



TOWN OF GRAFTON

Grafton Memorial Municipal Center
30 Providence Road
Grafton, Massachusetts 01519

Road Opening and Patching Procedures

Purpose:

The following specifications shall pertain to all individuals or contractors who are issued a road opening permit in the Town of Grafton. It shall be the responsibility of the recipients of road opening permits to perform all work in accordance with the following specifications.

Policy:

Article 1. GENERAL

1.01 Contact information. Applications for road opening permits shall provide the name and contact information of the on-site supervisor for work to be performed under the subject permit, as well as a secondary contact should the on-site supervisor be unavailable, to facilitate communications. Cellphone numbers and email addresses must be provided to ensure multiple modes of communication.

1.02 Application information. A permit application must be filed out with the application fee before preliminary investigation will be made for permit issuance. Standard application forms may be obtained at the Department of Public Works Office or online at <http://www.grafton-ma.gov>.

1.03 Duration. Upon the completion of work performed under the subject road opening permit, it shall be the responsibility of the recipient to maintain or replace all subsequent patching covered under the subject permit as deemed necessary by the Department of Public Works or its designee for a period of two (2) years after final completion and acceptance of work.

1.04 Rejection of application. The request for a permit will be denied when it appears that the work called for in an application would not conform to Town regulations, cause substantial or needless damage to a roadway, create excessive disturbances to traffic or create an exceptionally dangerous condition not commensurate with the benefits of the applicant. The applicant will be informed of such decision and the reason(s) for rejection. The Department of Public Works, or its designee, may refuse to issue a permit to any person, company, or utility when, in its opinion, work performed under a previously issued permit to the applicant has not been properly executed, or when said applicant has failed to reimburse the Town for recoverable charges billed under the terms governing a previous permit. The rejection of an applicant can be appealed to the Select Board for final decision. If it is the opinion of the Department of Public Works, or its designee, that the opening of a roadway would result in a hazardous situation, the application shall be amended to include utility pole jacking, boring or pipe jacking. This work shall be done by an experienced contractor.

1.05 Issuance of Permit. A permit must be signed by the Department of Public Works or its designee before it becomes valid. Approved permits will be issued by the Department of Public Works **after the application, bonds, insurance fees, and Dig Safe number have been received in good order.** The Permittee is forbidden to commence work until the above mentioned items have been complied with and the Permittee has notified the Department of Public Works or its designee **at least two (2) working days** in advance of the exact date and time they propose to begin work.

1.06 Emergency Permits. Nothing in this manual shall be construed to prevent making any such excavations as may be necessary for the preservation of life or property, or for the location of trouble in a conduit or pipe, or for making repairs, provided the person making such excavation shall apply to the Department of Public Works or its designee for such permit on the first working day after such work is commenced. Before any excavation work is started, the person or utility excavating must contact all utilities and the Town for subsurface utility locations.

1.07 Plans and specifications. When applicants are made for permits involving work of a major scope, complete plans and specifications must be submitted with the application. They should be detailed so that the exact location of the various parts of the work, the risk or injury to road users and the probability of damage to trees, roadway structures and private property can be ascertained. If, in the opinion of the DPW, the proposed plan needs to be reviewed by a third party, the applicant will bear all costs associated with said review.

1.08 Revocation of permits. Any permit issued by the Department of Public Works may be revoked by the Department of Public Works or its designee at any time by giving notice to the Permittee. Work shall cease and the work area safely secured unless or until the situation is resolved to the satisfaction of the Department of Public Works or its designee. The Permittee may file a written appeal to the Board of Selectmen who may overrule the decision of the Department of Public Works and may reinstate the permit.

1.09 Display of permits. A copy of the permit shall be at the job site **at all times** for inspection by Town of Grafton Police and Public Works personnel. To be valid, the permit must show the effective and expiration dates and be signed by the Department of Public Works and/or its designee. This regulation will also apply to the public utilities and their subcontractors.

