

Louisville Metro Public Works & Assets UTILITY POLICY



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**LOUISVILLE METRO
DEPARTMENT OF PUBLIC WORKS
UTILITY POLICY**

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UTILITY POLICY

The utility policy is established to describe the means and methods by which any contractor or franchised or legislatively empowered utility companies or those working for such entities (hereinafter referred to as "Permittee") will be permitted to work within the Louisville-Jefferson County Metropolitan public right-of-way.

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I. PURPOSE & BACKGROUND

This policy is established to describe the means and methods by which any Permittee or franchised or legislatively empowered Permittee will be permitted to work within the Louisville/Jefferson County Metro (hereinafter referred to as "Metro") right-of-way.

The placement of utilities in Metro's rights-of-way is at the discretion of the Louisville Metro Public Works Department (hereinafter referred to as "LMPW") under Chapter 53 of the Louisville Metro Code of Ordinances (hereinafter referred to as "LMCO"). LMCO 53.06 of the Code states: that "...No person other than an authorized officer or employee of the Metro Department of Public Works shall make any opening, cut, or excavation in or under the surface of any street, alley, sidewalk, or highway of Louisville Metro without a written permit from the Director."

It is recognized that there is a need to accommodate Permittee in the provision of public services; however, Metro must ensure that the primary purpose of the street, passage of vehicular, bicycle and pedestrian traffic, is maintained to the greatest extent possible. The use of the street corridors by Permittee is secondary to the movement of traffic. This policy strikes a balance between the public need for efficient, safe transportation routes and utility services within these routes.

II POLICY OBJECTIVES

Based on the Metro Code requirement, this utility policy has three primary objectives.

A. Ensure Public Safety / Minimize Public Inconvenience

First, Metro must ensure that the public safety is maintained and that public inconvenience is minimized by establishing time constraints for utility work, response time for utility repairs to the pavement, and standards for work zone safety.

B. Protect Public Infrastructure

The second objective is to protect the public's infrastructure investment by establishing repair standards for the pavement when utility cuts are made, and by specifying the inspection requirements for street repairs. Standards include but are not limited to: Americans with Disabilities Act (hereinafter referred to as "ADA") Standards for Transportation Facilities; Kentucky Transportation Cabinet Standard Drawings and Specifications; and Louisville Metro Standard Drawings and Specifications.

C. Facilitate Right of Way

The third objective is to facilitate utility work within the right-of-way through the standardization of utility placements and the maintenance of an efficient permit process.

To guide the staff, Permittee, and Permittees in achieving the above stated objectives, the following policy has been prepared. The policy is intended to provide general guidance only. Specific requirements will be developed based on site-specific conditions. Also, as with any policy, exceptions may be granted as deemed necessary by the Director of Public Works or designee (hereinafter referred to as "Director"). LMPW will conduct periodic reviews of the policy and invite Permittee's input in order to make this document an effective tool for the conduct of our mutual responsibilities to serve our respective "customers".

To meet all requirements of law, including but not limited to, the Americans with Disabilities Act (ADA), the Kentucky Department of Transportation (KYTC) Standard Designs, the Manual on Uniform Traffic Control Devices, Louisville ordinances, MSD Standards, Roadside Design Guide, Parks policies, and AASTHO.

III. PUBLIC SAFETY/MINIMIZE PUBLIC INCONVENIENCE

LMPW is charged with managing and coordinating all construction in Metro rights-of-way and easements. A major objective is to provide for public safety and to minimize inconvenience during the course of

construction activities within Metro. Accordingly, the constraints specified below vary according to the classification of the work area.

A. Work Within the Pavement

1. General

There must be at all times sufficient traffic lanes open to permit a substantially normal flow of traffic and proper provisions for maintenance of traffic. Street intersections must be kept open to traffic, sufficient space being provided for two (2) lanes of traffic unless an exception is granted by the Director. Traffic lanes shall be a minimum of ten (10) feet wide unless lanes of lesser width are approved by the Director. All exceptions to the Utility Policy shall be in writing.

When notified by Metro of an improper maintenance of traffic, the Permittee shall provide proper provisions for traffic control immediately. In case of emergency, arrangements are to be made by Permittee with the Police Department so that officers may be assigned to handle traffic until facilities for traffic maintenance can be obtained and placed. If proper facilities for maintenance of traffic and/or proper provisions for traffic control are not being provided by the Permittee, LMPW may take necessary steps to place traffic maintenance and traffic control facilities in proper condition. The cost thereof shall be collected from the Permittee.

Steel plates or bridges of sufficient size shall be furnished to cover openings, and to provide crossings over trenches or new pavement on main thoroughfares and at important intersections. The plates or bridging shall be securely fastened in place to prevent movement. It shall remain in place when no work is being done on a particular length of opening on which it is used as a cover. Temporary paving with a cold asphalt mix should be used to feather the edges of the plate to form a wedged taper to cover the edges of the steel plate in advance of oncoming traffic. Other alternative methods to accomplish this will be considered for approval.

When the final surface is not installed after backfilling of the trench, it shall be necessary to place a temporary surface on any street cut opening. The temporary surface installation and maintenance shall be the responsibility of the Permittee until the permanent surface is completed and accepted. The temporary surface shall be either hot mix asphalt, cold mix asphalt or concrete. Temporary asphalt surfaces shall be compacted and rolled smooth with a drum vibratory roller.

