UTILITY ACCOMMODATION POLICY

OF THE SEDGWICK COUNTY DEPARTMENT OF PUBLIC WORKS
Utility Accommodation Policy  
of the Sedgwick County Department of Public Works

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SEDGWICK COUNTY DEPARTMENT OF PUBLIC WORKS
UTILITY ACCOMMODATION POLICY

INTRODUCTION

This policy is adopted by the Sedgwick County Department of Public Works acting pursuant to the power and authority granted to it by the laws of the State of Kansas to establish and administer the County/Township Road System in a manner providing for the maximum convenience and protection of the traveling public.

The power and authority of the Board of County Commissioners may implement functions as may be required to ensure the efficient management and coordination of county government public works activities as set forth generally in KSA 19-4501.

Public or private utilities involving project work or a county or township road right-of-way, require a Utility Permit Agreement, which may be obtained from the Sedgwick County Department of Public Works, 1250 S. Seneca, Wichita, Kansas, 316-268-7901.

A project involves installation, maintenance, relocation or removal of public utilities within a contiguous area of one square mile.

Where laws or orders of public authority, industry codes, governmental codes or highway authorities prescribe a higher degree of protection than provided by this policy, the higher degree of protection shall prevail.

This policy shall become effective upon its passage by the Board of County Commissioners of Sedgwick County, Kansas, and shall supersede any previously published standards and policies concerning accommodation of utility facilities and appurtenances.

Sedgwick County Department of Public Works Representatives will offer assistance in obtaining Utility Permit Agreements and will review utility sketches and make recommendations. Sedgwick County Department of Public Works Representatives shall also be responsible for utility company compliance with provisions of the Utility Permit Agreement and this Utility Accommodation Policy in covering project work.

When circumstances are encountered which make the literal application of this policy impossible or impractical, alternate proposals may be submitted by the utility company to the County Engineer for consideration and approval.
I. GENERAL POLICY

This policy applies to all public and private utilities within the County road or Township road right-of-way in the unincorporated areas of Sedgwick County, Kansas.

A "Utility shall include, but not be limited to: electric power, telephone, telegraph, cable television, water, gas, oil, steam, chemicals, sewage, drainage and irrigation which directly or indirectly serve the public that are to be installed, operated, maintained or removed within the public road right-of-way.

A "Contractor" shall refer to every person, firm, association or corporation that may contract with any owner or lessee for construction, maintenance or repair of work performed on a public utility, which necessitates the performance of labor in, or the use or storage of materials upon, any road or road right-of-way.

A "Project" shall refer to the furnishing of materials or the performance of labor in or upon a road or road right-of-way which (1) occurs within a contiguous area not to exceed one square mile and (2) is prosecuted according to plans on file with the Sedgwick County Department of Public Works.

Attachments to bridges and structures are referred to in Appendix B of this policy.

A. UTILITY PERMIT AGREEMENTS

Utility Permit Agreements are required when utility facilities are installed, operated, maintained or removed within the public road right-of-way. The County Commissioners have the authority to approve and execute Utility Permit Agreements.

B. RESPONSIBILITIES

The Utility Permit Agreement outlines the responsibilities and provisions to the owner. The permit allowing a utility facility owner the privilege of placing its facilities in or on the road right-of-way, does not constitute any permanent right for such use.

C. BONDING AND LIABILITY

All work will require that a Performance Bond and "Adequate" Liability Insurance be on file with the County Clerk and a copy sent to the Sedgwick County Department of Public Works subject to the Utility Permit Agreement.

D. CHANGE OF OWNERSHIP

If and when a utility company changes ownership, the Sedgwick County Department of Public Works will be notified in writing the names and addresses of the new owners.
E. NON-COMPLIANCE

Non-Compliance with any of the terms of this Utility Accommodation Policy of Utility Permit Agreements may be considered as cause for shutdown of operations until compliance is assured or revocation of the permit. The cost of any work required by the County Engineer in the removal of non-complying construction will be assessed against the utility owner.

II. DESIGN

A. LOCATION

Utility installations or adjustments should be located to:
- Minimize need for later adjustments to accommodate future improvements within the Public Road Right-of-Way.
- Allow for planned expansion of utility facilities.
- Minimize public road and utility costs.
- Minimize hazards and interference with smooth flow of highway traffic.

B. MATERIALS

All utility installations on, over or under highway rights-of-way and attachments to highway structures shall be of durable materials designed for long service life expectancy and relatively free from routine servicing and maintenance. Conformance with current ASTM, AASHTO Specifications and Codes is mandatory.

