

BEFORE THE BOARD OF COUNTY COMMISSIONERS
OF COWLITZ COUNTY, WASHINGTON

In the Matter of Approval of a Policy)
for the Accommodation of Utilities)
in the County Road Right-of-Way)
Including Implementation of)
Associated Permit and Inspection Fees)

RESOLUTION NO. 01 157

WHEREAS, Cowlitz County is required to adopt a policy to accommodate utilities on County Rights-of-Way pursuant to Chapter 136-40 of the Washington Administrative Code; and

WHEREAS, it is necessary that Cowlitz County preserve the integrity of its roads and Rights-of-Way for the benefit of the general public and provide for the orderly control and development of installations therein by the various agencies, corporations, public utilities, and other persons enjoying multiple use and occupancy of Cowlitz County Rights-of-Way; and

WHEREAS, it is deemed equitable that those agencies, utilities and individuals who derive a lasting benefit through occupation of Cowlitz County Rights-of-Way should aid in maintaining the integrity and orderliness of such Rights-of-Way, and;

NOW, THEREFORE, BE IT RESOLVED that the Board of County Commissioners of Cowlitz County, Washington does hereby approve the Policy for the Accommodation of Utilities in the County Road Right-of-Way and the Permit and Inspection Fee Structure associated therewith as recommended by the Department of Public Works.

DATED this 18th day of September, 2001.

BOARD OF COUNTY COMMISSIONERS OF
COWLITZ COUNTY, WASHINGTON

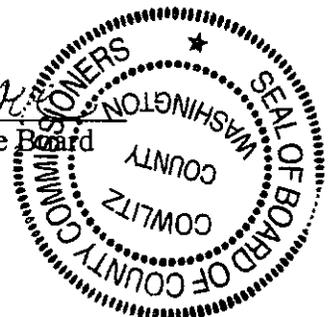
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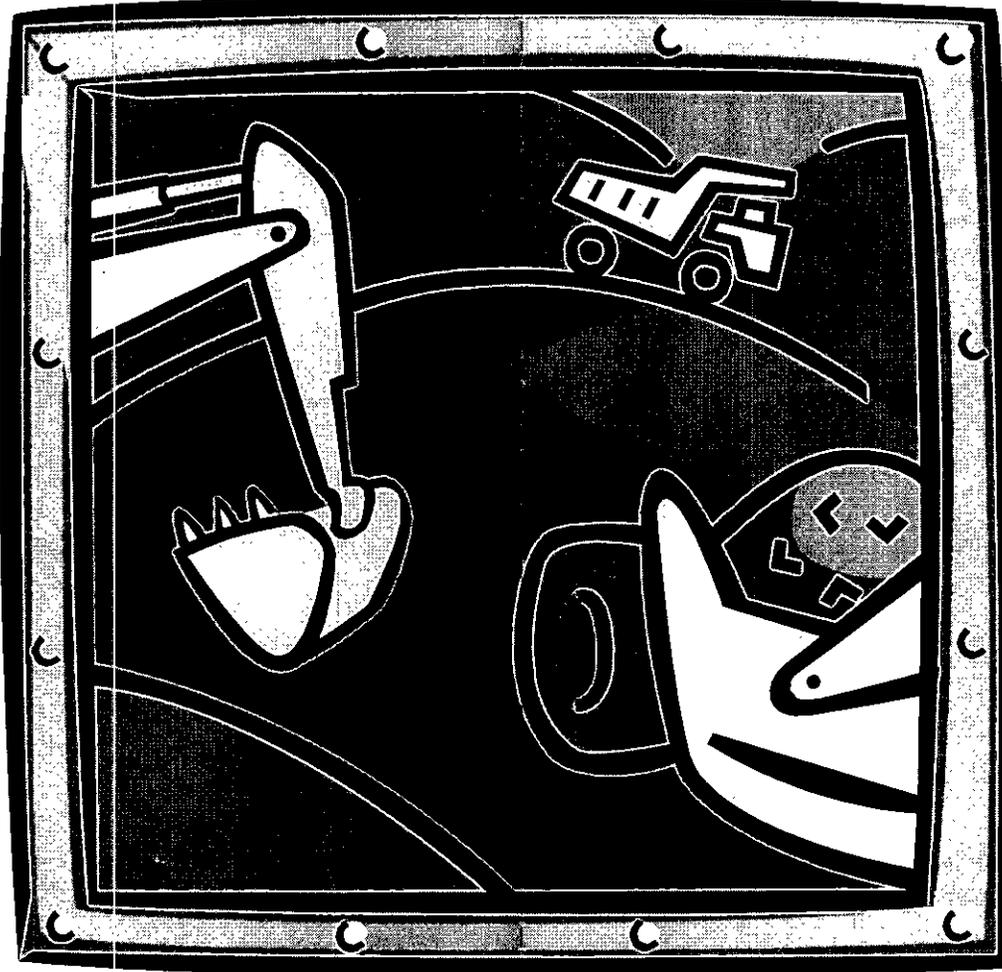
ATTEST

Vickie M. Musgrove
Vickie Musgrove, Clerk of the Board



Cowlitz County, Washington

Department of Public Works



ACCOMMODATION OF UTILITIES IN COUNTY ROAD RIGHT-OF-WAY Final Draft



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I. GENERAL

A. Purpose

The purpose of this ordinance is to establish a county policy to provide administrative, procedural and technical guidance for the installation, replacement, adjustment, relocation and maintenance of all above and below ground utilities which is performed within existing or proposed county road right-of-way subsequent to the adoption of this policy.

Such accommodation of utilities shall place primary emphasis on traffic operation and safety, with utilities accommodated in such a manner as not to materially degrade or adversely affect roadway operation, traffic safety, and structural integrity. It is not the intent of this policy to force utilities to relocate outside the County's public road right-of-way. Utility services are in the public interest and every effort should be made to accommodate utilities as cost effective as possible while maintaining public safety, operational efficiency and structural integrity of the road system.

There are several instances within this policy where Cowlitz County reserves the right to take action. The Cowlitz County Department of Public Works prefers to approach all projects in a cooperative manner and will assert these rights only when necessary.

B. Application

This policy shall apply to all franchises and permits issued pursuant to RCW 80.32.010, RCW 80.36.040 and RCW 36.55, to all public and private utilities, and to all installation, replacement, adjustment, relocation, or maintenance of utilities within the county road right-of-way, including but not limited to electric power, telephone, television, communication, water, gas, all petroleum products, steam, chemicals, sewage, drainage, irrigation and similar pipes, lines or cables.

Section II.G. has been included for consideration of deviations from this policy since this policy cannot address all situations and conditions that may be encountered.

Specific provisions contained herein may not be appropriate for all locations and existing conditions. This policy is intended to assist, but not substitute for, competent work by both design and installation professionals. This policy is not intended to limit any innovative or creative effort that could result in cost savings, better quality or improved safety characteristics.

It shall be the responsibility of any utility owner desiring to install, replace, adjust, relocate, or maintain any of its facilities to ascertain and abide by the requirements and

conditions of this policy prior to commencing any physical work within the County road right-of-way.

C. Definition of Terms

Unless otherwise stated, words and phrases used herein shall have the following meanings:

Appurtenances - Ancillary parts of a utility installation such as vents, drains, manholes, and shut-off valves.

As-Built Plans - Drawings, which indicate the size and type of material, installed and show the actual location and depth below the ground surface directly above the utility installation as installed in the field.

Auxiliary Lane - An auxiliary lane is that portion of the roadway adjoining the traveled way for speed change, turning, storage for turning, weaving, truck climbing, or for other purposes supplementary to the traveled way.

Backfill - Replacement of excavated material with suitable material compacted as specified around and over a pipe, conduit, casing or gallery.

Back Slope - The slope extending from the bottom of ditch to the ground surface away from the roadway.

Bedding - Material placed to provide protection and structural support for pipe, conduit, casing or gallery.

Boring - Installing a utility crossing by drilling a hole laterally underground for placement of a casing and/or a carrier.

Carrier - A pipe directly enclosing a transmitted fluid, gas, power line, phone line, etc.

