

UPDATED 03-01-22



General Guidelines and Small Wireless Facility Design, Aesthetic, Stealth and Concealment Standards

The public right-of-way of the Village of Hinsdale is a uniquely valuable public resource, closely linked with the Village's small town character, natural beauty and historic charm. Unregulated or disorderly deployment of small wireless facilities within the Village represents an ever-increasing and true threat to those attributes, and to the health, welfare and safety of the Village. Unregulated installation of small wireless facilities in the right-of-way may be harmful for a variety of reasons, including potential adverse consequences from placements along sidewalks and streets that could have negative impacts on both pedestrian and vehicle safety from visual cluttering and physical impediments stemming from such placements, negative impacts on the Village's goal of fostering a pedestrian-oriented environment and the Village's design and character, including aesthetic and accessibility concerns from intrusive installations of equipment mounted on poles or at ground level, negative impacts on property values resulting from poor placements and noise impacts from facilities that contain outdoor generators or other equipment.

Except where otherwise limited by State or federal law, the following general guidelines and design, aesthetic, stealth and concealment standards apply to the placement of small wireless facilities within the Village, and attempt to ensure that all small wireless facilities are installed using the least intrusive means possible. Small wireless facilities are, in addition, generally regulated by Title 7 (Public Ways and Property), Article G (Construction of Utility Facilities in Rights of Way) and Title 13 (Telecommunications), Chapter 8 (Small Wireless Facilities) of the Village Code and all terms used herein are as defined in Chapter 8 (Small Wireless Facilities).

General Standards. Every small wireless facility collocation shall comply with the following standards.

A. Small Wireless Facilities

1. Antennas and their related mounting equipment, including brackets, shall be mounted no less than twelve (12) feet above ground level, as measured to lowest most point of the installation.
2. Antennas shall, to the extent technically feasible, be designed and installed to appear hidden within the utility pole or to appear like an original part of the utility pole or wireless support structure.
3. Unless otherwise approved by the Director of Public Services, each antenna not hidden within a utility pole shall be located entirely within a shroud enclosure not more than six (6) cubic feet in volume that is capable of accepting paint to match the approved color of the small

wireless facility. In the case of an approved antenna that has exposed elements, the antenna and all of its exposed elements shall be able to fit within an imaginary enclosure of no more than six (6) cubic feet.

4. Top-mounted antennas and their enclosures shall be mounted directly above the utility pole or wireless support structure and shall not extend beyond the diameter of the utility pole or wireless support structure at the level of the antenna attachment, unless otherwise approved by the Director of Public Services. There must be a smooth transition between the utility pole and antenna and enclosure. See Section H, Exhibit 1. Height limitations for small wireless facilities and wireless support structures may be found at Section 13-8-8 of the Village Code.
5. Side-mounted small wireless facility antennas within a shroud enclosure and side-mounted small wireless facility equipment enclosures shall be, if possible, flush mounted to the utility pole or wireless support structure at the level of the attachment. If not flush mounted, metal flaps or “wings” shall extend from the enclosure to the utility pole or wireless support structure to conceal any gap between the small wireless facility and the utility pole or wireless support structure. The design of the flaps shall be integrated with the design of the small wireless facility, and shall be the same color. See Section H, Exhibits 3A, 3D & 3E.
6. Small wireless facilities located on street light poles or traffic control structures shall not block light emanating from the street light fixture or otherwise interfere with the purpose of the street light fixture or traffic control structure.
7. Small wireless facilities shall be attached to the utility pole or wireless support structure using rigid steel clamping mounts or stainless steel banding to the exterior of any metal pole. All mounts and banding shall be of the same color as the utility pole or wireless support structure, except as otherwise approved by the Director of Public Services. Care should be taken to integrate the mounting elements into the small wireless facility design. Through-bolting or use of lag bolts on Village-owned utility poles is prohibited.
8. For attachments to existing utility poles, wires serving the small wireless facility shall be concealed within the hollow interior of the

utility pole, or if concealment is not technically feasible, flush mounted to an existing utility pole in an enclosed wire chase on which the facilities are collocated, which is painted or otherwise colored to match the existing pole. For new utility poles or wireless support structures, wires serving the small wireless facility shall be concealed within the hollow interior of the utility pole or wireless support structure, except as otherwise approved by the Director of Public Services. See Section H, Exhibits 3A thru 3E.