Meter Bagging: For parking meter bagging requests, a permit from the Parking Authority of River City (PARC) is required. When permit has been obtained, contact PARC at 574-3817 with Meter and permit number as well as location(s). If work vehicles will be parking on site the permit must be in the window and visible at all times. Bagging must be done 24 hours in advance of any work.

2. Arterial Streets

Arterials are those streets in Louisville Metro designated as major thoroughfares (See Public Works Street Class on LOJIC). Being essential to the safe movement of the majority of citizens, these streets require stricter regulation to maintain the orderly and safe flow of traffic. Unless sufficient traffic lanes remain open to permit a substantially normal flow of traffic, work will be confined to the hours between 9:00 a.m. to 3:00 p.m. and 6:00 p.m. to 6:00 a.m., however, the Director may grant a change in hours.

When the final surface is not immediately installed after backfilling of the trench, it shall be necessary to place a temporary asphalt surface on any street cut opening. The temporary surface installation and maintenance shall be the responsibility of the Permittee until the permanent surface is completed and accepted.

3. Collector Streets

These are all streets which connect local streets to arterial streets. Note: restrictions such as those for arterial streets may apply depending on peak traffic hour activity. Generally, there will be no

restrictions on work hour or work days; construction shall be limited to 7:00 a.m. – 8:00 p.m. Monday through Friday (emergency work excluded). Two-way traffic shall be maintained at all times during peak traffic times; one lane closure will be allowed between 9:00 a.m. and 3:00 p.m. with flaggers.

Permanent restoration shall occur within one (1) week except as outlined by Public Works in the Permit. When the final surface is not installed within one (1) week after backfilling of the trench, it shall be necessary to place a temporary asphalt surface on any street cut opening. The temporary surface installation and maintenance shall be the responsibility of the Permittee until the permanent surface is completed and accepted.

4. Local Streets

These are those streets and cul-de-sacs which provide direct access to adjacent property or individual homes. Generally, there will be no restriction on work hours or workdays. Construction hours shall be limited to 7 a.m. - 8 p.m. Monday through Friday (emergency work excluded). At least a single lane shall be provided for two-way traffic with a flagman available for control.

Permanent restoration shall occur within two (2) weeks except as outlined in the Permit. When the final surface is not installed within two (2) weeks, it shall be necessary to place a temporary surface on any street cut opening. The temporary surface installation and maintenance shall be the responsibility of the Permittee until the permanent surface is completed and accepted.

B. Work Outside the Pavement

All work areas within the public right-of-way and outside the pavement shall be restored to their original condition or better after work completion. Pits/trenches that remain open overnight shall be secured to protect the public and adjoining property. In no case shall any work area outside of the pavement be left in a disturbed state longer than 30 days. When notified of a failure in the work area (i.e. cave-in), the Permittee shall respond and repair said work within twenty-four (24) hours.

C. Work Areas Generally

Disturbed areas shall be limited to no more than 300 linear feet of open trench before temporary repairs are initiated.

Care should be taken in job site parking to avoid damage to sidewalks and landscaping. Any curb, gutter, sidewalk or landscaping damaged by the utility shall be removed and replaced within thirty (30) days after the damage has occurred. Parked construction vehicles and equipment shall not restrict private property access for both pedestrians and traffic, nor hinder sight distances for traffic.

When notified by LMPW, or any other Metro entity, of an unsafe opening, the Permittee shall respond within twenty-four (24) hours.

No work will be permitted (except for emergencies) on certain streets during special Metro events, such as Derby, Thunder Over Louisville, etc., or others so designated in writing by the Director.

Salvage Requirements for work in Preservation Districts: In preservation districts the Permittee must be aware of type of street, sidewalk & curbing to determine type of repair or restoration needed. All areas within the designated historic preservation areas must be repaired using like materials and restored to its original condition. For information on historic preservation areas you can go to the following link: <http://www.louisvilleky.gov/PlanningDesign/Historic+Landmarks+and+Preservation+Districts+Commission.htm>

Work in a Restricted District: Pursuant to LMCO Section Chapter 53, all work in District A must comply with the provisions of LMCO Chapter 53.

The Permittee shall provide and maintain safeguards, safety devices and protective equipment and take any other needed actions as may be necessary to protect the public and property in connection with their work.

The presence of barricades, lights, or other traffic control devices provided and maintained by any party other than the Permittee, shall not relieve the Permittee of this responsibility. All traffic control around construction sites shall be in accordance with the Manual for Uniform Traffic Control Devices (MUTCD) and Louisville Metro Pre- Approved Plans, subject to modification for specific locations by LMPW Traffic Engineering.

Erosion and sediment control around work sites shall be in accordance with the Louisville Metropolitan Sewer District (MSD) standards. Inlet protection shall be provided at curb inlets and yard drains. Under no circumstances shall material (sediment, gravel, concrete, asphalt, etc.) be washed into storm drains. Excess material/sediment shall be allowed to dry and then be removed by vacuum sweeper or shovel and hauled away. Street washing shall be allowed only after sediment is removed in this manner. Effluent from dewatering operations shall be filtered or passed through an approved sediment-trapping device, or both, and discharged in a manner that does not adversely affect adjacent property. Saw cutting effluent and waste shall not enter the storm system and the Permittee conducting the saw cutting shall be prepared to collect the effluent and waste before starting the work. Upon notification of excessive erosion or sediment around work sites, the Permittee must take corrective action within twenty-four (24) hours.