C. METHOD OF WORK

Each utility company is responsible for the design of the facilities to be installed within the highway rights-of-way or attached to a highway structure. The method of work will be described and done in a manner satisfactory to the approval of the County Engineer.

D. PLANS

Sketches for utilities must include a thorough description of the area to be worked upon and type of work to be done. See Appendix A for information to be included in sketches.

III. SPECIAL PROVISIONS

Although all provisions cannot be covered in this policy, it is expected that work will be carried out in a manner which accounts for the health, safety and welfare of the public.

A. DISCHARGE OF WASTE MATERIAL

Applications for Utility Permit Agreements for the installation of utility facilities which will discharge materials into the nation's waters must be accompanied by satisfactory evidence of compliance with all applicable requirements of Corps of Engineers, and Federal, State or local environmental protection agencies.
B. PIPILINES CARRYING HAZARDOUS MATERIALS

Pipelines shall be installed in a safe and reinforced manner in case of breakage. Permit applications for pipelines carrying hazardous, corrosive or detrimental materials shall contain the names of company officials who can be contacted on a 24-hour basis in case of any incidence causing a dangerous situation involving the utility. The utility will notify the Sedgwick County Department of Public Works of all changes in the calling list.

C. STORAGE AND PARKING

Storage of materials, parking of equipment and vehicles, when not used in actual utility work within the public road right-of-way, shall be placed as far from the road edge as possible, so as to cause minimal damage to the right-of-way. Also, materials and equipment should not be left in right-of-way if the use of such is not intended in the near future from time of placement.

D. TRAFFIC CONTROL

The traveling public shall be protected from the activities of the contractor or individuals involved with utility construction and maintenance within the highway right-of-way by means of signs, flaggers, and traffic control devices as outlined in the latest edition of the "Manual of Uniform Traffic Control Devices" (MUTCD), U.S. Department of Transportation, FHWA.

E. ROADSIDE, LANDSCAPE AND PRESERVATION

1. AERIAL INSTALLATIONS

New aerial installations shall be avoided in such areas where there is a feasible and prudent alternative to the use of such lands by the aerial facility. Consideration will be given to utility owners for the necessary trimming, clearing or removal of vegetation to provide adequate clearance of overhead wires with regard to the preservation of planted vegetation. In no case will approval be granted for wasteful or wanton trimming or removal of vegetation in order to provide easy solutions to solve difficulties.

2. DISTURBED AREAS

Areas of highway rights-of-way disturbed by the installation, maintenance, removal and relocation of utilities shall be kept to a minimum. No work, other than emergency work, will be permitted on highway rights-of-way when soil condition is wet enough to cause rutting or other damage to the right-of-way.

All excavations will be backfilled within forty-eight (48) hours after work is completed, or as directed by the County Engineer and/or Township official, and shall comply with "KDOT Standard Specifications for State Road and Bridge Construction" 207.03d.
Disturbed areas shall be returned to normal grade and elevation, with adequate compaction of backfill material, and all excess material removed by the utility. Any asphalt damages due to utility project work, will be repaired in an equal or improved manner than previously existed within the time frame of project completion. Also, all destroyed vegetation shall be replaced by the utility by sodding, seeding, fertilizing and mulching as required by the County Engineer and/or Township Official.

Adequate protection against erosion shall be provided by the utility in disturbed areas that are susceptible to erosion. Such protection may be in the form of rock riprap, wash checks, hay cover or other material that is approved and does not interfere with highway maintenance operations.

3. DRAINAGE FACILITIES

Care shall be taken to avoid disturbing or altering existing drainage facilities. Underground utility facilities shall be backfilled with approved material and outlets provided for entrapped water. Underdrains should be provided where necessary.

4. CLEANUP

Prior to final inspection all unused materials or debris must be removed from the site of the project area, leaving the right-of-way in a clean, presentable condition.

5. SPRAYING, CUTTING AND TRIMMING TREES

Trees, shrubs, bushes, vines or ground cover on the highway right-of-way shall not be sprayed, pruned, trimmed, cut down, rooted up, removed or mutilated in any manner, unless Utility Permit Agreement and/or submitted plans explain such work, with the approval of the County Engineer and/or Township Official. Electric companies should explain trimming of trees on the Utility Sketch to prevent dangerous situations during installation and repair of aerial lines.

