Note: To modify this document for use by a county, simply change the county name and date in the title and delete this box. Cities and Townships will also need to do a word search through the text and replace “County” with either “City” or “Township” as appropriate. Enforcement section must be coordinated with wording in the resolution or ordinance adopting the right-of-way management program.

**Construction Requirements and Procedures for Installation of Utilities in the Public Right-of-way of**

**Sample County, Kansas**

# January 7, 2017

Note: These requirements are related to public health, safety, and welfare, the protection and restoration of county property, avoidance of obstructions to maintenance operations and use of the right-of-way by other utilities. The proper installation of the utility company’s facilities are included in the Contractor’s agreement with the utility company.

**General**

**Applicability** - These construction requirements shall be considered as forming an integral part of every permit issued for installation of utilities upon county road and street right-of-way and utility easements under county jurisdiction. The work authorized by any permit shall be done at such time and in such manner as shall be consistent with the safety of the public and shall conform to all requirements as herein specified. The work may be performed by the Utility Company or by a Contractor hired by the Utility Company but for simplicity either will be referred to in these construction requirements as “Contractor.”

**Correction of Work:**  If the County finds at any time, that the work is not being or has not been performed in accordance with these construction requirements, the Contractor (upon being notified by the County) shall immediately stop any new installation, and take the necessary steps at Contractor’s own expense, to place the previous work in condition to conform to these requirements.

**Plans** – Plans for utility installations shall include a description of the size and type of line, and adequate drawings to indicate the location of the proposed facilities with respect to the right-of-way line and the edge of the road.

**Opportunity to view** – Prior to construction the County is to view and approve planned location of any vaults and splice facilities with any horizontal dimension exceeding 36”, and power pole lines after pole locations are staked.

**Notification** - The Contractor must notify the County at least one business day before starting construction and at completion of construction. Notification procedure is to phone and email the contact person indicated on the Permit. If there is no answer leave a voicemail message stating the utility company name, contractor name, location of work, contact person and call back phone number, and follow up with an email with the same information. See the following sections on Road Closures, Backfill Requirements and Street Replacement for additional notification requirements for those items.

**Permit on Job** - A copy of the Permit and these construction requirements shall be kept by the Contractor on the site of the work while it is in progress and shall be exhibited upon request made by any county official.

**Revocation -** In the event of willful failure or neglect by Contractor or its agents to perform and comply with these construction requirements, the County may revoke the Permit and order Contractor to remove any and all facilities installed not in conformance with these Construction Requirements. In the event the Contractor leaves the right-of-way in a condition needing repair or construction, the County may repair such right-of-way and the costs of such repair shall be paid by the Contractor.

**Existing Facilities** – Contractor should avoid damage to existing utility installations.

**Permanent Warning Signs** – For pipeline crossings, permanent warning signs shall be placed at the right-of-way lines. The warning signs shall include the name of the owner and emergency contact information.

**Rural Markers:** In rural areas above ground facilities, such as pedestals or riser, that could be damaged by mowers will be conspicuously marked or painted a bright color.

**Road Closures**

**Individual permit required** – A separate utility permit is required for each and every road and sidewalk closure except for plowing across a gravel road where the road is closed to traffic for less than 15 minutes and the remainder of the construction period traffic is carried through construction with one lane open using flaggers for traffic control.

**Traffic Control Plan** – The Contractor shall provide a traffic control plan for each and every road closure, and furnish the plan to the County for review and approval at least two business days prior to the closure.

**Procedure** - Contractor will coordinate closure with the County. Prior to closure the Contractor will have all traffic control and signing in place. Closure timing will allow for morning and school commutes. The road cannot be closed or open without the specific permission of the County. Permission to close the road will be based on having proper signing in place and equipment on the job to perform the planned work. Permission to open the road will be based on proper repair of the pavement and shoulder so the road can be safely open to traffic. Normally the County will have a representative on site at the time the road is closed and opened. It is important that the contractor keep the County informed of scheduling of backfilling and pavement repair to insure proper inspection and minimize the time the road is closed to traffic.