IV. PROTECT THE PUBLIC INFRASTRUCTURE

The inspection process is the primary instrument by which LMPW seeks to protect the public investment in its infrastructure. Through a uniform and responsive inspection process, the public can be assured that work has been completed in accordance with current standards for reconstruction and site restoration. The objective of LMPW's inspection effort is to ensure that Metro infrastructure attains its maximum useful life and utility restoration callbacks are minimized.

A. Quality Assurance/Quality Control/Inspection

Every street and street repair situation is unique. Design criteria and construction standards cannot address every situation but, in order to maintain some form of consistency, these standards have been developed. In most cases, they provide the minimum acceptable standards for construction or repair. Consequently, when strictly applied, they will provide the minimally acceptable product. Therefore, this criteria has been developed to maintain the same integrity of the street pavement and subsurface condition prior to its being cut for utility installations.

Metro's quality assurance effort complements the Permittee's quality control efforts. Quality assurance is provided through the LMPW staff, who are responsible for the inspection of all right-of-way work. The staff serves as liaison with the Permittee to advise on construction standards, to coordinate activities between Metro and other Permittees and to advise on the extent of restoration.

Quality control is the responsibility of the Permittee. The Permittee is expected to be familiar with the applicable standards referenced herein and to employ qualified subpermittees who utilize these standards in the restoration of the right-of-way. Permittees who fail to comply with these standards risk exclusion from performing future right-of-way work.

Surface tolerances for street repairs should meet the standard for new construction. That is, the finished surface of the street repair should be tested with a ten-foot (10') straightedge parallel to the centerline or perpendicular across joints. Variations measured from the testing face of the straightedge to the surface of the street repair should not exceed one-quarter-inch (¼").

B. Reconstruction/Restoration Standards

The proposed criteria are guidelines to achieve the goal of "Quality" in street repairs. When used in conjunction with good planning and judgment, the repair methods will maintain the street at an acceptable condition with minimal degradation. All restoration shall result in a work site condition equal to or better than that which existed prior to construction. The following provisions will serve as guidelines for work in Metro:

1. *Pavement:*

Before any digging commences in pavement, the pavement shall be sawcut around the perimeter of the proposed trench. Pavement cuts shall be filled with compacted select material. Either concrete or asphalt will be placed to match at a minimum the existing street cross section.

Select material shall be placed in an excavation in lifts and compacted as indicated in the "Report of Trench Backfill Procedure Updates for LWC, LG&E and MSD Pavement Restoration," University of Louisville Center for Infrastructure Research; and Stantec Consulting Services.

Once the compacted backfill has been placed, the asphalt cutback shall be made. The cutback will extend 1 foot minimum on each side of the opening and will be over undisturbed existing base. All edges of the opening shall be neatly cut with an asphalt saw and uniformly tacked. In concrete pavement, the depth of the cutback excavation shall be to the depth of existing concrete pavement or eight-inches, whichever is greater. In asphalt pavement, the depth of the cutback excavation shall be to a depth of ten-inches (10") to allow for an eight-inch (8") concrete cap and a two-inch (2") asphalt surface.

When it is necessary to use cold patch in an opening due to the unavailability of plant mix materials, the cold patch will be compacted with a vibratory drum roller.

Pavement restoration will be approved based on their general appearance as well as their "rideability." Rideability is defined as a leveling tolerance to within one-quarter inch (1/4") at any point across the street cut as it relates to the surrounding asphalt street surface.

In all cases, site clean-up is necessary and required.

2. *Overlay Requirements:*

All public streets will be overlaid when any of the following conditions apply:

- a. When any underground facility is installed in the street and is parallel to the centerline of the right-of-way, the street must be overlaid from curb line or edge of pavement to curb line or edge of pavement for the entire length of the utility extension. If the utility extension terminates within 150 feet of the near right-of-way line of an intersecting street, the overlay shall extend to said right-of-way line. Otherwise, the overlay shall extend 15 feet from the end of the excavation. If granted an exception by the Director, limits of overlay may be reduced to existing joints in the pavement.
- b. When any underground facility is installed in the street and is perpendicular to the right-of-way centerline, and, if there are three such crossings within 150 feet of each other, the overlay shall encompass all excavations and extend from curb line or edge of pavement to curb line or edge of pavement. If the last excavation is within 150 feet of the near right-of-way line of an intersecting street, the overlay shall extend to said right-of-way line. Otherwise, the overlay shall extend 15 feet from the end excavation. If granted an exception by the Director, limits of overlay may be reduced to existing joints in the pavement.
- c. When any underground facility is installed in the intersection of two streets, the entire intersection must be overlaid to the extended right-of-way line of each intersecting street. If granted an exception by the Director, limits of overlay may be reduced to existing joints in the pavement.

An adequate overlay will consist of a 2" mill around the perimeter of the proposed overlay, tack coat and a 2" overlay of surface asphalt, with sealing on all of the joints.

