

*Town of Thatcher – Public Works Department*

**Permit Requirements and Specifications  
for  
Underground Work  
within  
Town Right-of-Way**

**Note to Field Crews**

**Permit application is in Appendix 1.  
Appendix 2 contains construction drawings.**

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# Permit

## Applicability

### Authority

The Thatcher *Town Code*, under Section 11-1-2: Excavations, grants authority to regulate street cuts and excavations.

### Parties Required to Submit

Any party desiring to excavate in Thatcher under any public streets or on right-of-way or easements must submit a permit application. This requirement includes individual citizens, contractors, utilities, and other government entities. An example of a permit application is found in Appendix 1. The approved application becomes the permit with the original being forwarded to the permittee.

### Location

A permit is required for each location to be cut. A series of closely grouped cuts that will be opened and closed during the same time frame may be approved under a single permit with special permission from the Town Manager or his designee (usually the Town Engineer or Streets Maintenance Foreman). A sketch of the proposed site will be required with the application.

## Notification

Parties desiring to excavate must submit an application a minimum of ten business days prior to commencement of work. Emergency cuts may be performed without prior notice; however, a permit must still be submitted the next business day. The permittee must call the Town Hall before actual work starts to allow inspection.

## **Approval**

Applications must be reviewed and approved before work may commence. The Town Manager or his designees are authorized to approve work. A telephone response to the applicant is required to be given within seven business days of submission; written confirmation will follow in the mail.

## **Fees**

A fee may be assessed to offset processing and inspection costs according to the current schedule of fees available at the Town Hall. The applicant is responsible for submitting the proper fee amount before the application will be reviewed. If a fee is charged, it will be listed in the Town's Schedule of Fees.

## **Effective Dates and Locations**

A permit is valid for the period of time and location noted on the application.

## **Changes**

The permitted time or locations may be changed without additional fees by writing a letter or telephoning noting the permit number and the new dates or locations desired. The notice of change must be received a minimum of four business days prior to the original dates requested. A telephone response will be given within two business days; written confirmation will follow by mail. *Applications submitted that anticipate routine work of relatively short duration should request a full week to minimize nuisance paperwork.*

## **Failure to Obtain Permit**

Any party failing to obtain a permit prior to construction activities except for emergencies as noted in the permit requirements may be subject to any or all of the following penalties:

- a. a fine will be levied according to Town Ordinance
- b. cost of the Town's crews to repair unauthorized site

# Surety

## Performance Bond

A performance bond and construction cost estimate will be submitted along with the permit application. The bond shall be of sufficient value to cover the cost for the Town to complete or correct the work if the permittee's work is deficient or incomplete. The bond will be enforced 7 calendar days following the permitted completion date if the site is not left in satisfactory condition. A standing bond may be issued for utilities and others who often perform street work.

## Insurance

A certificate of insurability must be submitted with the application for comprehensive public liability and property damage. The policy shall name the Town of Thatcher as an additionally insured party. Minimum coverage will not be less than \$1,000,000 per claim occurrence.

## Waivers

### Bond Waiver

A bond waiver may be granted to applicants if one or more of the following cases exist:

- a. in lieu of Intergovernmental Agreements addressing street openings
- b. in lieu of agreements between the Town and utility providers addressing street openings
- c. when the applicant has a bond in place with the Town for construction work performed in the discharge of a contract made with the Town

## Insurance Waiver

An insurance waiver may be granted to applicants if one or more of the following cases exist:

- a. in lieu of Intergovernmental Agreements addressing street openings
- b. in lieu of agreements between the Town and utility providers addressing street openings
- c. when the applicant has named the Town as an additionally insured party while performing construction work in the discharge of a contract made with the Town

## **Expiration**

Performance bonds are to remain in force for a minimum of one calendar year following the permitted completion date. Insurance will remain in effect through out the construction work, including site mobilization and demobilization.

