

County of Schenectady
Department of Engineering & Public Works

100 Kellar Avenue
Schenectady, NY 12306

Engineering Department: (518) 356-5340
Fax: (518) 356-9077

Highway Work Permit

**Application to Perform Work within
Schenectady County Right-of-Way**

Instructions and Form

Submit one copy (photocopies acceptable)

**Schenectady County Department of Engineering & Public Works
Highway Work Permit Application**

PERMITTEE:

Application is hereby made for a highway work permit:
(Contractor or Representative)

Name: _____

Address: _____

City _____ State _____ Zip _____

Applicant Telephone No. _____

Contact Person in case of emergency _____

Telephone No. of contact person _____

**COMPLETE BOTH PAGES OF
APPLICATION**

PROPERTY OWNER ADDRESS BELOW

Name _____

Address: _____

City _____ State _____ Zip _____

Return of deposit/bond
(Complete only if different from permittee)

Name _____

Address _____

City _____ State _____ Zip _____

**COMPLETE BOTH PAGES OF
APPLICATION**

Project Location and Description

Location: County Road Name _____ County Road No. _____

Nearest Cross Street or intersection _____

Town of: _____

Attached: Plans _____ Specifications _____

1. Estimated cost of work being performed in Schenectady County right-of-way \$ _____

2. Anticipated duration of work: From _____ 20____ thru _____, 20____

3. Protective Liability Insurance covered by Policy No. _____; expires on _____

Summary of Work: _____

Applicant Signature _____ Date _____, 20____

Permission is hereby granted the applicant to proceed as set forth and represented in the foregoing application and at the particular location described therein, in accordance with the map and plans hereto attached, and in accordance with the specifications, drawings, conditions and instructions showing requirements for performing work as prepared by the County Highway Superintendent or County Engineer and attached hereto and pursuant to the conditions and regulations, whether general or special, as set forth on the attachments included in this permit form.

Approved by _____ Title _____ Date _____, 20____

Job Inspected By _____ Title _____ Date _____, 20____

DURATION OF PERMIT: 90 DAYS

FEE SCHEDULE

TYPE OF WORK TO BE PERFORMED	Plan Review Fee	√	Construction Permit Fee	√	Total
COMMERCIAL OR RESIDENTIAL ACCESS					
Residential Driveway, Single dwelling – New	\$0		\$35		
Residential Driveway – Resurface/Enlarge	\$0		\$35		
Commercial Entrance – New/Minor (< 300 lin. ft. frontage or 3 dwellings)	\$50		\$50		
Commercial Entrance – New/Major (> 300 lin. ft. frontage or 3 dwellings)	\$200		\$300		
Commercial Entrance – Repair or Repaving	\$100		\$100		
Subdivision – (Three Lots/dwellings or Greater) or New Local Road/Public St.	\$100		\$200		
Construction Entrance – Temporary-Residential	\$0		\$50		
Construction Entrance – Temporary-Commercial	\$100		\$100		
UNDERGROUND INSTALLATION BY PUSHING/BORING OR OUT-OF-PAVEMENT EXCAVATION					
Water Main, Sewer Main, or Storm Sewer	\$100		\$100		Length > 200' add \$0.50 per foot
Pipe in Roadside Ditch	\$100		\$100		
Gas Main / Duct / Buried Cable	\$100		\$100		
Service Lateral Connection	\$50		\$50		
UNDERGROUND INSTALLATION WITH CUTTING OF PAVEMENT					
Water Main, Sewer Main, or Storm Sewer	\$100		\$100		
Pipe in Roadside Ditch	\$100		\$100		
Gas Main / Duct / Buried Cable	\$100		\$100		
Culvert Crossing w/Sectional Area >7.0 square feet	\$100		\$100		
HAUL PERMITS - OVERWEIGHT /OVERSIZED VEHICLES					
Hauling Permit; oversized or overweight (\$100 per road)	\$0		\$100 per road		
MISCELLANEOUS USES OR ACTIVITIES					
Tree Work	\$0		\$50		
Road Closing/ Detour	\$0		\$250		
Storm Sewer Connection at Private Lands; Minor < 6"φ	\$50		\$100		
Storm Sewer Connection at Private Lands: Major > 6"φ	\$100		\$300		
County Highway Relocation	\$200		\$500		
Full Depth Shoulder Reconstruction	\$100		\$250		
Replace Existing Culvert	\$0		\$50		
Modify Existing Residential Access	\$0		\$50		
Test Pits or Soil Borings on Right-of-Way	\$50		\$100		
AMOUNT DUE					
TYPE OF CONSTRUCTION OR ACTIVITY		DEPOSIT			
Driveway Installations		\$200			
Piping Roadside Ditches		\$200			
Open Cut at Shoulder		\$1,000			
Open Cut Pavement; one lane or less		\$3,000			
Open Cut Pavement, more than one lane		\$6,000			
Subdivision; Local Road / Public Street		\$3,000			
Commercial Entrance: New/Major		\$4,000			
Bores		\$1,000			

We require **TWO** separate **CERTIFIED** checks or **POSTAL MONEY ORDERS** for the Fees and Deposits. Checks or Money Orders shall be made out to: Schenectady County Commissioner of Finance and mailed to: 100 Kellar Avenue, Schenectady, New York, 12306.

Plan Review Fee: \$ _____ Check No.: _____ Bank (Name): _____

Construction Permit Fee: \$ _____ Check No.: _____ Bank (Name): _____

Deposit: \$ _____ Check No.: _____ Bank (Name): _____

Insurance Company: _____

Bond Amount: \$ _____ Bonding Company: _____ Bond No.: _____

INSTRUCTIONS FOR COMPLETING THE APPLICATION FOR SCHENECTADY COUNTY HIGHWAY WORK PERMIT

FRONT OF APPLICATION

An Applicant may not have all pertinent information at the time of completing the application form since certain information relative to fees, insurance and guarantee deposits may be contingent upon determinations to be made by the Department. In such cases, the information may be left blank and remittance withheld until the Department determines the information.