1.10 Extension of time. All work shall be completed in a manner satisfactory to the Department of Public Works or its designee before the expiration date shown on the permit. In cases where permanent repairs, such as loaming and seeding, must be made at a future date the permit holder shall request of the DPW an extension of time to complete the work. This request for extension must include an approximate time of when the vendor will return to perform the loaming and seeding. Extension of time may be granted upon written request by the Permittee stating the reason(s) for the request. **Should work not completed as per the applicant's request and a valid written extension has not been filed, fines shall accrue at a rate of \$100.00 per day.**

1.11 Indemnification. The permittee certifies that they are familiar with 520 CMR 14.00 (Excavation and Trench Safety) and all other laws and regulations applicable to the proposed work. The permittee also agrees as a condition governing the issuance of a permit, that they will hold

harmless the Town of Grafton, the Department of Public Works, and its agents and employees from any and claims and actions whatsoever arising from the issuance of said permit.

1.12 Clearance for vital structures. The excavation work shall be performed and conducted as to not interfere with access to fire hydrants, fire stations, fire escapes, water gates, underground vaults, vault housing structures, traffic signal cables and boxes, and any other vital areas of equipment designated by the Town.

1.13 Detours. When, in the opinion of the Department of Public Works or its designee, a Town road may be obstructed by the permit applicant's proposed operation to such an extent as to unduly restrict vehicular traffic or make hazardous its use, a parallel town road bypass may be designated. All expenses incurred by the Permittee as a result of establishing this bypass, including use and restoration of said detour, shall be responsibility of the Permittee.. A detour plan, printed on a 24"x36" sheet shall be submitted with the application. The Permittee shall notify the Police and Fire Departments of the layout and expected time of use of the detour. The detour plan must be approved by the Police Chief. In the event of a major, or long term, detour, the applicant will provide advanced notice and if deemed necessary by the DPW, provide an electronic message board to publicize the delay. Traffic control and sign placement is the responsibility of the contractor and shall comply with the applicable section of Part VI of the *Manual on Uniform Traffic Control Devices (MUTCD)* and the MassHighway Standard Details and Drawings for the Development of Traffic Management Plans. Prior to detouring traffic over a road bypass, an inspection shall be made by the Permittee and the Department of Public Works or designee to determine the adequacy of the signage and the structural condition of the road(s) involved. A second inspection shall be made by the same persons when the detour is terminated so that there will be an agreement as to the extent of the repairs, if any, to be made by the Permittee to restore the condition equal to those existing prior to the establishment of the detour.

1.14 Protective measures and routing of traffic. The Permittee shall, in general, maintain safe crossing for two lanes of vehicular traffic at all street intersections where possible, and safe crossings for pedestrians at the interval of not more than two hundred (200) feet. Adequate crossings shall be maintained for vehicles and pedestrians when an excavation is made across any public road, alley, or sidewalk. If the roadway is not wide enough to hold the excavated material without using part of the adjacent sidewalk, a passageway at least one-half (1/2) of the sidewalk width shall be maintained along such sidewalk line. When an excavation of any major or minor arterial takes up more than one-third(1/3) of the roadway, and is to remain open overnight, steel bridging of sufficient strength will be required to maintain a normal traffic flow. The Permittee shall take appropriate measures to assure that during the performance of the work, traffic conditions are as near normal as possible and shall be maintained at all times to minimize inconvenience to the occupants of the adjoining properties and to the general public. When traffic conditions permit, the Department of Public Works or its designee, with the approval of the Police and Fire Departments of the Town, may, with written approval (or by verbal agreement in cases of emergency), permit the closings of streets and alleys to all traffic for a specified period of time, if in its opinion, it is necessary. The written approval of the Department of Public Works or its designee may require that the Permittee give notification to various public agencies and the general public. In such cases, such written approval shall not be valid until such notice is given. In cases of emergency on weeknights, weekends, or holidays, the facility owner having such an emergency

shall contact the DPW, Police and Fire Departments, and the Grafton School Department by phone before closing the street to traffic.