9. All small wireless facilities shall be installed in accordance with all applicable Village codes. No wiring or cabling shall interfere with any existing wiring or cabling installed by the Village, a utility or a wireless services provider.
10. No guy or other support wires will be used in connection with a small wireless facility unless the small wireless facility is to be attached to an existing utility pole or wireless support structure that incorporates guy wires prior to the date the applicant has applied for a permit.
11. The small wireless facility, including the antenna, and all related equipment when attached to an existing or new utility pole or wireless support structure, must be designed to withstand a wind force and ice loads in accordance with the applicable standards established in Article 25 of the National Electric Safety Code for utility poles, Rule 250-B and 250-C standards governing wind, ice, and loading forces on utility poles, in the American National Standards Institute (ANSI) in TIA/EIA Section 222-G established by the Telecommunications Industry Association (TIA) and the Electronics Industry Association (EIA) for steel wireless support structures and the applicable industry standard for other existing structures. For any small wireless facility attached to a Village-owned utility pole or, in the discretion of the Village, to a non Village-owned utility pole or wireless support structure, the operator of the small wireless facility must provide the Village with a structural evaluation of each specific location containing a recommendation that the proposed installation passes the standards described above. The evaluation must be prepared by a professional structural engineer licensed in the State of Illinois.
12. The Village will not authorize any attachments of small wireless facilities to a Village-owned utility pole that negatively impacts the structural integrity of the pole. The Village may condition approval of

the collocation on replacement or modification of the Village-owned utility pole if necessary to meet Village standards.

13. Small wireless facilities shall be located in a manner that meets the Americans with Disabilities Act of 1990 and does not obstruct, impede or hinder the usual pedestrian or vehicular path of travel.
14. Small wireless facilities collocated on Village-owned utility poles may not use the same power or communication source providing power and/or communication for the existing infrastructure, except as otherwise approved by the Director of Public Services. The wireless provider shall coordinate, establish, maintain and pay for all power and communication connections with private utilities.
15. A four (4) inch by six (6) inch plate with the wireless provider's name, location identifying information, and emergency telephone number shall be permanently fixed to the small wireless facility equipment enclosure or shroud.
16. Small wireless facility equipment shall not be mounted on any Village-owned ornamental street lights in the B-2 Central Business District, or in any Historic District.
17. Small wireless facilities shall not be mounted within two hundred (200) feet of any residence.
18. The order of preference for the location for small wireless facilities from most preferred to least preferred is:
 - a. Collocation with existing small wireless facilities;
 - b. Mounted on an existing wireless support structure or utility pole;
 - c. Roof-mounted;
 - d. Building-mounted;
 - e. Mounted on a new wireless support structure or utility pole that will replace an existing wireless support structure or utility pole;
 - f. Mounted on a new wireless support structure.
19. Small wireless facility equipment not mounted on a utility pole or wireless support structure other than an antenna and any electric meter or other equipment that must be placed above ground to

function, shall be installed underground. Undergrounded equipment shall be installed flush to the ground, within three (3) feet of the associated utility pole or wireless support structure. Accessory equipment such as radios and computers that require an environmentally-controlled underground vault to function are not exempt from this subsection and shall be undergrounded. For equipment that must be placed above ground to function, landscaping shall be required to help mitigate the effects of the installation of any ground-mounted equipment. All ground-mounted equipment must be fully screened at all times.

20. Small wireless facilities other than those placed on wooden, electric utility poles, may not be powered by above-ground wire connections from other utility poles. Any above-ground wire connections from wooden, electric utility poles to a small wireless facility must follow an existing wire path; new wire paths are prohibited.
21. Any landscape features damaged or displaced by the construction, installation, operation, maintenance or other work performed by a wireless provider or their agents shall be replaced. If any trees are damaged or displaced, the provider shall hire and pay for a licensed arborist to select, plant and maintain replacement landscaping in an appropriate location for the species. Only International Society of Arboriculture certified workers under the supervision of a license arborist shall be used to install the replacement tree(s). Any replacement tree must be substantially the same size as the damaged tree and preapproved by the Village's arborist. All replacement landscaping shall be maintained by the wireless provider.
22. The Village, in its sole discretion, and at any time, may: (1) change any street grade, width or location; (2) add, remove or otherwise change any improvements in, on, under or along any street owned by the Village or any other public agency, which includes without limitation any sewers, storm sewers or drains, conduits, pipes, vaults, boxes, cabinets, poles and utility systems for gas, water, electric or telecommunications; and/or (3) perform any other work deemed necessary, useful or desirable by the Village (collectively, "Village work"). The Village reserves the rights to do any and all Village work without any admission on its part that the Village would not have such rights without this express reservation. If the Director of Public Services determines that any Village work will require a