F. TRENCHING AND BACKFILL

1. Trenches shall be cut to have vertical faces only where soil and depth conditions permit, with a maximum width of outside diameter of pipe, plus two (2) feet. Open pits or trenches shall be excavated and protected according to OSHA Safety Standards & Regulations and the "Manual on Uniform Traffic Control Devices."

   a. Bedding shall be provided to a depth of six (6) inches or half of the diameter of the pipe, whichever is the least. This requirement may be waived for lines with the inside diameter of two (2) inches or less, and installed in compliance with the current American Waterworks Association (AWWA) Standards, or other applicable industry standards.
b. Bedding material shall be free of lumps, clods, stones and frozen material and shall be graded to a firm but yielding surface without abrupt changes in bearing value.

c. The compaction density of the bedding and backfill material shall be 90% (std.) paralleling road right-of-way and 95% (std.) crossing road right-of-way as determined by AASHTO T-99 Standards, unless otherwise advised by the County Engineer.

G. PIPELINE INSTALLATIONS

1. It is the responsibility of the utility company installing pipelines to specify the type and class of material, maximum working pressures, and test and design pressure for the safety, health and welfare of the general public.

2. Vent standpipes shall be located and constructed so as not to interfere with maintenance of the road or concealed by vegetation. Where possible, they shall be marked and located at the right-of-way line. The markers shall give the name and address of the owner and phone number to contact in case of emergency.

3. Roadside ditches or natural water courses shall not be used for purging the carrier unless specifically authorized by the County Engineer and approved by the Wichita/Sedgwick County Board of Health.

4. The utility companies (with the exception of telephone utilities) shall place readily identifiable and suitable markers at the right-of-way where it crosses the road, except in those cases where a vent serves as a marker.

IV. MAINTENANCE AND SERVICING FACILITIES

A. OWNERS RESPONSIBILITIES

Maintenance of the utility is the responsibility of the utility owner. Maintenance must be performed to keep the facility in a safe and functional condition, and in a good state of repair in accordance with the requirements of Federal, State and local laws and regulatory standards and utility codes.

It is also the utility owner's responsibility to replace and stabilize all earth cover and vegetation where it has eroded over an underground utility facility where such erosion is due to or caused by the placement or existence of the underground utility facility.

The utility owner shall be responsible for all maintenance and repair which may occur for at least one (1) year or until inspection of work site is completed by the County Engineer and/or Township Official. All repairs or replacements necessary due to any failures shall be made by the utility owner within thirty (30) days after receipt of notice from the County Engineer.
B. EMERGENCY MAINTENANCE

Emergency maintenance of utilities located on public road rights-of-way is permissible without first obtaining a Utility Permit Agreement, if an emergency exists that is dangerous to the health, safety or welfare of the public and which requires immediate repair. The utility owner shall take all necessary and reasonable safety measures to protect the traveling public and cooperate fully with the Sheriff's Department and County Engineer. The utility owner, in such an event, will inform the County Engineer and/or Township Official as soon as possible of the maintenance location. This is to insure proper traffic control and coordination within the public road right-of-way.

V. UTILITIES INSTALLATIONS


A. UNDERGROUND INSTALLATIONS

Utilities will not be permitted in the traveled way, shoulder, shoulder slope, deep cuts, near bridge footings or in wet or rocky terrain. Any exception shall be approved by the County Engineer.

Unsuitable material located at trench bottom for pipelines will be layered with aggregate material of sufficient thickness for stabilization.

Manholes shall not protrude above the surrounding ground unless otherwise permitted by the County Engineer.

If less than minimum depth of cover is necessary because of existing utilities, water table, ordinances or similar reasons, the line shall be rerouted or protected with a casing, suitable bridging, concrete slab or other appropriate means with the approval of the County Engineer.

1. UTILITIES PARALLELING RIGHT OF WAY

   a. Underground utility installations shall be located at the outer limits of the right-of-way to minimize interference with maintenance operations and future highway improvements.

   b. Underground facilities shall be located at a minimum depth of three (3) feet below lowest point of ditch, except communications cable when parallel to right-of-way may have a minimum depth of two (2) feet of cover. Depth may be increased when crossing stream beds, side roads and major entrances.

2. UTILITIES CROSSING RIGHT OF WAY

   a. All road crossings shall be made by boring or punching under road. Open cuts across surfaced, gravelled and dirt roads
will be permitted only when special permission is granted by the County Engineer and/or Township Official.

b. Underground utility installations shall be located normal to highway alignment where practical.

c. All utility crossings on county roads will be enclosed in a casing approved by the County Engineer, with some exceptions as explained in VI B: Cased Lines & Uncased Lines.

d. All utilities crossing under ditches and roadways shall have a minimum depth of cover of five (5) feet below crown grade or three (3) feet below ditch grade, whichever is greater. In fill sections, the natural ground line at the toe of the slope will be considered ditch grade.

B. OVERHEAD INSTALLATIONS

Where aerial crossings are required, all poles, guys, anchors and appurtenances shall be located preferably within two (2) feet or less of the right-of-way line, to minimize adjustments for accommodating future road improvements. They shall not be located in ditches, at drainage structure openings or on roadway shoulders.