1.15 *Relocation and protection of utilities.* The Permittee shall not interfere with any existing facility without the written consent of the Town and the owner of the facility. If it become necessary to relocate an existing facility, this shall be done by its owner. No facility owned by the Town shall be moved to accommodate the Permittee, unless the cost of such work be borne entirely by the Permittee and approved in writing by the appropriate board, committee, or entity owning the facility. The cost of moving privately owned facilities shall be similarly borne by the Permittee unless it makes other arrangements with the person owning the facility. The Permittee shall support and protect all pipes, conduits, poles, wires, or other apparatus could be damaged, and for this purpose, pipe coating and other encasement or devices are to be considered part of the substructure, the Permittee shall promptly notify the owner thereof. All damaged facilities shall be repaired by the entity or person owning the facilities, and the expense of such repairs shall be charged to the Permittee. It is the intent of this paragraph that the Permittee shall assume all liability for damage to facilities and injury to persons. The only exception will be such instances where damage is exclusively due to the negligence of the owning company. The Town shall not be made party to any action because of this paragraph. The Permittee shall inform themselves as to the existence and location of all underground facilities and protect the same against damages which shall include notifying "DIG SAFE", local utility companies and the Department of Public Works.

1.16 *Protection of public property.* The Permittee shall not remove, even temporarily, any trees or shrubs which exist in the street area without first obtaining the consent of the Tree Warden or Town Official having control of such property.

1.17 *Care of excavated material.* All material excavated from trenches, and stockpiled adjacent to the trench or in any road, shall be stockpiled and maintained in such a manner as not to endanger those working in the trench, pedestrians, or users of the street, and so that as little inconvenience as possible is caused to those using the street and adjoining properties. Whenever necessary, in order to expedite the flow of traffic or to abate the dirt and dust nuisance, toe boards or bins may be required by the Town to prevent the spreading of dirt into traffic lanes. Where the confines of the area being excavated are too narrow to permit the piling of excavated material beside the trench, the DPW shall have the authority to require that the Permittee haul it to the trench site at the time of backfilling. Stockpiling of excavated materials shall be so located, or suitable precautions taken to ensure that any erosion of the materials shall not result in the situation of the stormwater drainage system, resource areas, buffer zones or waterways. The Permittee shall be liable for any flushing, cleaning, or dredging resulting from failure to comply with this provision. It shall be the Permittee's responsibility to secure the necessary permission and make all necessary arrangements for all required storage and disposal sites.

1.18 *Prompt completion of work.* After an excavation has commenced, the Permittee shall proceed with diligence and expedite all excavation of work covered by the excavation permit, and shall promptly complete such work and restore the street as specified. The Permittee shall perform such restoration so as not to obstruct, impede, or create a safety hazard to either pedestrian or vehicular traffic.

1.19 *Noise, dust and debris.* Each Permittee shall conduct and carry out excavation work in such a manner as to avoid unnecessary inconvenience and annoyance to the general public and occupants of the neighboring property. The Permittee shall take appropriate measures to reduce, to the fullest extent practical, noise, dust and unsightly debris at all times. The Permittee shall not use, except with the express written permission of the DPW, or in the case of emergency as herein otherwise provided, any tool, appliance, or equipment producing noise that may disturb the residents in the vicinity.

1.20 *Preservation of monuments.* Any monument set for the purpose of locating or preserving the lines of any road or property subdivision, or precise survey reference point, or a permanent survey bench mark within the public right of way, shall not be removed or disturbed without first obtaining permission, in writing, from the DPW to do so. Permission to remove or disturb such monuments, reference points, or bench marks shall be granted only when no alternate route for the proposed substructure or conduit is available. If the DPW is satisfied that no alternative is available, permission shall be granted only upon condition, by agreement in writing, that the person or utility applying for such permission shall pay all expenses incidental to the proper replacement of the monument by the Town.

1.21 *Bituminous or Granite curbing.* Any person or utility damaging curbing during the course of excavation, or for any other reason, shall be charged for the repair or replacement of the curbing. No person or utility shall remove, damage, haul away, or cause misalignment of any granite curbing, including radius curb and catch basin stones, for any reason, whatsoever, without first receiving written permission from the DPW.

1.22 *Inspections.* The Department of Public Works or its designee shall make such inspections as are reasonably necessary in the enforcement of these regulations. The Contractor, at the request and discretion of the DPW, will place a minimum of five thousand dollars (\$5,000) into an account for the purpose of inspection of the work by a duly authorized agent to be hired by the Town of Grafton, or any other necessary repairs or inspections, prior to any work being done. The account must be maintained in the positive to continue work (See Article VI for additional information). The Town shall have the authority to promulgate and cause to be enforced such additional rules and regulations as may be reasonably necessary.