Casing - A larger pipe enclosing a carrier for the purpose of providing structural, or other protection, to the carrier and/or to allow for carrier replacement without re-excavation, jacking, or boring.

Coating - A protective material applied to the exterior of a casing or carrier to prevent or reduce abrasion and/or corrosion damage.

Conduit (or Duct) - an enclosed tubular runway for protecting wires or cables.

Contractor - An entity hired to perform work.

Controlled Density Backfill (CDF) - a mixture of Portland cement, fly ash, aggregate, water and admixtures proportioned to provide a non-segregating, self-consolidating, free-flowing and excavatable material which will result in a hardened, dense, non-settling fill as specified by the Cowlitz County Department of Public Works.

Control Zone – That roadside area as defined by the “Control Zone Distance Table” (refer to the current version of the WSDOT Utilities Manual) within the road right-of-way in which placement of utility objects is controlled.

County Engineer - Refers to the Cowlitz County Engineer or a designee.

Cover - The thickness of material between the top of the installation and the ground surface directly above the installation.

Direct Burial - The installation of a utility underground by means of plowing or similar means.

Drain - Appurtenances that discharge accumulated liquids from casings and other enclosures.

Emergency - Any condition constituting a clear and present danger to life and property of the general public or a customer, subscriber service interruption, or pollution of the environment.

Encasement - A structural element surrounding a pipe or conduit for the purpose of preventing any physical damage to the pipe or conduit.

Encroachment - Any unauthorized use of the County road right-of-way and easements for other than road purposes.

Fore Slope - The slope extending from the roadway shoulder to the bottom of the ditch.

Franchise - An occupancy and use document that is granted by the Cowlitz County Board of County Commissioners for occupancy of road rights-of-way in accordance with RCW 36.55 and RCW 80.32.

Gallery - An underpass for two or more utility lines.

Jacking - Installing a utility crossing by pushing a casing laterally underground and placing a carrier through the casing.

Jetting - The use of an uncontrolled water stream to remove material prior to the insertion of a pipe, conduit or casing.

Manhole - An opening in an underground utility system allowing workers, or others, entry for the purpose of making installations, inspections, repairs, connections, cleaning, and testing.

MUTCD - Manual of Uniform Traffic Control Devices (Latest version)

Pavement (or Pavement Section or Pavement Structure) - the combination of sub-base, base course, and surfacing placed on a subgrade to support and distribute the traffic load to the subgrade.

Permit - A document issued under the authority of the County Engineer providing specific requirements and conditions for proposed utility occupancy at designated locations within Cowlitz County road right-of-way. Other permits may be required by other agencies. Obtaining a right-of-way use permit does not relieve the utility owner from obtaining other applicable permits.

Pipe - A structural, tubular product designed, tested, and produced for the transmittance of liquids and gases under specific conditions.

Plowing - The direct burial of utility lines by means of a 'plow' type mechanism that breaks the ground, places the utility line at a predetermined depth, and closes the break in the ground.

Pothole - An excavation to locate existing utilities.

Pressure - Internal gage pressure in a pipe in pounds per square inch, gage (psig).

Prism - see Roadway Prism

RCW - Revised Code of Washington

Relocation - All work necessary to move an object to another location.

Replacement - All work necessary to install a new facility in the place of an existing facility.

Restoration - All work necessary to replace, repair, or otherwise restore the right-of-way and all features contained within to the same or equal condition prior to any change or construction.

Right-of-Way - A general term denoting public land, property, or interest therein, usually in a strip, acquired for, or devoted to, transportation purposes.

Road (or Roadway) - A general term denoting a street, road, or other public way, including auxiliary lanes and shoulders, designated for the purpose of vehicular traffic.

Roadway - see Road.

Roadway Prism (or Prism) - That portion of a constructed road between the top of cut or toe of fill slopes on either side of the road including the traveled way, auxiliary lanes, curbs or shoulders, sidewalks, ditches and both cut and fill slopes.

Sleeve - A short casing through a pier, wall or abutment of a roadway structure.

Standard Specifications - The most current version of the Standard Specifications for Road, Bridge and Municipal Construction issued by the Washington State Department of Transportation (WSDOT).

Traffic Control - Necessary provisions to safeguard the general public, as well as all workers, during the construction and maintenance activities performed on utility facilities within the right-of-way.

Traveled Way - The portion of the road designated for the movement of through traffic, exclusive of shoulders, auxiliary lanes, and detour routes.

Trenched - The installation of a utility in an open excavation.

Trenchless - The installation of a utility without breaking the ground or pavement surface, usually accomplished by jacking or boring.

True Line and Grade - A reasonably straight line between specific points.

Utility - (1) A privately, publicly, or cooperatively owned line, facility, or system for producing, transmitting, or distributing communications, cable television, power, electricity, light, heat, gas, oil, crude products, water, steam, waste, sanitary sewer, storm drainage, surface water drainage or any other similar commodity which directly or indirectly serves the public. (2) The privately, publicly or cooperatively owned company or agency holding jurisdiction over the line, facility, or system.

Vent - An appurtenance to discharge accumulated gases from casings or other enclosures.

Window - An opening, typically rectangular in shape, cut in the pavement to allow potholing.

WSDOT - Washington State Department of Transportation

II. GENERAL CONDITIONS AND REQUIREMENTS

A. Franchise Policy

Unless otherwise exempted, any utility owner working within a County road right-of-way must secure a utility franchise from the Board of Cowlitz County Commissioners as per Cowlitz County Code Chapter 16.30.

1. The first priority for use of County right-of-way is for roadway purposes. Placement of utilities within the County right-of-way shall be considered so long as the structural integrity and traffic requirements (i.e. to provide safe, efficient, and convenient passage for motor vehicles, pedestrians, and other traffic) of the roadway are not impaired.
2. Aesthetics shall be a consideration. As a matter of policy, undergrounding of electric utilities, cable television, and telephone shall be strongly encouraged, particularly in an urban development.
3. Utilities to be located within the County road right-of-way shall be constructed in accordance with this policy and in compliance with the current Cowlitz County Road and Street Design Standards.
4. Franchise holders are not exempt from obtaining right-of-way occupancy permits or any other permits required for the work being performed.

B. Location Within the Right-of-Way

1. Utility installations shall be located to accommodate future roadway improvements and to permit access for servicing such installations with minimum interference to roadway traffic.

All utility owners shall make specific inquiries concerning long-range county road improvement plans in order to minimize the inconvenience to the Utility customer and road user in the event future road improvements (on existing or new alignment) would require adjustment or relocation of the utility. See also Section II.E.2

2. Unless otherwise approved by the County Engineer, all new above-ground utilities and their appurtenances, as well as all above-ground appurtenances of below-ground utilities that may constitute a roadside obstacle for traffic using the road, shall be located as close as practical to the edge of the right of way line. Such above-ground utilities and their appurtenances are not considered roadside obstacles if:

- a. They are located at least ten feet (10') beyond the edge of the traveled way for all roads with shoulders and have a posted speed limit of 35 MPH or less; or
- b. They are located at least 2 feet (2') beyond the face of the curb for all roads that are curbed and have a posted speed limit of 35 MPH or less.

For all roads with a posted speed limit of more than 35 MPH, the location of above-ground utilities and their appurtenances shall be evaluated using the principles and procedures as specified in Section 700, "Roadside Safety" of the current, or as hereafter amended, Washington State Department of Transportation Design Manual.

If an appurtenance within the right-of-way would constitute an unacceptable roadside obstacle, said obstacle must be:

- a. relocated to another place within the right-of-way,
- b. converted to a break-away design,
- c. crash-protected, or
- d. relocated to another location off the road right-of-way.

Actions a, b, and c must be approved by the County Engineer as a condition of permit approval.

Telephone pedestals that meet the breakaway requirement are not considered to be roadside obstacles.