small wireless facility located in the public right-of-way to be rearranged and/or relocated, the wireless provider shall, at its sole cost and expense, do or cause to be done all things necessary to accomplish such rearrangement and/or relocation, limited only by Village requirements as set forth in State or federal law. If the wireless provider fails or refuses to either permanently or temporarily rearrange and/or relocate the small wireless facility within a reasonable time after the Village's notice, the Village may (but will not be obligated to) cause the rearrangement or relocation to be performed at the wireless provider's sole cost and expense. The Village may exercise its rights to rearrange or relocate the wireless provider's small wireless facility without prior notice to the wireless provider when the Director of Public Services determines that the Village work is immediately necessary to protect public health or safety. The wireless provider shall reimburse the Village for all costs and expenses in connection with such work within ten (10) days after a written demand for reimbursement and receipt of reasonable documentation to support such costs.

23. Small wireless facilities may not be collocated on the following structures, whether located in the public right-of-way or not:
 - a. any utility pole scheduled for removal or relocation within twelve (12) months from the time the Village acts on the application;
 - b. new, non-replacement wood poles.
24. The wireless provider is required to install wireless facilities with antenna and other equipment that has the smallest visual profile to the extent commercially available, technologically compatible with the local network system and already used in its national or regional wireless network system.
25. The wireless provider is required to replace such equipment when replacement work is being done with equipment that has the smallest visual profile to the extent commercially available, technologically compatible with the local network system and already used in its national or regional wireless network system.
26. Applicants should, in particular, take note of the requirements for utility installations in the right-of-way in Section 7-1G-15 (Location of Facilities) of Chapter 7-1G (Construction of Utility Facilities in Rights of Way) of the Village Code.

B. Replacement of Existing Street Light Poles

The following standards apply when replacing an existing street light pole (including ornamental lights) with a combination small wireless facility and street light pole. Such replacements should only be located where an existing street light pole can be removed and replaced, or at a new location where it has been identified that a street light is necessary. All such replacements shall meet the following standards:

1. All replacement street light poles shall be a similar design, material, and color as the replaced existing street light pole and other poles within the immediate area, unless an alternative design is approved by the Director of Public Services. See Below. Note the difference between a typical street light and ornamental light.

Typical Street Light



Typical Ornamental Light



2. All replacement street light poles and foundations for each shall conform to the Village's standards and specifications for street light design and construction.
3. Replacement street light poles shall be an equal distance from other street light poles based upon the average distance between existing street light poles within the designated area.
4. Street light poles shall be designed and engineered to support a luminaire and/or mast arm of length equal to that of the existing pole to be replaced or of a length approved by the Director of Public Services based upon the location of the replacement street light pole.

5. All luminaires and/or mast arms shall match the arc and style of the original luminaire and mast arm, unless otherwise approved by the Director of Public Services.
6. The replacement luminaire and mast arm shall be at the same height above the ground as the existing luminaire and mast arm.
7. All replacement street light poles shall have new light emitting diode (LED) light fixtures of the same manufacturer, model and light output as the removed fixture and nearby light fixtures, or as otherwise approved by the Director of Public Services.
8. Replacement street light poles, including but not limited to the pole itself, head, fixtures, mast arm (If applicable) and electrical components, shall have a five (5) year manufacturer's replacement warranty.
9. Replacement street light poles shall meet American Association of State Highway and Transportation Officials structural guidelines for roadway applications and the American National Standards Institute requirements for vibrations.
10. Street light pole height shall be measured from the ground to the top of the street light pole.
11. All replacement street light pole heights shall be consistent with those of existing street lights.
12. The small wireless facility components shall be sized appropriately to the scale of the street light pole. However, to the extent commercially available, technologically compatible with the local network system and already used in its national or regional wireless network system, when performing replacement work, the wireless provider is required to replace any wireless facilities with antenna and other equipment that have the smallest visual profile.
13. A decorative transition shall be installed over the equipment enclosure upper bolts, or a decorative base cover shall be installed to match the equipment enclosure size. All hardware connections shall be hidden from view. Each street light pole component shall be architecturally compatible to create a cohesive aesthetic.
14. Replacement street light poles shall continue to be owned by the Village, unless otherwise mutually agreed to by the parties.

