to the special characteristics of Washington, DC.
- 1.2. To address the growing demand for wireless technology across the United States, cellular providers propose to increase the capacity of their networks by deploying small cell infrastructure (Small Cell), a new lower-powered antenna technology, to reduce data traffic load on roof mounted equipment and larger cell towers. This new technology requires infrastructure to be installed in closer proximity to the users on the ground
- 1.3. Small Cell infrastructure consists of antennas and related power equipment that transmits wireless signals to improve reliable data streaming. This infrastructure will provide cellular and data coverage to smaller geographic areas. New Small Cell facilities will improve the provider's ability to meet the public's current 4G (LTE) voice and data demands and the future 5th generation cellular needs for interconnected devices to operate at high speeds to access data.
- 1.4. Small Cell infrastructure will affect the function and aesthetics of public spaces. Cities across the nation are beginning to address the issue of balancing the need to accommodate the increased cellular demand with their community's public space character and function.
- 1.5. To provide the necessary coverage, each cellular provider will install infrastructure to serve their individual needs; additionally, some companies serve as an infrastructure provider, or hotelier, installing equipment that will house infrastructure for multiple cellular providers. Like other utilities, federal law allows Small Cell infrastructure equipment in the public right-of-way.

#### 2. Adoption

2.1. These guidelines are intended to cover the general standards and aesthetics for the design and installation of Small Cell technology in public space across Washington, DC. They are comprehensive in nature while recognizing the unique characteristics and history of Washington, DC. The guidelines cover the different areas of Washington, DC while keeping generally applicable standards based on the type of infrastructure installed.

- 2.2. As a result of this comprehensive approach, the guidelines have been drafted with input from a variety of stakeholders, including advisory neighborhood commissions, other community, civic and citizen associations, and members of the public.
- 2.3. Input was also received from staff of the District Department of Transportation (DDOT), the Office of Planning (OP), the Historic Preservation Office (HPO), the U.S. Commission of Fine Arts (CFA), and the National Capital Planning Commission (NCPC)
- 2.4. Based on the input received, a general consensus identifying the need for an independent design process to present options for the appearance of freestanding poles and at-grade cabinetry was articulated. As a result, additional guidance will be provided for cabinetry and freestanding poles for the final approval of the PSC.
- 2.5. The guidelines are also the result of the review of information shared by telecommunication providers, technical limitations, and requirements of Small Cell infrastructure standards and practices across the country, such as Denver, Boston, Dublin, OH, and Lincoln, NE. In addition, these guidelines have been informed through a best practices review of international cities in North America, Europe, and Asia.
- 2.6. The guidelines incorporate applicable local and federal policies and regulations. The applications shall comply with the most current version of guidelines and regulations, including but not limited to:
  - 2.6.1. Small Cell Master License Agreement
  - 2.6.2. District of Columbia (DC) Code
  - 2.6.3. DC Municipal Regulations
  - 2.6.4. DDOT Manual on Uniform Traffic Control Devices
  - 2.6.5. DDOT Design and Engineering Manual (DEM)
  - 2.6.6. The Comprehensive Plan for the National Capital
  - 2.6.7. Shipstead-Luce Act
  - 2.6.8. Historic Landmark and Historic District Protection Act of 1978
  - 2.6.9. DDOT Public Realm Design Manual
  - 2.6.10. National Mall Streetscape Manual

#### 3. Purpose

#### 3.1. Goals of the Guidelines

- 3.1.1. The Small Cell Infrastructure Guidelines set forth requirements and specifications for the placement and design of Small Cell infrastructure within the District's public right of way (ROW) to address engineering, safety, and aesthetic concerns. The guidelines intend to fit the functional needs of the cellular infrastructure necessary to provide adequate coverage within the character and function of the capital city's public space with the goals of:
  - 3.1.1.1. Avoiding impact on the most important view sheds and vistas within the L'Enfant Plan of Washington, DC;
  - 3.1.1.2. Minimizing the impact on the character of designated historic districts and landmarks, monuments, memorials, and federal buildings and open spaces;
  - 3.1.1.3. Protecting access and circulation to buildings and public open spaces; and