**Notification -** The Contractor will make the notifications of a closure and opening of the road to emergency services, school bus operators and others shown on the Notification of Road Closure sheet, if any.

**Traffic Safety**

**Execution** - Operations shall be so conducted at all times as to permit safe and reasonably free travel over the roads within the limits of the work. If the County finds at any time, that proper signing is not in place, or that conditions may not permit safe travel through the work area, the Contractor (upon being notified by the County) shall immediately stop work, and take the necessary steps to correct any traffic safety issues.

**Signs:** - The Contractor shall provide all safety measures for the movement of traffic in compliance with the current version of the Manual on Uniform Traffic Control Devices (MUTCD). These include all signs, warning devices, barricades, flaggers and equipment. Warning devices, signs, and barricades shall be kept clean and in good repair.

**Safety Apparel**: In accordance with the MUTCD all workers must wear ANSI Class 2 safety vests, shirts or coats.

**Flaggers** – Except for low speed and low volume roads with good sight distance the MUTCD requires flaggers when one lane of traffic is closed or obstructed.

**Damage to Road** - If signs, pavement or other facilities are damaged, and could adversely affect traffic, the damage shall be immediately repaired by the Contractor.

**Open Excavations** - Open excavations shall be fenced if left unattended. Excavation near the roadway or sidewalks shall be cribbed or sheeted, if necessary to prevent damage to the roadway or sidewalk.

**Weather** - Work shall be suspended during inclement driving weather such as ice, snow, rain or fog.

**Operations**

**Wet Weather** - No work, other than emergency work, will be permitted on rights-of-way when soil condition is wet enough to cause rutting or other damage to the right of way.

**Cutting Trees** - The permit herein granted does not confer upon the Contractor the right to cut, remove, or destroy trees or shrubbery within the legal limits of the highway or relieve Contractor from obtaining any consent otherwise required from the owner of the property adjacent thereto.

**Ditches** - All ditches and drain lines shall remain open and operative.

**Driving Limitations** - No driving is allowed onto the road from a ditch, on earth shoulders, or over curbs where damage will occur.

**Lugs on Equipment -** No lugs shall be used on equipment traversing a paved road which may damage the road surface.

**Storage** – Materials stored on the right-of-way shall be located close to the right-of-way line.

**Parking** - Equipment or vehicles when not in use shall not be parked on the roadway. Equipment shall not be parked at night on the right-of-way.

**Clean-up** - Street surfaces shall be kept free of mud and other construction debris.

**Location**

**General** -To enhance traffic safety by providing the maximum clear zone available within the existing right-of-way, all utilities should be located as close as possible to the right-of-way line. On relocations for construction projects on the side of the road where a power pole line is planned, the parallel installation of buried utilities shall not be closer than 4 feet to the right-of-way line, at locations for above ground facilities the line would deflect to the right-of-way line so the above ground facility could be placed at the right-of-way line. In subdivisions with platted utility easements, the facilities should be located in the utility easement if room is available.

**Vaults & Splicing Facilities.**- Vaults shall be placed and staggered so they do not to block corridors for future utility installations. Above ground splicing facilities must be located away from front yards and landscaped areas. Location of splice vaults and above ground splicing facilities with any horizontal dimension exceeding 3 feet must be specifically approved in the field by the County. The proposed location must be staked and all utilities in the area located and marked prior to the site visit. Pedestals placed in front yards in residential areas should be placed near side property lines. Telephone pedestals placed in rural areas in locations that are not mowed regularly by the land owner shall have a marking post or painted orange so they can be more easily seen by road mowers.

**Above Ground** - All above ground facilities should be located as close as possible to the right-of-way line, and no facilities that extend more than 4 inches above the ground shall be placed within 10 feet of the edge of a road surface. Pedestals, poles, guys, anchors and other above ground items shall not be located in a ditch, at drainage structure openings, or on the road shoulder, and shall be located to minimize interference with road maintenance operations.