3. Longitudinal installations shall be located as near as practical to the right-of-way line and on uniform alignment. Deviations for geologic, topographic or other reasons shall be reviewed on a case by case basis.
4. Above ground utilities and their appurtenances shall be set as near as practical to the right-of-way line.
5. Utility line crossings of a road shall be at right angles to the road centerline to the extent feasible and practical. Crossings shall be made on a true line and grade.
6. Installations that are required for a road purpose, such as street lighting or traffic signals, are to be located and designed in accordance with this policy.
7. The County Engineer may reserve the right to restrict the number of underground utility service connections and require the placement of one or

more distribution lines where such restriction will reduce the number of pavement cuts.

8. Where existing utilities or storm drains are in place, new utilities shall conform to this policy as nearly as practical, yet be compatible with the existing installations.
9. Gravity systems (sanitary sewer, storm drainage, etc...), shall have installation precedence over other systems except where a non-gravity system has already been installed under a previously approved permit.
10. Notwithstanding other provisions, underground systems shall be located at least four (4) feet away from road centerline and where they will not otherwise disturb existing survey monuments.
11. Above ground utilities and all above ground appurtenances associated with underground utilities shall not be located in such a manner so as to unnecessarily obstruct the efficient maintenance of roadside facilities such as shoulders, ditches and side slopes

C. General Design

1. Utility Owner Responsibility

The utility owner shall be responsible for the design of the utility facility that is being proposed for placement within the right-of-way. This responsibility, in addition to the integrity of the proposed utility facility, shall include provisions for public safety during the course of construction as well as full consideration of traffic safety and traffic accident potential for the life of the installation.

In the case of proposed attachment to existing bridges and structures, the utility owner shall be responsible to provide adequate information to the County Engineer so that the structure's ability to carry the additional load may be evaluated.

2. Review of Plans

The County Engineer shall review the utility owner's plans with respect to the following:

- a. location
- b. the manner in which the utility facility is to be installed, and

- c. measures to be taken to preserve safe and free flow of traffic, structural integrity of the roadway structure, ease of future road maintenance and appearance of the roadway.

No work may commence until the County Engineer's review is completed, all differences and questions resolved, and a written permit is issued to the utility owner.

3. **Provisions for Facility Expansion**

For new installations or adjustment of existing utilities, provisions (such as service stubs) shall be made for known or planned expansion of the utility facilities; particularly those located underground or attached to bridges or other structures within the right-of-way.

4. Granting of a franchise or permit shall not imply or be construed to mean that Cowlitz County shall be responsible for the design, construction, or operation of the facility or for public safety during its installation, operation and maintenance.

D. Standards and Codes

All utility installations shall be designed in accordance with the standards, codes, and regulations applicable to the type of utility. The methods of installation and restoration and materials used shall conform to the codes and standards established by the industry, as well as by Local, State and Federal Government regulations.

E. Adjustment of Existing Utilities for County Road Work

1. Existing utilities on County road right-of-way shall be either removed or relocated when road work by Cowlitz County would cause the existing utility to conflict with County standards. All such removal or relocation shall be at the sole expense of the utility owner (unless otherwise specified in a current franchise agreement) and all work must be accomplished under the same permitting process as for new installations.
2. The County Engineer will provide copies of the 6-year Transportation Improvement Program and the Annual Construction Program to all franchise holders. In addition, all utility owners with facilities affected by a proposed County Road project will be notified at the commencement of the design of said project to determine if relocation of said facilities will be necessary. If relocation of the utility is necessary, the relocation shall be completed prior to the scheduled start of the project unless other written arrangements are made

with the County Engineer. All costs associated with failure to move the utility prior to the scheduled start of the project or as otherwise provided for by written agreement with the County Engineer shall be reimbursed by the utility owner.

3. When work on County roads is required because of the impact of a private project or projects, the costs of relocating an existing utility to comply with County standards are the responsibility of the developer(s) whose project(s) necessitate(s) compliance with this policy. This is not intended to prevent the developer(s) from making financial arrangements with an appropriate utility owner to accomplish relocation.
4. Notwithstanding reinforcement or other protection, the utility owner shall be responsible for the security of each existing utility within a road construction zone. Where there are unusual utility hazards or where heavy construction equipment will be used, the utility owner shall provide adequate temporary protection of the existing facilities. In replacing the roadway, the design should give due consideration to the protection of previously existing utilities in the roadway section without sacrificing the geometry of roadway design.
5. If relocation of large, complex utility facilities are necessary, the County Engineer will notify and provide final plans to the utility a minimum of sixty (60) days prior to the scheduled start of the project. The plans shall show the location of survey monuments necessary to allow the utility to complete the relocation design.

F. Construction

1. Notification of Start of Construction

Any developers, utilities, or others intending to work in County right-of-way shall notify the Department of Public Works not less than five (5) working days prior to beginning the work. This notification shall include:

- General type of work (trench, push, pole setting or replacement)
- Road name & address
- Permit Number
- Location of the work (shoulder, in road, which side of road, etc.)
- Date when work is expected to be completed

Notification may be by mail, telephone, electronic mail (e-mail) or fax or in person.

Failure to notify may necessitate testing or retesting of those aspects of the installation that affect the County roadway at the expense of the developer or

utility owner. Furthermore, the work may be suspended pending satisfactory test results.

2. Inspections

If during construction, permit requirements are not being adhered to and written notification to the utility owner has not corrected the deficiencies, the County Engineer reserves the right to assign an independent inspector who will work with the utility owner's or developer's inspector to insure that all permit requirements are completed. All inspection costs incurred by Cowlitz County will be reimbursed by the utility owner at the County's actual cost.

G. Deviations from Policy

Deviation from this policy may only be granted by the County Engineer. The decision to grant, deny, or modify the proposed deviation shall consider the following criteria:

- The deviation will achieve the intended result with a comparable or superior design and a better quality of finished product.
- The deviation will not adversely affect safety and/or operation of the County facility.
- The deviation will not adversely affect maintainability.
- The deviation will result in a pleasing appearance.
- Failure to grant the deviation will create undue hardship or financial burden on the utility owner by reason of terrain, geology, or environmental damage along the roadside.

Those proposing deviations will be required to submit a written request for deviation to the County Engineer at the time of initial permit submittal. The applicant shall identify the section or sections of this policy for which the deviation is being requested and shall present supporting information that would justify the deviation being requested in terms of the above criteria.

Deviations must be approved prior to issuing the permit. When the need for a deviation arises during construction, construction may be delayed until the proposed deviation and supporting information is reviewed and evaluated by the County Engineer unless the deviation is of a nature that it can be handled by a minor field change or adjustment as provided for in Section III.B.4.

H. Coordination with Other Utilities

All franchises for utilities within county road rights-of-way are non-exclusive. Subsequently, there may be several utilities occupying the same general location. Therefore, it is the responsibility for any utility requesting a permit to place a pipe, line or conduit within the county road right-of-way to coordinate with all other utilities that may be occupying the same or nearby location to identify areas of conflict and to design the installation in such a manner as to minimize construction and ongoing maintenance conflicts. In addition, all new underground installations shall incorporate the necessary materials and technology to provide for an accurate location of the subject facilities during future construction activities.

Furthermore, it is the responsibility of all utilities occupying the county road right-of-way to cooperate with any new utility or new installation to provide such information as may be necessary to prevent or minimize conflicts during construction. Pre-engineering and pre-construction locates shall be provided by existing utilities to new installation permit applicants. In no case shall Cowlitz County assume any responsibility for insuring such coordination takes place, except for those cases where the County itself is a new or existing utility owner. The County Engineer may require proof of such coordination on any permit application. (RCW 19.122)

III. PERMITS

A. General Requirements

Unless otherwise exempted, a written permit shall be required for occupancy of road right-of-way by any utility facility (public or private; franchised or unfranchised). No facility shall be used for other than the purpose stated in the permit, or supporting franchise, unless written approval is granted by the County Engineer. Permit applications are available at the office of the Cowlitz County Department of Public Works. Permits will be issued in the name of the utility owner, not the contractor installing the utility. Other permits may be required by other agencies. Obtaining a right-of-way occupancy permit does not relieve the utility owner from obtaining other applicable permits. Off-site work related to new developments such as connections from existing utilities outside the limits of a new development to the utility system of the new development shall also require a permit but will not require separate or additional bonding or surety if already addressed in the bonding or surety requirement of the new development.