3.1.1.4. Minimizing visual and physical clutter within the streetscape.

#### 3.2. Areas of Special Interest

- 3.2.1. The L'Enfant Plan of 1791 established Washington, DC's historic urban form and its framework for development. Reinforced by the McMillan Plan of 1902, the combined Plan of the City of Washington includes an orthogonal grid and a series of diagonal avenues radiating from the White House and U.S. Capitol, which at the Capitol's center point, establishes the District's four quadrants. The intersection of the street grid and diagonal avenues create a system of parks, open space, and vistas that are integral to the District's historic street network. L'Enfant's urban framework is recognized for its national importance through its listing in the National Register of Historic Places.
- 3.2.2. The character of Washington, DC's streetscape reinforces the importance of the public realm, where the streets, squares, and public spaces are the primary features in the city defined against the background of urban development. A strong tradition of public space planning in the late 19th and early 20th centuries built upon Washington, DC's historic plans through intentionally designed public infrastructure and streetscapes, such as curb and gutters, tree planting, streetlights, and traffic control devices. Many of these elements are contributing elements to the L'Enfant Plan historic designation and to the Districts-cultural landscapes in Washington DC. This essential quality of Washington, DC's streetscapes and public spaces must be maintained as a creative, welcoming and livable environment, and to reinforce Washington, DC's unique role as the nation's capital and the home to approximately 700,000 residents.

#### 4. Review Process

#### 4.1. Master License Agreement

- 4.1.1. Before an entity can install Small Cell infrastructure in the ROW, it must first submit an have executed a Master License Agreement (MLA) with Washington, DC.
- 4.1.2. The MLA governs many aspects of Small Cell infrastructure and is a standardized document that does not allow modification or alteration by or for individual MLA applicants. The MLA includes multiple provisions that establish conditions, requirements, and limitations on the MLA holder and any Small Cell infrastructure installed in Washington, DC. In and of itself, the MLA does not permit the installation of any Small Cell infrastructure. It serves as a preliminary step in the process for an MLA holder to submit applications with DDOT for public space permits to install Small Cell infrastructure.
- 4.1.3. All of the conditions, requirements, and limitations to which the MLA holder agrees by executing an MLA with Washington, DC are incorporated by reference into every public space permit an MLA holder may receive. In addition, particular provisions may be reiterated in this document and in an issued public space permit.

4.1.4. A copy of each executed MLA can be found online at the Office of the Chief Technology Officer's website. The webpage is: <a href="https://octo.dc.gov/page/small-cells">https://octo.dc.gov/page/small-cells</a>

#### 4.2. Public Space Permits

- 4.2.1. All Small Cell installations in Washington, DC require a public space permit from the District Department of Transportation (DDOT). DDOT uses a transportation online permitting system (TOPS: tops.ddot.dc.gov) to process public space permit applications. All applications will require review to ensure adherence to these guidelines and all other applicable standards, regulations, and laws. Applications that comply with these guidelines and all other applicable standards, regulations, and laws will be processed by DDOT's Public Space Regulation Division.
- 4.2.2. Any applications that are not consistent with these guidelines require review and approval by the Public Space Committee (PSC) at a designated hearing and will include review and comment by Advisory Neighborhood Commissions (ANCs) as well as by NCPC, CFA, and HPO as appropriate.
  - 4.2.2.1. Applicants will be notified that their application is not consistent with these guidelines and at such time, will be notified of the PSC hearing date for which their application will be reviewed.
  - 4.2.2.2. As with all PSC hearings, the notification will be published in the DC Register and all constituents will be able to submit comments and testify at the hearing.
- 4.2.3. Federal Core Interest Area: Another deciding factor on the permit will be whether the facility will be located in the Federal Core Interest Area.
  - 4.2.3.1. Applications for small cell facilities that are identified as an allowable small cell facility on the Federal Core Interest Area Map, attached to these guidelines as Map 2 and incorporated herein, do not require NCPC or CFA approval.
  - 4.2.3.2. Within the Federal Core Interest Area, providers who desire a small cell facility in a location that is not indicated on the map must submit an approval letter from NCPC and CFA with their application to DDOT's Public Space Regulations Division. The request for exceptions without such letter will not be considered.
  - 4.2.3.3. Outside of the Federal Core Interest Area Map, if a provider seeks an exception to the small cell infrastructure guidelines, DDOT's Public Space Regulations Division will inform CFA and NCPC of the opportunity to comment during a 30-day comment period.
  - 4.2.3.4. All request to replace a temporary or permanent security element along the boundary of a federal building shall require NCPC review and approval.

#### 5. General Guidelines

#### 5.1. General limits: Locations

5.1.1. These guidelines for Small Cell infrastructure apply to all areas in Washington, DC, except those areas that are under Federal or private ownership.

