

EXHIBIT A

**BOULDER COUNTY  
UTILITY CONSTRUCTION PERMIT REQUIREMENTS**

Adopted by Boulder County Board of County Commissioners  
Resolution 95-58

May 30, 1995

**BOULDER COUNTY  
UTILITY CONSTRUCTION PERMIT REQUIREMENTS**

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# UTILITY CONSTRUCTION PERMIT REQUIREMENTS

## I. GENERAL REQUIREMENTS

### 1.1 Authority

Authority for the administration and enforcement of the Utility Construction Permits is derived from the 1973 Colorado Revised Statutes (C.R.S.), Sections: 37-84-103; 38-5-101; 42-4-101 through 42-4-513; 42-4-1207; 43-2-111; 43-2-147; 43-5-301; and 43-5-307 and 32-1-1006.

Failure to comply with the requirements set forth herein may be considered a misdemeanor offense as provided for within the statutes.

### 1.2 Permit Application Procedure

Any person, business, or agency, including contractors, developers, owners, governmental agencies, etc., who propose to perform new construction, exclusive of work which would be deemed routine maintenance which does not entail the disturbance of the right of way, within County road rights of way and who hereinafter shall be referred to as the applicant, must obtain a Utility Construction Permit from the Boulder County Transportation Department in accordance with these requirements. However, any activities in the right of way shall adhere to all applicable safety requirements. For work conducted within any floodway that is also located within its public right of way, the issuance of a Floodplain Development Permit will include the issuance of a Utility Construction Permit.

An application and inspection fee will be charged in accordance with the following schedule:

**Major installations** involving extensive road work:

\$150.00 Base Fee + \$.10 per linear foot for all construction for the purpose of defraying the administrative costs of the permit program.

**Minor installations** such as utility services bores, polesets:

\$75.00 FEE

Refer to Sample Permit Form

Application for the Utility Construction Permit must be submitted 10 working days prior to the planned commencement of construction. If applicable, the applicant shall submit engineered construction plans and specifications prepared by a Professional Engineer registered by the State of Colorado. When requested, submit a traffic control plan prepared by a certified traffic control person. A written schedule covering the general sequence, working hours and staging of the work to be performed shall also be submitted. An 8" by 11" drawing will suffice for minor installations such

as a service crossing. The methods specified for road construction and restoration on all permits are subject to the approval of the County Engineer or designee. The schedule and the plans shall not be changed after the permit is approved without the consent of the County Engineer or designee. Permits must be available at the work site on demand to County personnel at all times. Utility Construction Permits expire at the approved scheduled ending date and must be renewed in advance in order to be considered valid. For emergency situations, where time is not available to follow the procedures outlined herein, a verbal notification shall be made by calling the Transportation Department or the Sheriff's Department (441-4444) if the Transportation Department is not available. The written permit is to be obtained within the next 2 working days.

### **1.3 Bonding Requirements, Insurance, Registration Requirements**

Upon demand by the County, the applicant shall provide and secure unto the County a bond, or other suitable performance guarantee, for the total amount required to restore public property as specified herein and at an amount based on contract prices for performing such work as approved by the County Engineer. If said work and installation are not completed as herein called for and in accordance with the standards and specifications approved by the County, said bond shall be in default, and the County shall recover on same, provided notice of defect of installation and standards is given by the County in writing to the applicant 30 days prior to the date the bond will be called. The utility or applicant making application to work within Boulder County rights of way must be adequately insured and submit a current certificate of insurance at least once a year. Certificates should be forwarded to Boulder County Risk Management, P.O. Box 471, Boulder, Colorado 80306. The Comprehensive General Liability and Automobile Liability Certificates of Insurance must show minimum coverage of \$600,000 combined single limits for each occurrence and must indicate Boulder County as additional insured. A certificate indicating worker compensation and employers liability coverage shall also be forwarded to Boulder County Risk Management, P.O. Box 471, Boulder, Colorado 80306. All equipment used on County roads must also be properly registered in the State of Colorado.

### **1.4 General Policies**

Work is to be planned so as not to create safety hazards, maintenance problems, render portions of right of way infeasible for future road improvement, or to obstruct drainageways. Longitudinal installations are to be placed outside the maintained portions of the roadbed when possible. Longitudinal installations shall be discouraged from being placed in the wheel path. Transverse installations shall be "jacked" or bored under the road. Open excavations will be permitted only in instances where boring is proven infeasible due to site geology or the presence of existing utility conflicts.

All utilities shall be installed in accordance with the plans approved by the utility owner and the County. If applicable, plans for installations must bear the name, seal, and signature of a Colorado Registered Professional Engineer responsible for their preparation. The alignment of all the utilities within County rights of way and drainageways is subject to approval by the County. The issuance of

a Utility Construction Permit does not guarantee that deeded right of way exists where the utility is planned. The applicant is responsible for verifying and surveying, if necessary, the proposed utility corridor as part of plan preparation.

