

# Utility Right-of-Way Management Program Standards and Provisions June 26, 2017

The following standards and provisions are intended to provide reasonable parameters to the owners of public and private utility facilities located in the existing street rights-of-way. As of June 26, 2017 these standards govern the installation, upgrade, relocation and maintenance of all utility facilities within the Town's rights-of-way. Please note that the adoption of these standards is not a mandate on utility companies to improve their existing systems to meet the defined standards. However, the Town's expectation is that utility companies will comply with the standards on all future installation, upgrade, relocation and maintenance projects. Failure to comply with the standards and provisions and the conditions in the resultant Encroachment Agreement will result in no further Agreements for the utility company issued by the Town until they are brought into compliance.

The Town recognizes that the manner in which past facilities may have been installed varied depending on the environmental and other conditions of a given location. The Town further understands that accommodations may need to be made depending on the specifics of a given project. Therefore, it is the intent of the Town to work closely with the utility companies to find a mutually agreeable solution to all reasonable requests when the standards and applicable conditions pose unique challenges. Finally, please note that quicker review times can be expected when projects have no or few deviations from the standards.

While no set of standards can assure complete and perfect protection of public health and safety conditions in all circumstances, the adoption of carefully considered standards are intended to create a consistent and desirable quality-of-life environment for the community as a whole. The following regulations are adopted to apply to utility construction and maintenance located in public rights-of-way within the jurisdiction of the Town of Matthews.

If any provision of this policy as now or later amended, or its application to any person or circumstance is held invalid, the invalidity does not affect other applicability of the remainder of this policy. Nothing in these Standards and Provisions creates, or is intended to create, private rights of action by individuals.

## 1.0 General Encroachment Agreement Provisions

- 1.1. All utility construction and maintenance work in Town-maintained street rights-of-way requires an Encroachment Agreement issued by Matthews Public Works.
  - A. The Encroachment Agreement and plans must be submitted by the utility company. Matthews Public Works has 30 working days to respond after receipt of complete package. This timeframe applies to standard submissions for new installation requests, unless the Town determines that extraordinary factors warrant a longer review period. Existing facility maintenance timeframes will be determined by Matthews Public Works on a case-by-case basis.
  - B. Construction should not occur or be scheduled to occur before the review is complete and the Encroachment Agreement is signed.
  - C. Matthews Public Works may determine, on a case-by-case basis, that a Pre-Construction Conference is warranted.
  - D. A copy of the Encroachment Agreement must be kept at the construction site.
  - E. Matthews Public Works must be notified 5-7 work days prior to the **actual** start of work.
  - F. If pavement will be cut as part of the project, a Utility Cut Permit will also be required, which has additional provisions including an additional notification to the Town 48 hours prior to the pavement cut.
  - G. The Encroachment Agreement applicant must provide, if requested by the Town, a report describing the technical purpose and function of the proposed facilities.
  - H. Review by the Town does not certify the structural integrity of facility or structure. The obligation is on the applicant to ensure that collocated facilities can handle the additional loading on poles, structures, etc.