**Bury Depths** - In road and street right-of-way, buried pipes shall be not less than three feet deep; and buried telephone and cable lines shall not be less than 24” deep. On roads with ditches the depth of bury in the ditch area from the road shoulder to the back of the ditch shall not be less than 36 inches. In dedicated utility easements, all lines shall be placed according to utility standards. Through channels and drainage easements lines shall not be less than 36” deep.

**Bridge Attachments** – Bridge attachments are allowed as part of a normal utility permit for cable TV and telecommunications with casing less than 3 inch diameter located on the outside of the handrail of concrete and steel bridges. All other bridge attachments will require a special permit with plans prepared by a professional engineer

**Manholes in Pavement** - Manholes, valves, etc. shall be placed ½ inch lower than finished grade in paved surfaces, and 4 inches below finished grade in rock and dirt road surfaces.

**Boring** – Normal installation of lines across paved roads and sidewalks shall be by boring or jacking. Boring by water jetting or puddling is not be permitted. Top edge of bore pit shall be located at least four feet from the edge of a gravel road or paved road. On paved roads with a shoulder, the top edge of pit shall not encroach on the road shoulder. To prevent humping of the road or cracks in the pavement the depth under the pavement for jacking and directional boring shall be 1 foot for each inch of diameter of the jacking cone.

**Backfill Requirements** – Normal backfill requirements are compacted material removed from the trench. Under existing or future sidewalks and pavements, special backfill is required as shown on the standard street repair detail, which is a part of these construction requirements. Notify the county of the schedule for backfilling under pavement and sidewalks so an official has an opportunity to inspect the backfill while in progress. Failure to give adequate notice is basis for forfeiting any deposit as well as having the work rejected.

**Sidewalk & Curb Replacement** – Sidewalk and curb replacement shall be poured and finished to match existing sidewalk & curb. Remove walk and curb to the nearest joint. Concrete shall be 4,000 psi with air entrainment, cure with a spray on curing compound, and protect from hot and cold weather for 7 days when necessary. Sidewalk shall not be less than 4 inches thick.

**Street Replacement** – Streets will be repaired in accordance with the standard street repair detail which is a part of these construction requirements. Notify the county of the schedule for paving to provide an opportunity by the County to inspect the repair while in progress. Failure to give adequate notice is basis for forfeiting any deposit as well as having the work rejected.

**Cleanup and Restoration**

**Time** - Immediately after completion of the installation of the facilities, the road and right-of-way shall be restored to a condition equal to that existing before commencement of the described work.

**Methods -** All materials and construction methods used to restore the pavement, base and subbase shall be equal to or better than that required by the current edition of the "Kansas Department of Transportation Standard Specifications for Road and Bridge Construction".

**Ditches -** Restore to the original configuration all ditches and slopes.

**Yards** - Disturbed areas in yards shall be smoothed and hand raked. All areas shall be sodded except for trenches or plow marks less than 18 inches wide, which shall be seeded and mulched.

**Seeding & Sodding** - All disturbed grassed areas shall be seeded and mulched, or sodded.

**Settlement** - The Contractor shall be responsible for repairing any settlement resulting from this work.

**Maintenance -** The Contractor shall replace and stabilize all earth cover and vegetation where it has eroded where such erosion or vegetation damage is due or caused by the placement or existence of the utility facility.

**Final Inspection**

To receive acceptance of the work authorized by a utility permit, completion of the work must be verified by a final inspection. It is the Contractor’s responsibility to call for a final inspection. The Contractor will pothole buried lines at locations indicated by county inspector to verify that lines were buried as required in the permit. If work or restoration is found to be defective or insufficient the Contractor shall complete said work and call for a re-inspection. The Deposit, if any, will be returned after the work has been inspected and approved by the County.