- 5.1.2. Small Cell infrastructure is not permitted to be installed on:
  - 5.1.2.1. Medians and traffic islands (i.e. any public space that is contiguous only with roadways and does not border any private property, regardless of whether it currently houses a District owned streetlight or a third party utility pole)
  - 5.1.2.2. Bridges, tunnels, overpasses and elevated roadways
  - 5.1.2.3. Twin-Twenty or Washington Upright poles, or others not listed on chart 1
  - 5.1.2.4. All sidewalks and rights-of-way immediately adjacent to Federal reservations.
- 5.2. Avenues and streets on the Federal Core Interest Area Map (see Map X) that do not designate small cell infrastructure locations. General limits: Preference for Locations and Methods
  - 5.2.1. The preferred locations of Small Cell infrastructure, in order, are:
    - 5.2.1.1. A mount on third party poles on streets.
    - 5.2.1.2. A mount to Pendant Pole streetlights as allowed on streets.
    - 5.2.1.3. Standalone poles on streets or named alleys.
    - 5.2.1.4. Where there are existing poles that the guidelines allow for attachment, no new standalone poles will be permitted, except for within the Area of Federal interest.
  - 5.2.2. Small cell infrastructure shall not be installed on an existing or new pole, within 10 feet of a building façade or substantial building façade projection, such as a bay window.
  - 5.2.3. Small cell infrastructure may be installed on poles with traffic control devices, such as signs, when the small cell infrastructure is placed at least 5 feet or more above the traffic control device and a minimum of 15 feet above ground.

#### 5.3. General limits: Appearance

- 5.3.1. Any Small Cell infrastructure requiring ground level cabinetry is not to be installed until the ground level cabinetry design has been reviewed and formally adopted by the PSC as part of these guidelines.
- 5.3.2. Except when Small Cell infrastructure is attached to a wood pole, poles and all equipment must be the same color and finish as surrounding streetlight poles or third party poles.
- 5.3.3. Except when Small Cell infrastructure is attached to a wood pole, exposed wires are not permitted.
- 5.3.4. Corporate or company names (except for location identification purposes noted below), logos, identifying graphics or other advertisements shall not be painted, embossed, applied or displayed in any manner on the poles, equipment enclosures (boxes, cabinets, etc.), hand hole covers, or other component of the pole. Individual location identification information will be permitted, provided no letter, number, or graphic symbol is taller than one inch in height.
- 5.3.5. Antenna(e) shall be attached as noted in Illustrations 1-2. No antenna(e) shall be attached on an arm adjacent to the pole.

5.3.6. Height

- 5.3.6.1. Existing Poles: Any attachment, including antenna(e), to an existing pole shall not extend the existing pole to a height of more than 32 feet or by more than 10 percent, whichever is greater.
- 5.3.6.2. Standalone Poles: The height of any standalone pole including its antenna(e) shall not exceed 32 feet or no more than 10 percent taller than other adjacent poles, whichever is greater.
- 5.3.6.3. Wood Poles: The height of any replacement wood pole including its antennae shall not exceed 45 feet.

#### 5.4. General limits: Adherence to Other Applicable Standards

- 5.4.1. Nothing in these guidelines is intended to limit the applicability of any other duty, requirement, limitation, or condition for work in public space in Washington, DC. As required in the MLA and in accordance with DC Municipal Regulations, persons working in the public ROW are required to abide by all traffic control, construction safety, and public space restoration standards. Separate public space permits approving temporary traffic control may be required.
- 5.4.2. Nothing in these guidelines is intended to limit the responsibility of a person who obtains a public space permit to install Small Cell infrastructure in public space to obtain all other necessary licenses, permits, and approvals from any government agency or other party that has authority or responsibility to grant and issue such license, permit, or approval.
- 5.4.3. If a streetscape is redesigned in the future, including, but not limited to the location and type of streetlights, small cell providers will be required to remove their infrastructure at their own cost and apply to reinstall small cell infrastructure in accordance with these guidelines and the new streetscape.

#### 5.5. General Parameters on Installations: Types, Locations, and Frequency

- 5.5.1. Chart 1, Permissible Installation Types and Locations, indicates where Small Cell installations are allowed based on the location and context of each proposed placement.
- 5.5.2. Chart 2, Permissible Spacing and Frequency of Installations, indicates the spacing and frequency of Small Cell installations that will be allowed.
- 5.5.3. Map 1, Applicable Boundaries, indicates the areas included in the L'Enfant Plan, Shipstead-Luce Act, Old Georgetown, and Historic Districts.
- 5.5.4. Map 2, The Federal Core Interest Area includes streets that lie within areas with a concentration of federal lands, or street segments that establish or lie within contributing vistas as designated in the 1997 L'Enfant Plan National Register of Historic Places nomination.
- 5.5.5. Map 3 Federal Property Map, indicates the location of Federal Reservations and Properties.