Please complete the following:

- Permittee's (Applicant) name and address.
- Land Owner, Utility or Municipality's name and address
- Applicants telephone number. A telephone number where applicant can be contacted concerning the application. Please include area code.
- Provide County road name and number (if known) where project is located.
- Provide nearest cross street or intersection to the proposed project site.
- Provide name of city, town or village project is located in.
- Plans and specifications should accompany this application for any work that involves construction within the County highway right-of-way. Place a check mark on the lines for plans and specifications if they are attached.
- Estimate the cost of work to be performed in the County right-of-way and place this figure on the blank line.
- Provide your own protective liability insurance policy no. and expiration date.
- Give a brief description of the proposed work that is to be done under this permit.
- Signature of Applicant (permittee) and date.

BACK OF APPLICATION

- Check type of work that will be performed.
- Show total amount of deposit or bond required in last column.
- Show total amount of permit fee and deposit, if applicable.
- Indicate check numbers of permit fee and guarantee deposit along with bank names on checks.
- Provide name of insurance company providing protective liability insurance.

Shaded areas will be completed by the County.

Remove application form from packet and submit two copies to the Schenectady County Engineering Department for approval.

TYPICAL PERMIT SEQUENCE

Typical sequence for permit issuance and administration;

1. Permittee contacts the County Bureau of Engineering about work to be performed at the County highway system. Applicant provides municipally approved site plan or subdivision drawings or other information, including maintenance and protection of traffic plans, regarding the details of work proposed.
2. As needed, County engineer inspects the area of work and advises any additional requirements, conditions or materials.
3. Upon acceptance of plan by County engineer, the permittee provides the fee, deposit or bond, insurance certificate together with the completed application for issuance by the County.
4. Upon receipt of County permit (and all other approvals) permittee may commence work and shall permit County inspection at any time during the course of work. The applicant has full responsibility for maintaining site and traffic safety at the work area
5. Upon completion, permittee contacts County for final inspection. If the work is found satisfactory, including restoration of surfaces and drainage, then the engineer notes acceptance on copy of permit. Engineer directs staff to send voucher for return of deposit, or to release bond held by County Attorneys Office.
6. Permittee returns completed and signed voucher to Bureau of Engineering to be processed for payment. Payment sent by mail within 30 days of return of voucher.

NOTE: It is strongly recommended that the permittee contact the Underground Facilities Protection Corporation (UFPO) and other utilities for field location of utilities at work site. Telephone 1-800-962-7962. Be advised that not all utilities are participating in the UFPO location program.

**CONDITIONS & REGULATIONS PERMIT
TO PERFORM WORK WITHIN COUNTY RIGHT-OF-WAY**

FAILURE TO OBTAIN A PERMIT OR FAILURE TO COMPLY WITH THE TERMS OF A PERMIT MAY RESULT IN THE HALTING OF THE ACTIVITY FOR WHICH A PERMIT IS REQUIRED AND WILL BE CONSIDERED IN VIOLATION OF BOOK 24, SECTION 136 OF THE NEW YORK STATE HIGHWAY LAW, PUNISHABLE BY A FINE OF UP TO \$1000.00 FOR EACH DAY OF SUCH VIOLATION.

**Section 1
PERMITS**

- I. General
 - A. All work performed in a public right-of-way shall require the issuance of a highway work permit. Permits shall be obtained 48 hours prior to construction, except in the case of an emergency. In the case of an emergency a delay of 48 hours is granted excluding holidays and weekends, following the beginning of such repair before the permit for the same shall be in violation of New York State Highway Law.
 - B. Any permit issued shall pertain only to excavating or constructing within the County right-of-way and is in no way a permit to enter any private property adjacent to such right-of-way or easement or to alter or disturb any facilities or installations existing within the right-of-way and which may have been installed and are owned by others.
 - C. The County Engineer or Highway Supervisor is authorized to inspect all work performed under the permit, including, but not limited to clearing and grubbing, compaction of subgrade, base and asphalt, forms, concrete work, structures, and materials to be used. The Engineer or Supervisor is present on site to advise contractors of these standards. The inspector has authority to reject defective materials and workmanship.
 - D. No permits will be issued for roadway cuts on newly paved or overlaid roads for a period of two (2) years, unless approved in writing by the County Engineer or Supervisor. Services to new construction will be evaluated case by case. Emergency cuts will be permitted in accordance with requirements listed in this permit application.
 - E. Failure of the applicant to comply with any of the terms and conditions of the permit shall be sufficient cause for cancellation of the permit and may cause for the refusal of future permits. The permit, the privileges granted by the permit and the obligations of the permittee shall be binding upon the successors and subcontractors of the permittee.

- F. Exploratory test holes made to determine location of existing utilities and/or geotechnical information shall be charged the fee as set forth in the schedule. The permit fee will be based on each test hole. At the County Engineer or Supervisor's discretion, the fee may be waived for up to three test holes used in conjunction with boring.
- G. This permit shall not be assigned or transferred without the written consent of the County Superintendent of Highways or his Representative.
- H. The work authorized by this permit shall be performed to the satisfaction of the County Superintendent of Highways or his Representative.
- I. The Permittee shall submit to the said County Superintendent of Highways a detailed plan of any structures to be built with a description of the proposed method of construction before any work hereunder is started. This shall include such details as measurements of driveways with relation to nearest property corners as well as dimensions of driveway width. A description of the proposed method of construction will be included. Driveway plans should be prepared in accordance with the POLICY AND STANDARDS FOR ENTRANCES TO STATE HIGHWAYS.

II. TIME

- A. Permits, when issued, shall be valid for a period of ninety (90) calendar days, and may be renewed for one (1) additional ninety (90) calendar day period, providing the renewal is obtained (renewal may be obtained by telephone or fax) prior to the expiration date of the permit. Failure to obtain a renewal as stated herein will require the obtaining of a new permit and payment of all applicable fees. In the case of long-term projects, further extensions may be granted on a project by project basis.