Where there are curbed sections, the utilities, poles, guys, anchors and appurtenances shall be located as far as practical behind the face of the outer curbs and where feasible behind the sidewalks. The preferred location is near the right-of-way line.

The minimum vertical clearance to overhead installations shall be that required by the current edition of the National Electrical Safety Code, U.S. Department of Commerce, National Bureau of Standards. General clearance guides based on 175 foot span, are provided in the following table:

<table>
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<tr>
<th>Vertical Clearance (1)</th>
<th>Line Voltage</th>
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<tbody>
<tr>
<td>18 ft.</td>
<td>0-750</td>
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<tr>
<td>20 ft.</td>
<td>750-15,000</td>
</tr>
<tr>
<td>22 ft.</td>
<td>15,000-50,000</td>
</tr>
<tr>
<td>(2)</td>
<td>Over 50,000</td>
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</table>

(1) increase clearance 0.01 foot for each foot in excess of 175 foot span.

(2) increase clearance 0.033 foot for each 1,000 volts of the excess over 50,000 volts.

Installations preferably shall be limited to single pole type construction with vertical configuration of conductors and cables. Joint-use single pole construction is encouraged at locations where more than one utility or type of facility is involved.
VI. ENCASEMENT OF UTILITIES

A. GENERAL

Casings shall be an oversized load bearing conduit or duct through which a utility is inserted at locations where the line is conducive to exposure; as on bridges (see Appendix B) under roadways and near the ground surface.

Casings are used for the following reasons:
- to provide for utility repair without interference to highway traffic.
- to protect carrying pipe from external load or shock.
- to convey leaking fluids or gases away from the area directly beneath traveled way to a point of venting near the right-of-way line.

The casing shall include necessary appurtenances such as vents, drains and markers. Casing pipe shall be sealed at both ends with a suitable material to prevent unwanted leakage.

Utility Lines Crossing Right-of-Way:
will in general require casing between right-of-way lines with a minimum distance from toe of backslope to toe of backslope in ditch sections and from toe of fill slope to toe of fill slope in fill sections.

Utility Lines Paralleling Right-of-Way:
require casing only at certain locations such as crossing of sideroads and major entrances.

B. CASED LINES & UNCASED LINES

1. ELECTRIC SERVICE LINES

Electric Service Lines require conduit when crossing roadway from right-of-way line to right-of-way line and must be clearly marked by the owner at the outer limits of the right-of-way.

2. LINES CARRYING HIGH PRESSURE - HAZARDOUS OR CORROSIVE PRODUCTS

Lines carrying high pressure, hazardous or corrosive products such as natural gas, liquid petroleum, ammonia, chlorine, etc., need not be cased provided they are:

a. Welded steel pipelines
b. Cathodically protected
c. Coated in accordance with accepted industry standards
d. Meet the requirements of the American National Standards Institute
e. Designed for operating stress levels in accordance with Federal Pipeline Safety Regulations
A Waiver of Casing is required for this type of line stating that the conditions and provisions in (a) through (e) above will be complied with.

Such lines not meeting conditions and provisions (a) through (e) above must be cased and shall be vented and marked at the outer right-of-way limits. The markers shall give the name and address of owner and phone number to contact in case of emergency.

3. SANITARY SEWER

Sanitary sewer lines do not usually require casing, but exceptions may be made at the discretion of the County Engineer. Please note the state law requirements and the "Uniform Plumbing Code" Regulations on the distance required between sewer and water lines.

4. WATER LINES

Water lines of diameter two (2) inches or less inside diameter of copper, steel, or plastic do not usually require casement; except in certain instances as may be requested by the County Engineer.

Water lines placed prior to highway construction utilizing extra strength cast iron or ductile iron pipe with mechanical joints and seals and properly bedded do not require casement between right-of-way.

All other water lines crossing road right-of-way must be cased, from toe to toe of backslope in ditch sections or toe to toe of fill slope in fill sections. Venting and sealing of casement is not required.

5. TELEPHONE AND COMMUNICATIONS CABLE

Direct buried telephone and communications cable will not require casement.

6. OTHER UTILITIES

Utilities not previously mentioned will be dealt with on an individual basis to determine whether casing is required.

NOTE: Utility lines which by reason of shallow depth or location, make them vulnerable to damage from highway construction or maintenance operations shall be protected with a casing or use of other appropriate measures.

