

**ACCOMMODATION OF UTILITIES  
ON  
COUNTY HIGHWAY  
RIGHT-OF-WAY**

**McPHERSON COUNTY HIGHWAY DEPARTMENT  
PO BOX 30  
LEOLA, SD 57456**

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## I. POLICY

Transportation, communications, and utility networks are growing in complexity. Such networks include highways, railways, and waterways at the surface; subways, pipelines, and cables below the surface; communication lines and transmission lines above the surface; and wireless communication systems. The possibility of two or more networks occupying a common right-of-way or intersecting increases as the networks grow. As a result, problems arise due to the construction, maintenance, and operations of one network affecting the others.

It is in the public interest for utility facilities to be accommodated on highway right-of-way when such use and occupancy do not adversely affect highway safety, construction, maintenance, or operations. In this respect, guidelines outlining safe and rational practices for accommodating utilities within highway right-of-way are of valuable assistance to transportation agencies. The guidelines herein are provided in the interest of developing and preserving safe highway operations and roadsides.

It is policy of McPherson County to permit installation and maintenance of certain utility facilities on highway right-of-way under the jurisdiction of McPherson County and/or the McPherson County Highway Department (MCHD), subject to the following conditions:

- A. Such use and occupancy of the right-of-way does not interfere with the free and safe flow of traffic.
- B. Such occupancy does not interfere with existing, planned, or future use of the right-of-way for highway purposes.
- C. Such occupancy of the right-of-way does not impair the existing highway or its scenic appearance.
- D. Installation and maintenance of utility facilities on the right-of-way are performed in accordance with the following state laws, federal regulations, and guidance:
  - South Dakota Codified Laws
  - SDDOT Administrative Rules
  - The American Association of Highway and Transportation Officials publications titled *A Guide for Accommodating Utilities within Highway Right-of-Way*, current issue.

- E. Wherever applicable laws, regulations, rules, or guidelines differ from this policy, the more restrictive shall apply.
- F. The utility must be relocated when it has been determined to be in conflict with the proposed highway improvement. The Utility Company will be reimbursed according to the following:

1. If the utility is located within existing public right-of-way as recorded and/or documented at the McPherson County Register of Deeds, the utility must be relocated solely at the Utility Company's expense pursuant to SDCL 31-26.
2. If the Utility has prior rights, they will be reimbursed for the costs to relocate their facilities. Such easements must be recorded at McPherson County Register of Deeds.

Reimbursements must include hourly rates of employees (including benefits), equipment, and a list of all itemized expenses. All submittals are subject to being audited at the discretion of McPherson County.

Prior to relocation, the Utility Company shall submit the following:

- a written project schedule,
  - an estimate of all costs incurred associated with the relocation,
  - proof of senior rights and/or easements,
  - project plans and specifications
3. The Utility may provide betterments during the relocation but, the betterments are not eligible for reimbursement.
  4. Existing utilities may remain in place under the highway right-of-way provided the installations conformed to the prescribed guidelines in effect at the time the utility facilities were installed, do not interfere with existing, planned, or future use of the right-of-way for highway purposes.

If the existing utilities require significant maintenance, upgrades, and/or are being replaced, this work shall be done in compliance with current standards and guidelines.

The abandoned of in-place utility must preserve the safety of the roadway and must not interfere with traffic operations. Any abandonment of utilities occurring within the highway right-of-way shall only be done with the written consent of McPherson County and/or the McPherson County Highway Department.

- G. When highway improvements require relocation of utilities, and it is deemed to be feasible and in the best interest of the traveling public and/or McPherson County, the County may acquire additional right-of-way for the relocation of utilities. Acquisition of right-of-way for the relocation of utilities must be requested by the utility organization. It is incumbent on the Utility Company to demonstrate and prove why any additional right-of-way is needed over and above what would otherwise be required for the sole purpose of expanding the right-of-way for highway purposes.

## **II. APPLICATION**

This policy shall apply to all public and private utilities, including but not limited to, electric power, communications, cable television, water, gas, oil, slurry, petroleum products, steam, sanitary sewers, wireless facilities (towers), public and private drainage systems, irrigation, and all other facilities that are similar to those contained within in these policies.

This policy for accommodating utilities on public right-of-way applies only where McPherson County has jurisdiction which consists of all county right-of-ways located within McPherson County. The official county highway map is on file at the McPherson County Highway Department.

This policy does not apply to facilities wholly owned and operated by other entities such as the State, cities, and towns, townships, road districts, and other bodies.

In such instances where a given road or corridor has dual ownership (ie., another jurisdiction owns land adjacent to a roadway on one side only), individual maintenance agreements will be negotiated with the governing bodies.

In such instances where utilities encroach within county right-of-way and railroads, these will be addressed on a case-by-case basis. All attempts will be made to mutually comply with this policy as well as requirements assessed by the railroad authority.

### III. AUTHORIZATION

- A. State Laws governing the use of right-of-way for utilities include:

SDCL 31-26 Utility Lines Along and Across Highways  
SDCL 31-32 Highway Obstructions and Defects

Of note and as stated in SDCL 31-32-1, any intentional damage to a highway or bridge is a Class 6 Felony which is punishable up to two years imprisonment or a fine of \$4,000 or both.

- B. Administrative Rules promulgated by the State of South Dakota which provide guidance and/or procedures for the use of right-of-way for utilities include:

70:04:05 Utility Accommodations on Non-Interstate Rights-of-way  
70:10 Utility Corridor Management

It is the intent of McPherson County to generally comply with Administrative Rules governing similar practices along state-owned public right-of-way. However, some differences from the Administrative Rules and this policy exist, in which case, as stated above under Section I.E., the more restrictive standard shall apply.

- C. Additional Legal Rulings

*Official Opinion No. 90-16 – Removal of Utility Lines in Right-of-way* was rendered on April 26, 1990 by Roger A. Tellinghuisen, Attorney General. This document upheld state statute as found in SDCL 31-26 which states that it is the responsibility of the Utility Company to pay for the cost of removal and relocation of accoutrements owned by the Utility when located within county highway right-of-way.

- D. Conformity - When direct federal-aid funds are used on any highway improvement, the location and design of all utility facilities within highway right-of-way shall conform to the provisions of 23 CFR 645.

- E. Additional laws, administrative rules, and regulations of McPherson County, the State of South Dakota, and the federal government may apply. In no way does this policy intend to violate or supersede "laws of the land", regulations, and other standards. If conflicts between this policy and other laws, regulations, and standards, the more restrictive shall apply. This policy should be interpreted and applied to the extent consistent with state laws, which give utilities the right to

use and occupy highway right-of-way.

#### **IV. GENERAL REQUIREMENTS**

##### **A. General Features**

1. Highway safety is important when accommodating utility facilities within highway right-of-way. Utility accommodation must not adversely affect highway constructability, operations, maintenance, and safety.
2. All utility installations must be designed and located to avoid disturbing existing highway drainage or drainage facilities. Outlets or under-drains must be provided by the utility company, where necessary, for underground utility facilities.
3. On new installations or adjustment of existing utility facilities, provision should be made for known or planned expansion of the facilities, particularly those located underground or attached to bridges.
4. Utility permits are transferable with written permission from the McPherson County Highway Department, and new permit applications will be required for any proposed changes in size, type, or location.
5. The applicant will notify the Highway Department 3 business days prior to the beginning of the installation work, except in emergencies affecting the health and welfare of the public. Immediately following the final cleanup of the area, the applicant shall again notify the Highway Department. Any and all requirements and special conditions contained in the permit must be completed and approved by the McPherson County Highway Department prior to the utility company demobilizing from the site. If significant re-work is required, the utility company shall again notify the Highway Department of when all punch-list items are complete.

It is advised that each utility company should have a photo or video record of pre-existing conditions prior to beginning any work. Such documentation can be very helpful in resolving disputes both with the Highway Department and local landowners. McPherson County staff will also be obtaining photo or video evidence prior to the commencement of the work.



## **B. Bonding**

1. The applicant, if required by McPherson County, must furnish a performance bond issued by a responsible surety.
2. The performance bond must be in an amount equal to 100% of the estimated cost of the construction within the highway right-of-way. An itemized schedule showing all costs of labor, materials, and equipment must be submitted as part of the permit application when a performance bond is required.
3. The performance bond must be furnished prior to commencement of work.
4. The term of the performance bond will be as determined by McPherson County which will remain in effect until the work is completed and vegetative growth restored. Typically, the bond period will be for one year after final approval by McPherson County for the approved and completed work by the utility company.
5. The applicant (owner) must be responsible for any contractors or subcontractors secured for the purpose of installing, maintaining, relocating, or removing the facilities.
6. The applicant (owner) must have a copy of the permit available for inspection at the job site.
7. Generally, the bonding requirement will be waived for any service line.
8. Bonding will be required for any non-inert material. Non-inert materials include but are not limited to
  - Liquid Petroleum and other flammable liquids and gases,
  - Any substance that is detrimental to the growth of livestock and/or vegetation.
  - Pressurized sanitary force mains.
9. Bonding will be required for any buried main power line

including distribution and transmission.