15. Existing ornamental light poles must be replaced with matching poles with respect to design and size. (See photos below).

Typical Ornamental
Light



Typical Ornamental Light
with Appurtenance



C. Installation of New Wireless Support Structures, Where Allowed.

1. In the interest of administrative efficiency, the proposed location and design of new wireless support structures shall be reviewed with the Director of Public Services prior to application. Such review does not constitute approval, but is instead designed to identify existing utility conflicts and other issues that might be readily identified and/or resolved by communication between the applicant and Village staff.
2. A new wireless support structure shall be designed to minimize the visual and aesthetic impact of the new vertical element and associated small wireless facilities upon the surrounding area and shall blend in with the surrounding streetscape with minimal visual impact. The Village may require a new wireless support structure to be constructed of a specific material that will enhance the stealth and concealment of the structure.
3. New wireless support structures shall be metal unless otherwise approved by the Director of Public Services as appropriate for the immediate area. New wireless support structures shall match the design, size, material and color of existing utility poles (other than

prohibited wooden poles), including street light poles and ornamental lights, within the immediate area, except as otherwise approved by the Director of Public Services.

4. Within residentially zoned areas, new wireless support structure installations shall be located at a corner intersection on an existing utility pole. Where a corner intersection collocation is not possible, new wireless support structures shall be located at a corner intersection with an existing utility pole. If location of a new wireless support structure at a corner intersection is not possible, new wireless support structures shall be located where the shared property line between two residential parcels intersect the right-of-way whenever possible, unless an unsafe condition, cluttered appearance, or other violation of these standards will result.
5. New wireless support structures shall be equal distance from other utility poles based upon the average distance between existing utility poles within the designated area. If a new wireless support structure cannot be located the average distance from other utility poles, a new wireless support structure may be approved if such wireless support structure is designed as a stealth pole and the design and location is approved by the Director of Public Services.
6. The centerline of a new wireless support structure shall be in alignment with existing utility poles where present, or with street or parkway trees along the same side of the right-of-way. If no such centerline currently exists, the wireless provider shall coordinate with the Village to identify a mutually agreed upon location
7. New wireless support structures shall be located a minimum of twelve (12) feet from driveway aprons unless otherwise approved by the Director of Public Services.
8. New wireless support structures shall be sited outside the critical root zone of existing trees having a six (6) inch diameter at breast height located either in the right of way or adjacent to the right of way in the immediate vicinity, unless placement within a critical root zone is otherwise approved by the Director of Public Services, in consultation with the Village Arborist. No proposed installation shall result in the removal of any parkway tree unless otherwise approved by the Director of Public Services, in consultation with the Village Arborist. If an applicant is seeking to install a small wireless facility or new utility

pole as part of its application, the Village may, when concerned about the impact of the installation on existing trees, or for other reasons, propose that the small wireless facility be located on an existing utility pole or existing wireless support structure within two hundred (200) feet of the proposed collocation as specified in Section 13-8-5.K. of the Village Code.

9. The outside diameter of any new wireless support structure shall not exceed the diameter of existing utility poles located within three hundred (300) feet of the location of the new wireless support structure.
10. New wireless support structures shall not exceed the heights as authorized by Section 13-8-8 of the Village Code.
11. New wireless support structures shall be round in shape with a smooth pole shaft, the exception being when being installed adjacent to, or nearby ornamental lights. In this case, the support structure shaft shall be similar in shape to the existing ornamental lights and of a design approved by the Director of Public Services.
12. New wireless support structures incorporating pole-mounted small wireless facilities shall be uniformly tapered in diameter from the base to the top, with a maximum diameter of twelve (12) inches at the base and a maximum diameter of eight (8) inches at the top, unless an alternative design is approved by the Director of Public Services. Incorporation of equipment within an equipment enclosure in the base or other portion of the pole is preferred.
13. New wireless support structures incorporating small wireless facilities in an equipment enclosure within a base may utilize poles tapered in diameter or poles having a consistent outside diameter, unless an alternative design is approved by the Director of Public Services.
14. All new wireless support structures must be supported with a reinforced concrete foundation designed, stamped, sealed and signed by a professional engineer licensed and registered in the State of Illinois, and subject to the approval of the Director of Public Services. Optionally, screw in foundations are acceptable with stamped and sealed drawings from a professional engineer licensed and registered in the State of Illinois, and subject to the approval of the Director of Public Services.

