# TOWN OF SILVERTHORNE **EXCAVATION PERMIT PROCESS AND STANDARDS**

Adopted: March 23, 1994 (Ordinance #15)

Effective: April 22, 1994

## Section 1: Excavation and Encroachment Permit Requirements

## 1.01 Purpose and intent

Excavation and encroachment permits shall be obtained whenever a developer, contractor, property owner, utility company or other individual proposes to install utility lines, landscaping, culverts in Town road right-of-way or proposes to obtain access from a Town street. Utilities include water, sewer, natural gas, electricity, telephone and television cable lines. Excavation and encroachment permits are required to assure the method of installation meets the specifications in these regulations, allows for proper drainage and adequate revegetation of disturbed area outside the roadway is done. They are also intended to assure adequate reconstruction and/or repair of any damage caused to Town roads or road right-of-way.

## 1.02 Permit Required

It shall be unlawful for any person, other than an officer or employee of the Town in the course of his employment, to make, cause or permit any construction in, on, under or within a public way of the Town unless such person shall have first obtained a uniform excavation and encroachment permit from the Town Engineer or his authorized agent, and unless such construction performed in conformity with the permit, and the terms, and provisions of this manual. Included herein is construction on private property which extends onto or directly affects any public way of the Town.

## 1.03 Requirements for Performance Guarantee

Any permittee proposing to install utility lines, landscaping, culverts in Town road right-of-way or proposes to obtain access from a Town street shall secure to the Town a surety bond, irrevocable letter of credit, or security in some form acceptable to the Town for the amount of \$2000.00, per physical address, to guarantee the construction and performance for a period of two (2) years following issuance of the certificate of substantial completion by the Town Engineer. A permittee may provide to the Town a surety bond in the amount of no less than \$25,000.00 to cover all potential work within the Town limits. The Town Engineer reserves the right to have the permittee increase this surety bond amount. The \$25,000.00 surety bond must be valid for a period of two (2) years from October 31 of the year issued. Upon completion of the work, excavation backfill, pavement, revegetation, and cleanup in accordance with the standards and specifications determined by the Town Engineer, the permittee may ask for a certificate of substantial completion from the Town Engineer. If the work and installation are not completed as stated and in accordance with the standards and specifications determined by the Town Engineer, the Town shall give written notice of the defects to the permittee at least 30 days subsequent to the expiration date of the bond. The notice shall also state that the bond will be called unless satisfactory corrective work is done within 10 working days of the notice. If satisfactory corrective work is not done within the required time limit, the work shall be in default and the Town shall call the bond.

Utility Companies with franchise agreements with the Town, and utility companies providing telephone, telegraph, and wireless communications to the general public may be exempt from providing security for the guarantee and performance of work with the approval of the Public Works Department.

## 1.04 Contractor Insurance Requirements

All excavators shall submit with the original application a certificate of insurance coverage verifying at least one million dollars (\$500,000.00) personal injury and one million dollars (\$500,000.00) property damage coverage.

## 1.05 Permit issuance Requirements

No person or company shall be eligible to apply for or receive an excavation permit unless: Such person or company will actually perform the excavation work for which the permit is sought, and such person or company has a valid, unexpired, business license from the Town.

### 1.06 Procedures and Requirements for Issuance of Road Cut/Encroachment Permits

The following procedures must be followed and requirements met in the review of applications for Excavation and Encroachment permits.

## 1.07 Submittal Requirements for Excavation and Encroachment Permits

The following information must be submitted with any application for a excavation and encroachment permit, unless specific items are waived by the Town Engineer as unnecessary.