No work may commence prior to permit approval by the County Engineer.

An annual 'blanket' permit for certain types of work such as service connections and routine minor repairs that cause minimal disturbance to the ROW may be issued by the County Engineer. The issuance of such a 'blanket' permit is contingent upon the submittal of standard construction plans, payment of a permit fee as set forth in the permit fee schedule, and an assessment of the utility's prior experience with the County as to quality, timeliness of work, and site restoration.

B. Permit Procedure

1. All permit applications shall be submitted to the Cowlitz County Department of Public Works on a standard Cowlitz County form. Only the utility or its consulting engineer, when authorized in writing by the utility, may apply for permits. Application by contractors will not be allowed. Permit applications must be submitted at least five (5) working days before the anticipated start of work.

If a utility agency's policy requires the property owner receiving service to install their own connection, a permit will be issued to the property owner under the following conditions:

- a. The work shall be performed by a licensed and bonded contractor;

- b. The contractor shall provide an insurance certificate in a form and amount as approved by the County Engineer;
- c. The property owner shall be responsible for all of the work associated with the utility installation.

Advance consultation with the County Engineer is encouraged, especially for large or complex utility projects, to resolve questions and clarify the requirements of Cowlitz County prior to submitting the permit application.

The applicant shall include the following information with the permit application:

- a. General description of the facilities to be installed such as size, type, nature, operating pressure, transmittant and extent of installation including similar information for any other existing utility which may be affected by work done under this permit;
 - b. Three sets of construction plans. The plans shall conform to the following requirements:
 - 1) Plans shall be detailed as necessary to provide an accurate representation of the proposed work. Large or sensitive projects may require engineered drawings as deemed necessary by the County Engineer.
 - 2) Plans shall show the location and depth of all proposed underground facilities and shall be accurately dimensioned from known reference points (intersections, mileposts, etc.) and lines (roadway centerline, county right-of-way line, edge of pavement, edge of shoulder, etc.). Deviations in depth of cover and/or other location standards shall be shown on the plans. Where other utilities are present that may be affected by the work proposed under the permit, the permittee shall show said other utilities and their approximate location on the plans.
 - d. A traffic control plan meeting the requirements of the MUTCD.
 - e. Where underground utilities will be installed by plowing (see Section IV.G.4), a detailed description of the restoration and compaction method and equipment proposed to be used shall be provided.
2. The applicant may be required to stake the actual location of the facility in the field to assist in the permit approval process.

3. All requests for deviations or exemptions to these Standards shall be noted in the permit application and will be processed in accordance with Section II.G. of this policy.
4. Following permit approval, changes to the location or type of installation must be submitted and approved prior to construction. Revised plans shall accompany the location change proposal. It is expected that the utility will perform sufficient advance engineering and coordination with other utilities that may be effected to minimize such plan revisions or major field changes during the course of construction.
5. Minor field adjustments to the facility location or installation beyond a deviation in depth of cover and/or other location standards as shown on the plans due to unforeseen conditions will not necessarily require a new permit. , However, the field adjustment shall be discussed with the County Engineer and shall be noted on the permit plans. If a new permit or deviation from this policy is required by the County Engineer due to conditions encountered during construction, the required review for the new permit and/or processing of a deviation request will be given high priority.
6. The County Engineer may reserve the right to require utility owners to provide a complete set of as-built plans to the County within 60 days of completing the installation.
7. Other permits may be required by Cowlitz County and other agencies.
8. A permit fee based on the current fee schedule as adopted by the Cowlitz County Board of County Commissioners shall be assessed and paid at the time of permit application.
9. The utility or its contractor is required to provide the County Engineer at least one (1) working day notification prior to the start of work.

C. Restoration

By law (RCW 36.55.060) all franchise holders (unless otherwise specified in a current franchise agreement) are liable to Cowlitz County for all of the following costs:

1. Restoring the County road to an acceptable condition after utility installation, and

2. Removing and/or relocating utility installations when County road work of any kind requires such removal or relocation, whether or not such requirements are included in the permit.

Cowlitz County holds all utility owners, whether franchised or not franchised, liable for restoration of the county road and relocation of the utility as described above.

D. Insurance and Bonding

1. All work performed within the County right-of-way must be completed by the utility owner or by a contractor who is licensed, bonded and insured to work within Cowlitz County. The County requires that the entity performing the work have general liability insurance of at least \$1,000,000.
2. Private utilities performing work within County right-of-way may be required to provide to the County a performance bond or other approved surety equal to not more than 120 percent of the actual construction contract amount. As an alternative, a utility may request approval to post a biennial, renewable performance bond or surety based upon the total amount of work expected to be performed during the ensuing 24 months.

The decision on whether to require a bond or other surety will be based upon the utility's history of good performance such as continuous adherence to permit requirements, completed and timely site restoration, and prompt and satisfactory repair of any remedial work such as failed pavement patches. Such performance bond or surety shall be retained by the County for a period of two (2) years. During and at the end of the two (2) year time period, the County Engineer will periodically inspect the completed work and notify the utility of any remedial work that may be needed to restore the road to a satisfactory condition.

Should remedial work be required, the utility will be given the opportunity to arrange for the performance of the remedial work at its own expense. Should the utility not complete the remedial work in a timely manner, the County Engineer will arrange for the remedial work to be accomplished by its own forces or by private contractor, deduct the actual cost from the performance bond or surety and return the remainder to the utility.

3. The County Engineer may require a private utility owner to carry continuous liability insurance for installations that present an ongoing hazard to public safety.

E. Supervision of Work and Inspection

A duly authorized utility representative shall direct the performance of all work within the right-of-way, and shall have the full authority to represent and act on behalf of the utility. In the case of complex projects, or as directed by the County Engineer, the aforementioned utility representative shall be continuously present at the work site during working hours. In addition, competent contractor supervisors experienced in the tasks being performed shall continuously supervise all work. Incompetent, careless, or negligent employees shall be immediately removed from the project by the utility upon written request of the County Engineer. Failure to comply with this request shall be sufficient grounds for stoppage of all work and termination of the permit.

Where the nature of the utility work involves the placement and compaction of trench backfill, the utility shall provide or arrange for a qualified inspector to perform and record the required compaction testing of the backfill. Compaction requirements are addressed in Section IV.G. Within the limits of availability of staff as determined by the County Engineer and upon request, Cowlitz County may provide compaction testing at its cost. The cost shall include direct labor including benefits and equipment rental at the current approved rates.

F. Permit Exemptions

Certain utility work within the County road right-of-way that does not involve the breaking of pavement, shoulders or sidewalks will not require a permit. The exemption from obtaining a permit does not relieve the utility from complying with all other provisions of this policy such as proper traffic control and prompt repairing of any disturbance to the right-of-way.

Examples of permit exempt work would be emergency work (see Section III.H.), routine maintenance, clearing/trimming of trees and brush, making of service connections to existing electric utility, telephone or cable television pedestals, service connections to existing water or gas mains, replacement of defective parts, adjustment of components and work on overhead lines or service drops as long as there is no breaking of pavement, shoulders or sidewalks. Boring or jacking of utility pipes or conduits greater than two inches in diameter are not exempt from requiring a permit. Service connections in excess of 250 feet within the county road right-of-way will require a permit.

Service connections of 250 feet or less and/or boring or jacking of utility pipes or conduits of two inches or less in diameter will not require a permit but will require submittal of written notification to the County Engineer. This should be submitted on the standard utility notification form to be provided by the County. The intent of the form is to document activities occurring in the County road right-of-way. Permit fees will not apply to this type of activity nor will any formal approval by the County Engineer be required prior to start of construction. The notification form may be submitted any time leading up to, and including the day of the proposed work.

These exemptions will be cancelled and normal utility permits will be required for any utility or its contractors that fail to use proper traffic control devices, adequately restore any disturbances to the right-of-way, performs work in any manner that may endanger the public, or damages any other utility's installation or the County's road improvements.