		Installation type	
Pole Ownership	Pole Type		Cabinetry

District	Existing 5A Poles	Class A	To be determined in a separate PSC adoption	
District	Existing 5A	Class B	No ground level cabinetry allowed, other cabinetry may require retrofitting based on cabinetry design guidelines	
District	Existing Wood Poles	Class A or Class B	Attach cabinetry to pole	
District	Existing Pendant Poles with cobraheads	Class A	To be determined in a separate PSC adoption	
District	Existing Pendant Poles with cobraheads	Class B	No ground level cabinetry allowed, other cabinetry may require retrofitting based on cabinetry design guidelines	
District	Existing Pendant Poles with teardrops	Only Class B "collar" attachments. No attachments above the arm of the pole and no removal of the decorative finial permitted.	No ground level cabinetry allowed, other cabinetry may require retrofitting based on cabinetry design guidelines	
Carrier	New Standalone Poles: Pendant Pole or Washington Pole	Class A or Class B	To be determined in a separate PSC adoption	
3 <sup>rd</sup> Party	Existing Utility Pole	Class A or Class B	Attach cabinetry to pole	

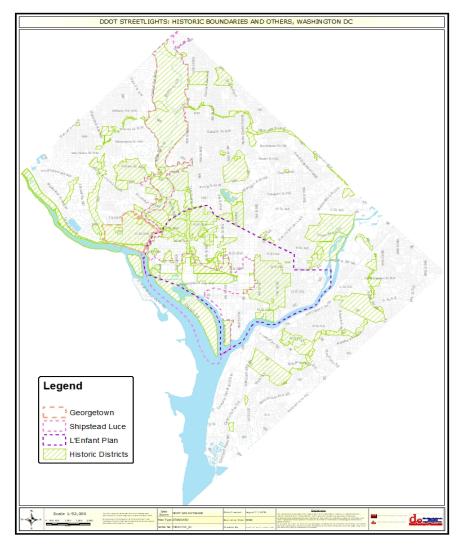
**Chart 1, Permissible Installation Types and Locations** 

	Outside Area Inter	•	Inside Areas of Special Interest		
Blockface Length Intervals <sup>1</sup>	Number of Small Cell Facilities Permitted per Blockface <sup>2</sup>	Minimum Distance between Facilities on same Blockface <sup>3</sup>	Number of Small Cell Facilities Permitted per Blockface	Minimum Distance between Facilities on same Blockface	Limit per Carrier per Block <sup>4</sup>
0'-150'	1	N/A	1	N/A	1
151'-300'	1	N/A	1	N/A	1
301'-450'	2	60'	1	N/A	1

451'-600'	2	60'	2	90'	1
601'-750'	3	60'	2	105'	2
Over 750'	3	60'	2	120'	2
	line extended of <sup>2</sup> This is inclusive <sup>3</sup> In other words, side of the block	f adjacent intersort e of all types of i the minimum di c. Distance shou	ared along the edg ecting streets. Installations and restance between to ld be measured in acilities' center poi	egardless of carr vo facilities shari a linear fashion	ier. ing the same

<sup>4</sup>A block is defined as two opposing blockfaces.

Chart 2, Permissible Spacing and Frequency of Installations



Map 1, Applicable Boundaries

### 6. Guidelines regarding Areas of Special Interest

- 6.1.1. With respect to these guidelines, areas of special interest shall be defined and include the following:
- 6.1.2. Historic Districts
- 6.1.3. Historic Landmarked Properties
- 6.1.4. Areas included within the Shipstead-Luce Act
- 6.1.5. Old Georgetown
- 6.1.6. Areas of Federal Interest as defined in Map X

#### 6.2. Historic Districts and Landmarked Properties

- 6.2.1. Small Cell infrastructure shall not be located along the front or side boundary lines of a D.C. Landmark, a National Historic Landmark, or a property individually listed in the National Register of Historic Places. Small Cell infrastructure located in unnamed alleys within a historic district shall setback a minimum of twenty feet (20') from the inside edge of adjoining sidewalk.
- 6.2.2. Small cell facilities shall not obstruct contributing vistas and views as designated in the 1997 L'Enfant Plan National Register of Historic Places nomination.

#### 6.3. Areas of Federal Interest

- 6.3.1. Small Cell infrastructure shall not be placed on public rights-of-way adjacent to or on federal reservations owned and administered by the U.S. Government.
- 6.3.2. Small Cell infrastructure adjacent to federal lands, except where prohibited adjacent to federal reservations, shall comply the guidelines as follows:
  - 6.3.2.1. Placement of small cell facilities in the Federal Core Interest Area shall be consistent with Map 3.
  - 6.3.2.2. Outside the Federal Core Interest Area, placement of small cell facilities adjacent to federal property shall comply with all sections of these Small Cell guidelines.
  - 6.3.2.3. Small cell infrastructure shall not be placed on public-rights-of way adjacent to federal reservations or federally owned land outside the Federal Core Interest Area.