3. Signalized Intersections

In no case shall a Permittee cut into the pavement of a signalized intersection without having contacted LMPW Electrical Maintenance (hereinafter referred to as "EM") Shop at (502)574-3261 forty-eight (48) hours prior. EM will locate buried loop detection devices so as to protect them from damage. Any Permittee that damages a loop detector will have the loop repaired or be charged for the repair or reinstallation of the device.

4. Pavement Marking

Lane striping or other painted and affixed delineators which are removed by Permittee shall be replaced by the Permittee before restoration will be considered complete. The inspector will notify the Permittee of the product (traffic paint, thermoplastic, raised pavement markers, lane tape) and applications, and Traffic Engineering will approve all traffic delineation materials. If pavement markings are not properly replaced twenty-four (24) hours after written notice to the Permittee, LMPW may take necessary steps to replace pavement markings. The cost thereof shall be collected from the Permittee.

5. Sidewalk

Sidewalks damaged by Permittee shall be removed and replaced in full sections. A section's size will be determined by the adjacent sections or Metro inspector.

All edges of concrete to be removed shall be sawcut and then formed from construction (or dummy) joint to joint. Any sections of sidewalk which have been undermined as work progressed will also be cut out and replaced with suitable backfill prior to replacement.

Should damage to Metro sidewalks be observed after the work has been completed, the Permittee shall be notified in writing to perform the repairs within thirty (30) days. Where sidewalk sections are removed at street corners, the sidewalk and adjacent curb shall be restored as a curb cut handicapped ramp. Construction of the ramp shall be in accordance with current ADA standards.

6. Aprons

Driveway aprons will not be "patched" following utility work. All edges of concrete restoration shall be sawcut and the property owner's access to his/her property shall not be unreasonably denied. In the event of a repair being necessary, an apron will be repaired with the same material from which it was made (i.e. exposed aggregate aprons will be repaired with exposed aggregate concrete).

7. Curb and Gutter

When curb and gutter is replaced, it will be restored to the nearest joint. Match existing curb elevations and ensure constant grade and positive drainage. Expansion material will be used at joints. Should the work include removal of a section which was finished with a dummy joint, the Permittee will saw cut the joint prior to forming and pouring the new section.

8. Street Crossings

In streets that are less than five (5) years old or have a Pavement Condition Index (PCI) greater than 85, the LMPW reserves the right to deny any street excavation or require repairs that are over and above these specifications.

9. Utility Marking

The overly-large paint marks left after utility marking is a source of concern to Metro. Marks made on curbs as well as beyond the location which will not be removed during construction have a tendency to remain in place for an indefinite time. Therefore, Metro's policy is that marks shall be large enough and frequent enough so as to be seen by the Permittee but not so as to become

graffiti on the pavements, curbs, and sidewalks. Marking of valve box and service locations shall be made neatly and be less than four inches square. As the use of concrete pavers and specialty concrete finishes increases, the Permittee are specifically cautioned to be discrete with marks on these surfaces, whether on Metro-owned or private property.

10. Grass Areas and Trees

All areas that have been landscaped prior to construction shall be restored to original or better condition. Un-landscaped areas that were otherwise covered with vegetation shall be reseeded with grass seed after construction. In areas that have been previously sodded, sod will be considered the appropriate restoration.

Trees will not be removed or heavily pruned in the course of programmed utility work without prior review by Metro's arborist.

In the event that construction may impact a tree root zone area (that area underneath the drip line of the tree), Metro may require boring the utility instead of an open trench.

11. Landscaped Areas

Metro has done extensive landscaping in areas of Metro, principally in medians of arterial streets. When work is planned in one of these planted areas, it is the Permittee's responsibility to contact the Metro Arborist two (2) days prior to the start of work for consultation and possible removal/replacement of plantings. LMPW will determine procedures to be followed for maintenance of the plants and their policies will govern.

In cases where above ground work needs to be screened or where existing plant materials must be replaced, the Permittee will install landscaping materials in accordance with a landscape plan provided by Louisville Metro. Appendix A – "Standard Landscaping Screening Materials for Use in the Public Right-of-Way" and "General Landscaping Notes" outlines in general acceptable materials and practices.

12. Special Construction

Areas such as Historic Preservation Districts, Historic Registries, Fourth Street, West Main Street, historical alleys consisting of exposed aggregate sidewalk, brick paving, granite curbs, cobblestones and "bomanite" type concrete are extremely difficult to match and may require replacement of entire slabs versus patching. Extreme care is required when working in these areas. All work under the pavements in these areas will require prior coordination with LMPW.

13. Parks and Parkways

Louisville Metro Parks is committed to the preservation, protection and enhancement of Louisville Metro parks and parkways and general guidelines for work in those parks and parkways is provided in Appendix B.

14. Brick Paver Salvage

Brick masonry pavers that are removed by any person or by Metro shall be salvaged by Permittee and stored by LMPW for future use. Salvaged or harvested brick masonry pavers can then be used for the purposes of preservation and maintenance of existing brick streets and alleys. Pavers that are installed pursuant to this section shall be installed using the same construction processes and techniques as used in the existing historic surface where possible (LMCO 97.095).

15. Environmentally Sensitive Areas:

Proposed Permittee work in environmentally sensitive areas, which include wetlands, streams, unstable slopes, and areas of differential settlement (i.e. peaty soils) may require a review by MSD for possible mitigation requirements. It is the Permittee's responsibility to educate itself on the

location of sensitive areas. The Louisville Jefferson Information Consortium (LOJIC) has interactive maps showing these areas within Metro limits.