15. All anchor bolts must be concealed from public view, with an appropriate pole boot or cover powder-coated to match the wireless support structure color.
16. If multiple requests are received to install two (2) or more wireless support structures in approximately the same location, in a manner that would violate these requirements or other Village requirements, the Village shall resolve such conflict through whatever reasonable and nondiscriminatory manner it deems appropriate.

D. Stealth and Concealment Requirements.

Wireless providers shall comply with the design and construction standards that are generally applicable to utility installations in the public right-of-way, as set forth Title 13, Telecommunications of the Village Code, in Chapter 7-1G of the Village Code, Construction of Utility Facilities in Rights-of-Way, as well as these standards, any other written design standards for decorative utility poles, or reasonable stealth, concealment, and aesthetic requirements that are otherwise identified by the Village in an ordinance, written policy adopted by the Village Board of Trustees, in the Village's comprehensive plan, or in another written design plan that applies to other occupiers of the rights-of-way, including on a historic landmark or in a historic district and any requirements adopted pursuant to the Illinois State Agency Historic Resources Preservation Act, or the National Historic Preservation Act of 1966, 54 U.S.C. Section 300101 et seq., and the regulations adopted to implement those laws. In addition:

1. The use of stealth technology in the location and construction of small wireless facilities is required whenever and wherever possible. Stealth technology means using the least visually and physically intrusive design and equipment that is not technologically or commercially impracticable under the facts and circumstances, to employ methods that blend into surroundings and not be visible; and to minimize adverse aesthetic and visual impacts on the right-of-way, property, building and/or other facilities adjacent to, surrounding and in generally the same area as the requested location of such small wireless facilities.
2. Small wireless facilities, including but not limited to antennas, equipment enclosures, mounting brackets and hardware, mounting posts, cables, and shrouds, shall be of a color that is identical to the utility pole or of a neutral color compatible with the color of the utility

pole and any surrounding elements so as to camouflage or conceal their appearance, create consistency among right-of-way infrastructure, and to make such small wireless facilities as unobtrusive as possible. The Director of Public Services may approve compatible color schemes for antennas and small wireless facilities. A clear, color digital photo simulation of the utility pole or wireless support structure location providing “before and after” views demonstrating the true visual impact of the proposed small wireless facilities on the surrounding environment shall be included in the application.

3. Mechanical equipment and devices shall be concealed underground, mounted within a concealment box designed as a decorative pole base or within unobtrusive equipment enclosures or other devices mounted directly to the pole a minimum of eight (8) feet above ground level and screened by means of Village approved concealment methods. See subsection A.19. above for further undergrounding requirements.
4. Small wireless facilities must be located and oriented in such a way as to minimize view blockage.
5. The wireless provider shall use the smallest suitable wireless facilities then in industry use, regardless of location, for the particular application.
6. Landscaping or fencing shall be required to help mitigate the effects of the installation of any ground-mounted equipment. All ground-mounted equipment must be fully screened at all times.
7. Small wireless facilities shall not be artificially lighted or marked, except as required by law.
8. Small wireless facilities, other than top-mounted antennas, shall be mounted on the side of the utility pole or wireless support structure opposite the direction of vehicular traffic along the same side of the right-of-way.
9. Alternative measures for concealment may be proposed by the wireless provider and approved by the Director of Public Services, if the Director of Public Services determines that the optional measures will be at least as effective in concealing the small wireless facilities as the measures required above.