III. Fees & Deposits

- A. The fees for permits are specified on the back of the permit application. All fees for permits shall be paid with a certified check or postal money order and are non-refundable. Certified checks and money orders shall be made out to the Schenectady County Commissioner of Finance.
- B. Permits, when issued, shall be valid for a period of ninety (90) calendar days, and may be renewed for one (1) additional ninety (90) calendar day period, providing the renewal is obtained (renewal may be obtained by telephone or fax) prior to the expiration date of the permit. Failure to obtain a renewal as stated herein will require the obtaining of a new permit and payment of all applicable fees. In the case of long term projects, further extensions may be granted on a project by project basis.

C. Payment of all fees shall be received upon application for the permit.

IV. Refunds of Fees

A. The permit fee itself is not subject to refund, however at the discretion of the County Engineer or Supervisor, the permittee, in those instances where the proposed work is not accomplished through no fault of the permittee, may receive credit toward future permits.

V. Deposits

A. Deposits in the form of a money order or certified check may be accepted for smaller size projects. Deposits accepted for road cuts will be retained for the two-year warranty period required by this permit. Deposits for all other projects will be returned at the completion of the project as long as all permit requirements have been satisfied.

VI. Exception to Deposits and Fee Schedules

A. Public utility companies making twelve applications or more per year may, in lieu of the deposit hereinbefore mentioned, deposit with the County of Schenectady its bond or surety company bond approved as form, manner of execution and sufficiency by the Department of Law of the County of Schenectady, which bond shall be retained as security for the faithful performance by the applicant of all the terms, agreements, covenants and conditions of the permit on the applicant's part to be done or performed which said bond shall be in an amount to be determined by the County Superintendent of Highways but in no case shall the face amount of the bond be less than Five Thousand Dollars (\$5,000.).

B. Any city, village, town, public improvement district or other municipality may, in lieu of making the cash deposit hereinabove first mentioned, file with County Superintendent of Highways a certified copy of a resolution duly adopted by the governing board of such municipality which said resolution shall guarantee faithful performance by said municipality of all the terms, agreements, covenants and conditions as set forth in the permit. SAID RESOLUTION SHALL BE IN A FORM PRESCRIBED BY THE COUNTY AND SHALL BE EFFECTIVE FOR A FIVE (5) YEAR TERM. AT THE TERMINATION OF EACH FIVE YEAR PERIOD, THE LOCAL GOVERNING BOARD SHALL BE REQUIRED TO ENACT A SIMILAR RESOLUTION FOR THE NEXT SUCCEEDING FIVE YEARS.

VII. Insurance Requirements

A. The said Permittee shall be responsible for all damages resulting in bodily injury, including death, and/or property damage liability due to activities of

the permittee, its Contractors, Subcontractors of either or both, agents or employees in connection with any act or omission hereunder, and does hereby expressly agree to indemnify and save harmless the County and/or the County Highway Department and/or the County Superintendent of Highways and his Representatives and employees from claims, suits, actions, damages and costs of every name and description arising out of or resulting from any act or omission hereunder as hereinafter set forth.

- B. The Permittee shall furnish with the foregoing application a policy of protective liability insurance issued as herein before set forth covering the liability of the County of Schenectady, with respect to all operations under this permit by the Permittee or by anyone acting by, through or for the Permittee, including omissions and supervisory acts of the County. The limits of liability in such policy shall not be less than \$500,000 for all damages arising out of bodily injury, including death at any time, resulting therefrom each occurrence and not less than \$1,000,000 for all damages arising out of injury to or destruction of property during the policy period. Such policy shall state that it will not be changed or cancelled until (10) days written notice has been given to said County of Schenectady.
- C. The enumeration in this permit of the kind and amount of insurance shall not abridge, diminish or effect the Permittee's legal responsibilities for the consequences of accidents arising out of or resulting from the operations of the Permittee under this permit.
- D. The above named Permittee hereby certifies that it has secured workers compensation insurance for the benefit of and will keep insured during the performance of the above described work, such as employees as are required to be insured by the provisions of Chapter 67 of the Consolidated Laws, being Chapter 615 of Law of 1922 and acts amendatory thereof and supplemental thereof.

VIII. Permit Bonds

- A. A non-cancelable permit bond in the amount associated to the following schedule, payable to the County of Schenectady, either as a sole or dual obligee, shall be required in the name of the permittee prior to issuance of any permit. Said bond shall assure that the permittee will comply with all County standards and specifications and shall assure recovery by the County of any expenses incurred, within a period of two years, following the expiration date of the permit, to the amount of said bond, due to failure of the permittee to comply with the provisions of this permit, or to otherwise cause expense to the County as a result of work performed.
- B. Construction cost less than \$10,000, provide Bond for \$10,000 for each permit.

- C. Construction cost greater than \$10,000, provide Bond for Value of Project for each permit.
- D. Projects greater than \$10,000 will require a permit bond for each project for the value of the work performed within the County's right-of-way. The Permittee shall provide the County documentation of the project cost at the time of the application for the permit, for evaluation and approval. The bond shall be from a company licensed to do business in New York and shall be in a form acceptable to the County Attorney's office.
- E. Any permit determined to be without an adequate bond as required under this section, shall be subject to immediate revocation by Schenectady County.
- F. The issuer of the bond shall give the County at least 30 days written notice prior to expiration or cancellation of such bond.
- G. A receipt demonstrating full payment of the bond shall be filed with the County.

IX. Display of Permits at Work Site

- A. Unless otherwise authorized, permits shall be kept at the work site or designated field office at all times and shall be made available for inspection upon request of any police officer or any authorized employee of the County of Schenectady authorized to enforce these rules.

X. Orders

- A. Except as otherwise provided by these rules, a person to whom an order is directed shall have an opportunity to be heard within five business days after a timely request for such opportunity is received by the Department. A request shall be made within the time and in the manner directed on the order. If, after considering the written objections of the respondent, The Director of Engineering affirms the order, the work required by the order shall be completed within 30 days after notice of such determination is mailed to the respondent.
- B. Notwithstanding the foregoing provision, an order to cease and desist may be given orally or in writing to the persons executing the work and shall require immediate compliance therewith.
- C. In accordance with Book 24, Section 136 of the New York State highway Law, where a respondent fails to comply with an order issued by the Director of Engineering, including an order to cease and desist, within the

applicable time, the Director may execute the work to be executed in such order. All costs and expenses of the County for such work may be recovered from the persons who are found to be liable for the violation.

