a. the street and number of the premise where the mechanical games are located.
b. the name of the person to whom the license is granted.
c. the number and location of all licensed mechanical games.

D. Transferability and effective date

1. Each license must be kept on the premise where the licensed mechanical game(s) are located and must be open to view and available for inspection at all times.

2. No license is transferable by the licensee.

3. Any license, unless sooner revoked pursuant to the bylaw, shall expire on December 31 of each year.

E. Amendments and revocation

1. Upon written request by the licensee to the board or upon its own initiative, the board from time to time may amend any license. Licenses may be amended to reflect a change in the premise or a change in the location of any mechanical game. The fee for any change in the location of any mechanical game shall be established by the board from time to time pursuant to chapter 40, Section 22F of the General Laws.[1] The fee for any change is payable at the time of application.

2. Any licensee shall comply with all conditions imposed by the board. Failure to comply with any license condition shall be grounds for the board to revoke, modify, or suspend any license.

Section 15(A): Street Opening And Public Works Construction License By-Law [2]

I. Street Opening

A. Introduction

From time to time, it is necessary to excavate in a public way in order, for example, to install, repair, or remove utilities or install or realign a driveway including the possible removal or re-alignment of curbing and/or fencing. Excluded from the operation of this by-law is the general reconstruction or repair of public ways by the municipal or state agency responsible for the maintenance and repair of such public ways. This street opening by-law is necessary to protect the health and safety of all persons traveling on public ways and is adopted in accordance with the authority granted, inter alia, by Article 89, section 6 of the Amendments to the Massachusetts Constitution, M.G.L. Chapter 40 section 21, MGL Chapter 165 section 20, MGL Chapter 166 section 25 and MGL Chapter 166A.

B. Definitions

ADA: The Americans with Disabilities Act of 1990, as amended (42 USC 12101-12213), and the Accessibility Guidelines for Buildings and Facilities (Appendix to Part 1191) of the U.S. Architectural and Transportation Barriers Compliance Board, as amended.

Applicant: Any public utility, municipal department, person or entity who owns or exercises general responsibility and control over: (i) utility or other pipes, ducts, lines

[1] STM December 15, 2008, Article #13, deleted sentence, inserted new sentence.
[2] ATM May 11, 1998 - Article #21 - deleted original text and inserted new text.

or other thing buried in or under a public way, or (ii) real property abutting a public way, or (iii) real property served by the public way or by items of the type specified in (i) above and who wishes to perform street opening work.

Application Fee: Such fee as may from time to time be established pursuant to chapter 40, Section 22F of the General Laws which fee shall accompany each application for a street opening permit.[1]

Architectural Access Board Regulations: The Rules and Regulations of the Architectural Access Board, Mass. Executive Office of Public Safety (521 CMR), as amended.

Awarding Authority: The board of selectmen of the Town of Foxborough has authority to exercise the powers granted by this by-law.

Awarding Authority Representative: That municipal officer or employee to whom the awarding authority in writing has delegated some of its powers hereunder so that the process of permit-granting, inspection, and administration will proceed expeditiously.

Cold Patch: A dense graded or open graded mix with cutback asphalt as the binder with 1% of the mix being hydrated lime based on the total weight of the aggregate. The mineral aggregates and bitumen shall be proportioned and combined to meet the limits specified in Table A, Subsection M 3.11.03 and M 3.11.04 of The Standard Specifications. Bituminous material shall be either cutback asphalt, Grade MC-250 or MC800 conforming to Section M3.02.0 of the Standard Specifications.

Compaction: Compressing of suitable material and gravel that has been used to backfill a trench by means of mechanical tamping to within 95% of maximum dry density as determined by the modified Proctor Test in accordance with ASTM 1557 method D.

Contractor: All officers or employees of applicant performing street opening work or any person or entity engaged by or on behalf of applicant to perform street opening work. The contractor for purposes of this by-law and for all questions of liability in connection with any street opening work shall be conclusively deemed agents of applicant for whom applicant is fully responsible.

Controlled Density Fill: Also called flowable fill, CDF is a mixture of portland cement, flyash, sand and water. It shall contain a minimum of 250 pounds of class F flyash or high air (25%) and will be self-leveling. It is hand-tool excavatable.

Default: The failure of the permit holder (including all contractors or other agents of permit holder) to (i) comply fully with provisions of applicable laws and regulations, (ii) comply fully with all of the applicable provisions of this by-law and the street opening permit including written supplemental instructions, the municipality's General By-Laws or other applicable law, and (ii) keep its certificate of insurance in full force and effect.