## **Failure to Complete Work**

In addition to invoking the performance bond option for poor or unfinished work, the Town may also enforce any or all of the following penalties:

- a. deny issuing future permits until the current problem is resolved
- b. perform repairs itself and back charge the permittee cost plus 15% for all incurred expenses

## **Indemnification**

By signing the permit application, the applicant agrees to indemnify, defend and hold the Town of Thatcher harmless from the following items caused by or resulting from activity or work performed under the permit, whether caused by or contributed to by the Town of Thatcher, its officials, agents or employees:



- a. any and all claims, liability, loss, damage or expense incurred by the Town of Thatcher on account of any injury to or death of any person
- b. any and all claims, liability, loss, damage or expense incurred by the Town of Thatcher on account of any damage to property

## **Public Convenience and Safety**

### **Blue Staking**

The permittee is responsible for contacting the Arizona Blue Stake center at 602-263-1100 in a timely manner to arrange for the locating and marking of underground utilities.

### **Traffic Control**

The permittee is responsible for traffic control throughout the entire construction process, including off-hour periods as long as any hazards exist. Adequate provisions must be made for both vehicular and pedestrian traffic. The permittee may not close off an entire road without receiving specific written permission from the Town before work starts. The permittee shall abide by the work zone guidelines outlined in Part VI of the Manual of Uniform Traffic Control Devices. Manuals are available by contacting:

Arizona Department of Transportation  
Engineering Records  
1655 West Jackson, Room 112F  
Phoenix, Arizona 85007  
(T) 602-255-7498

The permittee may be required to arrange to have the Thatcher Police Department assist with traffic control, which would be at the permittee's expense.

### **Site Access**

The permittee shall follow applicable regulations of the State of Arizona, including meeting OSHA standards, pertaining to preventing access of people not involved in the construction process (pedestrians walking by, etc.) from open holes, construction equipment, etc.. Signing, fencing, barricades, and other means will be used to protect non-participants from potential harm. Water may be needed for dust control purposes.

## **Emergency Services and Community Coordination**

The permittee is responsible for coordinating construction activities with the providers of emergency or community services who have jurisdiction in the area where the cut will be made. The following entities will routinely be contacted prior to work:

- a. Thatcher Police Department (Front Desk) 928-428-2296
- b. Thatcher Fire Department (Town Hall) 928-428-2290
- c. Graham County Sheriff's (Dispatcher) 928-428-3141
- d. Southwest Ambulance (Duty Officer) 928-428-7100
- e. Thatcher School District (Business Office) 928-348-7200

For large projects, especially when an entire road will be shut down, or those involving long time frames, local radio stations and newspapers are to be contacted for public service announcements. The costs of all coordination will be borne by the permittee.

## **Accident Reporting**

Permittee shall report all accidents that occur at the site, whether involving the permittee's crews only or the public. The report shall include the names, addresses, and telephone numbers of those involved along with a brief description and sketch of the site. Notes on unsafe acts or conditions shall be included. The report will then be signed and dated by the site foreman and turned in the next business day. A copy of the permittee's standard accident report is acceptable. The permittee shall immediately notify the Sheriff's dispatch office at 911 when accidents involving the public occur.

## **Regulatory Citations**

The permittee shall notify the Town if the permittee is cited by a regulatory agency concerning the job site as allowed by law (OSHA, etc.).

# Construction Specifications

## General

### Work Hours and Days

Non-emergency work is restricted to normal weekdays during daylight hours. Weekend, holiday or night work is not allowed without special permission from the Town's agents.

### Jacking or Boring

Jacking or boring in lieu of open trenching is an acceptable alternative but still requires submittal of a permit application.

### Minimum Depth

New installations shall be placed 3 ft. or deeper at all locations unless granted a variance by the Town.

### Limitations

These specifications represent the minimum requirements for routine repairs and utility extensions. The total length of open trench allowed under a single permit is 600 ft.. Plans and specifications must first be presented to the Town for new construction exceeding this limit.