- 1. Permit fee in the amount of \$100.00
- 2. Completed permit form
- 3. For minor installations, sketch plan showing the following:
  - a. location of all excavations using dashed lines
  - b. location of road and road right-of-way
  - c. location of any driveways
  - d. existing structures, if any
  - e. traffic control plan
- 4. For major installations, construction plans and specifications
- 5. Construction schedule
- 6. Evidence of valid Town of Silverthorne business license
- 7. Acceptable security for the bonding requirements.
- 8. Proof of workmen's compensation, personal injury, and property damage coverage

## 1.08 Action on Excavation and Encroachment Permits

Applications for excavation and encroachment permits will only be accepted between May 1, and October 31. Any potential permittee desiring to obtain a permit shall make written application therefor to the Public Works Administrative Secretary. Dates may be extended by the Town Engineer or his authorized agent.

Applications for excavation and encroachment permits shall be submitted a minimal of five working days prior to planned commencement of construction for minor installations and ten days prior to major installations. Construction cannot commence without permit approval. The Public Works Department is responsible for review of applications for excavation and encroachment permits. Consideration shall be given to how the proposed installation affects Town road maintenance and improvement programs.

Approval shall be granted only if the proposed installation meets the specifications in these regulations, the required fee has been paid, and surety has been posted if required. Approval of an excavation and encroachment permit may be accompanied by any conditions deemed reasonable by the Public Works Department to insure protection of health, safety, and welfare and compliance with these regulations.

The excavation and encroachment permit must be signed by the Town Engineer or his agent for it to be approved.

## 1.09 Construction Specifications and Schedule for Road Cut Work

All work undertaken within the Town road right-of-way shall conform to the requirements contained in these regulations, and to approved plans and specifications. In issuing excavation and encroachment permits, the Public Works Department shall also approve a construction schedule. The approved construction plans, specifications, and schedule cannot be changed without the written consent of the Town Engineer, except in emergency situations as provided under section titled "Emergencies".

## 1.10 Emergencies

If a true emergency exists where time is not available to follow the procedures for obtaining an excavation and encroachment permit or for making modifications to the approved plans, specifications, and schedule, excavator may proceed with excavation work after obtaining verbal approval from the Town Engineer or his agent. Excavator shall obtain a permit and provide surety as soon as possible.

## 1.11 Expiration of Excavation and Encroachment Permits

The excavation and encroachment permit is valid for the construction season issued.

## 1.12 Posting of Excavation and Encroachment Permits

Excavation and Encroachments permits shall be kept at the site of the excavation while the work is in progress and shall be exhibited upon request to any police officer or other authorized representative of the town.

## 1.13 Procedures for Road Closures During Excavation and Encroachment Work

Road closures to accommodate road cut work are not permitted unless justified on the basis of overall benefit to the general public. Requests for road closures shall be specified on the permit form submitted by the applicant, and no road closures shall be undertaken unless approved as part of the road cut permit issued by the Public Works Department. When road closures have been approved, the permittee shall use the following procedures:

- 1. Submittal of Plans and Schedule for Closures: At least five days prior to actual closure, the permittee shall obtain approval from the Public Works Department for a detailed traffic control plan. This plan must be based on the current Colorado Department of Transportation "S" Standards. In addition, immediately prior to actual closure, the permittee shall verify the schedule and location of road closures.
- 2. Notification of Closures: The day of the actual closure, the permittee shall notify Police Dispatch at 453-6222 of the exact location, and time traffic will be impeded. Permittee shall be responsible to provide public notification when requested by the Town Engineer or his authorized agent.
- 3. Time of Closures: Detours: Road closures are only permitted between the hours of 7:00 a.m. and 7:00 p.m. unless authorized otherwise by the Public Works Department. Where closures of more than one day are approved, a suitable detour must be provided, and must be marked and signed to accommodate night traffic.

## 1.14 Protection of Public Safety and Convenience

The permittee shall at all times conduct excavation and encroachment work to ensure the least possible obstruction and hazard to the traveling public. The permittee shall provide for the safety and convenience of the residents along roads

where work is being done, and for the protection of persons and property at all times. Adequate warning signs, barricades, lighting, flags, and other devices as specified in the <u>Manual of Uniform Traffic Control Devices</u> and the <u>Colorado Department of Transportation "S" Standards</u>, and as approved by the Public Works Department, shall be provided, maintained, and paid for by the permittee. Flagmen shall be posted to guide the traveling public where only one traffic lane remains open, or through otherwise unsafe operations. Any trenches approved to be left open over night on public property shall be fenced and barricaded with flashing lights.