Emergency Repair Work: Street opening work which must be commenced immediately to correct (i) a hazardous condition which could reasonably be expected to result in injury, loss of life, property damage or (ii) a condition which has resulted in the catastrophic failure of a utility transmission trunk line.

[1] STM December 15, 2008, Article #13, deleted definition, inserted new definition.

Gas Company: A public utility to which Chapter 164 section 70 of the M.G.L. applies.

Highway Department: The municipal agency generally responsible for the repair and maintenance of public ways within the municipality.

Infra-Red Process: That restorative procedure whereby an infrared heater softens existing pavement to a depth of one and one half inches, the softened area is treated with a penetrating asphalt emulsion, uniformly scarified and raked to a workable condition, and the treated surface then compacted by use of a steel-wheeled roller for the purpose of creating a smooth driving surface consistent with adjacent pavement.

License Applicant: Any person or entity in the general contracting business, qualified to do business in the Commonwealth of Massachusetts who wishes to perform street opening work in a public way either as a permit holder or as agent for one or more permit holders.

License Application Fee: Such annual fee as may from time to time be established pursuant to chapter 40, Section 22F of the General Laws and which shall be paid to the awarding authority each time a License application or renewal is filed.[1]

Licensed Contractor: A contractor who holds a current and valid public works construction license issued by the awarding authority.

Newly Paved Road: A road that has been re-paved (binder and top) within the past five (5) years.

Normal Working Hours: 7:30 am to 3:30 pm Monday through Friday excluding holidays.

Permit Holder: An applicant to whom a street opening permit has been granted.

Permanent Patch: A final repair of street opening work to be performed in accordance with this by-law and intended to return permanently the opened portion of the roadway to as good a condition as it was in prior to the performance of the street opening work.

Permanent Patch Window: That period of time commencing twelve (12) months and up to eighteen (18) months from the date of installation of the temporarypatch.

Processed Gravel: Inert material that is hard, durable stone and coarse sand, free from loam and clay, surface coatings and deleterious materials and which meets M1.03.1 of The Standard Specifications.

Public Utility: Includes a gas and electric company as defined in M.G.L. Chapter 164 section 1, telephone and telegraph company subject to Chapter 159 section 12, and cable TV companies or other telecommunication providers regulated by the Dept. of Telecommunications and Energy.

Public Way: Any road, including such appurtenances as berms, curbs, drains, sewers, water mains, sidewalks and paved and unpaved shoulders within the paper lay-out to which the public has access and the town is responsible for maintaining. Also referred to as a street.

[1] STM December 15, 2008, Article #13, deleted definition, inserted new definition.

Public Works Construction License: A license required of all contractors who are not officers or employees of a public utility or municipal department who wish to perform work including street opening work on public ways.

Refundable Deposit: That amount of cash or money represented by a certified bank check deposited by applicant with its application to secure applicant's performance of street opening work in accordance with this by-law.

Standard Specifications: The Mass. Highway Department's Standard Specifications for Highways and Bridges, 1995 Metric Edition.

Street Opening Permit: A permit granted by the awarding authority to an applicant for permission to do street opening work in a public way.

Street Opening Work: Any cutting, excavating, compacting, construction, repair or other disturbance in or under a public way together with restoration of the public way in accordance with this by-law following such disturbance but excluding the location or re-location of utility poles for which a grant of location has been obtained pursuant to M.G.L. Chapter 166 section 27.

Surety: A deposit of $5,000 cash, check or an irrevocable letter of credit will be required of each licensed contractor for surety against him due to default on the warranty. Additionally, if an irrevocable letter of credit is used, the format must be placed on the lending institution letterhead and it must be signed by an authorized bank agent. [1]

Temporary Patch: The application of either cold patch or two separate gradations of bituminous concrete consisting of binder and top layers and compaction to achieve a density equal to that of the surrounding pavement following excavation and compaction. Street Opening Permit: A permit granted pursuant to the street opening by-law conferring permission to do street opening work in a public way.

Violation: The failure of the licensed contractor, its employees, agents and subcontractors to (i) comply fully with any or all provisions of this by-law and any street opening permits or supplemental instructions, the Town's General By-Laws or other applicable law, or (ii) to keep its certificate of insurance in full force and effect.