### Interpretation

The permittee shall comply with M.A.G. specifications where this specification is silent. The Town Engineer will be available to clarify issues as needed.

## Joint Trenching

For major non-emergency work, the applicant shall notify local utility providers at the time application is made to inquire whether other providers desire to participate in the site work. Typically, the following groups may be interested in sharing a trench:

City of Safford	928-348-3192
Cable One	928-428-1850
Eastern Arizona College	928-428-8300
Arizona Eastern Railway	928-473-2447
El Paso Natural Gas	928-428-0383
Gila Valley Irrigation District	928-428-4189
Graham County Utilities	928-485-2451
Thatcher Unified School District	928-348-7200
Town of Thatcher	928-428-2290
Qwest	928-428-1178

Other providers must also submit applications. ADEQ and other regulations applying to service separation must be followed.

## As-builts

The applicant shall submit to the Town a sketch indicating as-built conditions if different from the sketch submitted with the original application.

## **Cut Procedures**

### Cut Width

Trenches should be as narrow as possible to minimize the size of the patch when the work is complete. However, they should be wide enough that workers can safely work and properly backfill the site. A trench cut may not be made within 4 ft. of a paved edge while leaving a narrow strip; rather the entire section to the edge of pavement must be removed for later replacement.

For deep sites, shoring is preferred instead of benching or sloping the sides to minimize cut width. The use of shoring versus side sloping is left to the judgement of the permittee. Work at sites that do not comply with OSHA trench safety requirements will be immediately suspended until the situation is corrected. See details and notes on Figure 1 in Appendix 2.

### Concrete Cuts

Concrete pavement, sidewalks, etc. must first be saw cut before excavation starts. The minimum depth cut shall be 1½". The concrete area to be removed must be wider and longer than the trench to allow the patch edges to rest on undisturbed soil. Reinforced concrete must be cut back to expose enough reinforcing to adequately splice it. See Figure 2 in Appendix 2.

### Asphalt Cuts

Asphaltic concrete pavement, 1" or thicker, must be saw cut before excavation starts. The minimum depth cut shall be 1½" or ½ of the thickness, which ever is greater.

Chip seals, slurry seals, etc. may be cut with a saw blade, spade tip on a jackhammer, or a roller blade mounted on a piece of equipment. The width of the pavement cut must be wider and longer than the trench. Ripping a section out with a backhoe without first cutting is not allowed. See Figure 3 in Appendix 2.

### Excavation

Once the pavement has been removed, base course and subgrade may be excavated and piled next to the trench. Material that will not be used for backfill must be hauled off during the excavation process. Care will be taken to stay within the lines prescribed. If the trench side caves in to encroach upon or undermine the pavement, the pavement must be cut back further to allow proper patching.

## Damaged Utilities

Occasionally, utilities are damaged during the excavation process. The permittee shall immediately notify the owners of the damaged utilities so repairs can be expedited. The permittee shall not attempt to repair another's utility. Permittee shall cooperate with the utility called to make repairs.

**Call 911 to immediately notify the Sheriff's Dispatch Office of situations such as a ruptured gas line or exposed power line that can pose a serious threat to public safety.**

## Dewatering

Ground water or water from a broken water line may be pumped into an adjacent ditch if there is no flooding danger to near by property owners. Efforts must be taken to prevent mud or loose rock from being deposited onto traveled surfaces. Sewage from a broken sewer line may not be pumped or dumped into ditches or adjacent properties but must be contained and hauled off for proper disposal. Sewage may be pumped into a downstream manhole if care is taken not to carry sand and rock with the sewage.

## **Crossings**

New power and communication lines crossing a street or a proposed street shall be run through conduit extending the full width of the paved section plus 3 ft. on each side.

Canal crossings for all utilities shall be run through a sleeve with an inside diameter at least 12" greater than the largest outside diameter of the carrier (including bells, etc.). The sleeve will maintain the same grade as the carrier. The sleeve will then be encased in concrete.