Noise, dust, and debris shall be kept to as low a level as practicable.

Excavation and encroachment work authorized by a permit shall be performed between the hours of 7:00 a.m. to 7:00 p.m. Monday through Friday (except holidays), unless the contractor obtains written consent from the Town Engineer to do the work earlier or later than the stated hours or on a weekend or holidays.

## 1.15 Construction Procedures for Excavation and Encroachment Work

The permittee shall plan excavation and encroachment work so it does not create safety hazards or maintenance problems, render portions of right-of-way unusable for future road improvement, or obstruct major floodways.

### 1.16 Compliance with Safety Standards

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

### 1.17 Staging of Installations

Staging of utility installations may be required by the Public Works Department to produce the least disruption possible for the traveling public. A permit for any subsequent stages may not be issued until the prior stage has satisfactorily progressed or been completed.

## 1.18 Installation of Utilities

All utilities shall be installed in accordance with the plans and specifications approved by the utility owner and the Town Engineer. Where applicable, the plans for installation must bear the name, seal and signature of a registered professional engineer responsible for their preparation. The alignment of all utilities within Town rights-of-way is subject to approval by the Town Engineer.

- 1. Underground Utilities: All accesses to underground utilities from the road surface (e.g. manholes, vaults) shall be of heavy duty construction capable of safely supporting anticipated maintenance equipment and vehicular traffic. The level of these accesses shall conform to 1/4" to 1/2" below the finished grade of the road.
- 2. Aboveground Utilities: All aboveground utilities shall be located and installed so it does not cause unnecessary obstruction to pedestrian and vehicular traffic or damage to the utility itself. No pole or structure above ground shall be placed within a pedestrian walkway nor set closer than ten feet to the shoulder of any Town road. A lesser distance, however, may be allowed if insufficient cleared right-of-way is available to meet this minimum distance. In no case will a pole be permitted within ten feet of the travel lane of a Town road except light and traffic control poles with breakaway bases. Maintain a minimum of ten feet from fire hydrants and water valves.

## Section 2: Standards and Specifications

## 2.01 Trenching, Backfill and Reconstruction of Road Surfaces

The method used in trenching for underground utilities, for backfilling trenches, and installing culverts shall comply with the specifications contained in these regulations. Upon completion of installation, the roadway shall be reconstructed using the specifications contained in these regulations for subbase preparation, base course materials, thickness and compaction, and final surfacing so as to restore the roadway to current construction standards for that type of road. All installations, backfill materials, and compaction procedures shall be inspected and approved by the Town Engineer prior to backfilling. If the Town Engineer is not notified prior to backfilling, then permittee shall remove and replace all backfill material at the Town Engineer's request. Permittee is responsible for all expenses incurred for the removal and replacement of the backfill material.

<u>Trench Excavation</u>: Trenches shall be excavated so that pipes can be laid straight at uniform grade, without dips or humps, between the terminal elevations shown on the drawings. Wherever a trench passes through a fill or embankment, the fill or embankment material shall be placed and compacted to an elevation twelve inches above the top of the pipe before the trench is excavated.

1. Trench widths: Trenches shall be excavated to a width which will provide adequate working space and side clearances for proper pipe installation, jointing, and embedding. Provide minimum clearance of;

Clearance	Pipe Diameter
6"	12" or less
8"	14" to 30"
12"	30" or greater

- 2. Excavation Below Pipe Subgrade: Except where otherwise required, pipe trenches shall be excavated below the underside of the pipe to provide for the installation of granular embedding pipe foundation material.
- 3. Pipe Clearance in Rock: Where rock excavation is necessary, over excavate trench bottom minimum of six inches (6") below bottom of pipe for pipe 24 inches in diameter or less and nine inches (9") for pipe larger than 24 inches. Backfill over-excavation with Class 1 granular bedding material.
- 4. Unstable Pipe Subgrade: When wet or unstable material is encountered in bottom of trench, over-excavate to depth suitable for construction of stable pipe bedding. Backfill trench to proper grade with granular bedding material.