**C. Location**

1. Interstates, National Highway Routes, State Primary and Secondary Routes, Urban Roads, and Streets, and Township Roads

All of these routes are not under the jurisdiction of McPherson County. Appropriate coordination with parties having jurisdiction shall be carried out by the Utility Company seeking to occupy such right-of-way.

2. County Highway Routes

- a. Utility facilities should be located to minimize the need for later adjustment to accommodate future highway improvements and to permit servicing such facilities with minimum interference to highway traffic.

- b. The alignment of longitudinal installations must be parallel to the centerline and must be located as near to the right-of-way line as practical (ie., 2 feet or less), so as to provide a safe environment for traffic operation and to preserve space for future highway improvements or other utility installations. Where irregular shaped portions of the right-of-way extend beyond the normal right-of-way limits, variances in the distance from the right-of-way line may be permitted to maintain uniform alignment.

If the applicant believes placing the utility within two or three feet of the right-of-way line presents an undue hardship, it the responsibility of applicant to prove the hardship and explain why doing so is impracticable.

- c. Utility facilities crossing a highway must be installed on a line generally perpendicular to the highway alignment. No skewed crossing will be allowed if greater than 45 degrees.

- d. Longitudinal utility installations located within urban areas and closely abutting improvements may require variances to the recommended location on the highway right-of-way and consideration of alternate techniques conducive to safe traffic movement that are agreeable to all parties involved.

Such variances shall be resolved in a manner consistent with the prevailing limitations and conditions. A minimum offset distance of 18 inches should be provided beyond the face of the curb to the face of utility appurtenance.

- e. The location of utility facilities shall be in accordance with the Americans with Disabilities Act.
- f. Electric power and communication cables, gas lines, water lines, and sewer lines should be separated from one another as required by appropriate codes and ordinances. GREAT LAKES - UPPER MISSISSIPPI RIVER BOARD (GLUMRB) – 10 State Standards may be used for general guidance.

#### **D. Traffic Control and Safety**

1. All utility construction and maintenance operations within highway right-of-way must be completed as expeditiously as possible. Construction or maintenance operations must be planned with full regard to safety of the highway users and utility personnel, and interference with highway traffic should be kept to an absolute minimum. On heavily traveled highways, McPherson County may not allow utility operations to interfering with traffic during periods of peak traffic flow.
2. All traffic control devices used during the installation or maintenance of all utility facilities within highway right-of-way must conform to the current edition of the "Manual on Uniform Traffic Control Devices", and to all current applicable standard drawings and practices of McPherson County and/or the South Dakota Department of Transportation.
3. The applicant must submit a traffic control plan with the Application and Permit form. Work must not commence until the traffic control plan is reviewed and approved by the McPherson County Highway Department. Warning signs shall be required when utilities are being installed anywhere on the right-of-way. McPherson County may require any signs, devices, or flag-persons deemed necessary to safely control traffic through or around the work zone. County personnel will monitor traffic control procedures throughout the installation process. Failure of the utility company to comply with this requirement may result in forfeiture of the performance bond.

4. No vehicles, equipment, or personnel shall operate or park within the traveled way, or "clear zone", during installation or maintenance of said facility, unless approved in writing, for open-trenching. Open cut trenching is generally forbidden.
5. In special cases, the county may allow it when no other viable alternative exists. If a utility facility is permitted to be installed by open trenching across a highway, a 12-foot traffic lane must be maintained on the roadway, or an approved detour provided, during installation of said facility. Full road-way closures may be allowed by the County if no other reasonable and practicable alternative exists.
6. If installation of a utility facility across a roadway necessitates temporary interruption of the flow of any highway traffic, work operations shall be confined to daylight hours and flag-persons must be provided to stop the traffic approaching the work area from each direction.
7. No materials shall be stored, equipment parked, or excavation piles placed in the "clear zone." All equipment not in use shall be parked at the outer limits of the right-of-way.

**E. Control of Access**

Vehicles and other work equipment used to install, maintain, or remove utility facilities within highway right-of-way must use established access points, service roads, driveways and existing approaches as much as possible to enter or leave the outer portion of the right-of-way for the performance of any necessary installation, maintenance or removal operations. Vehicles and other work equipment shall not use the through-traffic lanes or shoulder of the highway for work operations.

However, in emergencies affecting the health and welfare of the public or for emergency restoration of an essential utility service, exceptions may be granted by Edmunds County.

Temporary access points to be used exclusively by the applicant must be shown on the plan submittal as part of the permit application. Copies of any special agreements made by the applicant with adjacent landowners regarding access or temporary easement shall also be included as part of the plan submittal package.

## **F. Environmental and Land Use**

Environmental permits, approvals, and compliance is fully and completely the responsibility of the applicant. McPherson County will not permit any adverse impacts to any waters of the United States, historical or archeological resources, or threatened and/or endangered species without written approvals from the agencies having jurisdiction.

Any and all formal approvals, permits, and correspondence and/or approvals between the applicant and any federal, state, or other governmental agency germane to the utility permit application must be provided if requested by McPherson County.

This may include but is not limited to:

- US Fish and Wildlife Service
- US Army Corps of Engineers
- South Dakota Department of Natural Resources
- State Historic Preservation Office
- Public Utilities Commission
- State Department of Emergency Management

Utilities must not cross or otherwise occupy highway right-of-way in a manner that adversely affects the aesthetic quality or appearance of the highway and its environment. This provision prohibits the removal and alteration of trees and terrain features visible to the highway user unless certain conditions are met, as determined by and agreed upon by McPherson County. Tree removal on private property is not under the jurisdiction of McPherson County.

## **G. Scenic and Public Use Areas**

Installation of utility facilities will not be permitted within certain scenic and public use areas, except as follows:

1. New underground utility facilities will be permitted within such areas where they do not require extensive removal of, or damage to trees visible to the highway user or detract from the appearance of the area. New aerial installations are prohibited within such areas unless there is no feasible and prudent alternative to the use of such lands, and it is demonstrated that:

- a. Alternate locations for the utility facility are not available, are extremely difficult, unreasonably costly, or are less desirable from the standpoint of scenic appearance.
- b. Underground installations are not technically or economically practical, or are more detrimental to the aesthetic appearance of the area.
- c. The proposed utility installation will be made at a location and in a manner that will not detract from the scenic qualities of the area, and will employ suitable designs and materials which give the greatest weight to visual quality.

## **H. Irrigation and Drainage Facilities**

1. Irrigation facilities installed across highway right-of-way must be designed and constructed in accordance modern standards of practice and will be subject to approval by McPherson County. Irrigation facilities shall be designed, installed, and maintained without cost to the department.
2. Appurtenances associated with irrigation and drainage facilities which may constitute a hazard to highway traffic, or interfere with highway maintenance operations, must be installed outside the highway right-of-way. The approaches for a service road along an irrigation canal or drainage ditch which crosses the highway must be constructed in accordance with the McPherson County standards.
3. The department must be notified, in advance, whenever any repair, replacement or maintenance of irrigation or drainage facilities is to be performed within highway right-of-way. It must be the responsibility of the owner of said facilities to provide the necessary flag persons, barricades, and traffic signs for the safety and guidance of highway traffic.
4. The use of highway ditches to drain private lands, or for drainage by a Drainage District, Water Management Board, or other governmental agency, will not be permitted except by special agreement with McPherson County and other affected parties.
5. Irrigation and drainage facilities installed across highway right-of-way must be designed, operated and maintained so as to avoid disturbing existing highway drainage or highway facilities, and must not adversely affect the aesthetic quality or

appearance of the highway, the right-of-way, or the adjacent environment.

6. Railings, guardrail, or other protective devices must be installed by the owner of the facility when required by the current issue of "AASHTO's Roadside Design Guide" or the "MUTCD" and only with permission from McPherson County.
7. Guy wires, pole anchors, and other appurtenances shall not be placed within the right-of-way except when no other feasible alternatives exist. Such anchoring devices must be appropriately protected with bollards and/or hazard markers at no cost to McPherson County.