- D. In addition, failure to comply with an order issued by the Director may result in civil penalties in accordance with Book 24, Section 136 of the New York State Highway Law.

XI. Road Closures/ Detour

- A. There shall be no “Road Closures” or “Detours” of Schenectady County roads without prior written consent of the Engineer or Supervisor. All such requests for road closures or detours must be received five days prior to beginning the project and shall be accompanied by a detailed traffic control plan, which meets the requirements set forth in the latest “Manual of Uniform Traffic Control Devices.”
- B. In the event of an “emergency”, a road may be closed or be used as a detour route only long enough to complete the repair in compliance with all Schenectady County road repair requirements. The permittee shall be required to meet all traffic control standards set forth in the latest “Manual for Uniform Traffic Control Devices,” regardless of the time of day or night. The Engineer or Supervisor shall be notified within twenty-four hours of the emergency.
- C. The permittee shall notify all appropriate agencies (i.e. Local Police, State Police, Sheriff, Fire Department, Schools, etc.) before any road is closed.

XII. Safety

- A. All of the current requirements of the following shall apply: Occupational Safety & Health Administration; Federal Department of Labor; Accommodation of Utilities within State Right-of-Way; New York State Department of Labor; Industrial Code Rule 23, Protection of Persons Employed in Construction & Demolition Work; Industrial Code rule 53, Construction, Excavation and Demolition Operations At or Near Underground Facilities.

XIII. Suspension of Application Review

The Director may suspend review of applications for permits pending:

- A. Payment by an applicant of outstanding fines, civil penalties or judgements imposed or entered against such applicant by a court.

- B. Satisfactory compliance by an applicant with an order issued by the Director.

XIV. Permit revocation and refusal to renew permit.

- A. The Director of Engineering may, after giving the permittee notice and an opportunity to be heard, revoke or refuse to renew a permit:
 - 1. For failure to comply with the terms or conditions of such permit, these rules or other applicable law in carrying out the activity for which the permit was issued;
 - 2. Whenever there has been any false statement or any misrepresentation as to a material fact in the application or accompanying papers upon which the issuance of the permit was based; or
 - 3. Whenever a permit has been issued in error and the conditions are such that the permit should not have been issued.
- B. Prior to taking any of these actions listed in paragraph (A) above, the Director of Engineering shall give the permittee an opportunity to be heard upon not less than two days notice.
- C. Notwithstanding any inconsistent provision of paragraph (B) above, if the Director of Engineering determines that an imminent peril to life or property exists, the Director may revoke a permit without affording the permittee an opportunity to be heard prior to such revocation. Upon request of the permittee, the Director shall afford the permittee an opportunity to present his or her objections to such action within five days after the Department receives such request.

XV. Refusal to Issue Permit

The Director may refuse to issue a permit to an applicant:

- A. who has exhibited a pattern of disregard for the rules or orders of the Department or terms or conditions of permits issued by the Department or for other applicable law.

XVI. Material Requirements

- A. Material and Construction Specifications: Standard Specifications, Construction and Materials, New York State Department of Transportation (NYSDOT), Design and Construction Divisions, dated January 2, 1995 with all current additions and modifications.

XVI. Warranty

- A. The permittee, by acceptance of the permit, expressly guarantees complete performance of the work acceptable to Schenectady County and guarantees all work done by him for a period of two years after date of acceptance and agrees upon demand to maintain and make all necessary repairs during the two year period.
- B. Two warranty inspections shall take place. First, at the completion of the project, acceptance shall be made if all work meets Schenectady County standards. Second, approximately thirty days prior to the expiration of the two-year warranty, the County Inspector shall perform an inspection of the completed work. If the work is still satisfactory, the permittee shall be released from his obligation and the bond returned.
- C. All necessary repairs must be completed within 30 days of inspection, or the permittee's bond will be subject to seizure by the County to pay for necessary repairs. At the County Engineer's discretion, additional time may be allowed to complete the necessary repairs.
- D. At any time prior to completion of the two-year warranty period, the County may notify the permittee of any needed repairs. Such repairs must be completed within 24 hours if it is determined by the County to be an immediate danger. Non-emergency repairs shall be completed within 30 calendar days.

Section 2

CONSTRUCTION REQUIREMENTS WITHIN THE COUNTY RIGHT-OF-WAY

- I. General
 - A. These conditions and regulations apply to Highway Work Permits authorizing work within the County Right-of-Way for water mains, gas mains, sewer lines and miscellaneous structures. General conditions apply to power, telephone and communications installations as well as specific conditions on the setting and resetting of poles. These conditions and any special conditions which are added to this form on the will be enforced by the Schenectady County Engineering Department and Public Works Department.
 - B. Conditions imposed as a requirement of municipal approval, State Environmental Review Act implementation, or other permit approval as related to the County right-of-way and highway, shall be part of these requirements. The Superintendent of Highways may impose higher standards, conditions or requirements where consistent with the objective of protecting the public safety at the County Highway System and where

consistent with the powers and duties as expressed in statutes.

- C. The permittee agrees to adhere to all construction specifications set forth in the latest edition of the New York State Department of Transportation Standard Specifications for Construction and Materials including all current additions and modifications.

II. LOCATION

- A. All locations shall be approved by a representative of the County Highway Superintendent. Special permission will be required to use trees for guy. Any and all underground and overhead facilities encountered shall not be disturbed in any manner without proper authority from the Owner.