1.23 *Excavation on a resurfaced roadway.* Whenever the Town has developed plans to reconstruct a roadway, the Town, or its representative, shall give written notice to all abutting property owners, to Town departments and to all public utilities which have, or may wish to lay pipes, wires, or other facilities in or under our roadway. Upon receipt of such a written notice, such person or utility shall have sixty (60) days in which to install or lay any such facility. If an extension of time is needed by a person or utility for the installation of such facilities, the person or utility for the installation shall make written application to the DPW explaining fully the reasons for requesting such an extension of time. At the expiration of the time fixed and after such a roadway has been reconstructed, no permit shall be granted to open such a roadway for a period of five (5) years, unless an emergency condition exists such as structural or functional failure of a utility taking place. If a permit is granted, the Town may impose extraordinary conditions on the Permittee to preserve the structural condition of the pavement and to blend the permanent patch with existing pavement.

1.24 Waivers. The town of Grafton reserves the right to waive any or all regulations in the best interest of the Town on a case by case basis. All waivers shall be approved in writing by the Department of Public Works or its designee.

Article II. ROAD OPENINGS

2.01 Normal work hours shall be Monday through Friday (except holidays) between 7:00AM and 3:30PM. If a contractor wishes to work outside of these hours, written permission is required by the Department of Public Works, except as outlined in these specifications for emergency work.

2.02 Existing pavement shall be mechanically cut or saw cut in a workmanlike manner to provide a neat, straight, vertical edge.

2.03 No road opening shall remain open during hours of darkness or when unattended. There shall be no open trenches left in the public right of way overnight. At the conclusion of each work day, trenches shall be backfilled to grade or plated with a minimum ¾" thick steel plates and warning devices shall be placed to alert motorists of road conditions. Refer to 520 CMR 14.00 which can be found at <https://www.mass.gov/regulations/520-CMR-1400-excavation-and-trench-safety>

2.04 Traffic control and flashing barriers shall be provided and maintained at the work site at all times, in accordance with the applicable provisions of the Massachusetts Department of Public Works MUTCD as referenced in Section 1.13 of this policy. If the permittee cannot be contacted and it becomes necessary for the Town to place or remove any warning devices or appurtenances from the project due to negligence by the applicant, or to place structure or otherwise act to protect Town property or residents from hazards resulting from work conducted at this site, all cost for this work will be assessed against the applicant.

2.05 If exploratory openings such as test pits, borings and cores are made, they shall be filled and capped with suitable material compatible with the existing material of the surrounding area.

2.06 Uniformed police officers will be required if deemed necessary for proper traffic flow. Determination of need will be at the discretion of the Chief of Police or its designee. Cost to be borne solely by the Permittee.

Article III. STRUCTURES

3.01 All structures shall be of approved design and shall be installed in a good workmanlike manner, and shall conform with Section 201 of the *Massachusetts Highway Standard Specifications for Highways and Bridges*.

3.02 All castings (i.e., manhole frame and cover) placed within the paved roadway surface shall be supplied by East Jordan Iron Works and comply to current Town standards and shall be set flush to finish grade.

3.03 Mechanical means shall be used to provide proper compaction around structures placed in the roadway to avoid settlement of the structure and the area around it.

3.04 It is the contractors responsibility to replace all structures damaged during adjustment activities, with no compensation therefor.

Article IV. BACKFILLING

4.01 All backfill material shall be of suitable material containing no organic material or rocks larger than three (3) inches within twenty-four (24) inches of the surface. The Department of Public Works or its designee may require the use of controlled density backfill in lieu of any other material. All backfill material shall be compacted in a workmanlike manner in loose lift thickness of eight (8) to ten (10) inches by mechanical compactors. The twenty-four (24) inches immediately below the paved surface shall consist of only new select gravel conforming to the Commonwealth of Massachusetts, Department of Public Works *Standard Specifications for Highways and Bridges* (2022), specifically Section 100, Section 400, and Section 700, as well as any subsequent supplements. including any supplemental specifications issued since that time. **No trench shall be backfilled until it has been inspected by an authorize representative of the Department of Public Works.** After backfilling has been completed and sub grade reestablished, a minimum four (4) inch bituminous concrete, Type I temporary patch shall be installed and maintained for a period of at least six (6) months and through one freeze/thaw cycle. After this time, a permanent patch shall be installed in accordance with Article V of these regulations.