#### **1.4.1 Underground Utilities**

All road level accesses (manholes, vaults, etc.) to utilities, where permitted, shall be of heavy-duty construction, capable of safely supporting legal highway loading, anticipated maintenance equipment and vehicular traffic, and shall conform to the finished grade of the road. All underground utilities within public right of way shall be suitably marked per industry standards. When requested, new or replacement pedestals shall be labeled with the owner's name. For utility location guidelines, refer to Figure I.

Where the possibility exists of lowering the surrounding water table by installing a buried utility with previous backfill and thereby adversely affecting wells and vegetation dependent on the water table elevation in the area, suitable engineered methods shall be employed to mitigate the situation.

#### **1.4.2 Aboveground Utilities**

All aboveground utilities shall be located and installed so as not to cause unnecessary obstruction to pedestrian and vehicular traffic or damage to the utility itself that could be harmful to the general public. The minimum overhead transverse clearance shall conform to National Electrical Safety Code Standards, but shall not be less than 18.0 feet measured from the highest point of the road prism to the bottom of the cable. No pole, structure or aboveground installation shall be set to be in conflict with a pedestrian walkway, nor be set less than 10 feet from the edge of travelled way on local roads, and 20 feet on arterials. A lesser distance, will require a variance from the County Engineer and will be based on the guidelines contained in the "AASHTO" Guide for Accommodating Utilities Within Highway Right-of-Way. A variance will be considered if insufficient right of way does not permit the minimum distance and safety is adequately addressed. See Figure II.

#### **1.4.3 Utilities in Major Floodway**

All utilities within the County right-of-way must be located and installed in a manner that will prevent damage such as land erosion, water pollution or flood diversions. Any utility placed within a floodway, which is located within the public right of way, must also obtain a Boulder County Floodplain Development Permit, and other applicable permits.

#### **1.4.4 Non-Utilities in County Road Right of Way**

In general, only utility agencies have the right to be allowed within County road right of way. However, on occasion situations arise where an irrigation conduit or other private ownership buried conduit needs to be placed. These situations will be reviewed on a site specific basis and if approved

must adhere to all the same requirements for design, construction and safety as if they were a utility.

## **1.5 Road Closures Policies and Requirements**

If any emergency road closure is needed, contact the county sheriff dispatch center, 441-4444. Non-emergency road closures are not permitted unless justified on the basis of overall benefit to the general public.

When road closures are proposed, the applicant must follow the Road Closure Notification Procedure as outlined within Resolution 91-31. The procedure is as follows:

1. The Department of Transportation Traffic Engineer is notified on a proposed road closure.
2. The Traffic Engineer develops a road closure signing plan for County initiated road projects, or works with the applicant to develop a plan, if warranted. The County reserves the right to deny the closure of a road.
3. The County Traffic Engineer drafts a memorandum and road closure resolution to be submitted to the Boulder County Board of County Commissioners for approval a minimum of four business meetings in advance of the first day of the closure.
4. The memorandum will give an explanation as to why the road needs to be closed, the duration of the closure, and a vicinity map showing the affected roads.
5. The memo and the pre-signed resolution are copied to the State Patrol, the Boulder County Sheriff's Department (who in turn notifies, in writing, all affected emergency response agencies at least one week prior to the first day of the closure), the County Road Maintenance Department, the Traffic Control Section of the Transportation Department, and the County Public Information Officer.
6. On the first day of the closure, the Boulder County Transportation Department Project Inspector will call the Boulder County Dispatch Center to inform them that the road is closed.
7. Three weeks prior to the closure, the County Traffic Engineer will contact the County Public Information Officer and set up a schedule to distribute a news release to at least the two largest local newspapers and any other appropriate publications or news outlets. Included in the news release will be information specifying the closure location, date of first day, the reason, and the duration of the closure.
8. The County Traffic Engineer and the County Public Information Officer will review, before publication, the news release to be given to the news outlets.

Road closures will be permitted only:

1. If explicitly specified on the approved permit.
2. Between the hours of 8:30 a.m. and 3:30 p.m.

Where closures of more than one day are approved, a suitable detour must be provided and be adequately marked and signed to accommodate night traffic.

#### **1.6 Staging of Installation**

Staging may be required, in order to produce the least disruption possible for the travelling public. A permit for any subsequent stages will not be issued until the prior stage has satisfactorily progressed or been completed.

#### **1.7 Safety and Public Convenience**

The applicant shall, at all times, conduct their work to ensure the least possible obstruction and hazard to the traveling public. The safety and convenience of the general public and the residents along the road, and the protection of persons and property, shall be provided for at all times.