#### 6.3.3. Building and Open Space entrances

- 6.3.3.1. Placement of standalone poles. The functional and visual relationship of the pole to building and open space, park, and plaza features shall be considered as follows:
  - 6.3.3.1.1. Placement of small cell facilities shall not be located within a formal or informal setting within the building entrance area, whether the entrance is open or permanently or temporarily closed.
  - 6.3.3.1.2. The building entry setting is an integral component of the functional and decorative features of architectural design. These entrances are delineated by one or more of the following features, such as: doors, pilaster, entablatures, columns, balustrades, columns, fanlights, sidelights, stairs or ramps, podiums plinths, flagpoles, sculptural or decorative elements, and designed landscape plantings flanking the entry.

- 6.3.3.1.3. Placement of small cell facilities shall not be located along the frontage of public space features defined by landforms such as terracing, furnishings such lights and benches, and decorative elements, such as sculpture, statuary, water features, including fountains and pools located within a building yard, park, or plaza.
- 6.3.3.1.4. To the maximum extent possible, avoid pole placement of standalone poles that blocks views to and from building windows or detracts from the building's architectural quality.
- 6.3.4. Standalone poles shall not obstruct pedestrian access between the curb and sidewalk across the amenity zone.
- 6.3.5. Security
  - 6.3.5.1. A minimum distance of four feet (4') is required between a standalone pole and any permanent or temporary security elements, such as planters or bollards.
  - 6.3.5.2. A standalone pole may replace a perimeter security element if the pole is designed to comply with the vehicle crash rating required by the occupant of the adjoining building.
  - 6.3.5.3. All standalone poles that replace security element shall be coordinated with the building occupant.
  - 6.3.5.4. Replacement of security elements shall also require NCPC review and approval prior to submitting a permit application to DDOT, in accordance with federal review authority.
- 6.3.6. Within the Federal Core Interest Area, any deviation from these small cell guidelines requires approval by the NCPC prior to application to DDOT for a small cell permit, except for the following conditions:
  - 6.3.6.1. The standalone pole may be moved a maximum of three-feet to:
    - 6.3.6.1.1. avoid existing underground utilities and root zones; or
    - 6.3.6.1.2. improve the physical or visual relationship of the pole to:
      - 6.3.6.1.2.1. the building's function and features, as defined by these guidelines, such as access, windows or other openings, sculptural elements;
      - 6.3.6.1.2.2. features within adjoining open space, parks, or plazas, as defined by these guidelines, such as fountains, sculptural elements, seating areas.

#### 7. Guidelines regarding DDOT Streetlights

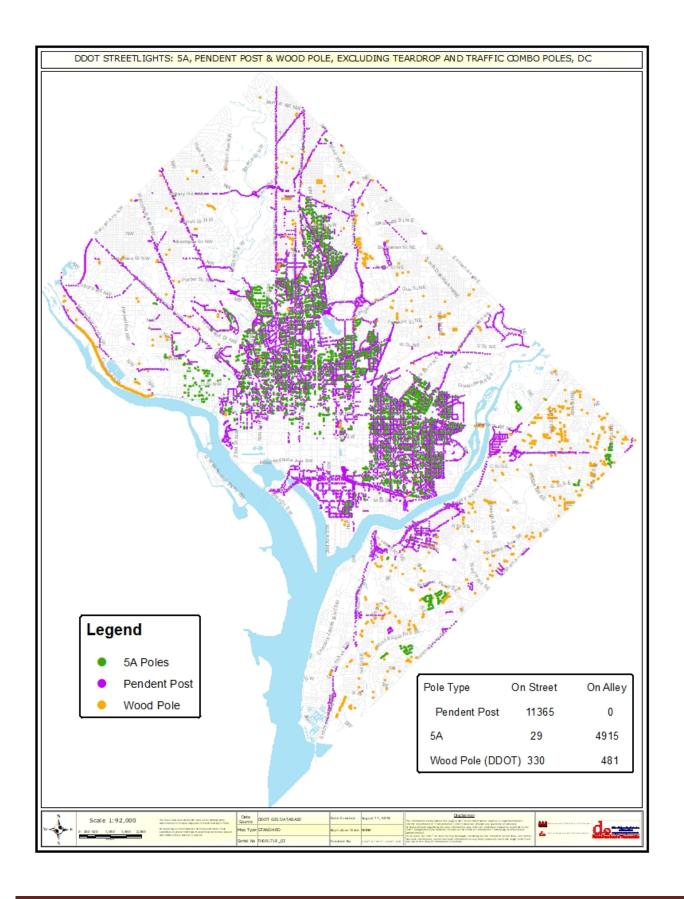
- 7.1. The guidelines will allow attachments to certain categories of poles. These include Pendant Poles with cobra head fixtures and tear drop fixtures as allowed, wood poles, and 5A poles (aka metal alley poles). (See Map 2, Pole Types and Locations and Illustrations 1 & 2.)
- 7.2. All other categories of DDOT streetlights will not be permitted for attachment of Small Cell infrastructure.
- 7.3. These guidelines do not allow the installation of new DDOT streetlights.