4.02 All soils used for backfilling shall be within the acceptable range for optimum moisture content to allow for proper compaction. Soils above optimum moisture content must be stockpiled and dried out; or, removed and replaced with suitable soils. All backfill shall be compacted to within 95% of the Maximum Standard Proctor Value.

4.03 The Town may require soil tests to be furnished by a recognized soil testing laboratory or registered professional engineer specializing in soil mechanics, when in its opinion, backfill for any excavation is not being adequately compacted. Such test must show that backfill materials meet the minimum requirements as prescribed by the Town and are to include test for sieve, proctor and density. All expense for the test(s) shall be borne by the permittee. The Department of Public Works or its designee will approve the testing laboratory prior to placement of any material.

Article V. ROAD PATCHING

5.01 Upon completion of the work and only after the required backfilling and compaction has been achieved in accordance with Section D above, shall road patching operations begin. In no event will openings be allowed to be left un-patched for more than forty-eight (48) hours without the expressed written approval of the Department of Public Works or its designee.

5.02 All road patches shall be placed perpendicular or parallel traffic flow. Angular patches across the roadway shall be permitted with the approval of the Department of Public Works or its designee. All trenches shall be saw-cut to provide a vertical joint for patching.

5.03 Hot patch shall be used at all times.

5.04 If a temporary patch is used, the Department of Pubic Works shall be notified and the recipient of the permit shall inform the Department of Public Works or its designee as to when a permanent patch is to be placed.

5.05 Permanent patches in a heavily traveled roadway , as determined by the Department of Public Works or its designee, shall be reinforced with a concrete slab no less than five (5) inches thick. Construction shall comply with the Commonwealth of Massachusetts, Department of Public Works *Standard Specifications for Highways and Bridges (2022)*, specifically Section 100, Section 400, and Section 700, as well as any subsequent supplements.

5.06 Patches shall be a minimum four (4) inches thick or the thickness of the existing pavement, whichever is greater.

5.07 Patches shall be rolled and compacted to match the existing surface in a good workmanlike manner and **all abutting surfaces sealed with hot rubberized asphalt sealant on the joints.**

5.08 Patches will be maintained by the permittee for a period of six (6) months at which time the patch will be finalized by the Infra-Red method of patching as directed by the Department of Public Works or its designee. No Infra-Red patching will be required on any pavement that is five (5) years old or greater.

5.09 All materials and construction methods must meet the Commonwealth of Massachusetts Department of Public Works Standard Specifications for Highways and Bridges (2022), including all supplemental specifications.

5.10 In the event of an overlay, the repainting of traffic pavement markings shall be the responsibility of the permittee. The Department of Public Works or its designee shall be notified prior to the painting of the new traffic pavement markings.

5.11 The permittee shall exercise extreme care to prevent the damage to major root system of trees. If at the sole discretion of the Tree Warden, work will harm a tree or root system, all work will cease until an acceptable protection plan is devised. In the event of damage to the roots that is severe enough to cause the eventual death of a tree, as determined by the Tree Warden, refer to Article 33, § 12 and 13 of the General By-laws of the Town of Grafton.

5.12 Where frame and covers are to be placed in the hardened surface, all manhole covers shall be set in concrete collars to within four (4) inches of the existing surface. A patch of Class I Bituminous pavement Type I shall be placed over the concrete collar to a level of flush with the pavement grade when satisfactorily compacted. All manhole, catch basin, sewer frames and grates shall be manufactured with U.S. made steel.