## 5. Bedding Material:

### a. Granular Material

For pipe 18" Ø and larger use Class 1 Structure Backfill per CDOT SS 703.8

<u>Sieve</u>	% Passing
2"	100
#4	30 - 100
#50	10 - 60
#200	5 - 20
L.L.≤ 35. PI≤ 6	

For pipe smaller than 18"\( \infty \)		
Sieve		% Passing
3/4"	*	100
3/8"		80 - 100

#4 #200

6. Placement and Compaction: Bedding material shall be spread and the surface graded to provide a uniform and continuos support beneath the pipe at all points between bell holes or pipe joints. It is permissible to slightly disturb finished subgrade surface by withdrawal of pipe slings or other lifting tackle. Depth of bedding shall be 1/4 of the outside diameter of the pipe but not less than 4 inches.

0 - 80

0 - 4

After each pipe has been graded, aligned, and placed in final position on the bedding material and "shoved home", sufficient pipe embedding material shall be deposited and compacted under and around each side of the pipe and back of the bell or end to hold the pipe in proper position and alignment during subsequent pipe jointing and embedding operations. Bedding material shall be deposited and compacted uniformly and simultaneously on each side of the pipe to prevent lateral displacement.

Bedding material shall be compacted to the top of the pipe in all areas where compacted backfill is specified. Minimum depth of bedding material on top of the pipe shall be 12 inches for sanitary sewer pipe and 8 inches for water line pipe.

Whenever class I structure backfill is used as bedding for thirty-six inch and larger pipe, the portion above the bottom of the pipe shall be vibrated with a mechanical vibratory compactor during placement to ensure that all spaces beneath the pipe are filled.

- 7. Compacted Backfill: Compacted backfill shall consist of suitable job excavated-material, finely divided and free from debris, organic material, cinders or other corrosive material, and stones larger than six inches in greatest dimension. Masses of moist, stiff clay shall not be used. Job-excavated materials shall be placed in uniform layers not exceeding 10 inches in uncompacted thickness. The method of compaction and the equipment used shall be appropriate for the material to be compacted, and shall not transmit damaging shocks to the pipe. Job excavated material shall be compacted to 95% of the maximum dry density at optimum moisture content as determined by AASHTO T-99 (standard) for the full depth of the trench. This compaction effort applies to the entire roadway prism which is defined as a slope of 1:1 out and down from the most outer edge of the shoulder. Outside of the roadway prism, job excavated material shall be compacted to 90% of the maximum dry density at optimum moisture content as determined by AASHTO T-99 for the full depth of the trench.
- 8. Flow Fill used as Backfill: If it is in the opinion of the Town Engineer or his authorized agent that flow fill is deemed necessary to replace unsuitable job excavated material the following flow fill specifications shall be used:

<u>Ingredients</u>	<u>Lbs</u>
Cement	50
Course Aggregate (AASHTO No. 57 or 67)	1700
Fine Aggregate (AASHTO M 6)	1845
Water (39 gallons)	325(or as needed)

The amount of water shall be such that the flow fill flows into place properly without excessive segregation. Approximately 39 gallons of water per cubic yard of flow fill is normally needed.

The contractor may use aggregate which does not meet the above specifications if the cement is increased to 100 pounds per cubic yard and the aggregate conforms to the following gradation:

Sieve Size	% Passing
1 inch	100
No. 200	0-10

The contractor may substitute 30 lbs./c.y. of cement and 30 lbs./c.y. of fly ash for 50 lbs./c.y. of cement or may substitute 60 lbs./c.y. of cement and 60 lbs./c.y. of fly ash for 100 lbs./c.y. of cement.

Compaction of flow fill will not be required.