Warranty: The period of one calendar year beginning after the installation of the permanent patch. During this period the licensed contractor shall be responsible to make any necessary repairs as requested by the awarding authority representative.[2]

C. General

No work (except the commencement of emergency repair work in accordance with paragraph VII hereof) in or under a public way shall commence until the applicant shall have applied for in accordance with paragraph IV, and obtained from the awarding authority, a street opening permit. All work contemplated by this by-law shall be done in a good and workmanlike manner using best engineering and construction practices and shall be done in accordance with (i) all applicable laws and regulations, (ii) all of the provisions of this by-law, (iii) any conditions contained in the street opening permit, and (iv) such reasonable supplemental instructions not inconsistent with the foregoing as the awarding authority or its representative may from time to time issue. A permit holder shall cause to be restored those portions of a public

[1] ATM May 14, 2001, Article #18.
[2] ATM May 14, 2001, Article #18.

way disturbed by the permit holder to as good a permanent condition, in the reasonable judgment of awarding authority or its representative, as they were in when permit holder made application thereunder.

No person or entity may perform any work (including street opening work or emergency repair work) in or under a public way unless it is a permit holder and (i) is a municipal department or public utility or their respective officers or employees (ii) is the holder of a current and valid public works construction license, or (iii) has engaged such a holder and such holder performs all such street opening work or emergency repair work as agent of permit holder.

In accordance with the Town's Five-year Street Cut Moratorium policy, except as may otherwise be provided by federal or state law, no street opening work in or under a public way shall be allowed before the date that is five years from the date that such way or any portion thereof is paved or re-paved. Appeals of this five-year moratorium shall be through a written request to the Board of Selectmen. The Board of Selectmen in their decision on any such appeals shall consider economic hardships, the applicants potential use of trenchless "no-dig" installation technology, the size of the proposed street cut, the location of the proposed street cut and whether the affected portion of the way is paved, the applicant's proposed method of pavement restoration, including pavement grinding and overlay fifty-feet on both sides of the trench, infared treatment of the trench pavement, and any other economic or technical considerations presented by the applicant or Superintendent.[1]

D. Application Procedure

The applicant shall file on forms designated by the awarding authority a completed and signed application at the office of the awarding authority (with a copy delivered simultaneously to the highway department) each time it desires to perform street opening work. The application shall be accompanied by any and all plans, certifications, certificates of insurance and other items specified in the application or reasonably requested by the awarding authority. If the applicant does not intend to perform the street opening work itself, it must in the application designate a licensed contractor to perform the work as its agent. The application shall also be accompanied by the application fee and the refundable deposit.

The highway department shall promptly review the application and make written recommendations concerning approval to the awarding authority and, if appropriate, shall include recommendations concerning permit conditions and supplemental instructions.

The awarding authority shall make a prompt determination on the application taking into account the following and such other facts as it may reasonably consider:

1) the recommendation of the highway department
2) the reason for the street opening work
3) whether the street is recently constructed or re-paved
4) whether there are other reasonable means adequate to accomplish the purpose for which the street opening permit is sought.

If the application is considered favorably, a street opening permit containing such conditions and supplemental instructions as the awarding authority reasonably deems appropriate shall promptly issue. If the application is not favorably considered, the

[1] ATM May 11, 2009, Article #18.

awarding authority shall communicate in writing to applicant the reasons its application was not favorably considered.

E. Refundable Deposit and Account, Warranty and Surety[1]

1. Refundable Deposit and Account: [2] The amount of the refundable deposit to secure proper restoration of a public way after street opening work is determined in the reasonable judgment of the awarding authority based on the extent of the work. (A current schedule of deposits for standard work is attached.)

Following notice given by permit holder that final permanent repairs to the public way have been completed, the awarding authority or representative will make a final inspection. Once the awarding authority or representative has concluded that permanent repair work has been satisfactorily concluded and that applicant has no other uncured defaults under street opening permits, it shall release the unexpended balance of the deposit serving as security for the street opening permit related to the inspected work.

All refundable deposits that an applicant submits for street opening permits shall be held by the awarding authority in one account which shall be designated as the applicant's refundable deposit account. Applicants upon request may receive periodic reports as to the balance standing within this account. Should a deposit associated with a specific permit be insufficient to secure the proper repair of a public way following a default by the permit holder, the awarding authority without limitation to other remedies available to it can deduct the cost of the proper repair from applicant's refundable deposit account for the purpose of funding the proper repairs. To the extent required by Chapter 164 of the General Laws applicable to gas companies, the provisions of this section and section VI hereafter shall not apply to gas companies which affirmatively claim exemption in their application for street opening permits.