No structures whatsoever may be placed inside the clear-zone without appropriate break-away devices which are proven to comply with FHWA standards.

#### **I. Wetlands, Erosion Control, Drainage**

1. Wetlands: The installation of privately-owned lines or conduits in the right-of-way for the purpose of draining adjacent lands onto the highway right-of-way is prohibited.
2. Erosion and Sediment Control: Erosion control measures must be implemented in order to prevent sediment from exiting outside of the active work zone. Any erosion or sediment that finds its way into waters of the United States is a violation of the *Clean Water Act* subject to state and federal penalties.

The following requirements generally describe an acceptable method of adequately preventing sediment and erosion from leaving the site.

- a) Appropriate erosion control devices must be placed before work starts.
- b) The surface area disturbed by utility installations or relocations must be kept to a minimum.
- c) Any and all denuded areas and other areas used for equipment and staging areas must be fully restored to pre-existing conditions.

- d) No topsoil shall leave the site. Topsoil shall be stockpiled separate from other gravels, clay, silts, and other non-organic materials. Topsoil shall be re-spread to pre-existing depth and not compacted.
- e) Either liquefied spray mulch or punched in straw mulch shall be used on slopes less steep than 3:1. Slopes 3:1 or steeper must include fabric to hold the soil prior to turf establishment unless spray mulch is used.
- f) Fertilizer shall be applied at the recommended rate for the seed being used. A "starter" fertilizer shall be used.
- g) Seed type shall match existing conditions which generally consists of native prairie grasses that are drought resistant and somewhat salt tolerant that also do not grow more than three feet in height. Standard Type D Seed Mix from the SDDOT may be used or an approved equal. Note that any annual cover crop such as oats or wheat cannot exceed 20% by weight. Application rate shall be according to manufacturer recommendations and/or according to specified rates as found in the SDDOT standard notes.
- h) All temporary erosion and sediment controls must be left in place until 70% of the area's new turf is established and actively growing.
- i) Dormant seeding may be performed by the applicant with approval from McPherson County.
- j) "Knifing-in" smaller service lines is acceptable.
- k) All erosion and sediment control measures must be checked and maintained periodically and also after every rain event of one-half inch (1/2") or more.
- l) All erosion and sediment control measures, and turf establishment practices must be to the satisfaction of McPherson County. Changes, modifications, and additions may be required to prevent sediment from leaving the site. McPherson County recognizes that all sites present unique situations and no single prescriptive plan is appropriate for each location. Applicants must use countermeasures as appropriate to prevent sediments from leaving the site.



- m) Allowing sediment to accumulate in county ditches is strictly forbidden.
  - n) Any sediment accumulation found in county ditches and/or culverts which derive from the active utility installation must be removed by the applicant at no expense to McPherson County.
  - o) Any sediment found leaving the site and encroaching onto private property shall be repaired by the applicant to the satisfaction of the landowner at no expense to McPherson County.
- 3) Drainage: Care should be taken in utility installations to avoid disturbing existing highway or private drainage facilities.
- a) For perpendicular utility crossings within proximity of transverse culverts under the roadway, all utilities shall be placed not less than 20-feet from said culvert horizontally. Major culverts, and/or significantly deep culverts may require more clear distance to avoid disturbance of the utility should the culvert need to be removed and replaced.
  - b) For utilities installed parallel to the roadway, each intersection between the utility and culvert should be addressed on a case-by-case basis. In general, if there is 42" in depth of cover or more above the culvert, smaller utilities may be placed above the culvert. If less than 42" of cover exists above a culvert and/or it is a significant utility, it is advisable to place the utility a minimum of three feet (3') below the bottom (exterior) of the culvert.

*It should be noted that new culvert installations typically need to be depressed one foot (1') below the stream elevation so the depth below the exterior of a new culvert should be increased to four feet (4') from the exterior.*

## **J. Disturbed Areas**

Within 30 days after installation, maintenance, or removal of utility facilities within highway right-of-way, all scars must be removed and the disturbed areas restored to their original condition and reseeded or re-sodded as specified above the class of seed and the amounts of seed and/or fertilizer to be used shall be approved, prior to

seeding, by McPherson County. The applicant shall be responsible for restoring vegetative growth on all disturbed areas.

**K. Corrective Measures**

When the Highway Department determines that an existing utility facility is unsafe, as determined by crash history or safety studies, the department will, in conjunction with the utility, initiate corrective measures.

**L. SPCC Plans**

As promulgated by the United States Environmental Protection Agency (EPA), the **S**pill **P**revention, **C**ontrol, and **C**ountermeasure rule provides requirements for oil spill prevention, preparedness, and response to prevent oil discharges to navigable waters and other waters of the United States. The rule requires specific facilities to prepare, amend, and implement SPCC Plans. The SPCC rule is part of the Oil Pollution Prevention regulation, which also includes the Facility Response Plan (FRP) rule. See subparts A, B, and C of 40 CFR part 112 for SPCC requirements.

For utilities whose production and distribution facilities require formal SPCC Plans, mini-SPCC plans for the prevention, control, and countermeasures of spills within McPherson County right-of-way will be required as part of the permit application. Simply providing a copy of the formal SPCC Plan is not acceptable. In such cases, a written narrative will be required that includes:

- Names, addresses, phone numbers, and emails for emergency contacts
- Material Safety Data Sheet, operating pressures and temperatures
- Expected volume of release in case of failure
- Maps and or directions of nearest valves or other control fittings
- Anticipated response times
- Brief description of emergency protocols including, prevention, control, and countermeasures should a failure occur
- Appropriate graphics and exhibits showing topographic flow direction, collection points, etc.

Any and all damage to county facilities caused by utility failure is 100% the responsibility of the utility to restore to pre-existing conditions. This includes the costs to repair all pavements, top soils,

gravel, fences, ditches, culverts, bridges, guardrail, etc., and also includes the cost of all mitigation, testing, studies, fines, long term monitoring, etc., as well as temporary and emergency labor, materials, and equipment used by police, fire, and other emergency services personnel, material, and equipment borne by the County and other local governments in response to the utility failure.

Yearly updates are required so as to keep all information related to spill prevention, controls, counter measures, and contact information and emergency procedures current.

**M. Records**

Records shall be maintained by the utility company that describes the alignment of the facility, usage, size, configuration, material, location, and vertical clearance (or depth of cover) at time of installation and any special features such as encasement. This information should be in a reproducible form available to the department, other utilities and transportation agencies. As-built drawings must be submitted if the field inspection determines the utility is not installed in accordance to the original permit and/or at the request of McPherson County. Accuracy for clearances around any structure shall be within 0.1 feet (one tenth of one foot).

## **V. UNDERGROUND INSTALLATION**

### **A. General**

1. For all crossings, the angle of intersection between the utility crossing and the highway shall be as near to 90 degrees as practical, but in no case shall it be less than 45 degrees.
2. Crossings shall not be installed where conditions are unsuitable or unstable, such as deep cuts; near footings of bridges and retaining walls; across at-grade intersections at grade or ramp terminals; or in wet or rocky terrain where it would be difficult to attain minimum cover.
3. Vertical and horizontal clearance between the utility facility and any highway structure or other highway appurtenance or other utility facilities, must be sufficient for safe and convenient maintenance and repair of the highway structure or other utility facilities.
4. Trenches or pits opened within highway right-of-way must be backfilled with the same material originally in place and compacted to a density equal to that of the adjacent undisturbed soil, or 90% via Standard Proctor testing, whichever is greater. The backfill must be mechanically tamped in layers not exceeding 6 inches in compacted thickness. Consolidation of the backfill by saturation or ponding is prohibited. The stockpiled topsoil must be evenly and smoothly replaced over the areas disturbed by the trenches or pits. Compaction test results must be made available if requested by McPherson County. If the native soils are unsuitable for compaction and are not achieving a stable platform to support the roadbed, they may need to be removed and replaced with better materials at no cost to the County.
5. If the installation is by open trenching across the roadway, then the top 12 Inches of backfill immediately below the pavement structure of the highway will be Aggregate Base Course as specified in the SDDOT Standard Specifications. Replacement of driving surface must be in-kind using means and methods as approved by McPherson County.
6. Excavated material shall not be placed on the through-traffic lanes, shoulders, in-slopes, or within the clear-zone limits of

the highway. Any unused excavated material must be removed from the right-of-way, or deposited on the right-of-way at a location approved by McPherson County.

7. If the existing highway pavement structure is removed or damaged during installation of a utility facility, the pavement structure must be replaced with the same type, quality, and section of material originally in place and restored to the original grade. The pavement structure must be replaced to the satisfaction of the Highway Department.