III. Construction Requirements

- A. Equipment outriggers shall be fitted with rubber pads whenever outriggers are placed on any roadway surface. Tracked equipment with grousers are not permitted on any concrete or asphalt surface. Use of Any equipment on or over concrete curb, gutter or sidewalk is specifically prohibited without a minimum of 12 inches of native material on that surface to prevent breakage. The permittee shall be responsible for any damage caused to existing concrete or asphalt by the operation of such equipment and upon order of the inspector shall replace such surfaces. Failure to do so will result in the permittee's bond being seized to cover the cost of repairs.
- B. All cuts on asphaltic paved streets are to be prescored for the entire thickness. The use of rotomillers, saws and jackhammers is an acceptable method of scoring, as long as the cut is continuous, straight and clean. Other mechanical cutters (i.e. hydrohammer cutting blades) are not acceptable.
- C. The permittee shall not disturb any surface monuments, benchmarks, survey markers, or points found on the line of work. Any points disturbed will be replaced at the permittee's expense.
- D. All material excavated from trenches and piled adjacent to the trench or in any street right-of-way shall be piled and maintained in such a manner as not to endanger pedestrians or the travelling public and so that as little inconvenience as possible is caused to those using the streets and adjacent properties. If excavated material is to be stored within the roadway prism overnight, the area involved must be barricaded in complete compliance with the "Manual of Uniform Traffic Control Devices."
- E. All permittee's shall conduct work in such a manner as to avoid

unnecessary inconvenience and annoyance to the general public. In the performance of the work, the permittee shall take appropriate measures to reduce dust, noise and unnecessary debris. No work shall be done between the hours of 8:00 pm and 7:00 am., nor at any time on Sunday, except with prior approval from the inspector, or in the case of an emergency.

- F. The Permittee is responsible for having qualified soils engineering firm test the compactive effort of the work in accordance with Schenectady County Standards and New York State Department of Transportation Standard Specifications for Construction and Materials including all current additions and modifications. The field test results shall be left on site with the Permittee or his representative, and final test results (signed by a registered engineer) are to be sent to the Engineer at the Schenectady County Engineering Department. These results are to include compaction and moisture results both passing and failing. At the discretion of the County Engineer, these test results may be waived for street cuts less than 30 linear feet. The project will not be placed under warranty until test results have been received and approved by the inspector. For roads reconstructed two years ago or less, compaction tests will be required for all road cuts, regardless of their size.
1. At the discretion of the County engineer, all unsuitable material will be removed from the site and suitable material imported. The Permittee shall inform the inspector of this and submit written documentation of the suitability of the import material for approved prior to placement.
 2. Jetting, puddling, flooding or any other means of using water within the trench section to achieve compaction of fill material or consolidation of bedding material, is not permitted for pipes 18" diameter or smaller. For pipes greater than 18" diameter, the warranty shall be extended to three years and the practice shall not extend above the springline of the pipe. These practices must be approved by the County Engineer prior to construction.
 3. Schenectady County highly encourages the use of an approved "flowable fill" mix. Compaction and density/moisture testing will not be required when this material is used. The permittee shall wait for all water to bleed to disappear before placement of asphalt or road base.

IV. Winter Work

- A. Street cuts performed between November 1st and March 31st shall be limited in quantity and extent. Due to problems associated with

potentially frozen backfill and inadequate temperatures to perform the work, street cuts shall be performed only under conditions, which provide adequate time for permanent patching to be completed. With the exception of emergency repairs, the Permittee shall provide the County with a detailed plan of how the project is to be completed under "cold weather" conditions and still meet All County standards.

Section 3 Construction Activities

I. Boring and Jacking Methods

A. All pipes, conduits or mains crossing highway pavements shall be driven beneath the roadway without disturbance to the pavement. Specific requirements include;

1. The point of driving shall not be less than 5 feet from edge of pavement, and;
2. Such pipes under the pavement shall, whenever possible, be enclosed in sleeves or larger pipes, so that repair or replacements may be made in the future without further disturbance of the roadway pavement. Grouting operations may be required if surface settlement, loss of soil or voids around the pipe develop. When grout is required, it shall consist of 1 part cement to 2 parts sand, by volume, and sufficient water to produce a consistency suitable for placing grout.

B. If the boring method in the driving of pipes or conduits is found to be impractical due to rock or soil conditions, the applicant may request an exception from the boring requirement and the representative of the County Highway Superintendent shall be consulted to determine the requirements for placing the pipe by the open-cut method. All exception requests will be reviewed and approved by the County Superintendent of Highways.

II. Road Cuts (Open Excavation Method)

A. Pavement and shoulder removal shall be done in a manner that provides for proper restoration of the replacement section. Straight full depth vertical cuts of the pavement will be required. Pavement cuts that become undermined shall be cut back and removed. All pavement cuts or shoulder cuts shall backfilled within 12 hours of excavation. With prior approval, a minimum of 1" thick steel cover plates may be used. On all pavements where cutting is across the line of traffic or where longitudinal

cutting is in the path of traffic, temporary repairs with cold patch or other acceptable type of bituminous patching must be placed as soon as the back-fill is installed and shall be maintained even with the surface of the pavement.

- B. It shall be the responsibility of the Permittee to have a temporary patch in place before the site is vacated. Road base is not suitable temporary patch material. All temporary patches must be replaced with final patch material within 48 hours, unless provisions are made with the County Engineer or Supervisor. Under no condition (weather excluded) may a patch go more than 14 calendar days without a permanent patch, and the permittee is responsible for maintaining the temporary patch throughout this time period.
- C. For all roadway trench cuts extending more than 100 linear feet, the permittee shall be required to rotomill (1" minimum) and overlay (1.75" minimum) the roadway from the edge of asphalt to the centerline of the road. In cases where the trench extends over the centerline of the road the entire road shall be milled (as required) and overlaid.
- D. The maximum length of open trench permissible at any time shall not exceed 500 linear feet, for pavement, removal, excavation, construction, backfilling, patching, and all other construction activities without the written permission of the County Engineer or Supervisor.
- E. All unstable and/or undermined asphalt or concrete shall be removed and replaced by the Permittee.

III. Manholes, water valves or similar appurtenances

- A. The top of the cleated surface is no less than ¼" and no greater than ½" below paved surface.
- B. The top of the cleated surface is a minimum of 6" below the finished grade of an unpaved surface.
- C. There will be a minimum of 12" of cover in roadside ditches.
- D. It is at the same grade as the finished roadway.