E. Historic Districts and Landmarks

For areas designated as historic districts, including but not limited to the Village's National Register Downtown Historic District and the Robbins Park Historic District, or on buildings or structures designated as historic landmarks pursuant to Title 14 Historic Preservation of the Village Code, in addition to the stealth, concealment and design requirements referenced above, following additional restrictions/conditions apply to the installation of small wireless facility:

1. Small wireless facilities shall not be mounted on any Village-owned ornamental street lights in any district;
2. Small wireless facilities shall not be mounted on any historic landmark or on contributing structures in any historic district;
3. Small wireless facilities and wireless support structures may not be located in the right-of-way in front of any historic landmark or in front of any contributing structure in areas designated as historic districts, including but not limited to the Village's National Register Downtown Historic District and the Robbins Park Historic District.
4. Small wireless facilities within the right-of-way or on private property in any designated historic district shall be collocated on existing utility poles unless an applicant is able to demonstrate that such collocation is not technically feasible. Where such collocation utilize stealth technology and be designed in such a manner so as to preserve the character of the district, ensure consistency with the surrounding elements, blend architecturally with any buildings or structures designated as historic landmarks or located within a designated historic district, and shall be designed to blend with the surrounding historical landmarks and/or district in design and color.
5. Small wireless facilities within historic districts may, at the discretion of the Village Manager, be forwarded to the Historic Preservation Commission for advisory review as to design, location and impact on the District's landmark status, subject to any permit review timelines as specified in Section 13-8-5.E. of the Village Code.

F. Historic District or Historic Landmark Limitations

1. The above design or concealment measures with respect to a historic district or historic landmark, including restrictions on a specific category of utility poles, may not have the effect of prohibiting any provider's technology. Such design and concealment measures shall not be considered a part of the small wireless facility for purposes of the size restrictions of a small wireless facility.
2. This subsection shall not be construed to limit the Village's enforcement of historic preservation in conformance with the requirements adopted pursuant to the Illinois State Agency Historic Resources Preservation Act or the National Historic Preservation Act of 1966, 54 U.S.C. Section 300101 et seq., and the regulations adopted to implement those laws.

G. Severability

Each section, paragraph, clause and provision of these guidelines and standards is separable and if any portion is held unconstitutional or invalid for any reason, such decision shall not affect the remainder of these guidelines and standards, nor any part thereof, other than that part affected by such decision.

H. Exhibits

Exhibit 1. Antennas

Permitted Example



Not Permitted Examples

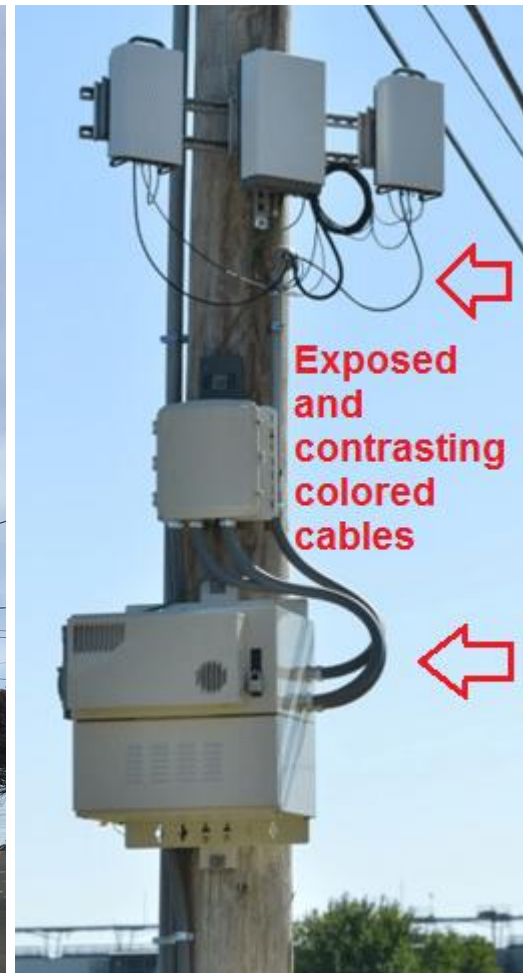
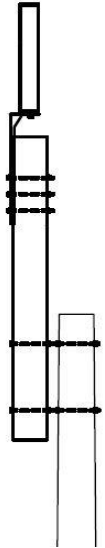
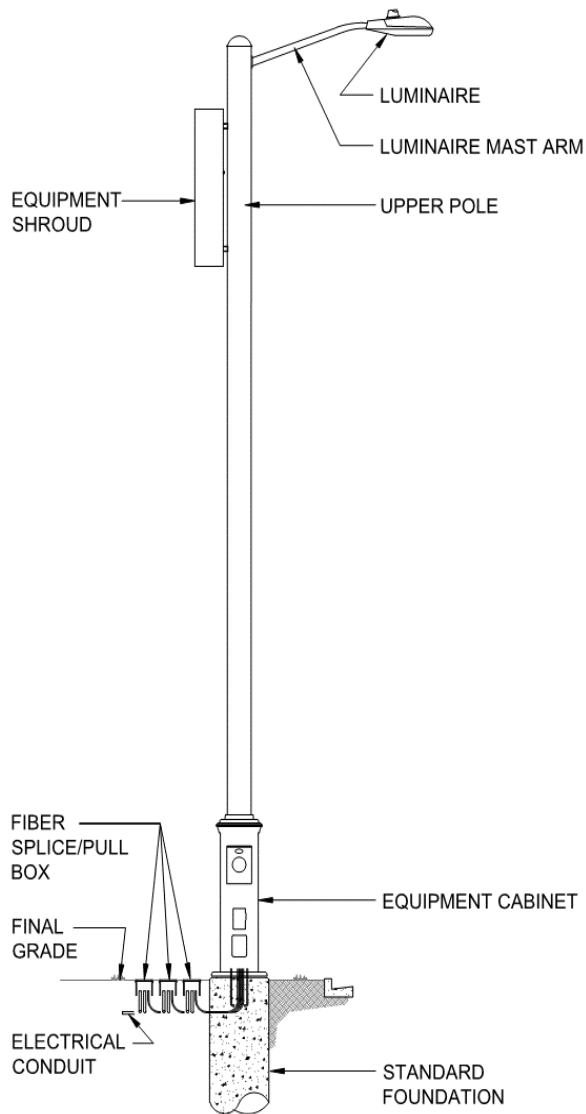