- 7.4. Any application intended to install on an existing DDOT streetlight must indicate the replacement of an existing DDOT streetlight pole. The replacement pole must be exactly the same in outward appearance, while having increased structural strength to support the additional equipment.
- 7.5. These guidelines do not allow the use of any streetlight on bridges, tunnels, overpasses or elevated roadways.
- 7.6. DDOT will require engineer-stamped plans showing the replacement of its existing streetlight pole.

#### 8. Guidelines regarding New Standalone Poles

#### 8.1. Appearance

- 8.1.1. Any Small Cell infrastructure requiring standalone poles is not to be installed until the standalone pole design has been reviewed and formally adopted by the PSC as part of these guidelines.
- 8.1.2. New standalone poles must match the appearance of existing DDOT streetlights.
- 8.1.3. There are two types of standalone poles allowed: Pendant Pole or Washington Upright Pole
  - 8.1.3.1. The type of pole to be used is based on the type of DDOT streetlight in the surrounding neighborhood. The pole will not include a streetlight; with the exception of a light fixture, it will mimic the appearance of streetlights in the area.
  - 8.1.3.2. In areas where the surrounding streetlights are Washington Uprights or Twin-Twenties, new standalone poles shall mimic the Washington Pole design.
  - 8.1.3.3. In areas where the surrounding streetlights are Pendant Poles, new standalone poles shall mimic the Pendant Pole.



Map 2, Pole Types and Locations

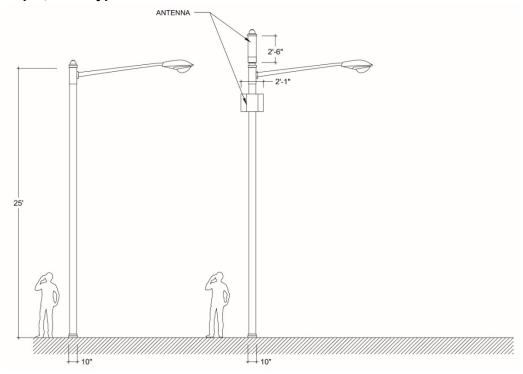


Illustration 1, 5A Pole

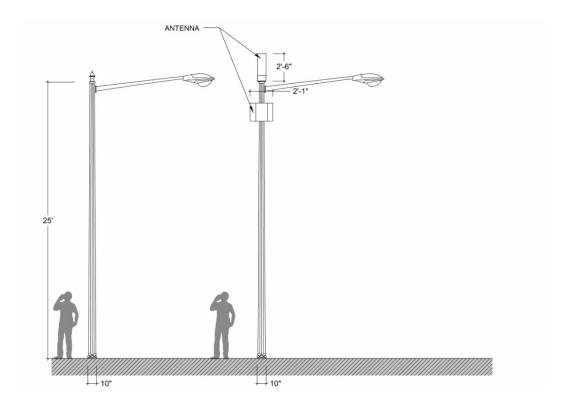


Illustration 2, Pendant Pole with Cobra Head

#### 8.2. Pedestrian Path and Amenity Zone

- 8.2.1. The sidewalk area of public space is typically delineated into the pedestrian path and the amenity zone. The amenity zone is located between the pedestrian path and the roadway and provides access between the two as well as the area for street trees, streetlights and traffic signals, and other functional elements. It is critical that all pedestrian paths are clear to facilitate safe and optimal access and circulation along sidewalks.
- 8.2.2. Standalone poles shall not be located in the clear pedestrian path, as established by the most current DC Municipal Regulations and the most current Manual on Uniform Traffic Control Devices and DDOT's Public Realm Design Manual.
- 8.2.3. Standalone poles shall be located in the amenity zone, when one is provided.
- 8.2.4. Standalone poles shall not be located within a designated right-of-way of a paper street or paper alley within the L'Enfant Plan.
- 8.2.5. In a non-residential area where there is no amenity zone, standalone poles shall be placed within the area traditionally devoted to the amenity zone within the right-of-way if it does not obstruct the required width for the clear pedestrian path in accordance with DDOT's most current Design and Engineering Manual (DEM) and DDOT's Public Realm Design Manual Section 3-4.
- 8.2.6. In a non-commercial area where there is no amenity zone, poles may be located in the sidewalk space within the right-of-way if it does not obstruct the required width for the clear pedestrian path in accordance with DDOT's most current Design and Engineering Manual (DEM) and DC Municipal Regulations, and DDOT's Public Realm Design Manual Section 3-4.
- 8.2.7. Standalone poles shall be aligned with existing streetlights, third party poles, and street trees as applicable in order to maintain a visual and physical organization of structures within the right-of-way, as measured from the center of the base of the pole. When streetlight and street tree alignment are offset within the amenity or curbside zones, prioritize alignment of the small cell facility with streetlights.
- 8.2.8. All measurements shall be taken from the outer edge of the standalone pole and the infrastructure listed in the following specific limits/prohibitions.
  - 8.2.8.1. The exterior of the standalone pole shall be placed a minimum of two feet six inches (2'6") from the face of curb Standalone poles must be placed a minimum of six feet (6') from existing fire hydrants or buildings' fire connections.
  - 8.2.8.2. Standalone poles shall be located a minimum of 10 feet (10') from light poles and traffic signal poles.
  - 8.2.8.3. Standalone poles shall be located a minimum of 3 feet (3') from bicycle racks and shall not impede the attachment of bicycles.
  - 8.2.8.4. Standalone poles shall not interfere with the operation of Capital Bikeshare docks and stations. This requires a minimum of four feet (4') of

