
**VILLAGE OF SUGAR GROVE
BOARD REPORT**

TO: VILLAGE PRESIDENT & BOARD OF TRUSTEES
FROM: ANTHONY SPECIALE, DIRECTOR OF PUBLIC WORKS
BRAD MERKEL, DEPUTY DIRECTOR OF PUBLIC WORKS
SUBJECT: RESOLUTION ADOPTING WRITTEN DESIGN STANDARDS FOR
USERS OF THE PUBLIC RIGHTS-OF-WAY
AGENDA: MARCH 3, 2020 REGULAR BOARD MEETING
DATE: FEBRUARY 26, 2020

ISSUE

Should the Village Approve a Resolution adopting written Design Standards for the PUBLIC RIGHTS-OF-WAY.

DISCUSSION

This item was Discussed at the December 3, 2019 Board Meeting.

On July 10, 2018, the Village Board approved **Ordinance #20180710** regulating micro antennas providing for the regulation and application for small wireless facilities in order to regulate the permitting and deployment of small wireless facility installations consistent with the requirements of the Small Wireless Facilities Deployment Act (the "Act"), which was signed into law on April 12, 2018, as Public Act 100-0585. The Act provides the regulations and process for permitting and deploying small wireless facilities within rights-of-way and on private property throughout Illinois (excluding Chicago). Per the Act, the Village can impose collocation requirements to ensure compliance with certain design standards.

The General Guidelines and Small Wireless Facility Design, Stealth and Concealment Standards would assist applicants with understanding the Village's objectives to preserve the character of the neighborhoods in which facilities are installed and prevent visual blight. A document such as this is particularly important for the Village, and helpful for applicants because all municipalities are spatially unique and have different regulations. Telecommunication companies and its third party subcontractors install equipment nationwide and would benefit to understand guidelines prior to designing and applying for a permit in each municipality.

COST

The cost for the Village Attorney to draft the Resolution is approximately \$2,000. This is unbudgeted however, the funds are available in the Community Development, account number 01-55-6301: Legal Services.

RECOMMENDATION

That the Village Board Approve the Resolution Adopting written Design Standards for the PUBLIC RIGHTS-OF-WAY.



RESOLUTION NO. _____

**A RESOLUTION ADOPTING WRITTEN DESIGN STANDARDS FOR USERS OF THE
PUBLIC RIGHTS-OF-WAY**

WHEREAS, the Village of Sugar Grove (“Village”) is not a home rule municipality within Article VII, Section 6A of the Illinois Constitution, and accordingly, seeks to act pursuant to the powers granted to it under 65 ILCS 5/1-1 *et seq.*; and,

WHEREAS, Public Act 100-0585, known as the Small Wireless Facilities Deployment Act (“Act”), became effective on June 1, 2018; and,

WHEREAS, the Village is authorized to enact appropriate regulations and restrictions relative to small wireless facilities, distributed antenna systems and other personal wireless telecommunication facility installations in the public right-of-way so long as it does not conflict with state and federal law, including the institution of concealment and design standards; and,

WHEREAS, Title 7 (Public Ways and Property) of the Village Code of Ordinances establishes regulations for the permitting and regulation of small wireless and utility facilities throughout the Village; and,

WHEREAS, the Village wishes to amend these provisions to include concealment and design standards so as to preserve the character of the neighborhoods in which the small wireless and/or other utility facilities are installed and to prevent visual blight.

NOW, THEREFORE, BE IT RESOLVED by the corporate authorities of the Village of Sugar Grove as follows:

Adoption of Concealment and Design Standards

Written Concealment and Design Standards for users of the public rights-of-way are attached hereto as **Exhibit A** and shall be incorporated as though fully set forth herein. The Concealment and Design Standards may be modified from time to time at the direction of the Director of Public Works or designee, without necessitating further action by the corporate authorities, so long as any such changes are consistent with the purpose and intent of Title 7 (Public Ways and Property) of the Village Code of Ordinances. A copy of the Concealment and Design Standards, and any subsequent amendments thereto, shall remain on file with the Village Clerk.

PASSED AND APPROVED by the President and Board of Trustees of the Village of Sugar Grove, Kane County, Illinois, this ____ day of _____ 2020.