Exhibit 2. Typical ornamental light pole

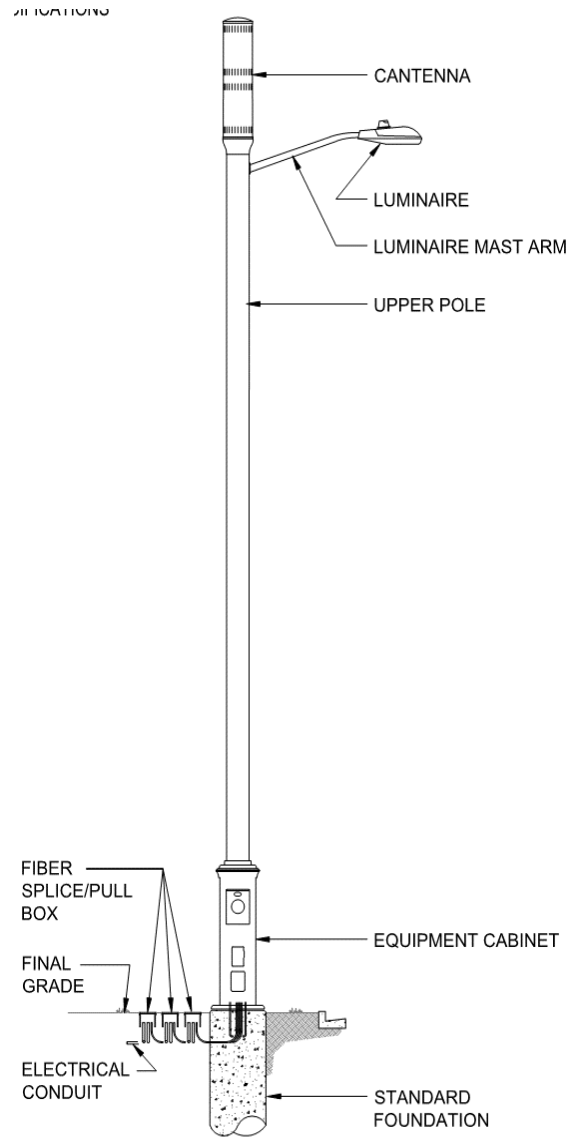


Exhibit 3. Examples of Acceptable Methods of Concealment

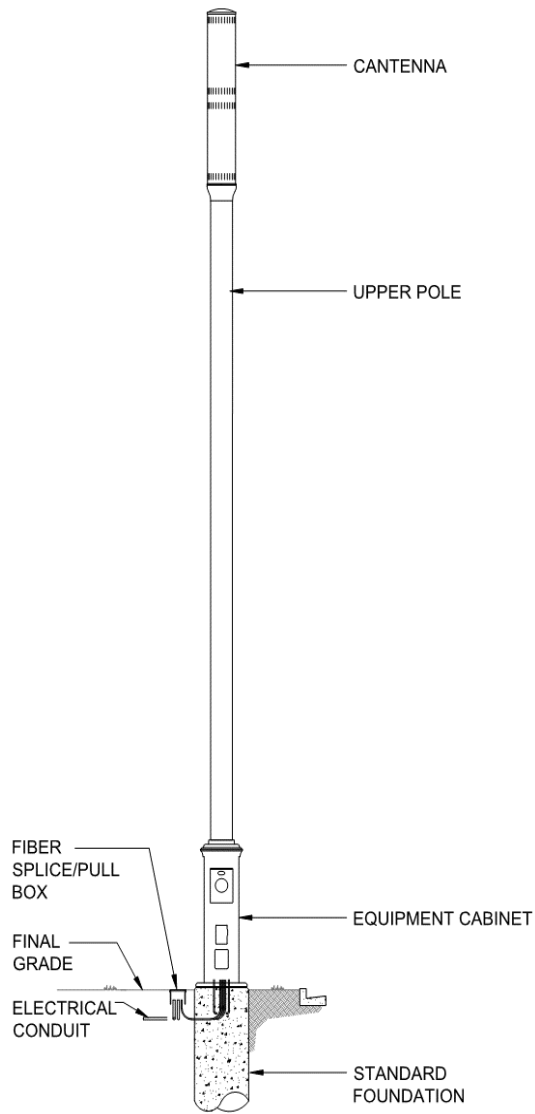
A. Combination Pole with
Equipment Shroud