An exception to this is if the utility owner removes or damages the pavement structure during the installation, relocation, or maintenance of the utility, and this occurs prior to the County's contractor placing a new pavement structure, the utility owner would not be required to replace the pavement structure provided that County's contractor will be placing the pavement within a reasonable time, and that the delay will not create a safety problem to the traveling public.

8. The permit owner shall be responsible for trench maintenance in all backfilled areas. A one year warranty is standard for all work done inside McPherson County right-of-way.

## **B. Pipelines**

### 1. Locations

- a. Existing longitudinal installations below the highway traveled way will be allowed to remain in place if the installation conforms to the guidelines in effect at the time of the initial permit, does not interfere with existing, planned, or future use of the right-of-way for highway purposes, and does not impede safety or traffic operations of the highway. New longitudinal installations below the highway traveled way will only be allowed in areas of congested rights of way that prevent installation outside of the traveled way.
- b. Longitudinal installations within the right-of-way must be located as close as practical to the highway right-of-way line unless the location is in a future construction area. In the event of conflict with known or future construction, McPherson County will consider the use of other back-slope locations, and as a worst case condition, within the

existing ditch bottom, provided all other provisions of this policy are satisfied.

- c. All pipelines located within the right-of-way must be installed underground except for bridge crossings.

## 2. Cover

- a. Pipelines within the highway right-of-way must be installed with a minimum of 3 feet of cover within ditches and no less than 6 feet under paved roadways, as measured from the top of the casing pipe or uncased carrier pipe to the existing ground surface. Pipelines crossing under paved roadways shall have a bury depth of not less than 6 feet from the travelled upon surface. The reason for this is thermal differences in our clay sub-grades create inconsistent behavior in load carry capacity which lead to early degradation of our pavements.
- b. Pipelines carrying liquids, subject to freezing, must be installed below the frost line or must otherwise be adequately protected against freezing. Frost depths around McPherson County typically reach 4 feet but may reach to depths over 5 feet.

## 3. Encasement and Mechanical Protection for Pipelines not Requiring Cathodic Protection

- a. Pipelines installed under McPherson County Highways must conform to the following:

Pipelines over 6 inches in diameter must be encased. This includes drain-tile carrier pipe (only solid walled, non-slotted carrier pipe is allowed within the right-of-way).

Pipelines with extra wall thickness may be permitted, in lieu of casing, as approved by McPherson County staff. Material and strength specifications for all non-encased pipes must accompany the permit application. Pipes carrying hazardous materials must be in accordance and comply with the U.S. Department of Transportation's Hazardous Material Regulations Board.

Pipelines up to 6 inches in diameter must use extra wall thickness using the same design as for pipelines over 6

inches in diameter.

- b. Casings must be designed to support the load of the highway and the live loads imposed on the highway. The casing pipe must be at least two nominal pipe sizes larger than the carrier pipe and must be composed of materials of satisfactory durability under conditions to which it will be exposed. Refer to Encasement in AASHTO Publication "*A Guide for Accommodating Utilities within Highway Right-of-Way.*"
- c. Encasement in AASHTO Publication "*A Guide for Accommodating Utilities within Highway Right-of-Way.*" The casing pipe must extend a minimum of 2 feet (610 mm) beyond the toe of the inslope of the roadway or beyond the clear-zone limits, whichever is furthest from the highway. On curbed sections, the casing pipe must extend outside the outer curbs.
- d. Casing pipe must be adequately sealed at both ends with suitable material that will prevent the formation of a waterway through the casing. A drain may be installed, if necessary, to evacuate water from the casing pipe, except on liquid petroleum pipelines.
- e. If uncased carrier pipe is installed in locations with less than the minimum cover, near footings of bridges or other highway structures, where the ground is unstable or subsiding, at locations vulnerable to damage from highway construction or maintenance operations, mechanical protection equivalent to casing must be provided for the carrier pipe.
- f. Uncased carrier pipe installed across a highway must conform to material and design requirements of the currently applicable industry and governmental codes and specifications. The carrier pipe must be designed to support the load of the highway plus live loads imposed on the highway.

#### 4. Vents

A vent pipe must be installed on the casing of pressurized carrier pipes transmitting liquid petroleum, natural gas, or other flammable or corrosive substances. The vent pipe must be not

less than 2 inches (51 mm) in diameter and must project through the ground surface at the right-of-way line or fence line. The vent pipe must extend not less than 3 feet (914 mm) above the ground surface. The vent must be located at the high end of short casings and generally at both ends of casing longer than 150 feet (46 m). Vent pipes are not required on pipelines with extra wall thickness.

## 5. Manholes

Manholes may be installed within highway right-of-way if there is no practical alternative location; however, manholes must not be installed in the pavement or shoulders of the highway. Manholes must be designed and located in such a manner that will cause the least interference with other utilities, future highway improvements, and normal highway traffic.

Manhole plate markers are required for all manholes placed within county right-of-way and shall be installed as part of original installation of said manhole at no expense to McPherson County.

## 6. Markers

All non-metallic underground lines must be accompanied by a trace wire, metallic tape, or other method to effectively locate and mark the underground lines. Whenever feasible, such methods should include devices incorporated into the utility line.

The locations of each pipeline crossing must be identified by a marker installed on each side of the crossing at the right-of-way lines or fences. Longitudinal installations of pipelines must be identified with markers placed along the right-of-way line at the termini of the pipeline and every 1000 feet along the length of the installation. The longitudinal markers placed at 1000 foot intervals may be omitted if the utility participates in "South Dakota One-Call." An identification sign must be installed on at least one of the marker posts, and must show the name, address, and telephone number of the utility company.

When private parties install carrier pipe for drain-tile systems, McPherson County will furnish the applicant with the appropriate markers. The cost of these markers is built into the cost of the permit.



The location of natural gas pipelines must be marked as required by 49 CFR 192 for crossings of a public road and every 1000 feet at right-of-way line along longitudinal installations.

#### 7. Restrictions Against Altered Use

- a. The permit applications must specify the class of transmittant, the maximum working, test, or design pressures, and the design standard for the carrier pipe. No change in transmittant or increased working pressure shall be made without prior approval of McPherson County.

#### 8. Installation

- a. Open Trenching - Pipelines may not be installed by open trenching through the paved surfaced sections of McPherson County Highways unless no other practicable alternative exists provided the open trenching installation is specifically authorized in the permit.
- b. Pipeline crossings by boring or jacking must be installed under the roadway section extending between the clear-zone limits.
- c. Wet-boring by high-pressure jetting of pipe under the highway is prohibited.
- d. The existing topsoil for trenches or pits must be removed and stockpiled prior to excavating. Trenches for installation of pipelines along or across highway right-of-way must be constructed in accordance with current OSHA standards.
- e. Bedding must be provided in an open trench through the surfaced section of the highway to a depth of 6 inches or half the diameter of the pipe, whichever is the least. Bedding must consist of granular material, 1 inch maximum in size, free of lumps, clods, stones or frozen materials and should be graded to a firm, but yielding, surface without abrupt changes in bearing value.

## **C. Underground Electric Power and Communication Lines**

1. General Features: Splice pits, risers, pedestals, and other above-ground facilities associated with underground electric power and communications wires and cables may be installed at the right-of-way line.
2. Location and Alignment: Longitudinal installations within the right-of-way must be located parallel to the highway as near as practical to the right-of-way line, (2 feet preferred) but must not be installed less than 5 feet from the toe of the in-slope where practicable.
3. Installation
  - a. Highway crossings must be installed under surfaced sections of all highways by boring or jacking pipe through the roadbed between the clear-zone limits. Wet boring by high-pressure jetting of the pipe under the highway is prohibited.
  - b. Highway crossings may be installed by open trenching only if boring or jacking pipe through the roadbed is impractical or extremely costly, and provided this method of installation is specifically authorized in the permit.
  - c. The existing topsoil for trenches or pits must be removed and stockpiled prior to excavating. Trenches for installation of underground electric power and communication wires and cables along or across highway right-of-way must be constructed in accordance with current OSHA standards.
  - d. Where underground electric power and communication wires and cables are installed by plowing, the plowed ridges must be mechanically compacted and made flush with the original ground.
  - e. The diameter of the hole for bored or jacked installations must not exceed the outside diameter of the casing pipe by more than 1 inch.
  - f. Oversized bores, overbreaks, unused holes and abandoned pipes must be backfilled with grout.

#### 4. Cover

Underground electrical cables installed within highway right-of-way must have a minimum cover of 36 inches. Underground communication wires and cables must have a minimum cover, within the right-of-way, of 36 inches. Local fiber optic telephone wire must be installed to a minimum depth of 36 inches.