P. Sean Michels
President of the Board of Trustees
of the Village of Sugar Grove, Kane
County, Illinois

ATTEST: _____
Alison Murphy
Clerk, Village of Sugar Grove

	Aye	Nay	Absent	Abstain
Trustee Heidi Lendi	___	___	___	___
Trustee Ryan Walter	___	___	___	___
Trustee Sean Herron	___	___	___	___
Trustee Ted Koch	___	___	___	___
Trustee Rick Montalto	___	___	___	___
Trustee Jen Konen	___	___	___	___
Village President P. Sean Michels	___	___	___	___

EXHIBIT A
DESIGN STANDARDS
FOR USERS OF THE PUBLIC RIGHTS-OF-WAY

The general guidelines and aesthetic, stealth, and concealment standards apply to the placement of small cell antennas and other utility facilities within the Village of Sugar Grove (“Village”). Small cell antennas and utility facilities are regulated by Title 7 (Public Ways and Property) and all terms used herein shall have the meaning as defined in that provision.

General Regulations. Every small wireless antenna and/or utility facility colocation shall comply with the following standards:

A. Small Wireless Antennas and Utility Facilities

1. Antennas shall be mounted no less than twelve (12) feet above ground level, as measured to lowest most point of 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. 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 antenna that has exposed elements, the antenna and 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 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 Village Director of Public Works or designee. There must be a smooth transition between the utility pole and antenna and enclosure.
5. Side mounted small wireless and/or utility 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 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 and/or utility facility, and shall be the same color.
6. Small wireless and/or utility 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 and/or utility 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 approved by the Village Director of Public Works or designee. Care should be taken to integrate the mounting elements into the facility design. Through-bolting or use of lag bolts on Village owned poles is prohibited.
8. For attachments to existing utility poles, wires serving the small wireless and/or utility 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 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 and/or utility facility shall be concealed within the hollow interior of the utility pole or wireless support structure, except as otherwise approved by the Village Director of Public Works or designee.
9. All small wireless and/or utility 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 service provider.
10. No guy or other support wires will be used in connection with a small wireless and/or utility facility unless the small wireless and/or utility 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 (“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 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 and/or utility 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 and/or utility facilities shall be located in a manner that meets that Americans with Disabilities Act of 1990 and does not obstruct, impede, or hinder the usual pedestrian or vehicular path of travel.
14. Small wireless and/or utility 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. The wireless/utility provider shall coordinate, establish, maintain, and pay for all power and communications connections with private utilities.
15. A four (4) inch by six (6) inch plate with the wireless/utility provider's name, location identifying information, and emergency telephone number shall be permanently fixed to the small wireless and/or utility facility equipment enclosure or shroud.
16. To the extent applicable, small wireless and/or utility facility equipment shall not be mounted on any Village-owned ornamental street lights.
17. Small wireless and/or utility facility equipment not mounted on a utility pole or wireless support structure shall be installed underground. If undergrounding is not possible, 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.

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 and/or utility 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 Village Director of Public Works or designee.
2. All replacement street light poles and foundations for each shall conform to the Village's standards 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 mast arm of length equal to that of the existing pole to be replaced or of a length approved by the

Village Director of Public Works or designee based upon the location of the replacement street light pole.

5. All luminaires and mast arms shall match the arc and style of the original luminaire and mast arm, unless otherwise approved by the Village Director of Public Works or designee.
6. The replacement luminaire and mast arm shall be at the same height above 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 manufacture, model and light output as the removed fixture and nearby light fixtures, or as otherwise approved by the Village Director of Public Works or designee.
8. Replacement street light poles 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 requirement 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 and/or utility facility components shall be sized appropriately to the scale of the street light pole.
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.
15. Existing ornamental street light poles must be replaced with matching poles with respect to design and size.

C. Installation of New Wireless Support Structures, Where Allowed

The following standards apply when installing new wireless support structures, where allowed:

1. A new wireless support structure shall be designed to minimize the visual and aesthetic impact of the new vertical element and associated small wireless and/or utility facilities upon the supporting area and shall blend in with the surrounding streetscape with minimal visual impact. The Village may require a new wireless and/or utility support structure to be constructed of a specific material that will enhance the stealth and concealment of the

structure.

2. New wireless and/or utility support structures shall match the design, size, material, and color of existing utility poles, including street light poles and ornamental lights, within the immediate area, except as otherwise approved by the Village Director of Public Works or designee.
3. Within residentially zoned areas, new wireless and/or utility support structure installations 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.
4. New wireless and/or utility 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 and/or utility support structure cannot be located the average distance from other utility poles, a new wireless and/or utility support structure may be approved if such wireless and/ or utility support structure is designed as a stealth pole and the design and location is approved by the Village Director of Public Works or designee.
5. The centerline of a new wireless and/or utility 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.
6. New wireless and/or utility support structures shall be located a minimum of twelve (12) feet from driveway aprons unless otherwise approved by the Village Director of Public Works or designee.
7. New wireless and/or utility support structures shall be sited outside the critical root zone of existing trees having a six (6) inch diameter at breast height located in the immediate vicinity.
8. The outside diameter of any new wireless and/or utility 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.
9. New wireless and/or utility support structures shall not exceed the heights as authorized by Title 7 (Public Ways and Property) of the Village Code.
10. New wireless and/or utility 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 Village Director of Public Works or designee.
11. New wireless and/or utility support structures incorporating pole-mounted small wireless and/or utility 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 Village Director of Public Works or designee. Incorporation of equipment within an equipment enclosure in the base or other portion of the pole is preferred.