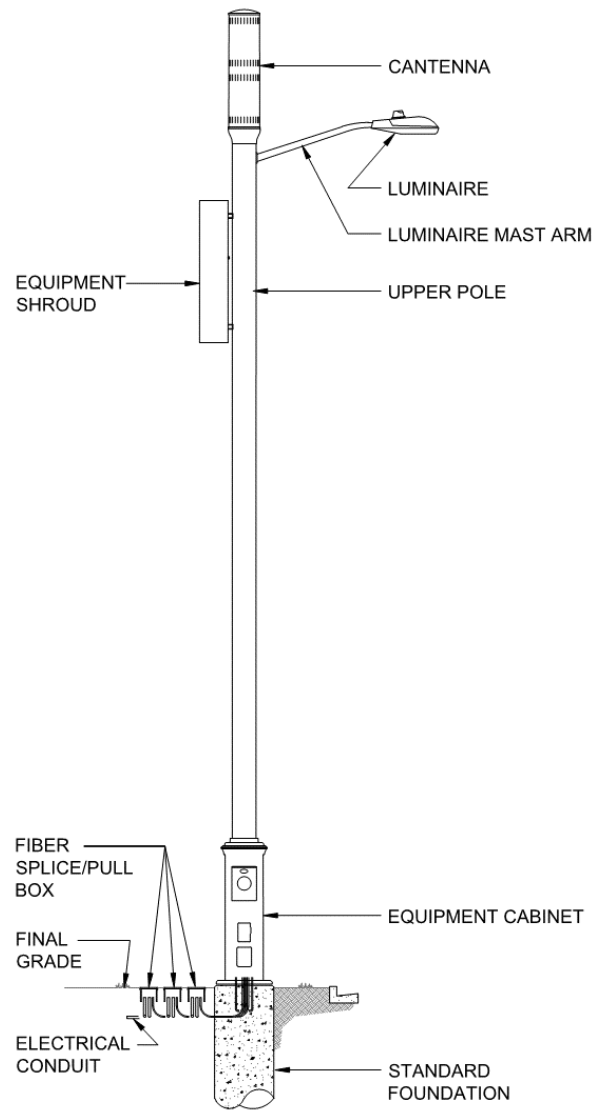
B. Combination Pole with
Antenna



C. Freestanding Small Cell



D. Combination Pole with Antenna



E. Examples of Landscape buffer for grade level equipment (where allowed)