- 1.2. North Carolina General Statutes (NCGS) § 89 Article 8A, known as the "Underground Utility Safety and Damage Prevention Act" (as modified from time to time), applies to all construction covered by Encroachment Agreements issued by the Town of Matthews.
- 1.3. The current version of the Charlotte Department of Transportation's (CDOT) Work Area Traffic Control Handbook (WATCH) shall be in force when performing any work on a utility facility in the Town's streets.
- 1.4. These standards shall apply to all Town-maintained street rights-of-way. Exceptions may be granted by the Town on a case-by-case basis at the Town's sole discretion.
- 1.5. Note that, if crossing another entity's right-of-way (e.g. NCDOT, rail lines, etc.), the standards and requirements of that entity may differ from, or supersede, these standards. It is the responsibility of the Encroachment Agreement applicant to meet all applicable standards and obtain necessary property rights for right-of-way work.
- 1.6. All utility facilities shall be designed and installed in accordance with appropriate industry standards, applicable laws, and national and state building codes, including, but not limited to, the National Electric Code and National Electric Safety Code.
- 1.7. Utility entities or their representatives shall take all reasonable steps necessary to protect and structurally support existing utilities, facilities and structures within the Town rights-of-way.
- 1.8. Utilities are encouraged to consolidate their facilities, wherever reasonable, onto one pole line or in one joint-trench or duct bank. Quicker review time can be expected when facilities are co-located.
- 1.9. Pole lines consisting of continuous runs of distribution facilities paralleling a roadway shall be limited to one side of the roadway except when the facilities are within a 3/4 mile radius of existing or future power distribution substation. This standard does not prohibit pole lines from moving from one side of the street to the other or service lines crossing the street.
- 1.10. Installation of utility facilities on highway structures such as bridges or culverts is generally prohibited. Matthews Public Works will review such proposed installations on a case-by-case basis.
- 1.11. Any relocation involving a streetlight requires prior approval from Matthews Public Works.
- 1.12. All utility installations crossing signalized intersections, requiring pole replacements, must be bored underground. For maintenance purposes, this does not apply to pole owners.
- 1.13. The right-of-way shall be restored to an equal or better condition than existed prior to the project and shall meet current accessibility guidelines.
- 1.14. Utilities shall maintain documentation of their respective facility locations/relocations and shall provide such documentation to the Town of Matthews upon written request. The Town recognizes that some of the information provided may be proprietary in nature. In such instances, utilities shall mark clearly and with particularity the sections of information it considers to be proprietary or otherwise not subject to the Public Records Act so that the Town can make any necessary determinations regarding such information.
- 1.15. Vertical utility markers are not permitted within the Town's rights-of-way.
- 1.16. These Standards and Provisions are intended to provide the Town with the maximum authority available to the Town in the regulation of applicable structures; to comply with the Town's obligations under applicable State and federal law; and to promote the public's health, safety, and welfare. Accordingly, they shall be interpreted in light of such intention and is consistent with State, Federal and local laws and regulations at the time of adoption.
- 1.17. The proposed installation shall be built in compliance with the approved plans on file. An electronic copy of the as-built drawings is required to be given to Public Works within ninety (90) days after construction is completed.
- 1.18. The utility owner shall keep on file as-built drawings and photographs depicting the entire facility installation, including all transmission equipment and all utilities.
- 1.19. The utility owner shall comply with all applicable provisions of these rules, any Encroachment Agreement issued under these Standards and Provisions, and all other applicable federal, state, and local laws. Any failure by the Town to enforce compliance with any applicable laws shall not relieve any applicant of its

obligations under these Standards and Provisions or all other applicable laws and regulations.

- 1.20. The facility shall be developed, maintained, and operated in full compliance with the conditions of any applicable Encroachment Agreement, and any law, statute, ordinance or other regulation applicable to any development or activity on the site. Any violation of the conditions of approval for any applicable Encroachment Agreement, or any other law, statute, ordinance or other regulation applicable to any development or activity may result in the revocation of this Encroachment Agreement. The remedies specified in this section shall be cumulative and the Town may resort to any other remedy available in law or in equity.
- 1.21. The Town may, at its sole discretion, allow for the testing of innovative construction methods that are not explicitly contemplated in these standards and provisions where there is mutual advantage to the Town and the utility company. Upon successful evaluation, the Town may amend the Standards & Provisions to incorporate the construction methods as a new practice.

## **2.0 Above Ground**

- 2.1. Replacement poles or pole modifications shall meet all applicable standards of the pole owner.
- 2.2. Where pole lines are located in the planting strip, the lowest facility attached to the pole line shall be a minimum of 25 feet above existing or proposed grade. The utility owner shall allow the Town to plant small maturing trees (20 feet tall at maturity, or less) with a minimum clearance to the lowest overhead facility of 5 feet. This standard shall apply to Encroachment Agreement requests for new facilities where three (3) or more consecutive poles are installed.
- 2.3. The maximum pole height above grade shall be 50 feet.
- 2.4. The longitudinal location of above ground facilities shall be behind the sidewalk as near as practical to the right-of-way line or easement line on a uniform alignment and as close to side property lines as possible.
- 2.5. If an above-ground facility or structure is determined by the Town to be in a location that has a safety concern, the Town may prohibit the installation of the facility in that location or require that the facility be relocated. Equipment and/or structure shall not interfere with pedestrian, bicycle or vehicular intersection sight distances.
- 2.6. Utility pole guy wires crossing an existing or proposed sidewalk shall allow a clear zone equal to the width of sidewalk plus two feet at a height of 8 feet.
- 2.7. Damaged poles or above ground facilities shall be "made safe" by the owner immediately upon discovery. Full repair or replacement shall be scheduled to occur within 90 days or as soon as replacement materials are available.
- 2.8. Poles and/or equipment shall be removed by the owner within 30 days of inactivation or abandonment.
- 2.9. Poles and pedestals shall have a mark or tag identifying the owner with contact information and unique identifier codes or numbers.
- 2.10. Existing decorative/metal street light poles may be required to be replaced if the pole owner determines the existing pole is not able to hold the equipment; the applicant shall bear the cost of replacement.
- 2.11. Wireless communication equipment may be attached to existing poles with the exception of decorative poles, traffic signals, and pedestrian lights. Approval must be granted from the pole owner and the Town of Matthews.
- 2.12. The Town may, in its discretion, require additional screening to be installed in order to minimize the visual impact of any new poles or associated utility cabinets. The Town may, at its discretion, require that associated equipment cabinets or facilities be installed underground.
- 2.13. Approval must be granted through the State Historic Preservation Office and the local Historic District Commission within historical areas of the Town.
- 2.14. New or expanded above-ground utility facilities (other than poles and facilities located on poles) such as pedestals, terminals, cross boxes, interfaces, remote terminals, and other items of industry standard nomenclature ("above-ground structure") that are part of a utility's distribution system (i.e., does not include facilities or devices that primarily serve individual properties) may be located in the rights-of-way