- clearance from the rear wheel of a docked bicycle, five feet (5') distance from each end of a station, and should not be installed in such a way that would prevent solar access to the solar panel.
- 8.2.8.5. Standalone poles shall be placed a minimum of ten feet (10') from any above grade building face, including bay windows, show windows, oriel windows, and building projections or overhangs.
- 8.2.9. In areas where DDOT does not have streetlight poles and instead attaches its streetlights to existing third party poles, no new standalone poles will be allowed.
- 8.2.10. In residential areas with DDOT-owned poles, standalone poles shall be placed in alignment with lot lines extended to the maximum degree possible.
- 8.2.11. Poles should be located, to the maximum extent possible, to minimize impact on businesses and residential mixed-use development by avoiding placement directly in front of building entrances, alignment with windows, primary entry walks, or delivery zones or entrances.

#### 8.3. Access, Circulation, and Sight Distances

- 8.3.1. Safe and functional access, circulation, and clear sight lines are important for pedestrian ease of movement and to maintain unobstructed line of sight among drivers, pedestrians, bicyclists.
- 8.3.2. Standalone poles shall not obstruct ADA access, including maintaining a clear landing at the top of curb ramps at crosswalks.
- 8.3.3. Pole placement shall not impede, obstruct, violate, conflict with, or hinder any mode of travel over or access to any public street, bridge, tunnel, highway, lane, path, alley, sidewalk, or driveway, including but not limited to the obstruction of sight lines.
- 8.3.4. Poles shall be placed consistent with the most current Manual on Uniform Traffic Control Devices and adopted District standards for maintenance of an intersection's sight line triangles.
- 8.3.5. A minimum of fifteen feet (15') shall be maintained between the pole and the outside edge of the alley or driveway.

#### 8.4. Spacing among Streetscape Elements

- 8.4.1. A standalone pole shall not be located within an existing street tree's protected zone. The protected zone shall be equal to one foot for each inch of the tree's diameter or a minimum of fifteen feet (15'), whichever is greater. The protected zone shall be measured from the outside of the tree to protect root growth.
- 8.4.2. Trees shall not be removed or have their critical root zones damaged for the installation of Small Cell infrastructure, regardless of whether the application is for a standalone pole or to replace an existing DDOT streetlight or third party pole. Excavation to install a replacement streetlight or third party pole may damage an existing trees critical root zone. As such DDOT reserves the right to deny a permit for a location where a tree has been recently removed.
- 8.4.3. If a street tree is planted in a location that would place the standalone pole within its protected zone, the small cell provider will be required to remove the standalone pole at its own cost and apply to reinstall the standalone pole in accordance with these guidelines.

8.4.4. No trees shall be pruned without the proper permit, nor shall a tree be pruned related to the installation or functioning of small cell infrastructure.

#### 9. Guidelines regarding Existing Utility Poles

- 9.1. Poles owned by a third party (i.e. poles installed in public space by entities other than DDOT) are typically wood utility poles and are located throughout Washington, DC's rights-of-way and alleyways.
- 9.2. With the consent of the pole owner, Small Cell providers may submit applications to install infrastructure attached to these poles.
- 9.3. These guidelines do not allow the installation of new third party poles. Any application must indicate the installation on and replacement of an existing third party pole.
- 9.4. All Small Cell equipment on third party poles, including antennas, antenna related equipment, cabinets, shrouds, conduit, and mounting hardware shall be a grey powder coated finish.

#### 10. Glossary

The following serve to define terms used in the guidelines as they relate to the public spaces in Washington, DC.

**5A Pole** – A DDOT-standard pole type as described in the DDOT Streetlight Policy and Design Guidelines, typically round in shape and found in alleys.