IV. Curb Cuts

- A. Curb cuts, cross-pans, sidewalks shall involve the removal of full sections; no half sections will be allowed. All work shall be completed in accordance with the New York State Department of Transportation Standard Specification for Construction and Materials, and shall be closed

to traffic for 7 days after placement. The Permittee shall maintain traffic control until the concrete is approved for traffic. It shall be the responsibility of the Permittee to protect the concrete from damage as a result of vandalism or other causes. Damage concrete shall be repaired or replaced at the direction of the County Engineer or Supervisor.

V. Excavation Outside Pavement and Shoulder Areas

- A. On longitudinal trench excavation outside pavement area, edge of trench shall not be closer than four five feet to edge of pavement except under written authorization of the County Highway Superintendent. Sheeting or shoring may be required.

VI. Tunneling

- A. Tunneling will be permitted only under exceptional circumstances by special permit and then only if shoring and controlled density backfill (K-Krete or equal) is provided.

VII. Necessitated Future Work

- A. The applicant agrees that any present or future injury to, or disturbance of the highway, its slopes or gutters, caused by placing mains and service pipe, shall be repaired by the applicant at his own expense and in accordance with the requirements of the County Highway Superintendent.
- B. If necessity arises in the future because of the work on the county highway system and/or its structures requiring the removal, relocation or replacement of the installation authorized by the permit, said work shall be done as directed by the Superintendent or his representative, and all cost and expense so incurred shall be the obligation of the said Permittee or his successor in interest.

**Section 4
EXCAVATION & BACKFILL REQUIRMENTS**

I. EXCAVATION

- A. Shoring in compliance with OSHA regulations and standards shall progress with the excavation to prevent cave-in.
- B. Outside of the pavement area the work shall be carried on in such manner that not more than 100 feet of trench remains open at the end of the day's work.
- C. Open excavations shall be protected with the required safety controls for

safety and for the maintenance and protection of traffic in accordance with the New York State Department of Transportation, Manual of Uniform Traffic Control Devices.

II. BACKFILL AND REPAIR OF EXCAVATED AREAS

A. Backfill in areas of road and shoulder pavement cut:

1. Wherever the road pavement is cut, including paved shoulders, backfill for the entire depth of the trench shall consist of the following materials
 - a. From bottom of trench to 21 inches below pavement surface a Select Granular Fill shall be used in conformance with Item 203.07 of the NYSDOT Standard Specifications. This material shall be placed in 6" lifts and compacted to 95% Standard Proctor Maximum Density.
 - b. A 12-inch Subbase Course, Type 2 shall be used in conformance with NYSDOT Item 304.03 of the NYSDOT Standard Specifications. This material shall be placed in 6" lifts and compacted to 95% Standard Proctor Maximum Density.
 - c. A 6 inch Asphalt Concrete - Type 1 Base Course in conformance with NYSDOT Item 403.11 shall be used.
 - d. A 1 ½ inch Asphalt Concrete – Type 3 Binder Course in conformance with NYSDOT Item 403.13 shall be used.
 - e. A 1 ½ inch Asphalt Concrete – Type 6F Top Course (High Friction) Marshall Design in conformance with NYSDOT Item 403.1701.
2. The permittee shall be required to furnish the Department with copies of in-process compaction reports certified by a professional engineer as to the compliance with the requirement of the aforementioned backfill requirements. This certified compaction report shall be submitted along with the cutform for every tenth street opening permit issued to the permittee or as directed by the Director of Engineering.
3. By special approval of the Schenectady County Engineering or Public Works Department a temporary pavement restoration shall be allowed when work shall continue longer than expected. This temporary pavement repair shall consist of 3 inches of Asphalt Concrete – Type 3 Binder Course in conformance with NYSDOT Item 403.13 and NYSDOT Item 304.03 Subbase Course, Type 2 compacted as required above. It shall be maintained flush with the existing pavement until permanent restoration of the pavement is

made.

4. As a measure of maximum density achieved for temporary restoration, the pavement surface shall not sink more than two inches from the surrounding existing surface during the life of the temporary restoration. More than two inches of settlement shall be deemed a failure of the compaction of the backfill and cause the removal of said backfill to the subsurface facility and new fill installed and properly compacted.

B. Backfill in areas of driveway pavement cut:

1. Wherever a paved driveway is cut, backfill for the entire depth of the trench shall consist of the following materials
 - a. From bottom of trench to 15" below pavement surface a Select Granular Fill shall be used in conformance with Item 203.07 of the NYSDOT Standard Specifications. This material shall be placed in 6" lifts and compacted to 95% Standard Proctor Maximum Density.
 - b. A 12" Subbase Course, Type 2 shall be used in conformance with NYSDOT Item 304.03 of the NYSDOT Standard Specifications. This material shall be placed in 6" lifts and compacted to 95% Standard Proctor Maximum Density.
 - c. A 1-½ inch Asphalt Concrete – Type 3 Binder Course in conformance with NYSDOT Item 403.13 shall be used.
 - d. 1 1/2" of Asphalt Concrete for Driveways shall be used in conformance with NYSDOT Item 608.0201 shall be used.
2. By special approval of the Schenectady County Engineering or Public Works Department a temporary pavement restoration shall be allowed when work shall continue longer than expected. This temporary pavement repair shall consist of 3 inches of Asphalt Concrete – Type 3 Binder Course in conformance with NYSDOT Item 403.13 and NYSDOT Item 304.03 Subbase Course, Type 2 compacted as required above. It shall be maintained flush with the existing pavement until permanent restoration of the pavement is made.
3. As a measure of maximum density achieved for temporary restoration, the pavement surface shall not sink more than two inches from the surrounding existing surface during the life of the temporary restoration. More than two inches of settlement shall be deemed a failure of the compaction of the backfill and cause the removal of said backfill to the subsurface facility and new fill

installed and properly compacted.