## Backfill Procedures

### Materials

Bedding under and around the utility will be clean, granular material with the following gradation:

- 100% passing the 1" sieve
- 15% passing the 1/4" sieve (maximum)

Native soil may be used if it meets the above gradation. Bedding will cover utility as shown in Appendix 2. Non-shrink grout, as specified below, may be used.

Non-shrink grout will be a fresh batch with approximately the following mix design:

3/8" rock chips	2600 lb.
Sand	800 lb.
Cement	94 lb.
Water	15 gallons

This mix design will produce one cubic yard of 1/2" slump grout.

Trench backfill above the utility bedding will be non-shrink grout for the following sites, here designated as Type I sites:

- a. under paved sections or sections that will be paved within one year
- b. under curb, gutter, or sidewalk (or proposed within one year)
- c. within 15' of a paved edge (or proposed within one year)

Sites falling outside of areas requiring non-shrink grout, here designated as Type II sites, may use aggregate base course, granular material, or cement slurries. Native soils may be used if low in clay content (soil is hand friable) and have no rock larger than 6". No organic material, waste pavement or other construction waste may be used as backfill.



## Methods

Bedding under the utility will be at least 4" deep. See Figure 2 in Appendix 2. Over excavation needs due to rock, etc. is left to the judgement of the permittee.

Bedding material under and around the utility shall be mechanically compacted in loose lifts not exceeding 9" in depth. Care shall be taken to soundly compact bedding under and around the utility to prevent shifting and settling (proper haunching, etc.).

For areas not requiring non-shrink grout, backfill over the bedding will be completed with loose lifts not exceeding 12". Backfill material will be maintained at appropriate moisture levels to obtain good compaction. Laboratory and field density test documentation will not be required for work completed under these specifications. As a guideline, a minimum compactive effort equivalent to 85% standard proctor density should be achieved in the field. *Water consolidation methods may not be used for obtaining density.*

A metallic or plastic warning ribbon noting a buried utility will be installed 12" to 18" below the surface for both Type I and Type II sites. A tracer wire may also be installed at the discretion of the permittee.

## **Surface Patching Procedures**

See Figure 3 in Appendix 2 for details on repairing surfaces that have been cut.

### Concrete Patches

A cut through non-reinforced concrete will be patched with a non-reinforced section with the greater thickness of existing + 3" or 6". A cut smaller than 4 ft. x 4 ft. through concrete reinforced with welded wire fabric may also be patched without reinforcement by installing a section with the greater thickness of existing + 4" for 8". Larger cuts must use like reinforcing in

the patch. Rebar-reinforced concrete must be the greater of existing + 4" or 12" thick.

Cuts through concrete reinforced with rebar must use like steel (grade, diameter, and spacing) for patching. The edge of the concrete must be far enough from the edge of the trench to allow minimum rebar splices of 12" or that satisfy American Concrete Institute ACI 318 code practice. Proper concrete and rebar practice will be used (properly cleaning the old bar, etc.) to install the patch.

Concrete used for patching will achieve a minimum of 3000 psi 28 day strength for sites allowing at least 7 days cure time before opening up to vehicle traffic or 2 days cure time before opening up to pedestrian traffic. Sites to be opened sooner must use a high early strength admixture to provide sufficient strength. Concrete slump, use of air entraining or other admixtures, etc. are left to the discretion of the permittee. Laboratory and field test documentation will not be required for work completed under these specifications.

Proper craftsmanship shall be used (proper edge tooling, floating, cold or wet weather protection, etc.) to ensure that a sound patch is installed. Patch finish must match finish of existing concrete.

The permittee may compact in small quantities of aggregate base course in small or incidental areas preparatory to placing concrete.

Particular attention shall be given to wheel chair ramps or other facilities mandated by the American with Disabilities Act to ensure proper reconstruction.

### Asphalt Patches

Cuts through bituminous surfaces shall be prepared first by applying tack oil around all edges. Tack oil will be SS-1h diluted 1:1 with water.