Certified flagpersons shall be required for one-lane or potentially hazardous operations. Adequate warning signs, barricades, lighting, flags, and other devices as specified in the latest Manual on Uniform Traffic Control Devices and the Colorado Department of Highways "S" Standards, shall be provided, maintained and paid for by the applicant.

The applicant's operations are to conform to the applicable requirements established by the Industrial Commission of Colorado and the Occupational Safety and Health Act (OSHA).

#### **1.8 Maintenance and Repair Responsibility, Warranty Period**

After completion of authorized work, maintenance and repair of the installation shall be the owner's responsibility for a period of 2 years. In the event that damage to the road results from the failure of the utility's facility, the owner of the facility shall be liable for road repairs. Maintenance of the work area during construction shall be the responsibility of the applicant.

#### **1.9 Road Changes, Utility Relocations**

In the event any changes are to be made in a County road that would necessitate the removal or relocation of an installation made by a permit applicant, the relocation or removal shall be at the utility owner's expense upon written request by the County. If possible, relocation or removal shall be completed within 30 working days after notification for minor utility relocations.

For major relocation projects, Boulder County and the affected utilities will adhere to the following procedure.

1. Boulder County will submit roadway project concept plans (plans approximately 30 percent complete) indicating proposed horizontal and vertical alignment to the affected utility companies. The utility companies will have 30 days from the date of receipt of the plans to forward comments to Boulder County concerning utility relocation coordination issues.
2. When plans have been developed to the preliminary stage (plans approximately 60 percent complete) indicating roadway grading, pavement section, drainage improvements, and actual physical locations of utilities in the right of way, Boulder County will submit plans to the affected utility companies. The utility companies will have 30 days from the date of receipt of the plans to forward comments to Boulder County concerning utility relocation coordination issues.
3. When plans have been developed to the final stage (plans approximately 90 percent complete) when plans are essentially complete except for final quality control review and minor corrections, Boulder County will submit plans to the affected utility companies. The utility companies will have 30 days from the date of receipt of the plans to complete and forward their final utility relocation plans to Boulder County for inclusion as reference drawings in the project "bid set".
4. The actual utility construction work will be completed within 45 calendar days from clearance of right-of-way and written notification from Boulder County. Alterations from this relocation timeframe requirement may be granted if appropriate scheduling provisions have been established within the design phases described above.

#### **1.10 Inspections, Final Release Requirements**

Adequate inspections ensure compliance with County requirements and are the basis for release of construction zone maintenance responsibility and/or for release of any bond. It is the responsibility of the contractor to contact the Boulder County Construction Inspector, (hereafter referred to as Construction Inspector), one day in advance of required inspections. In-progress inspections of all elements of work will eliminate the need for extensive post-testing. Any work or material which does not conform to County standards will be brought to the attention of the applicant in writing, and if immediate corrections are not made, construction will be suspended. Failure to notify the applicant of noncompliance with requirements shall not relieve the applicant of their responsibility to comply. All requirements for construction inspection and testing shall conform to Article V of the Boulder County Road Standards and Specifications.

Before a bonding commitment is released, written approval of satisfactory completion of work from the Construction Inspector must be on file with the County Engineer. Certification shall be by the Construction Inspector's signature on the space provided for that purpose on the original copy of the



permit.

## **II. SPECIFICATIONS**

### **2.1 Quality Control**

All work shall conform to the Boulder County Road Standards and Specifications.

Any work in which untested and unaccepted materials are used without written approval by the Construction Inspector shall be ordered removed and replaced at the applicant's expense.

Tests ordered by the Construction Inspector to ascertain compliance with specifications shall be the most recent standard methods of AASHTO or ASTM and shall be made by an independent testing firm at the expense of the applicant. Specific test locations and testing frequency may be specified by the inspector. Where the applicant or owner maintains their own testing equipment and qualified personnel, the requirement for an independent testing firm may be waived by the County. Copies of test data are to be furnished to the Construction Inspector in a timely manner. Failure to submit test results upon request by the Construction Inspector may result in suspension of the work. The applicant shall be fully responsible for the maintenance and correction of any faulty construction, including unsuitable road cuts and potholes developed during the construction period. The roadway and roadside areas where utility work has been performed shall be thoroughly cleared of all debris and extraneous material and shall be restored to a condition at least as good as the original condition.

Items checked include, but are not limited to: clean-up of pavement and all roadway appurtenances, pavement failures, broken concrete, damaged signs and fencing, debris on adjacent private property, etc. All deficiencies must be resolved to the satisfaction of the Construction Inspector.