C. Backfill for excavation within gravel shoulder area:

1. Wherever the edge of the trench excavation is within 5 feet of the edge of the pavement or paved gutter and/or within areas normally used by traffic, a Select Granular Fill shall be placed that conforms to NYSDOT Item 203.07 of the NYSDOT Standard Specifications. This material shall be placed in 6" lifts and compacted to 95% Standard Proctor Maximum Density.
2. Where the depth of the trench excavation is greater than the distance from the edge of pavement to the edge of the trench, steel sheeting may be required and left in place if so ordered by the representative of the County Highway Superintendent. The backfill of the excavated area shall proceed as stated above.

D. Backfill for excavation within areas outside of pavement and shoulder.

1. The excavations beyond the shoulder and pavement areas but within the roadway area shall be maintained level with the original surface at all times. Excavated material may be used to backfill the excavation compacting the material in 12" lifts to 90% Standard Proctor Maximum Density
2. Where the depth of the trench excavation is greater than the distance from the edge of pavement to edge of the trench, steel sheeting may be required and left in place if so ordered by the representative of the of the County Highway Superintendent. The backfill of the sheeting area shall proceed as stated above.
3. All surplus material between the ditch line and right-of-way shall be removed.

E. Backfill required for tunneled areas:

1. Voids in the lower layers of such rock backfill may be sand filled but the top layer adjacent to the pavement shall be grouted with a 1 part cement to 2 parts of sand mixture, by volume, and sufficient water to produce consistency suitable for placing grout. The grout shall be placed from the sides with a cement gun or forced in from the top through holes drilled in the pavement.

F. Backfill for pipes including water lines, sewer lines, closed drainage pipes below subbase depth and within the paved section of roadway or depth of

pipe is greater than its distance from the edge of pavement, the pipe shall be bedded with a Select Granular Fill in conformance with NYSDOT Item 203.07 of the NYSDOT Standard Specifications.

- G. Driveway culvert pipes shall be backfilled with a Subbase Course, Type 1 or Type 2 in conformance with NYSDOT Items 304.02 and 304.03 respectively, of the NYSDOT Standard Specifications. This material shall be placed in 6" lifts and compacted to 95% Standard Proctor Maximum Density.
- H. Backfill necessitated by service connections: Where service connections are made the trench shall be backfilled within two days from time of opening and suitable barricades shall be maintained during this time with flashing amber lights displayed at night.
- I. Backfill in areas disturbed for miscellaneous structures shall be a Select Granular Fill conforming to NYSDOT Item 203.07 of the NYSDOT Standard Specifications.
- J. All concrete and/or granite curbs disturbed during construction shall be replaced with new curbing and placed along the same line and grade of the existing curbing. Existing curbing may only be reused if inspected and approved by a representative of the Schenectady County Engineering or Public Works Departments. Curbing shall be installed per NYSDOT Standard Specifications and Standard Details.

Section 5 MISCELLANEOUS

- I. General
 - A. Footing or basement drains shall only be allowed to tie into a Schenectady County closed drainage system on a case by case basis. Drains must tie into a catch basin or other approved structure where the pipes are accessible for maintenance and repair. If no structure is present, one will need to be installed at the permittee's expense.
 - B. Manhole and catch-basin frames and covers shall be approved by the representative of the County Highway Superintendent and set in a workmanlike manner flush with the surface of the highway. Generally, materials, pre-cast concrete units and structures shall conform with the NYS Department of Transportation Standard Specification current to the date of work or higher standard as may be required by the Superintendent of Highways.

Section 6
MAINTENANCE OF TRAFFIC

I. General

- A. Traffic is to be maintained at all times during the progress of this work and adequate signs, barricades and lights shall be provided in accordance with the provisions of Sub-Chapter H of the NYS Department of Transportation's Manual of Uniform Traffic Control Devices.
- B. The applicant shall erect and maintain suitable guardrail or barricades around all trenches while work is in progress for the protection of the public and they shall be suitably lighted by flashing amber lights at night. The work shall be carried on in such manner that not more than 500 feet of trench in earth remains open at end of day's work.
- C. No pavement cuts are to be left unfilled overnight except in emergencies and, in such cases, adequate precautions must be exercised to protect traffic.
- D. No construction materials or equipment shall be left on the shoulders or pavement after working hours nor shall any construction equipment or material be placed in any manner or location that will obstruct highway or railroad warning signs.
- E. All open trench in the highway right-of-way shall be barricaded. There shall be conspicuously displayed bright red flags not less than 24"x24" attached to such barricades and illuminated at night with flashing amber lights. If, in the judgement of the representatives of the County Highway Superintendent, flagmen are necessary, they shall be employed by the Permittee and on duty at all times during the progress of the work so as to direct traffic and maintain flares, etc.
- F. Soft shoulder signs of adequate size not less than 30" square shall be erected and maintained on all backfill trenches within the shoulder area until the backfill is thoroughly settled. These signs shall be located at the beginning of each section of work at intersections and at a distance not greater than 1,000 feet apart.
- G. During winter conditions, highway shoulders shall be maintained free of obstructions, which would interfere with snow removal and ice control.
- H. The Permittee shall keep the traveled way free of foreign objects such as rocks, timber and other items that may fall from transporting vehicles.

Section 7

OVERHEAD UTILITY INSTALLATIONS

- I. Setting of Poles
 - A. All poles shall be set outside the ditch lines and so that there is no interference with the proper drainage of the highway. In case it is impractical to set poles so as not to interfere with the flow of water in the ditches, the shoulder, ditch and space around the poles shall be paved by the applicant so as to protect against erosion. Where possible, poles shall be set at least 8 feet from edge of pavement or the nearest point along guiderail.
 - B. There shall be no obstruction to private driveways, connecting highways or roads, paths or sidewalks.
 - C. In case it is found necessary to trim trees within the boundaries of the highway, the least possible amount shall be done and, in all cases, the consent of the abutting property owner must be secured before the poles are set and trees are trimmed.
 - D. Poles shall be of sufficient length to provide a clearance of not less than 18 feet above the crown of the highway under the worst conditions of temperature and loading. They shall be set in line properly plumbed and shall be well guyed. Poles shall be straight, sound, and the fittings shall be of sufficient strength to carry wires under the worst condition of loading (ice, wind, etc.).
 - E. Where communication and telephone wires cross high tension power lines, electric light or high voltage wires, special precautions shall be taken to maintain proper clearance under the worst condition of temperature and loading.
- II. Resetting Poles
 - A. If necessity arises in future because of work on the highway to relocate, replace or re-set poles, cables, or conduits, said work shall be done at expense of the applicant.