Hot-mix asphalt will then be placed and mechanically compacted to provide the greater of existing thickness + 1" or 3". Hot mix will comply with ADOT's Standard Specification No. 406 for 1/2" mix asphaltic concrete. Laboratory and field density test results will not be required.

The permittee may use small quantities of ABC for incidental areas preparatory to placing asphalt. The permittee may maintain a cold mix patch until the site is repaired with hot mix.

### Surface Penetrations

Valve boxes, manholes, utility vaults, etc. that protrude to the surface must be traffic bearing and include a concrete collar centered on the penetration. Lids shall be clearly marked as to the nature of the utility. See Figure 4 in Appendix 2.

### Restorations

Vaults or other fixtures belonging to other parties that are removed or damaged during trenching must be restored to the satisfaction of the owner. A Registered Land Surveyor must replace survey monuments that are disturbed. Buried survey monuments that are uncovered will be covered with a cast-iron hand hole at the Town's expense in cooperation with the permittee.

## **Temporary Bridging**

From time to time, work cannot be completed without allowing traffic to pass through a site. Steel plates may be used to bridge open holes to allow vehicles to pass. The permittee shall be responsible for selection of plate thickness; however, the minimum thickness will be 3/4" for A36 steel.

The maximum span allowed is 5 ft. without a design provided by a registered engineer. The plate edge shall be beveled 30° or taper packed with fine mix asphalt. Plate overlap onto adjacent surfaces shall be a minimum of 12" on each side but may need more depending on soil stability. The plate shall be anchored sufficiently to prevent movement during traffic. See Figure 5 in Appendix 2.

## **Site Clean Up**

The permittee shall clean the site prior to demobilization to the same conditions as existed before work or better. Damages to Town property, other utilities, or adjacent property shall be repaired to the satisfaction of all parties.

Signposts, mail boxes, vegetation, irrigation systems must be restored to the satisfaction of the owner. Site clean up will be part of the inspector's punch list.

# **Inspections**

## **Authority**

The Town reserves the right to inspect progress of construction at any time without notice. The Town's agents have the authority to suspend work and require rework if the permittee does not adhere to the requirements of the permit. The authority to suspend work includes OSHA safety violations observed of the permittee's crews. The Town's agents are the Town Manager or his designees.

## **Disclaimer**

Inspection of the site by an agent of the Town does not relieve the permittee of his or her responsibilities in discharging these requirements. The permittee will always be responsible for maintaining a safe, clean site with work that meets the construction specifications outlined in this specification. Inspection by the Town does not imply a waiver for surety.

## **Final Inspection**

As a minimum, the Town will inspect permittee's site at the completion of the work and provide to the permittee a punch list of outstanding items needing to be addressed. The permittee shall satisfy the requirements of the punch list and another inspection may be scheduled. Failure to comply with the final inspection requirements will cause the Town to invoke the performance bond clause noted in the specification.

## **Grievances**

The permittee may file a grievance against the Town if he or she feels that the Town is acting in an unfair manner or if the

permittee feels that the inspector's requests are out of the scope of the permit's requirements.

The process shown below will be taken to address grievances:

- a. The permittee must call or write a letter to the Town Manager outlining the alleged problems within five business days of the final inspection or other conflict. Safety issues will be taken up immediately at the site to minimize time and expense while promoting safety.
- b. The Town Manager or his designee will arrange a meeting with all concerned parties within five business days of receiving the complaint to review the case. A proposal to resolve the situation will be reviewed by the Town Manager for his decision.
- c. If the permittee is not satisfied with the Manager's decision, the case may be presented to the Town Council in a public meeting.
- d. If the permittee is not satisfied with the Council's decision, the case would be resolved as a suit in civil court.

# **Emergency Cuts**

## **Definition of Emergency**

An emergency is a repair required immediately to ensure the public safety and restore disrupted services for the benefit of citizens at large. Examples of emergencies are: a broken water main, gas line leak, or a damaged power or telephone cable.