VII. CASING MATERIAL

The following materials are acceptable for use in the casing of utility facilities:

Welded steel pipe, smooth wall, in sound condition with a minimum wall thickness as specified in American Petroleum Institute Code #1102 listed on following page:
## Casing Diameter

<table>
<thead>
<tr>
<th>Casing Diameter</th>
<th>Minimum Wall Thickness</th>
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<tbody>
<tr>
<td>6&quot;, 8&quot;, 10&quot;, 12&quot;, 14&quot; &amp; 16&quot;</td>
<td>.188&quot; - 3/16&quot;</td>
</tr>
<tr>
<td>18&quot;, 20&quot;, 22&quot;</td>
<td>.250&quot; - 1/4&quot;</td>
</tr>
<tr>
<td>24&quot; &amp; 26&quot;</td>
<td>.281&quot; - 9/32&quot;</td>
</tr>
<tr>
<td>28&quot;, 30&quot;, 32&quot; &amp; 34&quot;</td>
<td>.312&quot; - 5/16&quot;</td>
</tr>
<tr>
<td>36&quot;, 38&quot;, 40&quot; &amp; 48&quot;</td>
<td>.344&quot; - 11/32&quot;</td>
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Casing Diameter Under 6"

Standard wall pipe or .188" wall, as preferred.

The following types of pipe material shall meet the requirements of the current "KDOT Standard Specifications for State, Road and Bridge Construction" and the referred to minimum AASHTO and ASTM requirements:

A. Corrugated metal pipe and coupling bands
B. Reinforced concrete pipe
C. Vitrified clay pipe
D. Cast iron or ductile pipe of the same class

Polyvinyl Chloride (PVC) and Chlorinated Polyvinyl Chloride (CPVC) providing it meets the minimum ASTM Specifications and all applicable laws and codes. PVC, Types PSP and PSM sewer pipe, ASTM Specifications D 3033 and D 3034 respectively be in accordance with the listing below:

### TYPE PSP AND PSM PIPE DIMENSIONS

<table>
<thead>
<tr>
<th>Casing Diameter</th>
<th>Minimum Wall Thickness PSP</th>
<th>Minimum Wall Thickness PSM</th>
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<tr>
<td>4&quot;</td>
<td>.120&quot;</td>
<td>.120&quot;</td>
</tr>
<tr>
<td>6&quot;</td>
<td>.253&quot;</td>
<td>.153&quot;</td>
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<tr>
<td>8&quot;</td>
<td>.199&quot;</td>
<td>.205&quot;</td>
</tr>
<tr>
<td>9&quot;</td>
<td>.230&quot;</td>
<td>.230&quot;</td>
</tr>
<tr>
<td>10&quot;</td>
<td>.249&quot;</td>
<td>.256&quot;</td>
</tr>
<tr>
<td>12&quot;</td>
<td>.299&quot;</td>
<td>.305&quot;</td>
</tr>
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The use of PVC pipe for casing is acceptable up to a maximum diameter of 12 inches.

Electric conduits may be of non-metallic materials such as polyvinyl chloride, transite or vitrified clay.

## VIII. BORING

A. Pits for boring, tunneling or jacking will not be permitted in the highway median and will not be permitted closer to the roadway than toe of fill in fill sections or toe of shoulder slope in ditch sections when allowed on the right-of-way.

B. Casing and pipeline installations shall be accomplished by dry boring, tunneling, jacking, trenching or other approved methods.

1. The use of water under pressure (jetting) or puddling will not be permitted to facilitate boring, pushing or jacking operations.
Some boring may require water to lubricate cutter and pipe and under such conditions, is considered dry boring.

2. Where unstable soil conditions exist, boring or tunneling operations shall be conducted in such a manner as not to be detrimental to the roadside being crossed.

3. If excessive voids or too large a bored hole is produced during casing or pipeline installations, or if it is necessary to abandon a bored or tunnelled hole, prompt remedial action shall be taken by the utility company, subject to the approval of the County Engineer.

4. All voids or abandoned holes by boring or jacking shall be filled by pressure grouting when deemed necessary by the County Engineer. The grout material shall be a sand cement slurry with a minimum of two (2) sacks of cement per cubic yard and a minimum of water to assure satisfactory placement.

C. Bored or tunneled installations shall have a hole diameter which shall not exceed the outside diameter of the utility pipe, cable or casing (including coating) by more than one and one-half (1½) inches on pipes with an inside diameter of twelve (12) inches or less, or two (2) inches on pipes with an inside diameter greater than twelve (12) inches.
APPENDIX A

UTILITY SKETCH REQUIREMENTS

(1) Street names and number (both when available) and hundreds block (eg: 55th West) Hoover

(2) Section, Township and Range

(3) Road maintainer (County or Township)

(4) Type of street surface (concrete, asphalt, gravel, sand, dirt)

(5) Explain material to be installed, type of line, testing pressures, any casing, manholes or vents, etc., by location, dimensions, plan and profile.