G. Final Acceptance

The County Engineer will not make the final inspection until the work required by the permit, including final cleanup and restoration, has been completed. Final acceptance shall not constitute acceptance of any unauthorized or defective work or material. The Cowlitz County Department of Public Works reserves the right to require the utility to remove, replace, repair or dispose of any unauthorized or defective work or material as well as to recover damages for any such work or material discovered after completion of the project.

H. Emergency Work

Emergency work is required when there is a sudden, unplanned interruption in service, and it is necessary to immediately restore service to ensure the health, welfare, or safety of the public. Examples are a sudden discovery that a utility line is leaking or an important communication line has failed. In these cases, the utility can work in the right-of-way without first obtaining a permit.

For all such emergency work, the utility shall notify the County Engineer, by telephone or fax, as soon as practical. The utility shall confine its operations as much as possible to the non-traveled portion of the right-of-way and shall exercise caution to protect the traveling public in accordance with the currently applicable MUTCD.

If additional repair work beyond that done to solve the emergency is necessary, the utility will apply for a regular utility permit and complete the permanent repairs in accordance with the requirements of this policy.

IV. UNDERGROUND UTILITIES - Specific Requirements

A. Location and Alignment

1. Crossings

- a. All crossings of paved County roadways will be jacked or bored unless a deviation for open cutting and trenching is approved. All crossings are to conform to minimum cover requirements. Access pits for jacking and boring shall be located a minimum of four (4) feet outside the edge of traveled roadway. Exceptions will be handled in accordance with Section III.B.4 and/or Section II.G.
- b. For all crossings, the angle of crossing should be as near a right angle to the road centerline as practical. Lesser angles may be permitted based upon evaluation of practical alternatives.
- c. Crossings should avoid deep cuts, footings of bridges and retaining walls, wet or rocky terrain or locations where roadway drainage would be affected.

2. Longitudinal Installations

Longitudinal installations shall run parallel to the roadway and lie as near as practical to the roadway right-of-way line. All permit applications for longitudinal installations which will fall within the roadway prism shall include sufficient information which demonstrates that the installation will not adversely affect the design, construction, stability, structural integrity, traffic safety or operation of the present (or proposed) road facility.

3. Where irregular shaped portions of the right-of-way extend beyond the normal right-of-way limits, variances in the location from the right-of-way line may be allowed as necessary to maintain a reasonably uniform alignment.

B. Cover and Separation

1. The cover over the underground utility shall be not less than thirty (30) inches within the roadway prism and not less than twenty-four (24) inches outside the roadway prism. A lesser cover may be permitted where the utility is installed

into solid rock. Cover shall be measured from the actual surface point above the installation within the road right-of-way including ditch bottoms.

2. Where less than the minimum cover is necessary to avoid obstacles, the utility shall either be rerouted or protected with a casing, concrete slab, or other method approved by the County Engineer.
3. Sanitary sewer and water lines shall be separated in accordance with Department of Ecology guidelines.
4. Cover for utilities carrying flammable, corrosive, expansive, energized, or unstable transmittants shall not be reduced below the safety limits specified in the appropriate industry standards and specifications.

C. Encasement

1. Casings shall be required for roadway crossings where local features, embankment materials, construction methods, or other conditions indicate any possible damage could occur to the protective coating during installation. Casings shall also be used where required by the appropriate industry standards and specifications.
2. Casings may be required for the following conditions:
 - a. To expedite the insertion, removal, replacement, or maintenance of a carrier line crossing, or other locations, where it is necessary to avoid open trench construction.
 - b. As protection for carrier lines from external loads, or shock, either during or after construction of a road.
 - c. As a means of conveying leaking fluids or gases away from the area directly beneath the traveled way to a suitable point of discharge.
 - d. Jacked or bored installations of coated carrier lines unless assurance is provided to the County Engineer that there will be no damage to the protective coating.
1. Casing pipes shall extend a minimum of two feet beyond the toe of fill slopes, back of roadway ditch, or outside of curb.
2. Other than for necessary vents and/or drains, casing pipes shall be sealed at both ends.

3. Casing pipes shall be designed to support the roadway loads plus any surcharge loads thereon and, as a minimum, shall be equal to the structural requirements for road drainage facilities. Casings shall be composed of materials of sufficient durability to withstand any conditions to which they may normally be exposed.

D. Uncased Carriers

1. The carrier pipe shall conform to the material and design requirements of the appropriate utility industry and governmental standards and specifications.
2. The carrier pipe shall be designed to support the load of the road, plus surcharge loads thereon, when the pipe is operated under all ranges of pressure from maximum internal to zero pressure.
3. Suitable bridging, concrete slabs, or other appropriate measures as approved by the County Engineer shall be used to protect existing carriers when shallow bury or location makes them vulnerable to damage from road construction or maintenance operations.
4. Existing carriers may remain in place without further protective measures if they are of adequate depth and do not conflict with road construction or maintenance, and provided that the utility owner and the County Engineer mutually agree that the lines are, and will likely remain, structurally sound and operationally safe.

E. Appurtenances

1. Vents

Vents shall be required for casings, tunnels, and galleries enclosing carriers of fuel where required by federal safety standards. Vent standpipes should be located and constructed so as not to interfere with maintenance of the road nor to be concealed by existing vegetation in the immediate vicinity of the installation.

2. Drains

Drains shall be required for casings, tunnels, or galleries enclosing carriers of liquid, liquefied gas or heavy gas. Drains for carriers of hazardous materials shall be directed to natural or artificial holding areas that will prevent potential surface or ground water contamination. Drains for carriers of water and other non-hazardous materials may be directed into the roadway ditch or natural water course at locations approved by the County Engineer. The drain outfall shall not be used as a wasteway for routine purging of the carrier unless specifically authorized by the County Engineer.

3. Location Markers

Location markers and emergency information should be used when required by applicable state and federal standards. Markers may not be larger than a 4 x 4 wood post unless drilled to accommodate breakaway. Solid markers such as concrete may not be used.

4. Manholes

Manholes should be designed and located in a manner that will cause the least interference to other utilities or future road expansion. Where practical, installations in the pavement or shoulders should be avoided.

5. Above-Ground Appurtenances

Unless otherwise approved by the County Engineer, all above-ground appurtenances that may constitute a roadside obstacle for vehicular traffic shall be located as follows:

- a. Relocated to another place within the right-of-way,
- b. Converted to a break-away design,
- c. Crash-protected, or
- d. Relocated off the road right-of-way.

Actions (a), (b), and (c) must be approved by the County Engineer as a condition of permit approval. See Section II.B.2 for further guidance.

F. Individual Service Lines

1. Individual service lines (except for septic tank effluent and side sewer lines) shall:

- a. Be placed a minimum of thirty (30) inches below finished grade within the roadway prism and a minimum of twenty-four (24) inches below finished grade outside the roadway prism.
- b. Use road right-of-way only as necessary to make side connections so that the length of individual service lines within the County road right-of-way is minimized.

2. Septic tank effluent and side sewer lines shall:

- a. Have a minimum inside diameter of two (2) inches unless the line is operating under a pressurized system.
- b. Be encased in cast or ductile iron pipe (or approved equivalent) of larger diameter.
- c. Be placed with a minimum of thirty (30) inches of cover from the lowest roadside feature (i.e. bottom of ditch), with a maximum of ten (10) degrees of deflection from a perpendicular line to road centerline, and extend to outside the right-of-way line. Private easements shall be used for installation parallel to the roadway.
- d. Be jacked or bored under the roadway unless otherwise approved by the County Engineer.
- e. The County Engineer may require utility owners to provide a complete set of as-built plans to the County within sixty (60) days of completing the installation.

G. Installation

Installations shall ensure traffic safety and preservation of the roadway structure. Unless otherwise provided in the approved permit, construction shall be in accordance with the following controls:

1. Jacking or Boring (Untrenched construction)

Trenchless construction is required for utilities crossing under roads paved with bituminous surface treatment, asphalt concrete, or Portland cement concrete. Trenched construction (see IV.G.2) under paved roads may be approved on a case by case basis where the utility can demonstrate that untrenched construction is not feasible due to physical limitations or extraordinary costs.