only upon issuance of an Encroachment Agreement in accordance with the standards set forth below. Above-ground structures shall not interfere with the operation and maintenance of existing utilities, facilities, roadways or walkways within the public rights-of-way.

2.15. Above Ground Structure Location Criteria.

The following are preferred locations that minimize the aesthetic impact of the proposed above-ground structure:

- Dead-end streets
- Property line between two homes
- Heavily wooded areas
- Corner lot side yards
- In front of residential privacy fences
- Next to existing above-ground structures
- Outside the line-of-sight from driveways/intersections
- Edge of Town rights-of-way
- Cabinets are to be placed so that doors do not swing into walkways or roadways

2.16. Screening on above-ground structures still may be necessary on a case-by-case basis and will use the following suggested list of hardy shrubs suitable for utility cabinet screening:

- English Laurel
- Japanese Yew
- Leatherleaf Viburnum
- Japanese Holly
- Burford Holly
- Emily Brunner Holly
- Hetzi Holly
- Hetzi Juniper
- Inkberry Holly
- Yaupon Holly

2.17 In the event that screening, appearance, or other conditions are not adequate to minimize the impact of the structure, additional reasonable camouflage may be required or the Encroachment Agreement may be denied.

2.18 **Above-Ground in Residential Districts**

New poles may not be erected in residential areas solely for wireless communication equipment attachment unless:

A. The applicant has demonstrated that it has evaluated whether it can reasonably provide service by:

- 1) Installing poles outside of the residential area;
- 2) Installing poles in the rights-of-way along a street classified on the Charlotte Regional Transportation Planning Organization 's (CRTPO's) adopted Comprehensive Transportation Plan (CTP);
- 3) Attaching equipment to existing poles within the right-of-way;
- 4) Installing poles in rights-of-way contiguous to reverse-frontage parcels.

B. At least 10 working days prior to submitting an application, the applicant shall complete each of the following pre-submission requirements:

- 1) Notify all property owners within 500 feet of proposed pole installations, measured along the public right-of-way, via a door hanger, direct mailing or other means approved by the Town;
- 2) Host a community meeting to occur not less than 30 days after initial notice to present in reasonable detail the proposed draft plan of installation, including facility descriptions, locations, applicable screening, and aesthetic characteristics;
- 3) Receive and consider for a period of 30 days after the initial meeting any community

comments or proposed alternative locations and designs. Provide comments and response to the Town;

- 4) Host a second meeting to occur not less than 35 days after the initial meeting to present in reasonable detail the proposed plan of installation, including facility descriptions, locations, relevant screening, aesthetic characteristics, and responses to initial comments.

C. The Town agrees, at its discretion, that the Encroachment Agreement applicant has:

- 1) Documented in reasonable detail its compliance with the pre-submission notification and meeting requirements;
- 2) Evaluated, considered in good faith, and provided written responses to reasonable design or location alternatives offered by the Town, the applicable homeowners association, or affected residents during the pre-submittal period, and
- 3) Demonstrated that an FCC licensed wireless communications provider will be utilizing the pole for personal wireless communication services within a reasonable time after the issuance of the Encroachment Agreement by:
  - a) A statement from the applicant indicating how and when the proposed facilities will be used to provide personal wireless services, and
  - b) One of the following, provided that if there is information that the applicant or FCC licensed entity considers to be confidential, proprietary, or otherwise exempt from the disclosure under the North Carolina Public Records Act, the applicant shall mark such sections clearly and specifically to assist the Town in determining whether and how to protect such information from disclosure:
    - I. A copy of the applicant's FCC license;
    - II. A copy of the applicant's contract with an entity licensed by the FCC to provide personal wireless services;
    - III. An affidavit in a form provided by the Town and signed by an FCC licensed entity indicating that the applicant's proposed facilities will be used within a reasonable time to provide personal wireless services, or
    - IV. An affidavit in a form provided by the Town and signed by the applicant indicating that the applicant's proposed facilities will be used within a reasonable time to provide personal wireless services by an FCC licensed entity.