V. FACILITATE RIGHT-OF-WAY WORK

Metro recognizes that work within its rights-of-way by Permittee is necessary in order to provide our citizens with essential services. Accordingly, an efficient and responsive right-of-way permitting process has been established to avoid delays in allowing Permittee to maintain service to their customers. Also, by establishing uniform placements for utilities, conflicts between utilities may be minimized, benefiting all parties.

A. Standards for Various Utility Elements

The following information provides location and configuration standards for utilities for new developments and redevelopments, existing rights-of-way, easements, and Metro Capital projects. This section also addresses the requirements for telecommunication elements proposed to occupy and function within the right-of-way. The goal is to standardize and document Metro requirements regarding the placement of utility and telecommunication elements in accordance with applicable Metro standards, ordinances, regulations, and long-range plans, and current accepted utility standards.

1. Utility Elements

- a. Meters: Where practical, water meters are to be located within two feet of the back of the curb or at the property line where there is no curb and gutter. When possible, avoid placing within sidewalks or driveway aprons. Where new driveway aprons are to be built over existing water meters, ~~Louisville~~ Metro shall notify the Louisville Water Company and advise the homeowner of conflict consequences.
- b. Poles: With all new street side pole installations, including those poles installed to support a small cell antenna and, where required, associated attached appurtenances, consideration should be given to clear zones as designated by the Roadside Design Guide. See Section B. hereof for additional standards related to small cell antennae. Downguys shall be minimized and provided with yellow covers. Unused or abandoned guy anchors shall be removed (not cut flush) six inches (6") below grade and sidewalk section replaced, or surface backfilled and restored to original contours.

In specific areas (e.g. Central Business District) and in any new development (e.g. capital projects and subdivisions), Metro reserves the right to require underground services. Any proposed overhead facilities shall be subject to review by the Director. The Director shall also review any proposed changes to existing overhead utilities in existing developed areas, including but not limited to routing changes, installation of different materials or type of facilities than currently in use, and pole pattern re-locations.

- c. Sewer cleanouts: Sewer cleanouts will be provided per MSD specifications and located at the right-of-way line.
- d. Valves: All valves are to be installed with valve boxes set flush (1/4" + tolerance) with adjacent surfaces and located out of the pavement if possible. Gas valves for private services shall be located at or near the property line, outside of concrete sidewalks. When possible, avoid placing within sidewalks or driveway aprons. When notified by ~~Louisville~~ Metro of the settlement of a valve box, the Permittee shall raise the box within 30 days.
- e. Vaults: Locations of all vaults (telephone and electric) shall be coordinated with Metro on a case-by-case basis. Access to vaults shall be through standard manhole castings. For any vault to be repaired, replaced, or installed, the lids must meet ADA criteria longitudinally and horizontally.
- f. Waterlines: Waterlines shall be installed underground with six-inch (6") clearance at utility crossings. Installing facilities directly over and parallel to water mains shall be avoided.

- g. Ground Level Elements (hereinafter referred to as "GLEs"): GLEs are those elements associated with electrical and telecommunications utilities, including, but not limited to Panel boxes, Distribution boxes, Transformers, Public Telephone Kiosks, Pedestals, Switches, Battery Cabinets, and Video-Ready Access Devices ("VRADs"), etc.

GLEs shall be painted green, black or brown (unless aluminum or stainless), and/or screened from view by plantings. Such plantings shall be reviewed and approved by the Metro Arborist prior to installation.

When installed in easements alongside open drainage ditches such ground level elements shall be placed 10' from the edge of the ditch to allow for access by slope mowing equipment. Any exceptions will need specific written approval from LMPW.

Large GLEs (GLEs which exceed four (4) cubic feet in volume and/or eighteen (18) inches in height), shall be required to be metered to the extent they require an independent power supply, and the responsible Permittee shall pay any service charges, meter fees, lighting and maintenance fees and other expenses associated with connecting to the municipal power provider.

Utilities and approved franchisees engaged in the installation and maintenance of telecommunications utilities and associated equipment such as battery cabinets, small cell antennae, and VRADs are encouraged to obtain a private easement for Large GLEs.

- h. Hydrants: Fire Hydrants shall be set to established grade, with the center of the barrel two feet (2') behind the face of the curb line for standard curbs, and eighteen inches (18") behind the back edge of the curb for rolled curbs. In the absence of a curb, the hydrant shall be set approximately five feet (5') to fifteen (15') from the edge of the pavement, and no more than fifteen feet (15') from a hard traveled surface.
- i. Underground Cables and Pipelines: In new developments and redevelopments, Metro reserves the right to review the location of all underground facilities prior to their construction. Screening Required: VRADs and, at the discretion of LMPW, other Large GLEs shall be required to locate in an existing decorative newspaper corral where one exists in the public right-of-way. Where such corral does not exist, or where adequate space is not available in an existing corral, the Permittee shall install such decorative corral, the design of which shall be approved by LMPW in consultation with Develop Louisville's Planning and Design Services and Advanced Planning staff, to screen the installation. Where a VRAD or other Large GLE is located in a decorative corral, the Permittee shall maintain full responsibility for upkeep and maintenance of the corral. At the sole discretion of the Director in consultation with Develop Louisville's Planning and Design Services and Advanced Planning staff, where a VRAD or Large GLE is located in a residential area, appropriate landscaping may be substituted for the corral. The Director shall determine to what extent (if any) screening is required for a small cell antenna pole and any associated GLE.
- j. Sequential Preference Standards: Subject to satisfaction of the other placement criteria set forth herein, and as applicable, the terms of any franchise or municipal facilities agreement approved by Metro, sites for Large GLEs, and poles for small cell antennae located on the public right-of-way will be evaluated based on the following sequential preference, provided that all landscaping or screening required by LMPW can be provided at that location.
 - i. Right-of-way or utility easement abutting industrial sites;
 - ii. Right-of-way or utility easement abutting office or commercial sites;
 - iii. Right-of-way or utility easement abutting parking lots that accommodate multi-family residential uses;
 - iv. Right-of-way or utility easement abutting government centers, public or private schools, churches or other public buildings;