- a. Pipelines crossing under a road shall be installed using a technique (such as jacking or boring) which has been approved by the County Engineer. Jetting under roadways will not be permitted.
- b. The length of trenchless construction shall extend a minimum of four (4) feet from edge of traveled roadway.
- c. In no case shall the size of the opening exceed the pipe diameter by more than five (5) percent or one (1) inch, whichever is greater, unless bentonite or an equivalent non-shrinking material is injected into the

void. If, during the process of pushing, boring or bore-pulling, the roadway or shoulder of the road is damaged or distorted in any manner, the utility must make immediate repairs to the satisfaction of the County Engineer.

2. Trenched Construction and Backfill

Trenched construction under paved roads may be approved on a case by case basis where the utility can demonstrate that untrenched construction is not feasible due to physical limitations or extraordinary costs. The use of trenched construction under paved roads less than three (3) years old is normally prohibited. However, if approved it may require additional pavement restoration work over and above that described herein (such as extensive pavement removal and replacement and/or a pavement overlay) as directed by the County Engineer as a condition of such approval.

a. Pavement Removal and Restoration

Cowlitz County recognizes that occasionally it will be necessary to place utilities within the roadway prism using trenched construction. All County roads that are excavated or damaged as a result of any such utility improvements shall be fully restored by the utility owner.

Prior to excavation, the asphalt shall be cut adjacent to the excavation to avoid unnecessary damage to the surrounding asphalt during excavation. Backfill material and placement shall comply with Section IV.G.2.d. below. Surface repair shall be completed according to the following requirements, Section VIII.A.6 and Appendix A:

- 1) Prior to patching, all asphalt edges shall be square cut to a vertical plane using appropriate machinery. The cut edge shall be at least eight (8) inches outside the edge of the excavation. Asphalt cutting using the wheel roll method will not be acceptable.
- 2) All asphalt pavement edges shall be cleaned and coated with an approved asphalt emulsion.
- 3) Restoration of an asphalt concrete pavement shall match the depth of the existing pavement section but may not be less than two (2) inches whichever is greater. All crushed surfacing top course material shall meet WSDOT Standard Specification Section 9-03.9(3). All asphalt concrete shall comply with WSDOT Standard Specifications (including composition and

placement) for Class B asphalt concrete. The finished patch shall have a minimal crown to allow for traffic compaction of the new asphalt concrete.

Portland cement concrete pavement shall be restored consistent with Section 5-05 of WSDOT Standard Specifications.

Traffic lanes affected by the trenching shall be replaced in half lane increments so that there are no joints in the wheel tracks.

- 4) All joints between the patch and the existing pavement shall be sealed on the surface with hot tar. The hot tar seal shall then be sprinkled with clean sand.
- 5) The pavement repair shall have a design life at least as great as the existing pavement surrounding the patch.

No cold mix materials will be allowed for any reason including temporary patching unless prior approval from the County Engineer has been granted.

Nuclear gauge tests for asphalt compaction control will be taken by the County to determine whether acceptable densities are attained. The acceptable level of compaction shall be a minimum average density of 92 percent of the maximum density as determined by WSDOT Test Method 705.

The completed surface of all courses shall be of uniform texture, smooth, and uniform as to crown and grade and shall be free from defects of all kinds. The completed surface of the wearing course shall not vary more than ¼ inch from the lower edge of a ten (10) foot straightedge placed on the surface parallel to the centerline. The transverse slope of the completed surface of the wearing course shall vary not more than ¼ inch in ten (10) feet from the rate of the existing transverse slope. When deviations in excess of these tolerances are found, the pavement surface shall be corrected by the addition of asphalt concrete mixture of an appropriate class to low places, the removal of material from high places by grinding with an approved grinding machine, or by removal and replacement of asphalt concrete. Corrections of defects shall be carried out until there are no deviations anywhere greater than the allowable tolerances.

b. Trench Widths

Trenches within the roadway prism shall be as narrow as feasible to permit the installation of the pipe or conduit and allow sufficient room to properly compact the bedding and backfill material. The side slopes and shoring (if necessary) shall comply with the Washington State Department of Labor and Industries Safety Code.

c. Installation of Pipe or Carrier

The pipe or carrier shall be installed and the trench backfilled in a manner assuring no deformation of the pipe will occur.

If required, the bedding material shall consist of granular material conforming to WSDOT Standard Specification Section 9-03.15 or 9-03.16 for bedding material for rigid and flexible pipe, respectively. As an alternative, crushed surfacing top course meeting the WSDOT Standard Specification Section 9-03.9(3) may be used. The bedding material shall be graded to provide uniform support of the pipe or carrier. Unsuitable soils and rock ledges shall be excavated from the bedding zone and replaced with suitable material.

d. Backfill

Backfill shall be placed in two stages:

- 1) Sidefill to the level of the top of the pipe, then
- 2) Overfill to the former grade surface.

Backfill shall consist of crushed surfacing top course conforming to WSDOT Standard Specification Section 9-03.9(3). Cowlitz County may approve native or other materials if, in the judgement of the County Engineer, such alternate can be properly placed and compacted. All backfill material shall be placed in lifts no thicker than eight (8) inches (loose thickness). Each lift is to be uniformly compacted by mechanical tamping. Backfill within the roadway prism and within two (2) feet of the bottom of the pavement section shall be compacted to at least 95% of maximum dry density as determined by AASHTO Method T 180-96. Backfill more than two (2) feet below the bottom of the pavement section shall be compacted to at least ninety (90) percent. Backfill outside the roadway prism shall be compacted to a state comparable to the surrounding soil but not less than eighty-five (85) percent, unless otherwise indicated by the County Engineer. Compaction by saturation, ponding or other water settling technique is not permitted.

The County Engineer may require controlled density backfill (CDF) meeting County specifications for backfilling trenches within the traveled roadway in lieu of gravel backfill material in situations where even a minor amount of trench settlement cannot be tolerated such as installation of transverse trenches on paved arterial roads or where it is a practical impossibility to achieve the compaction requirements such as backfilling of windows or potholes on paved roads.

e. Density Testing

At least 24 hours prior to placing any surfacing materials on the roadway (unless other advance arrangements are made with the County Engineer), it shall be the responsibility of the utility owner (or the County if the County is providing the density testing; see Section III.E.) to provide density test reports by a qualified soils laboratory. A minimum of one test shall be taken every 300 lineal feet of trench and every 1.5 feet vertically unless otherwise specified by the County Engineer.

3. Overbreaks, unused holes, or abandoned casings shall be backfilled as directed by the County Engineer.

4. Direct Burial/Plowing

Direct burial of communication, electrical and other lines by means of a vibratory plow on, or adjacent to, existing roads will be allowed by the County Engineer provided that the structural integrity of the roadway is not impaired and under the following conditions:

- a. Plowing will normally not be permitted when conditions are such that surface water will enter the area disturbed by the plow. Surface water may be streams, ponds or other standing water as well as precipitation runoff. Plowing in or within two (2) feet of an existing ditch bottom will not be allowed unless provisions for regrading of the ditch, armoring the flow area with non-erodable rock and treatment of the fore and back slopes to prevent erosion are included in the permit.
- b. Plowing will normally be restricted to those areas outside the roadway prism unless there is insufficient right-of-way or topographic features that make the use of plows not feasible. The preferred location of all plowing is between the back of ditch and the right-of-way line in cut sections and at the base of the fill slope in fill sections.
- c. Plowing within the roadway prism shall be performed as far from the traveled way as practical irrespective of the road surfacing. In no case

shall plowing be permitted within the paved portion of any paved road. If the wheels or tracks of the plow damage any of the paved portions of the road repairs must be made as directed by the County Engineer.

- d. In all cases, the utility or its contractor shall immediately apply suitable compactive effort by means of mechanical tampers of the impact type to the area disturbed by the plow to seal the disturbed area and restrict future surface water penetration.

5. One Call System

Prior to commencing work, the utility shall insure that any existing utility facilities shall be located and identified in accordance with Title 19 RCW, Chapter 19.122, sections 19.122.010 through 19.122.900 (Washington State One Call System).