#### 5. Markers

All non-metallic underground lines must be accompanied by a trace wire, metallic tape, or other method to effectively locate and mark the underground lines. Whenever feasible, such methods should include devices incorporated into the utility line.

The locations of each underground electric power and communication wires and cables crossing must be identified by a marker installed on each side of the crossing at the right-of-way lines or fences.

Longitudinal installations of underground electric power and communication wires and cables must be identified with markers placed along the right-of-way line at the termini of the pipeline and every 1000 feet along the length of the installation. The longitudinal markers placed at 1000 foot intervals may be omitted if the utility participates in "South Dakota One-Call." An identification sign must be installed on at least one of the marker posts, and must show the name, address, and telephone number of the utility company.

#### 6. Casing

1. Underground electric power and communication wires and cables may be installed across the highway without protective conduit or duct, except that encasement or other suitable protection must be provided in locations;

a) where there is less than minimum cover;

b) near the footings of bridges or other highway structures; or

c) near other locations where there may be a hazard.

2. If casing or duct is installed under the surfaced section of the

highway, the casing must extend a minimum of 2 feet beyond the toe of the highway inslope or the clear zone, whichever is furthest from the roadway.

The casing or duct must be adequately sealed at both ends with a suitable material that will prevent the formation of a waterway through the casing. Vents are not required on such installations. A drain may be installed, if necessary, to remove water from the casing pipe.

The casing or duct must be designed to support the load of the highway and live loads imposed on the highway and must be composed of material of satisfactory durability under the conditions to which it is exposed.

## **VI. Underground Telecommunication Systems**

- A. General:** Underground telecommunication (wireline or fiberoptic) cables may be installed longitudinally and will be permitted to cross highway right-of-way at approved locations.
- B. Location:** The crossing must be installed as close to perpendicular to the highway alignment as possible.
- C. Installation**
  - 1. Telecommunication systems crossing state boundaries must have 48 inches cover for crossing and longitudinal installations.
  - 2. Conduit: All highway crossings must be installed inside conduit or casing pipe within the clear zones.
  - 3. A 3" to 6" wide color-coded warning tape labeled continuously with "CAUTION - FIBER OPTIC BURIED BELOW" shall be buried 30 inches above the center of the cable. Additionally, the underground lines must be accompanied by a trace wire to effectively locate and mark the underground lines. Whenever feasible, such methods should include devices incorporated into the utility line.

## **VII. OVERHEAD ELECTRIC POWER AND COMMUNICATION LINES**

### **A. General Features**

1. It is the policy of the department to restrict installation of poles, guys, pedestals, and other above-ground utility facilities within highway right-of-way, in order to preserve a safe roadside environment, to retain the aesthetic quality of the highway, and to minimize interference with highway maintenance operations.
2. The minimum vertical and lateral clearances of overhead utility facilities within the highway right-of-way must conform to provisions of the latest edition of the "National Electrical Safety Code."
3. Longitudinal installation of overhead utility lines on highway right-of-way must be limited to single-pole type of construction. At locations where more than one utility or type of facility is involved, joint-use single pole construction must be used if possible.

### **B. Location**

1. Overhead utility lines may be installed on and along the right-of-way provided the lines are located at, or near as practical to, the right-of-way line.
2. Poles supporting overhead utility lines installed along or across highway right-of-way must be located as far as practical from the through-traffic lanes of the highway. Supporting structures must not be installed inside the "clear zone" unless the structures can be placed behind guardrails or retaining walls, beyond deep drainage ditches, at the toe of steep inslopes, or other similar protected locations.
3. Guys and push braces must not extend into the highway right-of-way beyond the midpoint of the backslope. Guy wires, pole anchors, and other appurtenances shall not be placed within the right-of-way except when no other feasible alternatives exist. Placement of any anchoring devices within the clear zone is strongly discouraged. Such anchoring devices must be appropriately protected with appropriate breakaway devices and/or hazard markers or guardrail at no cost to Edmunds County.

## **VIII. INSTALLATIONS ON HIGHWAY STRUCTURES**

### **A. General Features**

1. Attachments of utility facilities to bridge structures should be avoided where it is reasonable to locate them elsewhere. However, where other locations prove to be difficult and unreasonably costly, attachment to a bridge structure will be considered, provided the attachment can be made without materially affecting the structure, the safety of traffic, the efficiency of maintenance of the structure, the efficiency of bridge inspections, its appearance, and provided the structure can support the additional load.
2. Generally, utility installations must be attached to the bridge structure beneath the structure's floor, between the outer girders or beams or within a cell, and at an elevation above low superstructure steel or masonry.
3. The location of utility facilities on a structure which will interfere with access to parts of the structure for painting or repair is prohibited. Manholes for utility access will not be permitted in the bridge deck.
4. The utility installation on the bridge must be mounted so as not to reduce the vertical clearance above a river, stream, pavement, or top of rails. Utility attachments to the outside of bridges will not be permitted unless there is no reasonable alternative.
5. Utility facilities must be firmly attached to the bridge structure and padded, where necessary, to eliminate noise and abrasion due to vibrations.
6. Installation of utility facilities through the abutment or wingwall of an existing bridge is prohibited.
7. In locations where a utility facility attached to a structure is carried beyond the back of the bridge abutment, the facility must curve or angle out to its proper alignment outside the roadbed area as quickly as is practical.
8. Utility facilities may be attached to structures by hangers or roller assemblies suspended either from inserts in the underside of the bridge floor or from hanger rods clamped to

a flange of a superstructure member. Bolting through the bridge floor or concrete beams is prohibited. Welding of attachments to steel members, or bolting through such members is prohibited. Where there is transverse bridge steel extending sufficiently from the underside of the bridge floor to provide adequate clearance, utility facilities may be installed on rollers or neoprene-padded saddles mounted atop such transverse members.

9. The design of a utility facility attached to a highway structure must include satisfactory provisions for linear expansion and contraction due to temperature changes. Line bends or expansion couplings may be used for this purpose. Materials used for attaching a utility facility to the structure must be compatible with the structural material to eliminate the possibility of corrosion.
10. A utility facility and associated appurtenances attached to a highway structure must be painted when requested by the County. The type and color of the paint will be approved by the County.
11. Each proposed bridge attachment will be considered on its individual merits.

#### **B. New Bridge Structures**

1. Where the Department plans to construct a new bridge structure, the design of the structure will, upon request of a utility company, be reviewed for accommodation of existing or proposed utility installations consistent with the requirements set forth herein. The utility company may be required to reimburse the County for any additional costs associated with accommodation of the utility facility on the new structure.
2. Installation of a facility by a utility company on a new structure must be coordinated with the bridge construction so as not to interfere with the operations of the highway contractor.

#### **C. Pipelines**

1. Pipelines, except those requiring cathodic protection and those carrying natural gas, must be encased throughout the

bridge and the casing must be carried beyond the back of the bridge abutment, and effectively opened or vented at each end. The casing pipe must be designed to withstand the same internal pressure as the carrier pipe. Pipeline with extra wall thickness may be permitted, in lieu of casing, if designed by the specifications approved by the U.S. Department of Transportation's Hazardous Material Regulation Board.

2. The carrier pipe must be pressure tested before start-up in accordance with the latest edition of applicable industry codes, or appropriate regulations.
3. Emergency shut-off valves must be installed on all pipeline attachments to a highway structure where such pipeline carries gas, liquid petroleum, or other hazardous materials under pressure. The shut-off valves should preferably be of automatic design and placed within an effective distance on each side of the structure, unless the pipeline is equipped with nearby shut-off valves or operates under effective control of automatic devices.
4. Pipelines carrying liquids subject to freezing must be protected to prevent the liquids from freezing.

**D. Power and Communication Lines**

1. Electric power and communication lines attached to a highway structure must be insulated from the structure, and carried in protective conduit or pipe throughout the bridge and to underground locations at each end of the structure. Exposed metallic conduit carrying electrical cables must be grounded separately from the structure.
2. Attachments for electric power and communication lines must provide sufficient clearance for convenience and safety during maintenance and repair of bridge structure or other utility installations on the bridge.



## **IX. PERMITS**

### **A. General**

1. A written permit must be obtained from the County Highway Department prior to installing, modifying, or maintaining a utility facility or adjusting an existing utility facility, on, over, or under highway right-of-way on the county highway system. See Appendix \_\_\_\_\_. In addition, the utility owner must coordinate with all other agencies and obtain the necessary permits.
2. More than one installation may be included on the permit form, provided that the installation is part of one contiguous project/system and will be installed/maintained/modified in the same year.
3. In general, the size and scope of the permit should match the size and scale of the utility installation. For example, the information expected for a service line installation is less versus the installation of a high pressure 30-inch gas line or a 16-inch water-main. McPherson County reserves the right to require signed and stamped drawings by either a registered Professional Engineer and/or Registered Land Surveyor as appropriate.