12. New wireless and/or utility support structures incorporating small wireless and/or utility 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 Village Director of Public Works or designee.
13. All new wireless and/or utility support structures must be supported with reinforced concrete foundation designed, stamped, sealed and signed by a professional engineer licensed and registered in the State of Illinois, and subject to the Village Director of Public Works or designee's approval. 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 Village Director of Public Works or designee's approval.
14. 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.
15. 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 the 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 in Title 7 (Public Ways and Property) of the Village Code, as well as these standards, any other written 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's 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. In addition:

1. The use of stealth technology in the location and construction of small wireless and/or utility 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 impartible under the facts and circumstances, to employ methods that blend into surroundings and not be visible; to minimize adverse aesthetic and visual impacts on the right-of-way, property, building and/or other facilities adjacent to, surrounding, and generally in the same area as the requested location of such small wireless and/or utility facilities.
2. Small wireless and/or utility 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 and/or utility facilities as unobtrusive as possible. The Village Director of Public Works or designee may approve compatible color schemes for antennas and small wireless and/or utility facilities. A clear, color digital photo simulation of the utility pole or wireless support structure providing “before and after” views demonstrating the true visual impact of the proposed small wireless and/or utility 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.
4. Small wireless and/or utility facilities must be located and oriented in such a way as to minimize view blockage.
5. The wireless and/or utility provider shall use the smallest suitable wireless and/or utility 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 and/or utility facilities shall not be artificially lighted or marked, except as required by law.
8. Small wireless and/or utility 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 and/or utility provider and approved by the Village Director of Public Works or designee, if the Village Director of Public Works or designee determines that the alternative measures will be at least as effective in concealing the small wireless and/or utility facilities as the measures required above.

H. Exhibits

Exhibit 1. Antennas

Permitted Example



Not Permitted Examples

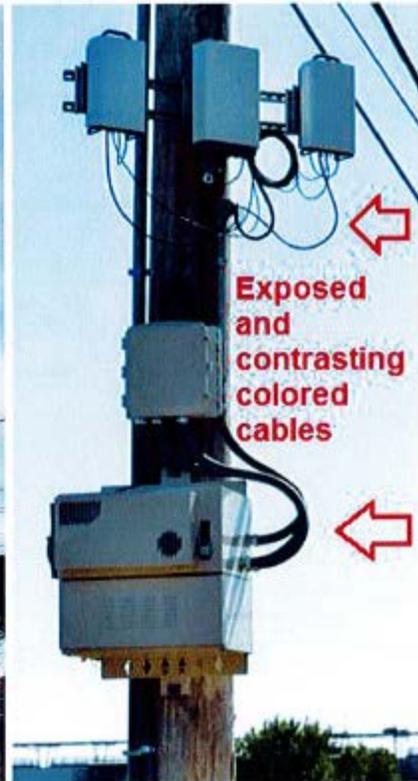
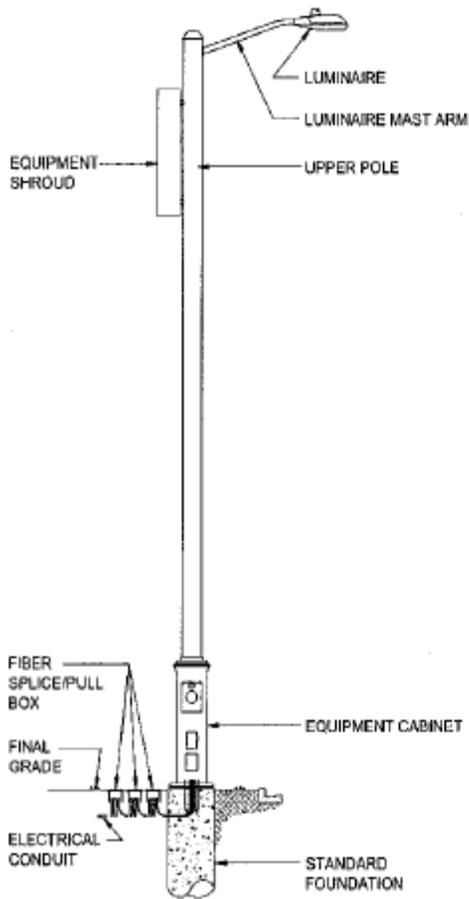
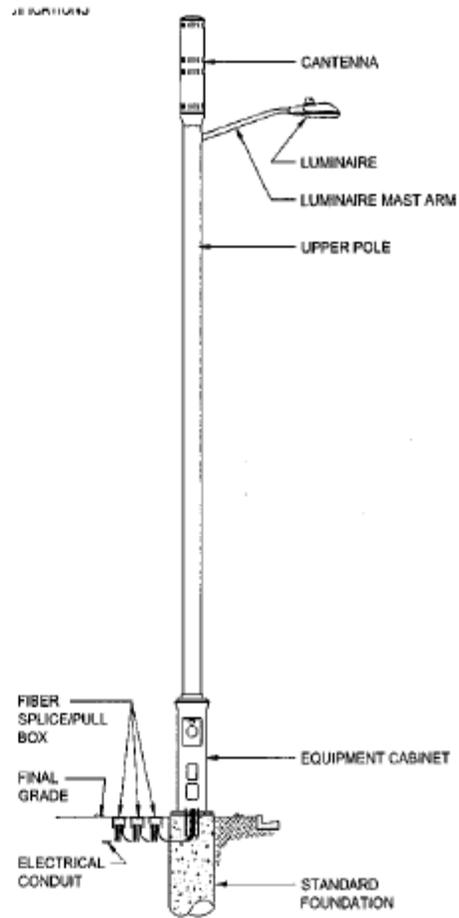