(6) Indicate name and general location of subdivision, additions or developments.

(7) Indicate location of line
   a. distance from edge of right-of-way
   b. length of line

(8) Indicate what the new line is tying into (terminal pt, existing line, service for new development, etc.)

(9) Explain if line will be cut or bored into ground.
   NOTE: No County road or paved driveway will be cut across without special permission from the County Engineer.

(10) If all driveway entrances are to be bored, note as such. If cut, indicate location of driveway and length of cut.

(11) Indicate other utility lines by location and description in the project area. If there are none, make a statement indicating as such.

(12) Any trees or obstacles in the line location shall be indicated and noted of any approved disturbance.

(13) All sketches shall include a north arrow, symbol legend and dimensioning.

NOTES:

1. A general legal description should be included on the Utility Permit Agreement.

2. All township roads require township approval first. The original permit is then sent to the County for final approval.

3. Utility permits are required for all utility work done in Sedgwick County with the exception of the Cities of Wichita, Valley Center, Haysville, Derby and all 3rd class cities with roads not under the jurisdiction of County/Township maintenance.

4. Utility applicants shall notify County, Township and other utilities located in the work area 24 hours prior to beginning of construction work.
WARE TOWNSHIP
SEC. 1, T-123-S, R-5-E

COMPANY NAME: TELEPHONE LINE REF. NO. QR 756

LEGEND

WATER LINE -----
TELEPHONE LINE -----
GAS LINE -----

NOTE:
TELEPHONE LINE WILL BE LOCATED 1' FROM R.O.W. AND BE AT 3' OF DEPTH NOT INTERFERING WITH OTHER LOCATED UTILITIES.

SHERWOOD ACRES SUBDIVISION

CUT & RESTORE 40'

CUT & RESTORE 30'

GAS LINE IS 3" FROM R.O.W.
WATER LINE IS 2" FROM R.O.W.

BORE A TOTAL OF 6 DRIVES
-1'-0"

NOTE: TREES WILL NOT BE DISTURBED
LINE TIES INTO EXISTING LINE

WARE TOWNSHIP ROAD—SAND

SERVICE LINE TO PRIVATE HOME
BORE 60'

240'

SUNNY LANE

CUT AND RESTORE DRIVE 24' WIDTH

SEC. 12

TRUMAN TOWNSHIP ROAD—DIRT
221st North

BORE 40'

300'

BORE 60'

BORE 50'

WATER LINE 2' FROM R.O.W.
GAS LINE 3' FROM R.O.W.

SEC. 7

No Other Utilities Located

North
APPENDIX B
BRIDGE ATTACHMENTS

A. GENERAL

All proposals for utility installations and other attachments to bridges or structures must be reviewed by the County Bridge Engineer.

Policy stated earlier in the main section of this book also applies to bridge attachments.

A Utility Permit Agreement will also cover bridge attachments with the addition of a drawing, entitled "Bridge Detail." (As seen in the example in the latter part of this appendix.)

A permit allowing a utility owner the privilege of attaching its facilities to a public road structure does not constitute any permanent right for such attachment. Any removal, remodeling, maintenance or relocation of the attachment, whether required by Sedgwick County or not, will be promptly accomplished by the owner at no cost to Sedgwick County unless other provisions have been made.

Insurance coverage, for any damages that occur by reason of pipeline attachments carrying PETROLEUM, HAZARDOUS AND/OR CORROSIVE PRODUCTS, will be provided by the utility company in the amount determined for each bridge or structure by the County Engineer.

B. DESIGN

The utility company is responsible for the design of their facility attachments to a public road structure and shall submit plans for review and approval, prepared and signed by a licensed professional engineer.

When a new structure is in the design stage, the County Bridge Engineer through cooperation with the utility company, may arrange for conduit or pipe hangers to be shown on bridge construction plans for installation by the County Department of Public Works. Additional costs resulting from such attachments are borne by the utility company unless otherwise provided by agreement.

Satisfactory provision for longitudinal (conduit or pipeline) movement due to temperature differentials or lineal expansion and contraction of the bridge shall be made in conduit or pipeline designs. Such provisions may be line bends, flexible couplings or other methods acceptable under appropriate industry standards and specifications.

Manholes used to service the facility shall not be located in the bridge deck. Such manholes shall be located beyond the edge of the wearing surface of the bridge or structure.

The County Bridge Engineer may be contacted for recommended locations and acceptable types of utility attachments for various bridges. Some standard utility attachments and their placement are illustrated in the latter part of this appendix.
1. LOCATION

Generally, utility lines and conduits are located at the side of the bridge attached to the deck or hubguard.