Application for a permit must be in writing and include drawings showing the proposed location of the utility facility within highway right-of-way.

The drawings must include:

- plan dimensions of the proposed installation in relation to right-of-way lines, easements, H-lots, etc.
- north arrow and scale
- describe any and all vertical and horizontal datum used
- centerline of the roadway(s)
- describe and label any referenced monuments or control points should be clearly shown and labeled including control points, section corners, property pins, etc.
- access and staging areas
- fences, approaches, trees, brush, and other

- topographic features disturbed during installation and/or staging and access
- highway structures
- locations and size of any boring or jacking pits
- bedding and backfill dimensions, depths, compaction, and materials and methods
- erosion and sediment controls including seeding and topsoil stockpile areas
- other utilities within work area and potential conflicts
- clearly label all bends (including degree), joints, valves, and other fittings
- traffic control
- SPCC Plan (see Section IV.L)

The application must include a general description of the type, size, and design of the utility facility to be located within the right-of-way and a written description of the proposed method of installation.

The application must show the location of the proposed facility, in footage, to the nearest intersection or other known and easily referenced location.

4. Prior to issuance of a permit authorizing installation of a utility facility within highway right-of-way, the proposed installation will be reviewed for possible conflict with existing or planned use of the right-of-way for highway purposes. Installation of a utility facility within highway right-of-way must be at a location, and installed in such a manner, so as not to impair the existing highway, conflict with planned future highway improvements, interfere with the free and safe flow of highway traffic, or impair the scenic appearance of the highway.
5. All fees and bonds are due prior to the issuance of the permit.
6. Permit Application Information

All permit applications must include the following:

- a. Completion of all applicable blanks in the blocks titled Applicant Information, Location of Facility, and Type of Facility. Be sure to indicate the applicable direction(s).

- b. Two (2) copies of the plan view of the proposed facility. Either 8½x11 or 11x17 paper sizes will be accepted.
- c. Two (2) copies showing the locations and size of any boring or jacking pits.
- d. The required permit fee(s). See Appendix.
- e. Proposed traffic control plans, as appropriate.
- f. Erosion and sediment control plans, as appropriate.

## **X. NON-COMPLIANCE**

Non-compliance with any of the terms of McPherson County policies, permits, and/or agreements, may be considered cause for shut-down of operations, withholding of relocation reimbursement until compliance is assured, or forfeiture of the performance bond. The cost of the work caused to be performed by the County in removal of non-complying construction will be assessed against the owner of the utility facility, or the applicant's performance bond.

## **XI. REFERENCES (CURRENT ISSUES)**

1. American National Standards Institute (ANSI) Standard Code for Pressure Piping, 25 West 43<sup>rd</sup> Street, New York, NY 10036
  - a. ANSI B 31.1, Power Piping
  - b. ANSI B 31.3, Process Piping
  - c. ANSI B 31.4, Liquid Transportation Systems for Hydrocarbons, Liquid Petroleum Gas, Anhydrous Ammonia and Alcohols
  - d. ANSI B 31.8, Gas Transmission and Distribution Piping Systems
2. American Water Works Association (AWWA) Standards and Specifications, 6666 W. Quincy Avenue, Denver, CO 80235.
3. United States Department of Transportation Federal Motor Carriers Safety Administration
4. 23 CFR 645
5. National Electric Safety Code.
6. American Association of State Highway and Transportation Official's, (AASHTO) Roadside Design Guide
7. U.S. Department of Transportation, Federal Highway Administration's, "Manual on Uniform Traffic Control Devices."
8. AASHTO "A Guide for Accommodating Utilities Within Highway Right-of- Way"
9. USDOT, FHWA "Program Guide: Utility Relocation and Accommodation on Federal-Aid Highway Projects.
10. 40 CFR 112 Oil Pollution Prevention

## **XII. APPENDICES**

- A. Glossary
- B. Application and Permit Form
- C. Permit Fee Schedule
- D. Policy Memoranda
- E. Cancellation Notice
- F. Completion Certificate

## **APPENDIX A GLOSSARY**

**ACCESS CONTROL** – Access to the highway can be made only at designated points.

**AVERAGE DAILY TRAFFIC** - The average 24-hour volume, being the total volume during a stated period divided by the number of days in that period. Unless otherwise stated, the period is a year (abbreviated as ADT).

**AASHTO** - American Association of State Highway and Transportation Officials

**BACKFILL** - Replacement of suitable material compacted as specified around and over a pipe, conduit, cable, casing, or gallery.

**BEDDING** - Organization of soil or other suitable material to support a pipe, conduit, casing, or utility tunnel.

**BORING** - The operation by which large carriers or casings are jacked through oversize bores. The bores are carved progressively ahead of the leading edge of the advancing pipe as soil is mucked back through the pipe.

**CAP** - Rigid structural element surrounding a pipe, conduit, casing, or utility tunnel.

**CARRIER** - Pipe directly enclosing a transmitted fluid (liquid or gas).

**CASING** - A larger pipe enclosing a carrier.

**CFR** – Code of Federal Regulations.

**CLEAR ZONE** - That roadside border area, starting at the edge of the traveled way, available for use by errant vehicles.

**COATING** - Material applied to or wrapped around a pipe.

**CONDUIT OR DUCT** – A pipe or tubular runway for protecting wires or cables.

**CONFLICT** – A utility installation that does not conform to the guideline established by "A Policy for Accommodation of Utilities on State Highway Right-of-Way," and includes existing, proposed, and future highway construction. A utility shall abide by the current version of this Policy each time a permit is authorized for its work. When future changes are made to

this policy, an existing utility facility is not required to meet the new version unless proposed changes to that facility require a new permit from the County.

**CONFLICT RESOLUTION** – In the event there is a disagreement between a utility organization and the County regarding how any specific point in this Accommodation Policy should be interpreted, the utility may submit a written request for consideration by the Highway Superintendent. Upon reviewing the request, the Highway Superintendent will render a decision and/or consult with county legal staff prior to rendering a decision. A decision by the Highway Superintendent regarding any dispute over the interpretation of the Accommodation Policy shall not exclude the opportunity by the utility to pursue legal action if they deem it necessary. Under special circumstances, the utility may present their case to the Board of County Commissioners who will serve in the capacity of arbitrator to settle the dispute.

**CONTROL OF ACCESS** - The condition where the right of owners or occupants of abutting land or other persons to access, light, air, or view in connection with a highway is fully or partially controlled by public authority.

**FULL CONTROL OF ACCESS** - Access is controlled to give preference to through traffic. Access connections for selected public roads only are provided; at grade crossings and direct private driveway connections are prohibited.

**PARTIAL CONTROL OF ACCESS** - The control of access is exercised to give preference to through traffic to a degree that, in addition to access connections with selected public roads, there may be some crossings at grade and some private driveway connections.

**COVER** - Depth to top of pipe, conduit, casing, cable, or similar linear utility tunnel below the earth or roadway surface.

**CRADLE** - Rigid structural element below and supporting a pipe.

**DEPARTMENT** –“Department” means the Highway Department of McPherson County unless otherwise specified, as in, the South Dakota Department of Transportation, etc.

**DIRECT BURIAL** - Installing a utility underground without encasement.

**DRAIN** - Appurtenance to discharge liquids from casings.

**ENCASEMENT** - Structural element surrounding a pipe.



**ENCROACHMENT** - Unauthorized use of highway right-of-way for any purpose.

**FLEXIBLE PIPE** - A plastic, fiberglass, or metallic pipe having a large ratio of diameter to wall thickness which can be deformed without undue stress.

**FRONTAGE ROAD** - "Frontage street or road" means a local street or road auxiliary to and located on the side of an arterial highway for service to abutting property and adjacent areas and for control of access.

**GALLERY** - An underpass for two or more utility lines.

**GROUNDING** - Connected to earth or to some extended conducting body whether the connection is intentional or accidental.

**GROUT** - A cement mortar or a slurry of fine sand or clay.

**HIGHWAY, STREET, OR ROAD** - "Highway, street, or road" means a general term denoting a public way for purposes of vehicular travel, including the entire area within the right-of-way. A highway in a rural area may be called a "road", while a highway in an urban area may be called a "street".