- v. Right-of-way or utility easement abutting undeveloped sites;
- vi. Right-of-way or utility easement abutting the rear yard of a single family residential property at an interface with a made alley;
- vii. Right-of-way or utility easement abutting the back yard of a single family or multi-family residential property which is not at an interface with a made alley;
- viii. Right-of-way or utility easement abutting the side yard of a corner single family residential property;
- ix. Right-of-way or utility easement abutting the front yard of a residential property.

This is not an all-encompassing list and is provided to develop a thoughtful approach to proper siting of utilities and associated elements. For example, assuming a proposed location meets all other placement criteria, a structure will be permitted to be placed in a right-of-way or utility easement abutting the front yard of a residential property only if the Permittee demonstrates to the Director's satisfaction that it cannot reasonably be placed in any location described in 1 through 8 above.

The foregoing notwithstanding, new or replacement utility structures and related appurtenances must be placed in accordance with AASTHO (American Association of State Transportation and Highway Officials) Roadside Design Guide. Furthermore, utility structures and associated appurtenances may not create a sight distance obstruction and should not be placed at mid-block locations.

2. Additional Standards For Telecommunications Elements

- a. Location of GLEs. The placement and design of GLEs associated with telecommunications elements shall comply with the requirements for GLEs set forth in Section A. above, and the additional requirements of this Section.
- b. Location of Small Cell Antennae: A small cell antenna is a device mounted on existing or proposed poles the purpose of which is to receive and/or transmit digital data and relay this data to a central node or hub for further processing and distribution to a user base. A small cell antenna may be mounted on a new or existing pole, such as existing wooden power utility poles, wooden or metal light poles, or newly installed wooden or metal poles. Any antennae installed on existing utility poles shall have the approval of the affected utility in writing. A small cell antenna also requires a battery cabinet, which may be mounted on the pole or set on the ground. For purposes of this Metro Utility Policy, the term 'small cell antenna' shall include the antenna, pole, pole-mounted or ground-mounted battery cabinet, and other associated equipment.

When considering the location of small cell antenna, the highest preference shall be given to co-location of any proposed antennae on existing utility poles. The location of any associated battery cabinets and other appurtenances shall, by attachment agreement with the affected utility, be placed in accordance with the National Electric Safety Code and applicable requirements of the affected local utility.

If co-location is not possible, proposed siting of small cell antennae shall comply with the Sequential Preference Standards set forth in Section A. above. It is understood that locations of telecommunication elements are, by the nature of the type of service they provide, governed by customer density and demand. To that end, it is recognized that an evaluation process should be conducted based on the Sequential Preference Standards to establish proper siting to minimize visual/physical inconvenience on the general public.

Prior to approval of any proposed small cell antennae, the Permittee shall submit to LMPW a written explanation of how the proposed location comports with the Sequential Preference Standards.

- c. Screening Required. Due to the potential for small cell antennae in the right of way to constitute visual nuisances, the Director may require placement and/or replacement of landscaping or other screening which the Director deems necessary as a condition of approval of the site.
- d. FCC-RF Compliance Assessment. Prior to approval of proposed small cell antennae, the Permittee shall submit to LMPW an FCC-RF compliance assessment by a third party, qualified to prepare such assessment, demonstrating that the proposed installation will comply with all federal RF exposure guidelines during all conditions of its operation.
- e. Public Notice Requirements. Before final approval for the location of any small cell antenna, including its appurtenances as previously described herein, the Permittee shall, at their own expense, provide written notification by first class mail to the Metro Council member of the affected property and to all property owners located within 150 feet of the proposed installation of the Permittee's intent to install such equipment. The Permittee shall provide a copy of the notice and a list of everyone to whom the notice was mailed to LMPW, and shall certify in writing that the notice was sent pursuant to the requirements of this section. The notice shall include (a) an explanation of the purpose of the small cell antenna, (b) a description of the proposed location, including dimensions for the base and supporting pad, and a depiction of the general appearance, (c) information addressing public safety concerns related to RF emissions, and (d) contact information for the Permittee and a statement advising the property owner that he or she may contact the Permittee within fourteen (14) days after receipt of the letter to discuss any questions or concerns.

No permit shall be issued for any small cell antenna or related appurtenance until twenty-one (21) days after the Permittee provides the certification to LMPW that the notice required by this section was mailed.