Wherever possible, attachments will be placed on the downstream side of bridges.

Transition of alignment of utility from paralleling right-of-way to bridge or structure should be perpendicular to the roadway. The utility line should come up along the outside or over the wing wall and then on adjacent to the deck of the bridge or structure. Attachment of utilities to existing bridges shall be made using hangers or clamps. On new structures only, a hole through bridge abutments or wing walls will be made only when design calls for reinforcement around the hole and leakage of water or backfill material is prevented. Any exception to this will be approved by the Bridge and County Engineer.

2. MATERIALS

a. All attachments to bridges and structures shall be of durable materials designed for long service life expectancy and relatively free from routine servicing and maintenance. Conformance with current applicable materials specifications and codes is mandatory.

b. All steel materials used in attaching a utility to a structure must be stainless or galvanized.

3. METHOD OF ATTACHMENT

On steel structures utilities must be supported by some type of clamping device. Welding and drilling are prohibited.

On concrete structures utilities are to be attached using expansion anchors installed by drilling. The explosive type drive force method of anchoring is prohibited.

4. PLANS

Bridge detail plans will include an end view and cross sectional view of the bridge showing attachment points. Also a precise attachment detail will be shown.

Other information to be included: weight (lbs/ft), location of conduit and attachments, number and spacing of attachments and diameter of conduit.

Refer to bridge detail sketch.

C. PIPELINES

1. Attachment of pipelines carrying liquid petroleum, hazardous or corrosive products will not be permitted in bridges or structures except in
extreme cases where the owner can substantiate that any other location is extremely difficult and of unreasonable cost to the utility company and to the consumer.

2. Pipelines carrying natural gas, liquid petroleum products or other volatile fluid or gas under pressure will require installation of emergency shut off valves. Such valves shall be placed within an effective distance on each side of the bridge, unless the pipeline is equipped with nearby shut off valves or operates under control of automatic shut off devices.

3. Attachments shall be encased the length of the bridge with the casing carried beyond the back of the bridge abutments and opened or vented at each end to detect leakage when the line carries fluids such as:
   a. Petroleum, hazardous and/or corrosive products, sewage, etc., or
   b. Water lines carried over railroads, streets or other roads.

4. Carrier and casing pipe shall be suitably insulated from electric power line attachments.

D. COMMUNICATIONS AND ELECTRIC LINES

Communication and electric power line attachments shall be suitably insulated, grounded and carried in protective conduit or pipe from point of exit from the ground to re-entry.

E. MAINTENANCE

1. Maintenance of the utility facility is the responsibility of the utility owner. Maintenance of the utility attachments will not be performed from the roadway, unless specifically authorized by the Department of Public Works.

2. Utility installations and attachments shall be maintained to the satisfaction of the County Engineer.
BRIDGE DETAIL

COUNTY ____________
TOWNSHIP ____________
REF No. ____________

Note: Each bridge detail drawing should be depicted as to the specific bridge, the attachment is being made to.

WEIGHT PER FT. _______ LBS/FT. OF CABLE
(WEIGHT - INCLUDES CONDUIT & CABLE)
DIA. OF CONDUIT _______ IN.
LENGTH OF CONDUIT _______ FT.
TOTAL WT. CARRIED _______ LB.

LIST OF MATERIALS

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<thead>
<tr>
<th>ITEM</th>
<th>NO. REQ'D</th>
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<tr>
<td>A</td>
<td>2</td>
<td>J CONDUIT HANGER GALVANIZED AND PLASTIC COATED</td>
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<td></td>
<td>10</td>
<td>CONDUIT, STEEL, GALVANIZED</td>
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ATTACHMENT DETAIL

FIELD BEND CONDUIT

POINT OF ATTACHMENT

300 PR. CA. IN 3" IRON PIPE
9.3 LB/FT
93 LB

(ATTACH WITH HOLD DOWN PIPE CLAMP)

END VIEW

CROSS SECTIONAL VIEW
PREFERRED
"UTILITY ATTACHMENT"
PLACEMENTS

SINGLE CONDUIT UTILITY ATTACHMENT PLACEMENT
For concrete deck with reinforced concrete slab bridges.

SINGLE CONDUIT UTILITY ATTACHMENT PLACEMENT
For bridge with concrete piers and half of aluminum, steel or concrete type A.

SINGLE CONDUIT UTILITY ATTACHMENT PLACEMENT
For concrete box girder reinforced concrete slab bridges.

SINGLE CONDUIT UTILITY ATTACHMENT PLACEMENT
For bridge with concrete piers and half of aluminum, steel or concrete type A.