Section 8 COMPLETION OF WORK

- I. **General**
 - A. All work is to be performed in a manner approved by the representative of the County Highway Superintendent.

- B. All disturbed areas shall be returned to their original condition in a manner satisfactory to the County Highway Superintendent or his representative. All unpaved areas disturbed due to work within our right-of-way shall be topsoiled, seeded and mulched.
- C. The Permittee shall be required to restore shoulders and ditches and clean up the highway as his work progresses. All driveways shall be restored with material equivalent in kind and to their original conditions.
- D. All surplus earth and rubbish shall be cleaned up and removed from the highway left in a neat and orderly condition.
- E. Cutforms
 1. A sketch showing the exact dimensions and location of the restored area, and a description of the opening or trench defined by distance in feet from the nearest driveway or intersection and from the edge of pavement.
 2. The highway permit number
 3. The date of completion of the final restoration
 4. The name and address of the final pavement contractor
 5. A compaction report certified by a New York State licensed professional engineer.
- F. Failure to file cutforms in a timely manner may jeopardize future permit requests.

Section 9
QUALITY CONTROL TO STREET REPAIRS

- I. Every street therefore every street repair situation is unique. The design criteria and construction standards cannot address every unique situation. In most cases, they provide the “minimum” acceptable standards. Strictly applied, they will provide the minimum acceptable product. If the goal, on the other hand is “quality of excellence” in street repairs, then the standards should be viewed as guidelines, which must be used in conjunction with planning, and judgement. In many cases, it may be necessary to exceed the minimum standards to achieve a quality product. Following are issues that require consideration in a “quality” approach to street repairs.
 - Appearance – Does the final appearance of the street suggest the repairs were well planned, or that they happened by accident?
 - Rideability – Are the transitions onto and off of the patch smooth? Does the patch itself offer a smooth ride, and are the joints located outside of the normal wheel path?
 - Pavement Management – Is the patch consistent with the longer-term pavement management strategy for the particular street?

- Future Maintenance – Will the patch pose any future maintenance problems, or make future maintenance more difficult?
- Coordination – Can joint efforts with other utilities or County departments mitigate the negative effects of street repairs?

A. Appearance – Consciously or not, the driving public “rates” the general appearance of the roadway system, including street repairs. Street repairs which are satisfactory from a functional point of view may produce a negative reaction from the public if they give the appearance of being poorly planned or executed.

1. Existing pavements shall be removed to clean, straight lines, PARALLEL and PERPENDICUALR to the flow of traffic. Do not construct patches with angle sides and irregular shapes.
2. Avoid patches within patches. If this cannot be avoided, make the boundaries of the patches coincide.
3. Asphalt and concrete pavements shall be removed by sawcutting or grinding. Avoid breaking away edges of the existing pavement or damaging the remaining pavement with heavy construction equipment.

B. Rideability – A driver may see a street repair, but in the case of a quality repair, he/she should not be able to “feel” it in driving normally down the street. Completed street repairs shall have a rideability at least as good as, if not better than, the pavement prior to the repairs.

1. Do not place overlays with feathered edges. Overlays shall be place by first removing the existing pavement to the desired depth by sawcutting or grinding, and then replacing the pavement flush with the adjacent surfaces.

2. Particular care must be taken in constructing overlays to provide smooth transitions, and to avoid problems with drainage or access at the edges of gutters.

3. Street tolerance of street repairs shall meet standards for new construction. That is, finished surface of the street repair, when tested with a ten foot straight edge parallel to the centerline or perpendicular across the joints, will show variations measured from the testing face of the straight edge to the surface of the street repair which do not exceed one-quarter inch.

C. Pavement Management – Street repairs shall leave a pavement in a condition as least as good as, if not better than, the condition prior to the repairs.

1. In most cases, and particularly in the cases of extensive excavation and repairs, the permittee shall be required to survey the existing pavement condition with a representative of Highways and Transportation prior to the work. After

completion of the work, survey the pavement condition again to verify pavement's condition has been maintained or improved.

2. In the case of minor repairs, these pavement surveys can be made by visual observation. However, in the case of major projects, which involve excessive haul of materials or unusually heavy construction equipment activity, non-destructive testing of the pavement condition before and after construction may be required by the County.

3. On all streets constructed or overlaid during the last two years, the roadway shall be overlaid the entire roadway width for a distance of 15 feet beyond the limits of the cut. A rotomill shall be used to grind the extra width beyond the actual trench.

4. Do not allow the edges of a patch to fall in existing wheelpaths. The edges of the patch parallel to the direction of traffic shall be limited to the boundaries of the lane or the centerline of the travel lanes.

D. Future Maintenance – Excavations and street repairs, even well constructed street repairs, shorten the pavements life expectance. Several types of street distress such as settlement, alligator cracking, and potholes, often show up around patches. Quality street repairs shall attempt to reduce the occurrence of this type of distress.

1. Avoid weakening or destroying the existing pavement around an excavation with heavy equipment, stockpiling, or delivery of materials, etc. When damage does occur, remove the damaged pavement, extending the limits of the street repair, before placing the pavement.

2. For patches in asphalt, a tack coat shall be applied to all edges of the existing asphalt prior to paving the new pavement.

E. Coordination – Coordination with County departments and other utilities is essential in an effective street patch effort.

1. Except for emergencies, a permit is required before beginning excavations and street repairs. The permit process is intended to identify problems with proposed work before it begins, as well as to maintain a record of construction in public ROW. In the case of emergencies, obtain a permit for the excavation within 48 hours of the repair.