Within Cowlitz County, the One Call System number for location of utility installations is (360) 425-2506 or 1-888-925-4100. Location requests must be made a minimum of two (2) working days in advance of excavation activities.

H. Final Utility Adjustment To Finish Grade

- 1. All utility covers that are located on proposed asphalt roadways shall be temporarily placed at subgrade elevation prior to placing base material.
- 2. Final adjustment of all covers and access entries shall be made following final paving by:
 - a. Saw-cutting or neat-line jack hammering of the pavement around lids and covers. Opening should not be larger than twelve (12) inches beyond the perimeter of the cover.
 - b. Removing frame, surfacing courses, and base material; adding raising bricks; replacing frame and cover to finish grade.
 - c. Placing compacted fill to six (6) inches below the top of the asphalt concrete.
 - d. Filling the remaining six (6) inches with asphalt concrete complying with WSDOT Specifications (including composition, placement and compaction) for Class G asphalt concrete.

V. ABOVE GROUND UTILITIES - Specific Requirements

Power and Communication Lines

1. Single pole construction and joint use of the pole is generally desirable and should be used whenever feasible.
2. The vertical clearance for overhead power and communication lines above the road and the lateral and vertical clearance from bridges shall meet or exceed the National Electrical Safety Code as adopted by the State of Washington Department of Labor and Industries.
 - a. The minimum height of a road crossing shall be measured from the lowest portion of the line crossing the road or depending on road topography, the shortest distance between the line and the roadway surface, whichever is least.
 - b. The minimum height of longitudinal lines shall be measured from the lowest portion of the line to the ground line.
 - c. All clearances shall be according to the National Electrical Safety Code temperature and loading standards, and shall comply with all other requirements of that code.
3. Unless otherwise approved by the County Engineer, all new above-ground utilities and their appurtenances as well as all above-ground appurtenances of below-ground utilities that may constitute a roadside obstacle for traffic using the road shall be located as close as practical to the edge of the right-of-way line. Such above-ground utilities and their appurtenances are not considered roadside obstacles if:
 - a. They are located at least ten (10) feet beyond the edge of the traveled way for all rural roads with a posted speed limit of 35 MPH or less; or
 - b. They are located at least two (2) feet beyond the face of the curb for all urban roads that are curbed and have a posted speed limit of 35 MPH or less.

For all roads with a posted speed limit of more than 35 MPH, the location of above-ground utilities and their appurtenances shall be evaluated using the principles and procedures as specified in Section 700, "Roadside Safety" of the current or as hereafter amended Washington State Department of Transportation Design Manual.

If the appurtenance is located within the control zone, said obstacle must be:

- a. Relocated to another place within the right-of-way,
- b. Converted to a break-away design,
- c. Crash-protected, or
- d. Relocated to another location off the road right-of-way.

Actions (a), (b) and (c) must be approved by the County Engineer as a condition of permit approval.

4. Guy wires to ground anchors and stub poles shall not be placed between a pole and the traveled way unless approved by the County Engineer.
5. Locations of new poles shall be compatible with existing driveways, intersections and other roadway features, they shall not interfere with sight distance, roadway signing, traffic signals, culverts, etc. To the greatest extent possible, utilities shall share facilities so that a minimum number of poles are needed.
6. Where irregular shaped portions of the right-of-way extend beyond the normal right-of-way limits, variances in the location from the right-of-way line shall be allowed as necessary to maintain a reasonably uniform alignment.

VI. INSTALLATIONS ON ROADWAY BRIDGES AND STRUCTURES

Attachment of new utility lines to a roadway structure (including bridges) may be allowed where such attachment conforms to sound engineering considerations for:

- Preserving the roadway structure and its safe operation
- Maintenance
- Appearance

The new attachment shall be in accordance with the following:

- A. Each proposed attachment shall be considered on its individual merits and shall be separately designed to ensure compatibility with the appearance of the structure.
- B. The attachment of a utility will only be considered when the structure in question has been adequately designed to support the additional load and can accommodate a utility facility without compromising roadway features and ease of maintenance.
- C. Utilities shall not inhibit access to any portion of the structure. Access to the structure needs to be maintained at all times for painting, repair, and maintenance.
- D. Manholes and other utility access panels shall not be permitted within the roadway portion of the structure.
- E. Attachment of a utility to a pipeline structure carrying a hazardous transmittant shall be avoided where possible.
- F. The utility attachment shall not reduce the under or over clearance of a structure where such clearance is critical.
- G. The preferred location for utility attachments is beneath the structure's deck or floor, between the girders or beams within a cell or at an elevation above the lowest portion of the superstructure steel or masonry. Attachment to the outside of a structure should be avoided when there are reasonable alternatives.
- H. Utility mountings shall be of a type that will not create noise resulting from vibration.
- I. Any hole created in a structure abutment shall be of the minimum size necessary to accommodate the utility line, and shall be sleeved and sealed to prevent any leakage of water or backfill material.

- J. The utility line at the back of the abutment shall curve or angle out to the outside edge of the roadbed area in as short a distance as is operationally practical.
- K. Communication and electrical power line attachments shall be suitably insulated, grounded, and carried in protective conduit or pipe from the point of exit from the ground to the point of reentry. Carrier and casing pipe shall be suitably insulated from electric power line attachments.
- L. The utility owner shall be responsible for restoration and repair of any portion of a structure or roadway that has been disturbed by the utility installation or use.

VII. RIGHT-OF-WAY USE RESTORATION REQUIREMENTS

A. General

1. Existing drainage ditches, culverts, and other facilities, shall be kept clean at all times. Temporary diversion of any drainage system will not be permitted without the written consent of the County Engineer. Any drainage culvert, catch basin, manhole, or other drainage structure disturbed by excavation shall be replaced with new material or repaired to the satisfaction of the County Engineer. Temporary Erosion/Sedimentation Control measures shall be employed to protect adjacent property and storm drain facilities.
2. A gravel shoulder disturbed by excavation shall be shaped to its original configuration. All backfill shall be compacted as described in Section IV.G.1.d. All shoulders shall be sloped to drain away from the adjacent paved surface for paved roads with gravel shoulders and away from the centerline of all gravel roads. The surface of the shoulder shall be finished with a minimum of two (2) inches of compacted crushed gravel meeting WSDOT Standard Specification Section 9-03.9(3) for crushed surfacing top course.
3. No excess or unsuitable material shall be wasted on County right-of-way unless approved by the County Engineer.
4. Paved street surfaces shall be cleaned at the end of each day's operation with a power broom or other approved means.
5. All open trenches must be backfilled or covered with steel plates (Maximum of 20 lineal feet) at the end of each day. Appropriate lighted traffic control warning motorists and pedestrians of the pavement discontinuity must be provided during non-working hours. Any access points or other open excavations which are left open during non-working hours shall be barricaded with flashing warning lights to prevent people, animals or vehicles from falling into the open excavation. See Section IX for additional guidance on traffic control requirements.
6. The final pavement patch for both rigid and flexible pavement (see Section IV.G.2.a. and Appendix A) shall be completed as soon as possible after completion of the trench backfill, subject to the following:
 - a. No more than 1,500 lineal feet of cut pavement may remain unpatched at any time;

- b. Temporary pavement patching may be required if, in the opinion of the County Engineer, the weather conditions are such that a satisfactory permanent and final patch will not be achieved. In such cases, the utility will be required to remove the temporary patch and install the final patch when the weather so permits.
- 7. Final cleanup, including complete restoration of shoulders, cleaning of ditches, culverts and catch basins, and removal of loose material from back slopes of ditches shall not exceed 1,500 lineal feet behind excavation operations or as required by the County Engineer.
- 8. Any survey monumentation that has been disturbed during the course of the utility work shall be restored to its original location. See Section XI.D. for further guidance.