F. Fee and Deposit Changes; Municipal Exemption

From time to time hereafter the awarding authority, after public notice and hearing, may amend the schedule of deposits, the application fee, the hourly after-hours inspection charges or any other amounts due under this by-law. A reasonable hourly charge for inspectional services which must be performed outside of normal working hours in accordance with a posted schedule established by the awarding authority will be billed to permit holder and due and payable fifteen (15) days after billing. In extraordinary situations where extensive installation or renewal of utility lines overburden the normal capacity of the municipal departments to conduct inspections, the awarding authority can, after notice to permit holder, or as a condition of the permit, elect to treat all inspections as after-hours inspections and bill permit holder accordingly. Applicants which are municipal departments are exempt from payment of all fees and deposits hereunder. Public Utilities to the extent exempted as provided in Paragraph V above are exempt from payment of all fees except the application fee.

G. Emergency Repair Procedure

If the conditions for emergency repair work exist, then an applicant after giving oral, faxed or electronic notice to the police and highway departments may commence street opening work. All such emergency repair work shall be done in strict compliance with this by-law except for compliance with any notice provision inconsistent with such emergency action.

On the business day following the commencement of emergency repair work, the applicant shall file with the awarding authority (i) a written statement setting forth in

[1] ATM May 14, 2001, Article #18.
[2] ATM May 14, 2001, Article #18.

detail the facts and circumstances constituting the conditions for emergency repair work, (ii) an application for a street opening permit covering the street opening work already commenced in accordance with Paragraph IV, (iii) the filing fee and required refundable deposit. If all of the materials such as plans, etc. are not then available to applicant, applicant will supply them as soon as available. Awarding authority will promptly process the application and grant the street opening permit with such conditions and supplemental instructions as it may reasonably require.

H. Insurance[1]

The permit holder and/or each licensed contractor shall acquire and continuously maintain while it possesses any street opening permits liability insurance coverage on all personnel and equipment to be used in the street opening work which insurance is to be with insurance companies licensed to do business in the Commonwealth of Massachusetts and shall contain the following coverages and be in the following minimum amounts:

Commercial General Liability Insurance including operators, independent contractors, complete operations, XCU hazards, broad form property damage and personal injury.

General Aggregate:	*[2]
Products and complete operations:	
Aggregate	*
Each occurrence	*
Personal & Advertising Injury	*

Automobile Liability Insurance – covers owned, non-owned and hired vehicles

Combined Single Limit	*
Or	
Bodily Injury Liability	
Each Person	*
Each Accident	*
Property Damage Liability	*

Worker's Compensation and Employer's Liability

Bodily Injury by accident	* each accident
Bodily Injury by disease	* policy limit
Bodily Injury by disease	* each employee

*in an amount to be set by the Board of Selectmen.

Certificates of Insurance shall provide for at least thirty (30) days notice to the awarding authority of cancellation or material change. The name of the municipality shall be listed as an additional insured on the Certificate of Insurance.

I. Licensed Contractors

Any contractor or other person or entity that wishes to perform work on a public way and which is not either a municipality or a public utility (including their respective officers or employees) must be licensed by the awarding authority, pursuant to Section

[1] ATM May 10, 1999, Article #13.

[2] ATM May 11, 2009, Article #21, delete specific dollar amounts and replace with language set forth.

II, below. Application for a public works construction license must be made on a yearly basis.

J. Terms of the Street Opening Permit

1. Term of Permit. All street opening permits shall be valid for thirty (30) days and, upon written request to the awarding authority, renewable for an additional thirty (30) days. Permits must be present at the work site. Permits can be revoked by the awarding authority if the applicant is in default.

2. Inspections may take place at the following events:

a. prior to backfilling the trench
b. following completion of temporary patch placement
c. during the permanent patch window
d. following completion of permanent patch placement

Permit holder or contractor will notify awarding authority representative when an inspection is desired and co-ordinate the timing of such inspection.

3. Working Hours. Except in emergency situations, street opening work will occur during normal working hours. The permit holder must give notice of the intended street opening work seventy-two (72) hours in advance to the highway superintendent, and, unless the requirement for a police detail is waived by the police chief of the municipality, must arrange for and pay for a police detail to be present throughout the period of time that street opening work is being conducted.