**INTERSTATE SYSTEM** - "Interstate system" or "interstate highway system" means that part of the state highway system designated as the South Dakota portion of the national system of interstate and defense highways as provided for in Public Law 85-767 [23U.S.C. 101 et seq.]

**JACKET** - Concrete encasement around a pipe.

**MANHOLE** - An opening in an underground system which workmen or others may enter for the purpose of making installations, inspections, repairs, connections, and tests.

**MEDIAN** - "Median" means the portion of a divided highway separating the traveled ways for traffic in opposite directions.

**MUTCD** - Manual of Uniform Traffic Control Devices.

**NORMAL** - Crossings at a right angle.

**SOUTH DAKOTA ONE-CALL** - Excavation Notice System. Dial 811 prior to digging.

**OBLIQUE** - Crossing at an acute angle.

**PAVEMENT STRUCTURE** - The combination of subbase, base course, and surface course placed on a subgrade to support the traffic load.

**PERMIT** - The document by which McPherson County as designated to the Highway Department authorizes the use and occupancy of highway rights-of-way for utility facilities or private lines.

**PIPE** - A tubular product made as a production item for sale as such. Cylinders formed from plate in the course of the fabrication of auxiliary equipment are not pipe as defined here.

**PIPELINE** - A line of pipe with or without pumps, valves, and control devices for conveying liquids, gases, or finely divided solids.

**PLOWING** - Direct burial of utility lines by means of a "plow" type mechanism which breaks or slices the ground, places the utility line, and closes the break in the ground in a single operation, also commonly referred to as "knifing".

**PORTAL** - The entry or exit location where a utility is to be bored, jacked, or installed by other than the open-cut method.

**PRESSURE** - Relative internal pressure.

**PRIVATE LINES** - Privately-owned facilities as defined by "Utility," but devoted exclusively to private use.

**RIGHT-OF-WAY** - "Right-of-Way" means a general term denoting land, property, or interest therein, acquired for or devoted to highway purposes and shall include, but not be limited to publicly owned and controlled rest and recreation areas, sanitary facilities reasonably necessary to accommodate the traveling public, and tracts of land necessary for the restoration, preservation, and enhancement adjacent to a highway system.

**RIGID PIPE** - Pipe designed for diameter deflection of less than 1 percent.

**ROADSIDE** - "Roadside" means a general term denoting the area adjoining the outer edge of the roadway.

**ROADWAY** - "Roadway" – means in general, the portion of a highway, including shoulders, for vehicular use. In construction specifications, the portion of a highway within limits of construction.

**SAFETY REST AREA** - A roadside area with parking facilities separated from the roadway provided for motorists to stop and rest for short periods. It may include drinking water, toilets, tables and benches, telephone, information, and other facilities for travelers.

**SEMI-RIGID PIPE** - Pipe designed to tolerate from 1 percent to 3 percent diametric deflection.

**SLAB (FLOATING)** - Slab between but not contacting pipe or pavement.

**SLEEVE** - Short casing through pier or abutment of highway structure.

**SPCC PLAN** - As promulgated by the United States Environmental Protection Agency (EPA), the **S**pill **P**revention, **C**ontrol, and **C**ountermeasure rule provides requirements for oil spill prevention, preparedness, and response to prevent oil discharges to navigable waters and other waters of the United States. The rule requires specific facilities to prepare, amend, and implement SPCC Plans. The SPCC rule is part of the Oil Pollution Prevention regulation, which also includes the Facility Response Plan (FRP) rule. See subparts A, B, and C of 40 CFR part 112 for SPCC requirements.

**TRANSMITTANT** - The substance being transmitted by the utility.

**TRAVELED WAY** - that portion of roadway designated for the movement of vehicles, exclusive of shoulders and auxiliary lanes.

**TRENCHED** - Installed in a narrow open excavation.

**UNTRENCHED** - Installed without breaking ground or pavement surface, such as by jacking or boring.

**UTILITY** - Service supplied to the public including, but not limited to, water, sewer, light, gas, power, telegraph, telephone, transit, pipeline, and high-technology computer lines, and all facilities similar in nature.

**VENT** - Appurtenance to discharge gaseous contaminants from casing.

**WALLED** - Partial concrete encasement alongside pipe.

**APPENDIX B**  
**UTILITY OCCUPANCY APPLICATION AND PERMIT**

For the Utility Occupancy Application and Permit please go to:

## APPENDIX C

### EDMUNDS COUNTY UTILITY PERMIT FEE SCHEDULE

<u>Type of Permit</u>	<u>Fee</u>
Private Service (occupancy, no crossing).....	\$ 0.00
Private Service, Crossing .....	\$ 0.00
Standard Utility (occupancy).....	\$ 0.00
Plus additional per each crossing .....	\$ 0.00
Plus additional per each longitudinal parallel mile .....	\$ 0.00*
Hazardous Utility (occupancy) .....	\$ 250.00
Plus additional per each crossing .....	\$ 1,500.00
Plus additional per each longitudinal parallel mile .....	\$ 1,800.00*
Open cut crossing.....	\$1,500.00**
Plus additional per day road closed .....	\$ 500.00
Open cut, partial crossing .....	\$ 500.00
Plus additional per day lane closure .....	\$ 500.00**
Bridge attachment.....	\$ varies
The County requires a structural review by a professional engineer for all utilities to be attached to a bridge. The County will provide this service and pass on the cost to the applicant, or, the applicant can provide a signed and stamped review by a structural professional engineer at their expense.	

\* Distance in miles will always be rounded up to the nearest mile, ie., a 400-foot parallel run will charged a mile and a 1.3 mile parallel run will be charged 2 miles, and so on. If the utility enters and leaves the right-of-way intermittently for a total of 0.1 miles in a distance of X miles, the fee will be based on 1 mile.

\*\* Open cuts are discouraged but may be the only practicable alternative. By special circumstance only will open cuts be allowed.

Above fees will be waived for US Government, State, City, County, Township, or other governmental entities.

**APPENDIX D**

**POLICY  
MEMORANDA**

RESERVED FOR FUTURE USE

**APPENDIX E**

**UTILITY PERMIT  
CANCELLATION NOTICE**

When utility companies remove or abandon their facilities from or within County right-of-way, they must notify the McPherson County Highway Department. The regular application/permit contains provisions for removal and abandonment.

For major removals, a similar permit application may be required under which similarly required information as contained in a new permit application such as traffic control and erosion controls may be required. This may include a performance bond.

Should the removal of existing utilities include removals on a structure or bridge, additional information may be required and special provisions may be levied by McPherson County. In some instances, advice from a Structural Engineer may be required to guarantee no loss in strength and/or service life of county facilities.

On a case by case basis, for buried utilities, abandonment in place may be the preferred means of taking a utility out of service. Such instances will be reviewed and approved by the McPherson County Highway Department.

## APPENDIX F

# McPHERSON COUNTY HIGHWAY DEPARTMENT UTILITY PERMIT COMPLETION CERTIFICATE

Complete this form, print, and mail to:  
McPherson County Highway Depart.  
PO Box 30  
Leola, SD 57456  
mcphersonhwy@valleytel.net

**Instructions:**

**By submitting this document,** Applicant certifies that all conditions and special provisions attached to this permit have been completed in compliance with permit requirements and any and all specifications and special provisions attached to the original permit. With this submittal, County Personnel will conduct a final inspection.

Prior to demobilizing from the project location(s), the Applicant shall notify the Highway Department after construction is complete so that a final inspection may be performed by County Highway personnel. Special conditions required by the County may be applied to this permit and shall be complied with by the Applicant pending Final Approval. If any deficiencies are noted during the final inspection, the Applicant will be responsible to correct deficiencies within 30 days of notification. A copy of the final and approved permit will be sent to the Applicant of record and the original will be on file at the McPherson County Highway Department. In such cases of successful completion of utility installation, the County will return the Applicant's Performance Bond, or portions thereof, as appropriate.

Significant departures from originally agreed stipulations as part of the original permit application, or as amended and agreed upon throughout installation, may cause the revocation or suspension of the permit. Corrective actions must be completed within 30 days of notification by the Applicant. In case of severe inconsistencies, County forces will either correct or remove or cause to be corrected or removed the portions out of compliance and the Applicant will either be billed for all labor and materials and/or the Applicant will forfeit their performance bond as appropriate.