The maximum layer thickness for flow fill shall be three feet. Additional layers shall not be placed until the flow fill has lost sufficient moisture to be walked on without indenting more than two inches. Any damage resulting from placing flow fill in layers that are too thick or from not allowing sufficient time between placement of layers shall be repaired at the contractor's expense.

## 2.02 Culverts

This section covers corrugated metal pipe used for culverts, and storm drains beneath roads. The use of other materials shall be determined by the Town Engineer. Minimum diameter for culverts or storm drain pipe shall be 18 inches or equivalent. Culvert pipe shall be furnished and installed with all jointing materials, accessories and appurtenances as indicated on the drawings and as specified. Minimum grades for culverts shall be 1.00%.

- 1. Corrugated Metal Pipe Materials: Materials used for culverts or storm drains shall conform to the applicable AASHTO provisions of the <u>Standard Specifications for Highway Materials</u>.
  - a. Circular Metal Pipe: Corrugated metal pipe shall be AASHTO M 36-78 and galvanized with 2-2/3" x 1/2" corrugations. The corrugations may be annular or spiral with annular ends.
  - b. Coupling Banks: All field joints in corrugated metal pipe will be made with coupling bands, fabricated from the same material as the pipe. Coupling bands for field joints in corrugated metal pipe for all culverts shall be the pipe manufacturer's standard coupling band type.
  - c. End Sections: Flared metal end sections shall be provided on all culverts unless otherwise specified by the Town Engineer. The end sections shall be fabricated from 16 gauge galvanized sheet metal for 24 inch diameter and smaller pipe and 12 gauge galvanized sheet metal for 36 inch diameter and larger pipe. The end sections shall be provided with a rolled reinforced edge and a galvanized top finish plate.
- 2. HDPE (High Density Polyethylene) Pipe Materials: Materials used for culverts or storm drains shall conform to the applicable AASHTO provisions of the <u>Standard Specifications for Highway Materials</u>.
  - a. Circular Plastic Pipe: Corrugated plastic pipe shall be Hancor brand or equivalent.
  - b. Couplings: Couplings shall be as recommended by the pipe manufacturer.
  - c. End Sections: Flared end sections shall be provided on all culverts unless otherwise specified by the Town Engineer. End sections shall be as recommended by the pipe manufacturer.

- 3. Handling: Pipe, couplings, and accessories will be handled in a manner that will ensure installation in sound, undamaged condition. Equipment, tools, and methods used unloading, reloading, hauling, and laying pipe will be such that the pipe is not damaged.
- 4. Cleaning: The interior of the pipe and any couplings shall be thoroughly cleaned of all foreign matter before being installed. Before jointing, all joint contact surfaces shall be wire-brushed, if necessary, wiped clean and kept clean until jointing is completed.

### 5. Installation

- a. Installation Requirements: Corrugated metal pipe shall be laid true to the grade required by the drawings, and shall be installed in accordance with the following requirements:
  - 1. Pipe: The pipe shall be protected from lateral displacement by means of a pipe embedding material as specified for trench backfill. The minimum cover for corrugated metal pipe is 12 inches.
  - 2. Couplings: Sections of the corrugated metal pipe shall be joined together using metal coupling bands, centered on the joint, and with the pipe sections as closed together as possible. Each coupling band shall be bolted in placed and tightened sufficiently to ensure a tight joint and to form a continuous conduit capable of resisting all stresses. Pipe shall not be laid in water or under unsuitable weather or trench conditions.
  - 3. End Sections: The end sections shall be attached to the culvert by threaded rod and connecting lug.
  - 4. Rip-Rap: Size of rip-rap bed and size of the rip-rap shall be determined from the <u>Drainage Criteria Manual</u> provided by the Urban Drainage and Flood Control District, Denver Colorado. The rip-rap shall consist of hard, dense, sound, rough fractured stone as nearly cubic as practical. Slab type stones and flaking rock shall not be used.
- b. Use of Culverts at Access Point to Roads: Driveways or road connections to a Town road shall not be constructed in such a way as to impede the normal flow of drainage in roadside ditches, culverts, underdrains, bridges or other drainage works, or to cause such drainage to flow onto or across the driving surface of a Town road. In the event that such an impediment results in damage to a Town road, the Public Works Department will remove the impediment and bill the property owner for the costs of repairs to the road, including labor, equipment and material.