### **2.2 Trenching, Backfill and Pavement Restoration**

Jetting backfill will not be permitted within County roadways. Suitable material excavated from the trench may be used for backfill subject to approval of the Construction Inspector. At no time will contaminated, wet, soggy, frozen or other unsuitable material be allowed as backfill. If proper backfill material is not at the excavation site, suitable material shall be brought in and unsuitable material removed from the site. Backfill shall extend to the subgrade of the road or to natural ground. Backfill within the roadbed shall consist of pervious material free of six -inch or larger rock, shall be placed in maximum twelve-inch lifts, and each lift shall be compacted to 95% maximum density with moisture control before the next lift is installed. Backfill within 12 inches of finished grade shall consist of three-quarter inch road base, compacted to 95% with moisture control. In some cases, full depth road base or flowable fill backfill may be specified by the Construction Inspector.

All cuts made in asphalt or concrete surfacing shall be made by mechanically cutting to a neat, true horizontal and vertical line, and shall be cut one foot wider on each side of the top of the trench excavation. The final pavement cut shall not be made until immediately prior to patching. Repair of concrete surfacing shall consist of dowelling into the existing concrete surface adjacent to the limits of the excavation and providing proper class of concrete and reinforcement within the concrete patch area. Refer to Figure III for the Typical Road Cut Restoration and Backfill Drawing.

All excavations that are made in paved streets shall be completely restored after acceptance of the backfill by the Construction Inspector. Temporary hot asphalt or cold mix shall be placed immediately in all patch areas, on all arterial and collector streets, and within 7 calendar days on all others. In the event weather conditions preclude restoration by permanent hot bituminous pavement, temporary repairs shall be made by tamping and rolling into place a cold mix asphalt. Such cold mix patches shall be removed and replaced by a permanent hot bituminous pavement within a maximum of 10 working days or as weather and availability of materials permit.

Permanent hot asphalt patches shall be no less than three inches in thickness or not less than the thickness of the pavement adjacent to the excavations, whichever is greater, and shall be installed in accordance with the Boulder County Road Standards and Specifications. Damaged pavement within the construction zone shall be repaired by appropriate methods as approved by the County. In general, cracks are to be filled with the proper asphalt hot bituminous pavement product and the surface properly seal-coated. Subgrade failures caused by the applicant's operation of heavy equipment shall be rectified by reconstructing the subgrade layers and replacing the subbase, base and asphalt pavement.

If a utility line is placed longitudinally under the existing asphalt roadway, the roadway shall be patched, then a surface treatment commensurate with the existing road conditions shall be placed for the length of the project. The width of the surface treatment will be a minimum of the width of one lane of the roadway, and may be required to be the width of the entire roadway, based on the determination of the County Engineer or designee. The thickness and composition of the surface treatment shall be determined by the County and shall be commensurate with the existing condition of the roadway surface.

If a utility cut is to be made in any County road in which the age of the asphalt pavement surface is less than 3 years old, the utility will be required to patch the excavated area and overlay the entire width of road, for the length of the disturbance, with 2" of Colorado Department of Transportation specified Grade CX hot mix asphalt.

All pre-existing pavement markings shall also be restored upon completion of the surface treatment.

In the event that bituminous base, soil cement, or other base course materials are encountered during excavation, restoration shall be made in kind or as otherwise specified by the County.

Roads completed over excavated and backfilled trenches or cuts that show signs of depressions or evidence of failure and which have not been repaired by the applicant after seven days notice will be

considered a violation of the permit and the area will be repaired by the County at the applicant's expense.

### **2.3 Bridge, Culvert and Structure Crossings**

In general, utilities are discouraged from being attached to bridges. Where utilities are permitted to be attached to bridges, due to overriding conditions encountered in the field as judged by the County, then such utilities shall be placed so as to not obstruct the waterway of the bridge or interfere with the existing guardrail. Utility locations on the bridge shall be determined by the County Engineer.

Utilities shall be placed at least four feet below the channel flowline as close to the right of way limits as conditions permit. The utility shall be continued four feet below the flowline elevation for a minimum distance of at least 10 feet on either side of the channel bank. A lesser distance may be considered based on a scour analysis prepared by a professional engineer at the cost of the applicant.

## Boulder County Utility Construction Permit Request

Date Submitted :

Contractor Name :

Address :

Phone :

Contact Name :

Work Location : (Road Name, Address)

Description Of Work :

Purpose :

Special Notes : (To Include Total Footage In Right-of-Way)

Proposed Start Date :

Proposed Finish Date :

Permit Request may be delivered, mailed or faxed to :

*Boulder County Transportation Department*

*C/O Utility Coordinator*

*5201 St. Vrain Road, Building 5, Longmont, CO 80503*

*P.O. Box 471 Boulder, CO. 80306 (Mailed)*

*Phone: (720) 564-2661 Fax: (303) 682-6714*