- f. Aesthetic Considerations. The Permittee shall provide lighting or other design elements and amenities as required by the Director to enhance the aesthetic appearance and coordinate the proposed telecommunications elements with the surrounding environs.
- g. The Permittee may exercise the option of using the services of a third party to assist in the location of any small cell antenna and associated appurtenances however the permittee remains responsible for all areas addressed in this policy.
- h. Removal of telecommunications elements. The Permittee shall immediately remove telecommunications elements that become redundant, unnecessary or otherwise unused, or if the Permittee discontinues service in Louisville, fails to receive a renewal of any expired franchise or municipal facilities agreement from Metro or is able to provide the service that required the installation of such elements using technology that does not require above ground installation. At the sole discretion of the Director, a bond shall be posted to cover the costs of future removal of telecommunications elements. Such bond shall be set in an amount to cover removal as well as reconstruction costs, and shall be administered by LMPW.

3. CABLE TV: RESERVED

B. Right-of-way Permits

Metro monitors utility work through the utility permitting process. This process allows Metro to coordinate activities between Metro forces and other utilities, to maintain a record of street cuts & repairs and to identify specific Metro requirements.

1. When Permits Required

Any work within the right-of-way which disturbs the pavement, curb and gutter, driveway entrances, sidewalk, landscaping or grassed areas, requires a permit.

This work may include, but is not limited to: utility main and/or lateral replacement and repair; valve replacement and repair; installation of new underground mains or laterals, structures or accessories; splices, buried drops (under pavement or sidewalks); pole changes for height, accident, etc.; cathodic protection; boxes and vault installations and jacking or boring under the right-of-way where disturbance within the right-of-way may occur.

2. Obtaining Permits

Before work within the right-of-way is started the necessary permit shall be obtained from LMPW. Unless otherwise agreed, emergency work requires that a permit be obtained as soon as possible but not later than 18 hours after the onset of work (LMCO 97.091). Permits are usually issued for the time period requested by the Permittee. However, when situations warrant, the permit expiration date may be extended when prior notification is received. If work on an existing permit has not been started by the expiration date, the permit will be cancelled and a new permit will then be required to initiate the work.

3. Responsibility

The Permittee is responsible for the work performed and LMPW will contact the Permittee for required adjustments or corrections regardless of whether the Permittee performed the work itself or subcontracted and assigned the work. The Permittee is solely responsible for the work performed. The Permittee shall have a copy of the permit on the job site at all times.

Permittee shall be responsible for the condition of any right-of-way repairs. The restoration shall be made with like materials to that which the street, alley, sidewalk, or highway is constructed. After the completion of the work allowed by such permit, the Permittee shall, within five days, report in writing to the Director that the work has been completed. The Permittee shall maintain the condition of the surface over such opening or excavation for five years in as good condition as the remainder of the street, alley, sidewalk, or highway and shall repair or reconstruct the surface as often as may be necessary. Should such person fail to maintain, repair, or reconstruct any such surface within ten days after written notice from the Director, LMPW may have such surface repaired or reconstructed and charge the cost of repair, including any costs associated with the use of any like materials used in restoration, to the person responsible therefor. Such person shall indemnify and save harmless the Metro, its elected and appointed officials, employees, agents and successors against any claim for damages by reason of any defective condition of any such street, alley, sidewalk, or highway surface due to such existence, construction, or by reason of any work so done, of whatever nature (LMCO 53.06).

Should the condition of the restoration become such that additional pavement is in jeopardy of failure, then the Permittee may be held responsible for an area larger than the original repair. Other repairs (sidewalk, curb and gutter, trenches, etc.) shall be warranted for two (2) years.

C. Bond Requirements and Insurance

To protect Metro against any loss or damage on account of any opening or excavation in or under the surface of any street, alley, sidewalk, or highway, every person before doing any work therein shall file with LMPW acceptable insurance and bonding per LMCO 53.07.

D. Radio Frequency Identification (RFID)

To track restoration responsibility, LMPW will provide RFID tags with the permit. The RFID tags will be preprogrammed with:

- Year of restoration;
- Utility permit number; and
- Permittee responsible for the work.

RFID tags are to be placed in the concrete cap below the final surface in the middle of all street cuts. For longer or wider trenches, RFID tags are to be placed in the concrete cap at both ends of the street cut, at each intersection, and at intervals not to exceed 250 feet.

E. Permit Denial

A permit application may be denied for the following reasons if deemed in the public's interest;

- Past due fees from prior permits.
- Failure to return the right-of-way to its previous condition under previous permits.
- Undue disruption to existing utilities, transportation or Metro use.
- Area is environmentally or historically sensitive as defined by federal, state or local laws and regulations.
- Failure to provide required information in a timely manner.
- The applicant is in violation of the provisions of this policy.