5.13 With the exception of emergency work, no excavation shall be permitted from November 15 to April 1. Work within this period may be allowed at the discretion of the Department of Public Works or its designee. If the applicant is not satisfied with the decision of the Department, they may appeal the decision with the Select Board

5.14 *Permanent Patch/Resurfacing* Asphalt at road cuts running perpendicular to the flow of traffic shall be cut back a minimum of ten (10) foot outside all sides of the excavation- **and for a five (5) foot radius around the entire casting when the work entails tying into an existing**

structure – then removed along with the temporary patch, and recompact by mechanical means before permanent patch is applied. Larger excavations, such as water main extensions, running parallel to the flow of traffic, will require full lane width mill and overlay at minimum. Depending on the damage to the existing roadway surface, curb to curb mill and overlay may be required. Prior to work starting, a representative of the DPW and the permittee shall inspect the condition of the road on which the work is being performed. Another inspection shall be made upon completion of the work by the same individuals. At that time, the final determination will be made to the extent of resurfacing to take place. This decision is up to the sole discretion of the Department of Public Works.

Article VI. FEES

6.01 Application & Base Permit- \$150.00

6.02 The Base Permit covers the first 100 square feet (ft²) of road opening. An additional charge of \$1.00 for each additional 10 square feet, or portion thereof, will be assessed for any excavating greater than 100 ft². For example, a project requires a trench in a road to be 5 feet wide by 100 feet long (5' X 100' = 500 ft²). Base fee for 100 sf= \$150. 500 ft² – 100 ft² = 400 ft² not covered under the base permit. Therefore take the remaining 400 and divide it by 10. The result is then multiplied by \$1.00. So 400 / 10 = 40 and 40 X \$1= \$40. Total road opening fee for this example would be \$190.00.

6.03 *Construction Monitoring and Inspection.* A minimum of \$5,000.00 shall be placed into an account specifically for services as described in Section 1.22 of this policy. The Town of Grafton will contract for these services. Once the account has dropped below \$1,000.00, the permittee will replenish the account to the \$5,000.00 minimum. Should this account fall below \$500.00 during construction, work will immediately cease until the account has been replenished. All costs associated with re-mobilization will be borne by the Contractor.

6.04 Excavation(s) for individual water, sewer or gas services that disturb less than 250 square feet (ft²) shall be charged a flat rate of \$500.00 for inspectional services.

Article VII. BONDING/INSURANCE

7.01 All grantees shall provide the Town upon application, as a minimum, a certificate of insurance for liability, property damage and bodily injury in the amount of \$1,000,000.00 CSL. The Town of Grafton shall be named as an additional insured on all certificates. Evidence of statutory limits for worker's compensation shall be provided. Higher limits may be required depending on project size and discretion of the Town of Grafton.

7.02 Prior to issuance of the permit, the applicant shall deposit with the town a Surety Bond in the amount and form as shall be determined by the Department of Public Works, or its designee. The amount of Surety Bond shall be established separately for each permit in the event of the failure of the permit holder to complete the work or make required repairs or restoration for damages involving the work or encroachment authorized by the permit, but shall not be less than \$5,000.

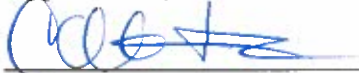
7.03 The amount of the bond shall be computed on the basis of cost required to make proper restoration or repairs to the work performed. Immediately upon approval of an application for permit, the Department of Public Works or designee shall advise the permittee as to the amount of the bond required. An annual blanket Surety Bond, consisting of \$5,000 cash may be deposited to avoid the inconvenience and expense of obtaining individual bond for each permit requested.

7.04 The bond shall be released to the permit holder upon expiration of the guarantee period. The guarantee period shall be for a period of two (2) years following the satisfactory completion of the work. During the guarantee period the Permittee shall be responsible for the restoration, repair and maintenance of said work.

7.05 Should the proposed work in an existing public way be integral to the construction of a subdivision approved by the Planning Board, the applicant may, with the permission of the Department of Public Works and the Planning Board, pursuant to MGL Chapter 40, Section 81U, bond the off-site work in conjunction with the on-site work. This agreement will also include full-time inspectional services while work is on-going in the existing public way.

Date: 1/3/23

Approved By: Select Board



Colleen Roy, Chair



Mathew Often, Vice Chair



Andrew Jefferson, Clerk



Ann Marie Foley, Member



Raymond Mead, Member