In certain instances, a culvert may not be required by virtue of the topography. In that event, a written waiver must be obtained from the Public Works Department. Such a waiver does not constitute a waiver of the permit fee, inspection of the access or any other requirement of the access.

### 2.03 Subgrade

The bottom of the excavation or top of the fill is considered the subgrade, and shall conform to the lines, grades, and cross sections shown on the plans.

1. Subgrade Specifications: Soft, spongy or frozen subgrade shall be removed as directed and replaced with suitable granular material placed and compacted to 95% of the maximum dry density at optimum moisture content as determined by AASHTO T-99.

2. Compaction: Before subbase construction begins, soils in the subgrade shall be compacted to at least 95% of the maximum dry density as determined by AASHTO Method T-99 and the moisture content must be no more than 3% of the "Standard Optimum".

## 2.04 Gravel Roads

Suitable material excavated from trenches may be used for backfill subject to approval of the Public Works
Department. If proper backfill is not available at the site, suitable material shall be imported and unsuitable material
removed from the site. Suitable material shall be determined by the Town Engineer. Backfill shall extend to the
subgrade of the road or to natural ground.

- 1. Gravel Specifications: Gravel used shall be CDOT Class 6 per SS 703.03 Table 703-2. The minimum depth shall be 8 inches. The composite base course and subbase course shall be free from organic and frozen matter, lumps or balls of clay.
- 2. Compaction of Subbase or Base Course: The subbase or base course shall be placed and spread in a uniform layer and without segregation of size to a depth not exceeding eight inches of uncompacted material. The material will be compacted to at least 100% of the maximum dry density at optimum moisture content as determined by AASHTO Method T-99.
- 3. Manholes: On gravel roads where manholes or water valve boxes are located in the roadway, they must have a minimum of five inches of cover at finished grade.

### 2.05 Paved Roads

All cuts made in asphalt or concrete surfacing shall be made by mechanically cutting a horizontal and vertical line and shall be cut one foot wider than the edges of the trench or the damaged area. The final pavement cut shall not be made until immediately prior to patching. After acceptance of the backfill by the Public Works Department all excavations made in paved streets shall be completely restored within fifteen (15) calendar days. If the permanent hot bituminous pavement patch cannot be restored within this time limit then the permittee is required to immediately make temporary repairs by tamping and rolling into place a cold mix asphalt patch. The permittee shall then have 30 days to remove the temporary cold mix asphalt patch and install the permanent hot bituminous pavement patch. In the event weather conditions preclude restoration by permanent hot bituminous pavement, a temporary cold mix asphalt patch may be installed. Such cold mix patches shall be removed and replaced by a permanent hot bituminous pavement as weather and availability of materials permit. Permanent hot mix patches shall be no less than 3 inches in thickness or not less than the thickness of the pavement adjacent to the excavation, whichever is thicker. Permittee shall be responsible for the maintenance of the cold mix asphalt patch.

- 1. Base Course Specifications: Placement of base material shall be to a depth of no less than 8 inches. Base material shall be free from organic and frozen matter, lumps or balls of clay. When placed and compacted, it shall result in a firm, dense, unyielding foundation. Base material shall meet CDOT Class 6 specifications per SS 703.03 Table 703-2.
- 2. Compaction of Base Course: Base material shall be deposited and spread without particle segregation in loose layers not to exceed 6 inch in depth or when compacted, the layer shall have a thickness not to exceed four inches. The material shall be compacted to at least 100% of the maximum dry density at optimum moisture content as determined by AASHTO Method T-99. Base course shall not be placed upon a soft, spongy, frozen subgrade or subbase.