D. The Encroachment Agreement application shall include a written description and visual depiction of how the proposed facilities will reasonably maintain the existing aesthetic character of the neighborhood with respect to facility color, facility design, and any proposed attachments or support equipment, including but not limited to light fixtures. The applicant must match the design of any existing decorative poles to the greatest extent possible.

E. The maximum height of the pole in an area zoned single-family residential where the existing utilities are installed underground shall not exceed 40 feet above ground level. Where utilities are above ground in an area zoned single-family residential the maximum height shall be the lesser of 50 feet or the height of existing adjacent utility poles, except where, at the Town's discretion, increased pole height is an acceptable alternative to either reduce the total number of new poles or to allow installation of a pole in a location preferred by the community. The maximum height of an antenna on top of any pole shall be no more than 10 feet above the height of the pole.

F. The minimum distance of the pole from any single-family dwelling structure shall be at least 150% of the pole height and shall not be located directly in front of any single family dwelling located in a single family zoning district. The minimum setback distance shall be measured from the facility installation to the nearest point of a single-family dwelling located in a single-family zoning district.

G. The Town encourages the installation of wireless transmission equipment on an existing structure for the purpose of transmitting or receiving radio frequency signals for communications purposes

to avoid unreasonable duplication of wireless facilities. Co-located facilities and equipment may be separately owned and used by more than one entity.

- 1) All new communication facilities shall be designed and constructed to provide for co-location and utilize neutral host equipment capable of use by multiple additional wireless communication providers;
- 2) As a condition of installing a new pole or facility for personal wireless communication services, the owner of a new pole shall reasonably consent to allowing future requests for co-location by other providers of personal wireless services on reasonable terms and conditions that do not discriminate between similarly situated providers of wireless communication services.
- 3) New wireless communication poles that cannot be co-located on an existing pole must be separated by a minimum of 400 feet from existing poles.

### **3.0 Underground**

- 3.1. Pull boxes and hand holes 4 feet by 4 feet in area or smaller shall be acceptable. Larger pull boxes, hand holes, manholes, and vaults may be permitted on a case-by-case basis as determined by Matthews Public Works.
- 3.2. Pull boxes and hand holes shall have a mark or tag identifying the owner.
- 3.3. Pull boxes, hand holes, manholes, and vaults shall be located outside the sidewalks where possible. They shall not be located in driveways, curb ramps, or within the intersection corner radius. A minimum 30-foot corner radius shall be recognized, where the existing corner radius is smaller. If the existing corner radius is greater, then the facility shall be placed beyond the end of the radius.
- 3.4. Pull boxes, hand holes, manholes and vaults, if permitted to be in pedestrian/non-motorized areas, shall have lids identifying the utility owner with an ADA compliant and skid resistant surface. Lids shall have a minimum vertical load capacity of 20,000 lbs. in accordance with ANSI/SCTE 77 and ANSI Tier 15 test provisions. Lids shall be one piece for boxes 30 inches by 48 inches and smaller unless otherwise approved by Matthews Public Works.
- 3.5. If applicable, pull box, hand hole, and manhole lids shall be flush and centered within a single section of sidewalk. Vertical surface discontinuities shall be no more than ½" maximum and that those between ¼" and ½" shall be beveled with a slope no more than 50%. Any sinking that occurs shall be repaired within 30 days of the notice from Matthews Public Works or other entity.
- 3.6. Only directional drilling is allowed for horizontal bores. Conduit proposed to be installed by horizontal directional drilling shall be approved with minimum review by Matthews Public Works. Drilling details shall be provided on the construction plans and installation shall conform to the requirements contained in this document for horizontal directional drilling.
- 3.7. All proposed facility installations crossing laterally at intersection shall be drilled, bored or tunneled to minimize open cuts. If Matthews Public Works agrees that drilling, boring or tunneling are not feasible, then open cutting may be permitted through a separate Utility Cut Permit. Micro-trenching is only allowed by special exception and will be subject to additional specified requirements.
- 3.8. Open cuts and trenching may be permitted by Town of Matthews on a case-by-case basis. Open cuts, if permitted, shall conform to the Town of Matthews Utility Cut Policy and CDOT Street Maintenance Utility Cut Specification Manual and Attachments.
- 3.9. All proposed utilities shall be placed in such a way as to not interfere with the operation and maintenance of existing utilities, facilities, roadway, driveways or pedestrian walkways within the public rights-of-way or easements.
- 3.10. Construction located within planting strips shall comply with the following guidelines :
  - A. Parallel conduit installation shall maintain a minimum clearance of 5 feet from the trunk of any tree within the right-of-way when trenching. When boring conduit closer than 5 feet from existing tree trunks a minimum bore depth of 5 feet will be required.
  - B. Pull boxes, hand holes, manholes, vaults and bore pits shall be installed outside tree root

protection zones.