Exhibit 3. Examples of Acceptable Methods of Concealment

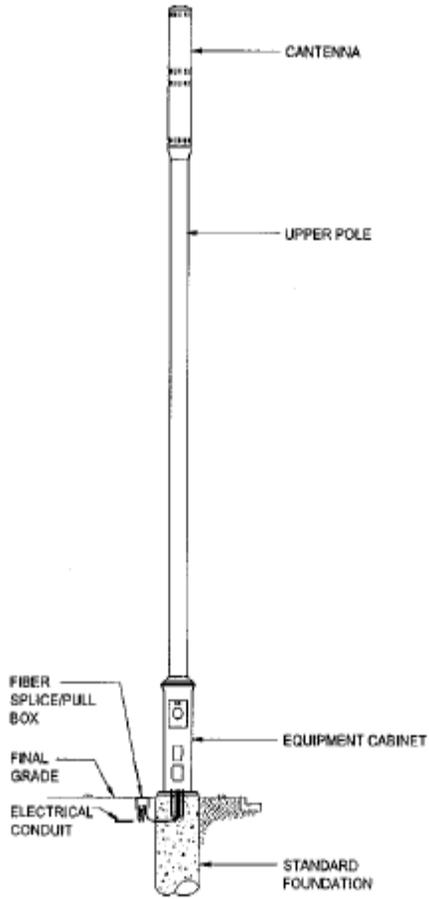
A. Combination Pole with Equipment Shroud



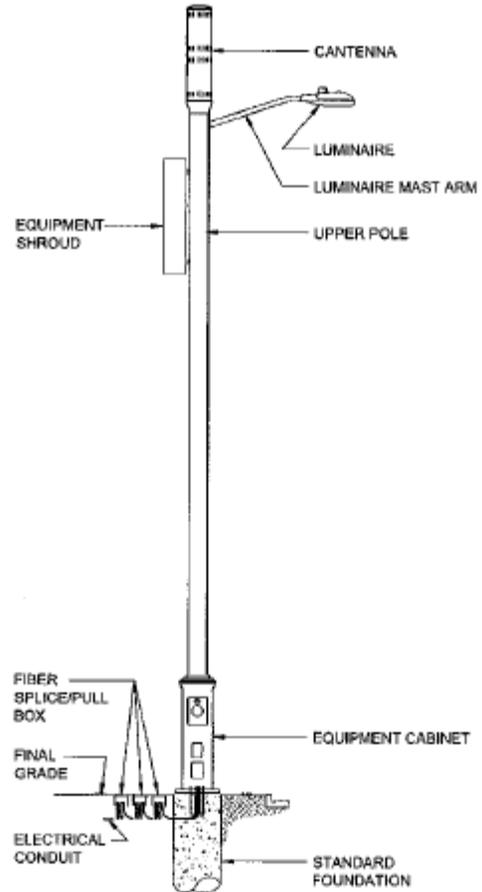
B. Combination Pole with Antenna



C. Freestanding Small Cell



D. Combination Pole with Antenna



E. Examples of Landscape buffer for grade level equipment