MULTIPLE CONDUIT UTILITY ATTACHMENT PLACEMENT
For bridge with concrete curb handrail.

MULTIPLE CONDUIT UTILITY ATTACHMENT PLACEMENT
For bridge with concrete piers and half of aluminum, steel or concrete type A.
LESS PREFERRED
"UTILITY ATTACHMENT"
PLACEMENTS

SINGLE CONDUIT UTILITY ATTACHMENT PLACEMENT
For Steel Bridge with beam frame deadweight.

SINGLE CONDUIT UTILITY ATTACHMENT PLACEMENT
For Steel Bridge with beam plate deadweight.

NOTE: Weight to include conduit and cable.

Multiple Conduit Utility Attachment Placement
For steel bridge with beam frame deadweight.

Multiple Conduit Utility Attachment Placement
For Steel Bridge with beam plate deadweight.

NOTE: Weight to include support systems, conduit, and cable.

NOTE: Bottom of conduit cannot be lower than top of bottom spans.

NOTE: Bottom of conduit hundred can not be lower than top of bottom spans.
ACCEPTABLE HANGER & CLAMP TYPES:

- Split Ring Hanger
- Pipe Roller Hanger
- Clevis Hanger
- T-Slot Hanger
- Duct Support System
- Hold Down Pipe Clamp
- Right Angle Pipe Clamp
- Edge Pipe Clamp
<table>
<thead>
<tr>
<th>UTILITY COMPANY</th>
<th>ADDRESS</th>
<th>CONTACT</th>
<th>NUMBER</th>
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<tbody>
<tr>
<td>Air Capital &quot;Cablevision&quot;</td>
<td>705 N. Broadway, Wichita</td>
<td></td>
<td>262-0661</td>
</tr>
<tr>
<td>Amoco Pipeline Co.</td>
<td>P.O. Box 498, Shawnee Mission</td>
<td></td>
<td>1-913-661-2130</td>
</tr>
<tr>
<td>Anadarko Production Co.</td>
<td>P.O. Box 351, Liberal</td>
<td>I.R. Eaton, Pipeline Supt.</td>
<td>1-624-6253</td>
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<tr>
<td>Arkansas Louisiana Gas Co.</td>
<td>1630 S. Baehr, Wichita</td>
<td></td>
<td>942-8358</td>
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<tr>
<td>Cities Service Gas Co.</td>
<td>4002 S. Seneca, Wichita</td>
<td></td>
<td>524-0491</td>
</tr>
<tr>
<td>City of Wichita, Water Dept.</td>
<td>455 N. Main, Wichita</td>
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<td>524-3321 after 5</td>
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<tr>
<td>Derby Refining Co.</td>
<td>201 W. 1st, Wichita</td>
<td></td>
<td>268-4580</td>
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<tr>
<td>Gas Service Co., The</td>
<td>1026 E. 26th N., Wichita</td>
<td>Jackie, Line Location</td>
<td>263-7511</td>
</tr>
<tr>
<td>Jayhawk Pipeline Corp.</td>
<td>P.O. Box 1030, 202 W. 1st S., Wichita</td>
<td>J.A. Jordon</td>
<td>267-0361</td>
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<tr>
<td>K.G. &amp; E.</td>
<td>P.O. Box 208, Wichita</td>
<td></td>
<td>261-6311 aerial</td>
</tr>
<tr>
<td></td>
<td></td>
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<td>261-6248 underground</td>
</tr>
<tr>
<td>Kaneb Pipeline Co.</td>
<td>4th Financial Ctr., Wichita</td>
<td>Jim Strickland, Oper. Supt.</td>
<td>262-1408</td>
</tr>
<tr>
<td>Mobil Pipeline Co.</td>
<td>310 E. 2nd St., Rm 305, Wichita</td>
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<td>267-7271</td>
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<tr>
<td>Phillips Pipeline Co.</td>
<td>P.O. Box 4145, Wichita</td>
<td>Dave Bishop</td>
<td>838-3411</td>
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<td>918-661-450 after 5</td>
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<tr>
<td>Sedgwick County Electric CO-OP Assoc.</td>
<td>P.O. Box 220, Cheney</td>
<td></td>
<td>1-542-3131</td>
</tr>
<tr>
<td>Southern Kansas Telephone Co.</td>
<td>Clearwater</td>
<td></td>
<td>584-2255</td>
</tr>
<tr>
<td>Southwestern Bell Telephone Co.</td>
<td>626 N. Broadway, Wichita</td>
<td>KAN-U-DIG-IT</td>
<td>261-6516 261-6574</td>
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