APPENDIX A: LOUISVILLE METRO LANDSCAPE PLAN

STANDARD LANDSCAPING SCREENING MATERIALS FOR USE IN THE PUBLIC RIGHT-OF-WAY

	BOTANICAL	COMMON
<u>EVERGREEN</u>		
	<i>Pinus strobus</i>	White Pine
	<i>Pinus taeda</i>	Loblolly Pine
	<i>Pinus virginiana</i>	Virginia Pine
	<i>Taxodium distichum</i>	Bald Cypress
	<i>Juniperis virginiana</i>	Eastern Red Cedar
	<i>Juniperis species - Thuga</i> <i>occidentalis</i>	Eastern Arborvitae
<u>SHRUBS</u>		
	<i>Aesculus parviflora</i>	Bottlebrush Buckeye
	<i>Aralia spinosa</i>	Devil's Walkingstick
	<i>Corylus americana</i>	American Hazel Nut
	<i>Ilex decidua</i>	Possumhaw
	<i>Ilex glabra</i>	Inkberry
	<i>Myrica pennsylvanica</i>	Bayberry
	<i>Cornus sericea</i>	Red Twig Dogwood
	<i>Forsythia x intermedia</i>	Border Forsythia
	<i>Rhus aromatica</i>	Fragrant Sumac
	<i>Rhus typhina</i>	Staghorn Sumac
	<i>Rhus copallina</i>	Shining Sumac
	<i>Viburnum dentatum</i>	Arrowwood
	<i>Sambucus pubins</i>	Red Elder
	<i>Sambucus canadensis</i>	American Elder
	<i>Spirea</i>	
	<i>Weigelia</i>	
	<i>Philadelphus coronarius</i>	Mockorange
	<i>Rhamnus cathartica</i>	Buckthorn (Tall Hedge)
	<i>Viburnum prunifolium</i>	Blackhaw
	<i>Viburnum trilobum</i>	American Cranberrybush

PERENNIAL GRASS

Miscanthus sinensis	Chinese Silver Grass
Erianthus ravennae	Pampas Grass
M. Strictus	Porcupine Grass
M. Zebrinus	Zebra Grass

BAMBOO

Phyllostachys spp.	Chinese Hardy Bamboo
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GENERAL LANDSCAPING NOTES

1. The type of plant material to be used will be specified on the permit by Louisville Metro.
2. On Standard Landscaping Plans, utility equipment access doors will generally be oriented to face away from the street.
3. The clearance on non-door sides shall be three (3) feet, ten (10) feet clearance on the door access side.
4. Indigenous plants should be specified whenever possible.
5. Plant selection and placement are both site-specific components of the screening process

** NOTE: all fire hydrants shall be kept clear of weeds, rubbish, and all other obstructions, by the abutting property owner. Landscaping or decorations shall not be used to obstruct or hide the fire hydrant from clear view, nor prohibit access to the hydrant for use or maintenance. Hydrants shall not be permitted to supply irrigation systems. Damage caused to landscaping within a 15-foot radius of the hydrant due to periodic maintenance, use, or testing of a fire hydrant, shall be the responsibility of the owner of the landscaping. (Ord. 29-1980 Code: 94.82)

APPENDIX B: UTILITY POLICY FOR PARKS AND PARKWAYS

Louisville Metro Parks (Metro Parks) is committed to the preservation, protection and enhancement of Louisville Metro parks and parkways and the following policy is intended to provide general guidelines for work in those parks and parkways.

Specific requirements will be developed based on site-specific conditions and standards and criteria will continue to be refined as this process is implemented. Standards for the Olmsted parks and parkways are being developed in a Master Plan.

Requirements for work on the parks and parkways include:

A. Initial Notification

Prior to the development of detailed design, the Parks Director is to be notified in writing of any project being considered in the parks or parkways. Notification should include a description of the work to be done, the location, the date when construction will begin and the estimated duration of the construction period. If Metro Parks determines that a design review will not be necessary, permit notification will follow (see Section C).

B. Design Review

Depending on the proposed scope of work, size of project, location and environmental conditions, the Parks Director may assign staff to participate in the detailed design process. Metro Parks will set project construction standards specific to the site which will include but may not be limited to:

- Trenching and pruning requirements to protect trees and shrubs.
- Worksite boundaries, fencing, access roads and staging areas.
- Erosion control, aeration and fertilization.
- Restoration of turf and grading for proper drainage and appearance including specifications for seed mixture.
- Designating employee and equipment parking and materials storage boundaries.
- Issues of traffic and public safety.
- Screening of permanent structures with plant materials and/or fencing.

C. Permit Notification

The Permittee must submit a permit application, including any exhibits, to the Parks Director allowing two (2) weeks for review and approval.

D. Inspection

Metro Parks staff will inspect all work during and after construction to ensure compliance with agreed upon standards.

E. Special Conditions

Scheduling: At the time of permit notification, Metro Parks will identify potential scheduling conflicts resulting from major mark/community events in the immediate vicinity.

Safety: Metro Parks expects Permittees to use special precautions to insure the safety of all park and parkway users. Park roads may be congested with bicyclists, pedestrians, joggers and horseback riders and sight distances are often significantly shorter than typical Metro streets.

Environmental and Historical: Erosion control measures in excess of those required by MSD may need to be implemented. Historic elements and materials, i.e., limestone curbs, cobblestone paths, etc., should be preserved or salvaged. Replacement materials and details should match the original in quality, appearance and durability.

F. Tree Replacement Policy

Care must be taken to preserve and protect specimen trees and shrubs. Any tree within a construction zone that dies within three (3) years must be replaced according to an established ratio based on value of the tree lost, as calculated by a certified Arborist or landscape architect, unless death by other causes can be proven.

G. Emergency Work

The Parks Director must be notified within 12 hours of the start of any emergency work required in the parks and parkways.