<b>Utility Company:</b>		<b>Date:</b>	
<b>Applicant Name:</b>		(printed)	(signature)
<b>Address:</b>			
<b>Business Phone:</b>		<b>Cell Phone:</b>	
<b>Email:</b>			
<b>Site Foreman Name:</b>		<b>Cell Phone:</b>	
<b>Email:</b>			
<b>Permit No.</b>			

**TO BE COMPLETE BY McPHERSON COUNTY HIGHWAY DEPARTMENT**

<b>Field Review 1 Conducted by:</b>		<b>Date:</b>
Describe reason for visit	COMMENTS (Punch-list Items)	
<b>Final Inspection Conducted by:</b>		<b>Date:</b>
	COMMENTS	
Project Acceptance Date _____		(1-year warranty period begins starting this day)

**The work requested under the subject Permit No. has been completed to the satisfaction of Edmunds County and all proper procedures, submittals, and restorations have been made, Signed \_\_\_\_\_**



## **APPENDIX G**

### **McPherson County Resolution #**

*A Resolution for Approval of Promulgation of Criteria, Rules, and Forms for Permitting  
Utilities*

*Crossing Highways Under McPherson County Jurisdiction*

WHEREAS, it is in the best interest of the County to develop and preserve safe highway operations and roadsides by assuring that standard guidelines and permitting processes for utility facility crossings of McPherson County highways be put in place; and,

WHEREAS, McPherson County Ordinance MC#\_\_\_\_\_, permits the McPherson County Highway Superintendent to promulgate criteria, rules, and forms for the permitting of utility facilities crossing highways under his jurisdiction within McPherson County; and,

WHEREAS, the McPherson County Commission, in accordance with McPherson County Ordinance MC#\_\_\_\_\_, seeks to adopt said criteria, rules, and forms by resolution for enforcement as contemplated by the Ordinance; now,

THEREFORE BE IT RESOLVED, by the McPherson County Board of Commissioners, that the attached document "ACCOMMODATION OF UTILITIES ON COUNTY HIGHWAY RIGHTOF-WAY", including its Appendices, be adopted as the enforceable criteria, rules, and forms for highway utility crossings pursuant to McPherson County Ordinance MC#\_\_\_\_\_, Section 2, and such provisions not inconsistent with the provisions of the Ordinance shall have the same force and effect of the provisions of the Ordinance.

## APPENDIX H

### McPherson COUNTY ORDINANCE # \_\_\_\_\_

#### *McPHERSON COUNTY HIGHWAY UTILITY CROSSING ORDINANCE*

An Ordinance for Permitting Requirements for Utilities Crossing Highways Under McPherson County Jurisdiction:

WHEREAS, transportation, communications, and utility networks are growing in complexity, which include highways, railways, and waterways at the surface; subways, pipelines, and cables below the surface; communication lines and transmission lines above the surface; and wireless communication systems; and,

WHEREAS, the possibility of two or more networks occupying a common right-of-way or intersecting increases as the networks grow, and, problems may arise due to the construction, maintenance, and operations of one network affecting the others; and,

WHEREAS, it is in the public interest for utility facilities to be accommodated on highway rights-of-way when such use and occupancy do not adversely affect highway safety, construction, maintenance, or operations; and,

WHEREAS, in this respect, guidelines outlining safe and rational practices for accommodating utilities within highway rights-of-way are of valuable assistance to transportation agencies, and;

WHEREAS, it is in the best interest of the County in order to develop and preserve safe highway operations and roadsides that standard guidelines and permitting processes be put in place; and,

THEREFORE, BE IT ORDAINED BY THE McPHERSON COUNTY COMMISSION:

#### Section 1: DEFINITIONS AND SCOPE

(a) The term "utility facility" as used in this ordinance includes all public and private utilities, including but not limited to, electric power, communications, cable television, water, gas, oil, slurry, petroleum products, steam, sanitary sewers, wireless facilities (towers), public and private drainage systems, irrigation, and all other facilities that are similar to those contained within in these policies.

(b) The term "right-of-way" or "highway right-of-way" as used in this ordinance includes only those under the jurisdiction of the McPherson County Highway Department, unless otherwise indicated.

(c) The term "public government applicants" as used in this ordinance includes the United States government, State of South Dakota, municipalities, counties, and townships that are applicants for a permit pursuant to this Ordinance.

#### Section 2: AUTHORITY OF SUPERINTENDENT TO PROMULGATE CRITERIA

(a) The County Highway Superintendent is hereby granted the authority to promulgate criteria, rules, and forms for the permitting of utility facilities within the right of way of any highway under the jurisdiction of the County. These criteria and rules shall be promulgated in the form of a policy document that shall define all criteria and rules applicable to the permitting of such utility installations, relocations, or expansions within County highway rights-of-way.

(b) Any criteria, rules, and forms promulgated by the County Highway Superintendent under this section, including any proposed revisions of the same, must be approved by resolution of the County Commission before becoming effective.

(c) Any criteria, rules, and forms so promulgated by the County Highway Superintendent and approved by the County Commission by resolution shall be compiled as a policy document in guidebook form and shall be placed on file with the County Auditor, with the County Highway Department, and at other publicly accessible locations at the discretion of the Superintendent.

(d) Criteria, rules, and forms so promulgated in the manner required by this section that are not inconsistent with the provisions of this Ordinance shall have the same force and effect of the provisions of this Ordinance.

### Section 3: PERMIT REQUIRED

(a) Before the installation, relocation, or expansion of any utility facility may be made within any highway right of way under the jurisdiction of the County, the owner of a utility shall submit an application to the County Highway Superintendent for a utility permit allowing for such installation, improvement, maintenance, relocation, or expansion. The application for said permit shall be in a form promulgated by the Superintendent pursuant to Section 2 of this Ordinance.

(b) The Superintendent may grant, grant with modifications or conditions, or deny a permit application based on the requirements of this Ordinance and the criteria and rules promulgated by the Superintendent pursuant to Section 2 of this ordinance.

(c) Any installation, relocation, or expansion of a utility facility made by the owner must be done in accordance with all conditions of the permit as granted by the Highway Superintendent.

(d) Permits granted pursuant to this Ordinance may be revoked by the Superintendent upon a written finding that any of the criteria or rules applicable to such permits have in fact been violated, or that any of the conditions placed upon a permit have been violated or otherwise not fulfilled.

(e) Any person or entity aggrieved by a decision of the Superintendent to grant, grant with conditions, deny, or revoke a permit pursuant to this Ordinance may appeal the decision by providing written notice of said appeal to the County Auditor, County Highway Superintendent, and County Commission Office within five (5) working days of the Superintendent's decision. The County Commission shall hear all such appeals as an agenda item at one of its regular meetings. The County Commission shall review

the Superintendent's decision for abuse of discretion and shall vote to uphold, uphold with modification, or reverse the Superintendent's decision.

#### Section 4: PERMIT FEES

(a) The County Highway Superintendent may set a fee for the issuance of permits under this Ordinance. Any such fee shall be set and published in the criteria guidebook promulgated by the Superintendent under Section 2 of this Ordinance.

(b) No permit application may be granted under this chapter unless the applicable permit fee is paid in full or is otherwise exempted under this Ordinance.

(c) Such fees are waived for public government applicants.

#### Section 5: BONDING

(a) The County Highway Superintendent may, as a condition of granting a permit pursuant to this Ordinance, require a performance bond be furnished by the applicant if not otherwise required by law.

#### Section 6: VIOLATIONS AND PENALTIES

(a) Any violation of this ordinance may be punished as a Class 2 misdemeanor, with the maximum penalties for such violation defined by SDCL 22-6-2(2), in accordance with SDCL 7-18A-2. Restitution to return the highway to the condition it was in before work was performed in violation of this ordinance may also be required pursuant to SDCL Ch. 23A-28. Each and every day that such violation continues may constitute a separate offense.

(1) At the time of adoption, this penalty as defined by SDCL 22-6-2(2) is a maximum fine of five hundred dollars (\$500.00) and maximum thirty (30) days imprisonment in the county jail. However, it is the intent of this ordinance to provide for the maximum penalty allowed by law as defined by SDCL 22-6-2(2) at the time of the offense.

(b) In addition, any violation of any the provisions of this Ordinance or of the criteria and rules promulgated pursuant to this Ordinance may be considered cause for denial of a permit or the revocation of an existing permit issued pursuant to this Ordinance, as well as the consequences of such denial or revocation for non-compliance specified in this Ordinance or in the criteria and rules promulgated pursuant this Ordinance.

(c) If a performance bond is required for the project pursuant to Section 5 of this Ordinance or other provision of law, the County may assert a claim against such bond for any unreasonable lengthy loss of public service and for any remedial work required to place the highway in the same or similar condition as it was in before the commencement of work by the permit holder, if the permit holder fails to remedy the highway itself in a timely manner consistent with the requirements of the permit.