### 2.06 Pavement

- 1. Tack coat: Apply to edges of concrete or existing asphalt where HBP will abut. Apply to bottom mat of HBP just prior to placing top mat or overlay. Protect tack coat surfaces while curing, re-tack any disturbed areas and blot excess with sand before paving. Remove overspray of tack coat from surfaces not to be paved.
- 2. Placement of Hot Bituminous Pavement: Bituminous plant mix shall be placed only on properly constructed and accepted layers that are free from water, snow and ice. Do not place asphalt paving mix when the temperature is below 40°F. The minimum placement temperature is 235°F.
- 3. Pavement Thickness: Replacement pavement shall match the existing adjoining pavement but not less than 3 inches.
- 4. Final Compaction: Final compaction shall result in a course which is smooth and true to the established crown and grade. It shall have the average thickness specified and shall at no point vary more than 1/4 inch from the thickness specified. Any mixture that becomes loose and broken, mixed with dirt, or in any way defective, shall be removed and replaced with fresh hot mixture, which shall be compacted to conform with the surrounding area. The surface of the finished pavement shall be free from depression exceeding 1/2 inch in ten feet as measured by a ten foot straight edge measured in any direction.
- 5. Testing after Final Compaction: The asphalt pavement shall at no point have a density less than 95% of the determined Marshall stability (50 blow).

## 2.07 Inspection and Testing of Excavation and Encroachment Work

Adequate inspections ensure compliance with the Town requirements and are the basis for release of maintenance responsibility and/or for release of any bond. It is the responsibility of the permittee to contact the Public Works Department one day in advance of required inspections. In-progress inspections of all elements of work will eliminate the need for extensive post testing. In making inspections, the Public Works Department shall check for compliance with these regulations and approved plans, and also for adequate cleanup of roadway surfaces and the right-of-way.

Any work or material which does not conform to these regulations, any pavement failures or broken asphalt, damaged signs or fencing, any remaining debris either in the roadway or adjacent property, or improper drainage, shall be brought to the attention of the permittee both verbally and in writing. Any work in which untested or unaccepted materials are used shall be ordered removed and replaced at the permittee's expense. If immediate corrections are not made, further project construction shall be stopped. The acceptable tolerance for surface settlement will be no greater than 1/2" inch measured vertically from a straight edge projected in any direction across the patch

Determination of whether or not road cut work done by the permittee complies with these regulations is solely left to the discretion of the Town Engineer. If it is decided testing is required to ascertain compliance, the most recent standard methods of AASHTO or ASTM shall be used and conducted by an independent testing firm. If the testing determines that the road cut work has passed then the permittee shall not be responsible for the testing expense. If the testing determines that the road cut work has failed then the permittee shall be responsible for the cost of the testing and any additional testing required to bring the road cut work to standard.

If the permittee maintains his own testing equipment and qualified personnel, the requirement for an independent testing firm may be waived by the Town Engineer. Copies of test data shall be furnished to the Public Works Department in a timely manner.

## 2.08 Responsibility for Corrective Work Upon Completion of Excavation and Encroachment Work

The permittee shall be fully responsible for the maintenance and correction of any faulty construction, including unstable road cuts and chuckholes 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 resolved to the satisfaction the Public Works Department. Failure to do so could be cause for denial of future excavation and encroachment permits or call of the permittee's bond.

## 2.09 Guarantee Period for Excavation and Encroachment Work

The permittee shall be responsible for a period of two years after completion of road cut for any maintenance or repair necessary to keep the roadway in an acceptable condition. The Town shall retain the permittee's bond for the guarantee period to insure any required corrective work is done.

### 2.10 Changes Affecting Utilities

Future changes to Town roads may require the relocation or removal of utility installations. For minor changes, the affected utility company shall complete the relocation or removal within thirty days after notification by the Public Works Department. For major utility relocation projects involving extensive design, securing of contracts or materials orders, the affected utility company shall complete the relocation or removal within ninety days of approval from the Public Works Department for the final design. To avoid the necessity for such changes, utility companies are encouraged to locate their facilities consistent with future plans for Town roadways.