Areas of Special Interest – Areas within Washington, DC that include the L'Enfant Plan, Shipstead-Luce Act, Old Georgetown, Historic districts, and the Federal Core Interest Area.

**Amenity Zone** – The area of public space between the curb and the sidewalk reserved for the installation of street lights, parking meters, bicycle racks, signs regulating curbside management. It also includes the tree space, the area of public space reserved for the planting of street trees.

**Antenna** - an apparatus designed for the purpose of emitting radiofrequency (RF) radiation, to be operated or operating from a fixed location, for the transmission of writing, signs, signals, data, images, pictures, and sounds of all kinds.

**Building Entrance Area -** The building entry setting is an integral component of the functional and decorative features of architectural design. These entrances are delineated by one or more of the following features, such as: doors, pilaster, entablatures, columns, balustrades, columns, fanlights, sidelights, stairs or ramps, podiums plinths, flagpoles, sculptural or decorative elements, and designed landscape plantings flanking the entry.

**Building face** – Any building wall, or its projection, that fronts a right-of-way.

Clear pedestrian path - The straight path that is free of all obstructions within the sidewalk between the amenity zone and the public parking area or property line/building restriction line. The clear pedestrian path is measured from the farthest extended portion of any element projecting out from the building facade, such as a sidewalk café, to the curb line or the nearest obstruction, such as the outer edge of a tree box.

**Cobra head fixture** – A DDOT-standard lighting fixture as described in the DDOT Streetlight Policy and Design Guidelines, typically attached to a pendant pole, wood pole or 5A pole.

**Federal Interest Core Area** - The Federal Core Interest Area includes streets that lie within areas with a concentration of federal lands; and streets, or segments thereof, that create or lie within a contributing vista as designated in the 1997 L'Enfant Plan National Register of Historic Places nomination.

**Federal Reservation** – Federal park lands owned by the U.S. Government, as shown Map x.

**Monumental Core** – The spatial and symbolic center of the city, which includes the U.S. Capitol grounds, the White House, the National Mall, Federal Triangle, and the surrounding government offices and civic, cultural, and symbolic structures. The monumental core is most closely linked to the distinctive image of the capital city and the functions of the federal government. While the major landmarks and resources within the core are perceived, it does not have a rigid geographic or jurisdictional boundary and continues to evolve.

Open Space features of landscape design. Features that are delineated in one or more of the following: landforms such as terracing, furnishings such as lights and benches, and decorative elements, such as sculpture, statuary, water features, including fountains and pools located within a building yard, park, or plaza.

Paper street or paper alley – An unimproved public right of way.

**Pendant Pole** – A DDOT-standard pole type as described in the DDOT Streetlight Policy and Design Guidelines, that is typically fluted.

**Primary building face** – The face of a building that generally represents the building's overall design intent and includes access points with the highest volume of pedestrian traffic.

**Small Cell infrastructure** – Low-powered antennas and related equipment that provide cellular and data coverage to smaller geographic areas, supplementing the larger cellular network and improving service for wireless customers.

**Standalone poles** – Independent poles that antennas are attached to for the purpose of transmitting wireless signals.

**Streetscape elements** – Components that make up the city street, such as trees, light poles, bicycle racks, traffic cabinets, parking meters, signs, sculptures, and street furniture.

**Teardrop fixture** – A DDOT-standard lighting fixture as described in the DDOT Streetlight Policy and Design Guidelines, typically attached to a pendant pole that is teardrop in shape.

**Terminating Vista (Linear view corridors):** Linear views that extend from a street level viewpoint to and terminate at a focal point object(s) such as a structure and building. Within the L'Enfant Plan, there are important terminating vistas (linear view corridors), defined by street walls and public realm elements, which terminate at significant civic buildings or memorials.

**Third-party pole** – An existing pole in public space owned by a party other than Washington, DC or the cellular provider installed to provide public utilities and that can accommodate Small Cell infrastructure equipment.

**Traffic signal** – A pole of any type to which a traffic or pedestrian signal or other traffic right of way regulating equipment is attached. This includes Stop, Yield, and similar signage. It does not include street name, parking regulation, or similar signage.

**Twin-Twenty Pole** – A DDOT-standard pole type as described in the DDOT Streetlight Policy and Design Guidelines that is in the same family as the Washington Upright, that is typically fluted and decorative in design with two globe-type light fixtures mounted on top.

**Views and Vistas** – Primary, Radiating, Orthogonal, Major Cross-Axes, Tangential, Frontal, and Axial Street vistas that contribute to the 1997 L'Enfant Plan National Register of Historic Places nomination.

**Washington Upright Pole** – A DDOT-standard pole type as described in the DDOT Streetlight Policy and Design Guidelines, also referred to as Washington Globe, available in several heights and is typically fluted and decorative in design with a globe-type light fixture mounted on top.