## **Emergency Procedures**

Repair procedures may begin immediately following emergency blue staking by the Town and other utilities. Site safety, including traffic control, remains a primary goal during repair procedures. A permit application must be submitted to the Town Hall the following business day.

## **Assistance**

Applicants needing assistance in filling out the permit application or interpreting these requirements may receive help from the Town's staff during normal business hours at the Thatcher Town Hall at 3700 West Main in Thatcher, Arizona or by calling 928-428-2290. *The Town's designated agents will make themselves immediately available for conflicts or concerns involving safety.*



## **Appendix 1: Permit Application**

*Town of Thatcher – Public Works Department*  
**Underground Work Permit**

Permit No. \_\_\_\_ - \_\_\_\_\_

Applicant Information

Applicant's Name: \_\_\_\_\_

Organization/Company Name: \_\_\_\_\_

Telephone No.: \_\_\_\_\_ Fax No.: \_\_\_\_\_

Mailing Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_ Zip Code: \_\_\_\_\_

Are you the party to perform the work (Y/N)? If not, name and address of performer: \_\_\_\_\_  
\_\_\_\_\_

Project Information

Start Date: \_\_\_\_\_ Completion Date: \_\_\_\_\_

Purpose of Opening:

\_\_\_\_ New Construction

\_\_\_\_ Repairs

\_\_\_\_ Removal of Abandoned Work

\_\_\_\_ Other: \_\_\_\_\_

Type of Opening:

\_\_\_\_ Open Trench

\_\_\_\_ Trenchless

Location of Work: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Agreement

In consideration of being permitted to make such street opening and excavation as noted, I hereby agree that I will faithfully comply with the terms of this permit, including the Special Provisions. By signing this application for permit, I state that I have read, understood, and agree to follow the "Permit Requirements and Specification for Underground Work within Town Right-of-Way" as available from the Thatcher Town Hall at 3700 West Main, Thatcher, Arizona, including the indemnification clause.

\_\_\_\_\_  
Signature of Applicant

\_\_\_\_\_  
Title of Applicant (please print)

\_\_\_\_\_  
Date of Application

>>>>>>>>> TO BE COMPLETED BY TOWN STAFF <<<<<<<<<<

Attachments Included: \_\_\_ site sketch, \_\_\_ bond, \_\_\_ insurance

Fee Required:

Waivers Granted:

\_\_\_ No

\_\_\_ No

\_\_\_ Yes \$ \_\_\_\_\_

\_\_\_ Yes \_\_\_\_\_

Special Provisions: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Approved by: \_\_\_\_\_ Date: \_\_\_\_\_

Date Applicant Notified: \_\_\_\_\_

Final Inspection by: \_\_\_\_\_

Date of Final Inspection & Tentative Acceptance: \_\_\_\_\_

## **Appendix 2: Construction Details**

## **Appendix 3: References**

## References

1. ADOT Construction Manual (2010)  
Arizona Department of Construction  
Engineering Records  
1655 West Jackson  
Phoenix, Arizona 85007
2. ADOT Standard Specifications for Road and Bridge Construction (2008) Same address as no. 1 above.
3. Uniform Standard Specifications for Public Works Construction (2010)  
Maricopa Association of Governments  
302 North First Avenue, Suite 300  
Phoenix, Arizona 85003  
602-452-5036
4. Uniform Standard Details for Public Works Construction (2010)  
Same address as no. 3 above.
5. Wisconsin Transportation Bulletin No. 17: “Managing Utility Cuts”  
Transportation Information Center  
University of Wisconsin at Madison  
Department of Engineering – Professional Development  
432 North Lake Street  
Madison, Wisconsin 53706  
800-362-3020

## **Appendix 4: Revisions**

## Revisions

<u>No.</u>	<u>Description</u>	<u>Date</u>
0	First Issue for Public Use	6 Jul 1998
1	Revision of Contacts & Specifications	8 Jul 2010