- C. Special attention shall be given to the placement of construction equipment (such as boring rigs and contractor vehicles) in order to avoid compaction of soil and damage to existing roots in the root protection zone.
  - D. Temporary tree protection fencing is required to be installed prior to any trenching.
- 3.11. Damaged facilities shall be made safe within 24 hours after discovery. Repair or replacement shall be scheduled to occur within 90 days or as soon as replacement materials are available.
- 3.12. All non-metallic underground facilities shall be installed with a tracer wire providing the ability to be located from the surface by conventional electronic tracing technology.
- 3.13 **Underground Construction Methods**
- A. When Horizontal Directional Drilling, a three foot (3') minimum depth shall be used and should follow the construction and safety practices as described in the "Horizontal Directional Drilling Installation Guidelines" manual, current edition, published by the National Utility Contractors Association (NUCA). All current Occupational Safety and Health Administration (OSHA) guidelines shall be adhered to.
  - B. Jack Sleeve and Bore
    - 1) Jack Sleeve and Bore operations should follow the construction and safety practices as described in the "Guide to Pipe Jacking and Micro Tunneling Design" manual, current edition, published by the National Utility Contractors Association (NUCA). All current Occupational Safety and Health Administration (OSHA) guidelines shall be adhered to.
    - 2) All bore pits less than 5 feet deep shall be minimum distance of 5 feet from the back of curb or from the edge of pavement. All bore pits 5 feet deep or greater shall be a minimum distance from the back of curb or from the edge of pavement based on a ratio of one foot of separation per one foot of depth. By example, a 10 foot deep pore pit shall be a minimum of 10 feet from the back of curb or edge of pavement.
    - 3) Bore pits shall be protected and made safe by fencing around or plating over.

#### **4.0 Other Provisions**

- 4.1 The Town's Encroachment Agreement approval does not authorize any construction on private property, rail rights-of-way, utility easement, state-maintained streets or any areas not controlled by the Town of Matthews. Any crossing or parallel routing of a facility along state maintained streets requires an Encroachment Agreement with the North Carolina Department of Transportation (NCDOT). To obtain a NCDOT Encroachment Agreement in the Matthews area, contact NCDOT District 2 Engineer's Office.
- 4.2 Steel plates and construction signs shall have a mark or tag identifying the owner and owner contact information.
- 4.3 All right-of-way lines are to be shown on submitted plans. Mecklenburg County tax mapping is not to be used as right-of-way data. Issuance of an Encroachment Agreement by the Town is not an approval or verification of right-of-way lines shown on the plans. The Town of Matthews does not guarantee the right-of-way of the road, nor will it be responsible for claims for damages brought by any property owner.
- 4.4 Access to properties shall be maintained at all times.
- 4.5 The contractor shall utilize door hangers, telephone contact, e-mail contact or some other form of notice to notify residents and businesses of pending utility work. Notices shall include the project name; a brief description; the contractor's 24-hour contact information; and the proposed schedule for work in the immediate area. The contractor shall distribute the notices a minimum of 7 days prior to commencement of beginning work. This does not apply to emergency situations.
- 4.6 The contractor shall comply with requirements of the Town's Noise Ordinance and all other applicable ordinances.
- 4.7 Special attention shall be given to the placement of construction equipment (such as boring rigs and

contractor vehicles) and materials to not obstruct sight distances.

- 4.8 The contractor shall not close or block sidewalk on both sides of a street or more than two consecutive blocks on the same side of the street.
- 4.9 Restoration of all improvements shall be completed on a block-by-block basis to reestablish functionality of the right-of-way as soon as possible. The contractor must begin restoration of the first block upon starting new installation of the second block. In lieu of this requirement a temporary and permanent restoration plan prescribing specific restoration phasing may be included with the Encroachment Agreement application.
- 4.10 Matthews Public Works shall be provided notice of the final inspection upon completion of the installation. All punch list items shall be resolved within 30 days.