B. Final Cleanup and Restoration

In addition to restoration of the roadway as described above, the responsible utility owner shall care for adjacent areas in compliance with Section 1-04.11 "Final Cleanup" and 8-01 "Erosion Control" in the WSDOT Standard Specifications. In particular:

- 1. Streets and roadways shall be cleaned and swept both during and after the installation work.
- 2. Disturbed soils shall be final graded, seeded, and mulched after installation of the utility. In limited areas, seeding and mulching by hand, or sod placement using approved methods, will be acceptable.
- 3. Ditches lined with erodable soil and subject to rapid flows may require erosion control methods such as seeding, jute matting, netting, or placement of sod or rock lining.
- 4. Any silting of downstream drainage facilities, including ditches or pipe and catch basins, which results from the utility installation shall be cleaned out and the site restored to a stable condition as part of the site cleanup.
- 5. Damaged existing storm drainage facilities and roadside features shall be replaced with new materials by the permit holder.
- 6. Unsatisfactory restoration work (either for initial construction or for periodic maintenance) shall be promptly redone by the utility owner. If necessary, and after written notice to the utility, unsatisfactory restoration work may be redone by the County or by private contractor and billed to the utility owner.

C. Maintenance Work

1. If the utility owner intends to use chemical sprays to control or kill weeds and brush, prior approval must be granted on an annual basis by the County Engineer. The County may limit or restrict the types, amounts, and timing of applications. The utility owner shall be responsible for any drift of the spray that contacts vegetation on private property.

All chemicals must be approved by both State and Federal regulatory agencies and all applicators must be licensed with the State of Washington and abide by all state regulations.

2. Refuse and debris resulting from periodic maintenance of a utility shall be removed from County right-of-way.

VIII. TRAFFIC CONTROL AND PUBLIC SAFETY

Traffic controls, detours, and maintenance for all utility work shall conform to the current MUTCD (Manual on Uniform Traffic Control Devices for Streets and Highways).

- A. All construction and maintenance operations shall be planned to keep interference with traffic to an absolute minimum. On heavily traveled roads, construction operations that interfere with traffic shall not be allowed during periods of peak traffic flow. Work shall be planned so that obstruction of intersecting streets, road approaches and other access points is held to a minimum.
- B. One lane of traffic shall remain open at all times and shall be attended by flaggers with appropriate construction signing provided. The road shall be restored to two-way traffic at the end of each working day. Applications for total road closures must be filed with the County Department of Public Works at least 21 working days prior to the anticipated closure.
- C. If, in the opinion of the County Engineer, weather conditions deteriorate to the point where the traveled roadways are unsafe for the public, or detrimental to the restoration of the roadway, excavation shall cease immediately and cleanup shall be promptly accomplished.
- D. Adequate provisions shall be made to safeguard any open excavation. This may include barricades, lights, flaggers, and other protective devices as necessary.
- E. Any material stored along County right-of-way must be placed a minimum of ten feet from the traveled roadway and adequate provision shall be made to warn the public of such stored materials including barricades, lights, flaggers and other protective devices as necessary.

IX. AESTHETIC AND SCENIC CONSIDERATIONS

A. No new installations of overhead communication, power, or other utility shall be permitted within county-designated areas of scenic beauty. When practical, utilities should be placed underground on rights-of-way through or adjacent to the following:

- scenic strips
- viewpoints
- rest areas
- recreation areas
- public parks
- historic sites

B. Overhead utility installations may be permitted in those areas listed in the preceding section A only when the following conditions exist:

1. Other utility locations are not available, are not technically feasible, are unreasonably costly, or are less desirable from the standpoint of visual quality; and
2. The location, design, and materials of the proposed installation will adequately protect the visual qualities of the area being traversed.

X. MISCELLANEOUS PROVISIONS

A. Utility Design Considerations

1. To preserve traffic sight distances at public and private road intersections, above-ground utility objects that will obstruct traffic sight distances at public or private road intersections shall not be placed in the turn radius area.
2. Where above-ground utility objects are to be placed behind existing guardrail, the minimum distance behind the back of the post of said guardrail shall be forty-two (42) inches to allow for proper functioning of the guardrail when hit.
3. Customer service poles shall be placed on the owner's property instead of the County road right-of-way.

B. Drainage

Care shall be taken during utility installations to avoid disturbing existing drainage facilities. Underground utility facilities shall be backfilled with pervious materials and outlets shall be provided for entrapped water. Underdrains should be provided where necessary.

C. Protection of Public and Private Property

During the course of construction the utility and/or its contractors shall take all reasonable precautions for the maintenance and protection of public and private property. All damages shall be restored or repaired to the original condition as part of the final cleanup and restoration.

D. Preservation/Protection/Restoration of Survey Monuments

It shall be the responsibility of the utility to locate, identify and protect all survey monumentation that may be disturbed by the utility work. Should any survey monumentation be disturbed during the course of the utility work, the utility shall notify the County Engineer and shall further, at the utility's cost, secure the services of a professional land surveyor registered with the State of Washington to restore the survey monumentation to its original type and location.

E. Repairs and Maintenance

1. All utility facilities shall be kept in a good state of repair. All maintenance operations, unless otherwise exempted from requiring a permit, shall be carried out with advance approval and in the form required by the County Engineer.

2. The storage of materials on County roadways shall not be allowed. Parking of vehicles on roadways shall be kept to a minimum, and suitable traffic control shall be provided.
3. If emergency repairs to the utility are required, such repairs shall be undertaken and notice shall be given to the County Engineer immediately. Approval as to the manner of repair shall be secured from the County as soon as possible.
4. The utility owner shall confine its operations as much as possible to the untraveled portion of the right-of-way and shall exercise caution to protect the traveling public during such repairs.
5. All temporary traffic control devices such as flaggers, warning lights, barricades, and signs shall be employed in accordance with the current MUTCD.

F. Striping Replacement

All traffic striping and walkway delineation disturbed during construction shall be replaced. Temporary striping shall be used on a limited basis.

G. Traffic Signal Detectors

In such cases where utility work disturbs or damages any traffic control signal detector imbedded into the roadway surface, the utility shall be responsible for the prompt repair or replacement of said detector.

H. As-Built Plans

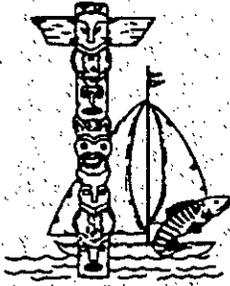
The County Engineer may require utility owners to provide a complete set of as-built plans to the County within sixty (60) days of completing the installation.

City of Kalama

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MAR 16 2001



Public Works

6300 Old Pacific Hwy. S.
P.O. Box 1007
Kalama, WA 98625
(360) 673-3706
FAX: (360) 673-3707

City Hall

320 N. First
P.O. Box 1007
Kalama, WA 98625
(360) 673-4561
FAX: (360) 673-4560
cityofkalama@kalama.com

COMMISSIONERS OFFICE

Police

385 N. First
P.O. Box 297
Kalama, WA 98625
(360) 673-2165
FAX: (360) 673-2144



March 15, 2001

Board of Cowlitz County Commissioners
207 Fourth Avenue North, Room 101
Kelso, WA 98626

SUBJECT: Utility Accommodation Policy County Road Rights-of-Way

Dear Commissioners:

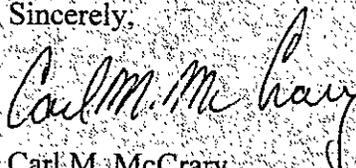
Please accept this letter as an endorsement of the proposed Cowlitz County Utility Accommodation Policy. We believe Ryan Lopossa has done an exceptional job of listening to concerns of franchise holders and revising the policy drafts accordingly.

The City of Kalama furnishes domestic water and sewer service to approximately 600 residences outside our city limits, and we have miles of pipes buried within the county road rights-of-way. It is our intent to give excellent economical service to our water and sewer customers while at the same time protecting the safety of the county roads.

This policy is mutually beneficial to the City of Kalama and Cowlitz County with the exception of the requirement for us to have individual permits prior to making water service line pushes with 2" pipe conduits. These 2" galvanized conduits are used only for passing our individual customer service lines from the water main to the water meter, crossing from one side of the road to the other. They create very minor soil displacement.

We applaud the County effort to develop this policy with the minor exception mentioned above. Thank you.

Sincerely,


Carl M. McCrary
Director of Public Works

cc P/W