4. Dig-Safe. The permit holder shall, in accordance with all current laws of the Commonwealth of Massachusetts, notify all public utilities seventy-two (72) hours in advance of making any excavation in a street. Such notification shall be made by means of obtaining a DIG-SAFE number. Said number shall be provided on the street opening permit application. The permit shall not be issued until this information is provided.

5. Existing Utilities. Before starting any excavation, the permit holder or contractor must confer with all public utilities to obtain information from each as to the horizontal and vertical locations of existing utilities and other conditions that may affect the excavation. The permit holder or contractor shall not interfere with any existing utility without the written consent of the awarding authority representative and the owner of the utility. If it becomes necessary to relocate an existing utility, this shall be done by its owner and the cost of such work shall be borne by the permit holder. The permit holder or contractor shall inform itself as to the existence and location of all underground utilities and protect the same against damage.

6. Protection of Existing Lines and Structures. The permit holder or contractor shall adequately support and protect by timbers, sheeting, etc. all pipes, conduits, poles, wires, cables or other appurtenances which may be in any way affected by the excavation work and shall do everything necessary to support, sustain and protect them under, over, along or across such work area. The excavation work shall be performed and conducted in such a manner that it shall not interfere with access to fire stations, fire hydrants, water gates, underground vaults, catch basins or any other public structure.

7. Adjoining Property. The permit holder or contractor shall, at all times and at its own expense, preserve and protect from injury any adjoining property by providing proper foundations and shall take such other precautions as may be necessary for this purpose.

The permit holder or contractor shall at all times and at its own expense shore up and protect all buildings, walls, fences, trees and other property likely to be damaged during the progress of the street opening work and shall be responsible for all damages to public or private property or streets resulting from its failure to properly protect and carry out said work. The permit holder or contractor shall not remove, even temporarily, any trees or shrubs which exist in planting strip areas without first obtaining the consent of the highway superintendent.

8. Damaged trees. In the event a tree is either accidentally destroyed by the permit holder or contractor or is authorized for removal by the awarding authority representative, the permit holder or contractor shall remove the tree, stump and debris from the work site, and replace the tree with an identical species with a minimum caliper of two inches in the identical location.

9. Pedestrian Crossings, Open Trenches. The permit holder or contractor shall, where possible, maintain safe crossings for two lanes of vehicle traffic at all public intersections as well as safe crossings for pedestrians at intervals of not more than three hundred (300') feet. If any excavation is made across a public way, it shall be made in sections to assure maximum safe crossing for vehicles and pedestrians. An open trench may not exceed three hundred (300') feet unless specifically permitted by the awarding authority or its representative. If the public way is not wide enough to hold the excavated material for temporary storage, the material shall be immediately removed from the location.

10. Traffic. The permit holder or contractor shall take appropriate measures to assure that during the performance of the street opening work, so far as practicable, normal traffic conditions shall be maintained at all times so as to cause as little inconvenience as possible to the occupants of the adjoining property and to the general public. The awarding authority representative may permit the closing of streets and walks to all traffic for a period of time. Unless the requirement for a police detail is waived by the Police Chief of the municipality, the permit holder shall engage a police detail to maintain traffic control and public safety at the project site while street opening work is in progress. Warning signs shall be placed a sufficient distance from the project site in order to alert all traffic coming from both directions. Cones or other approved devices shall be placed to channel traffic. Warning signs, lights and such other precautions shall conform to the Manual on Uniform Traffic Control Devices. Construction materials and equipment on the site shall be limited in quantity and in the space they occupy so that they do not unduly hinder and block traffic.

11. Gutters and Basins. The permit holder or contractor shall maintain all gutters free and unobstructed for the full depth of the adjacent curb and for at least one (1) foot in width from the face of such curb at the gutter line. Catch basins shall be kept clear and serviceable.

12. Excavated Material. The permit holder or contractor shall remove all excess excavated material, surplus water, muck, silt, residue or other run-off pumped or removed from excavations from the site.

13. Temporary Repairs. At the end of each day, all trenches must be plated if repair work is not completed and/or back-filled, Compacted and Temporarily Patched on the day repair work is completed. No open un-plated trenches are permitted overnight and work in plated trenches must be continually prosecuted to completion to minimize the time trenches are plated.

14. Noise. The permit holder or contractor shall perform the work in such a manner as to avoid unnecessary inconvenience and annoyance to the general public and occupants

of neighboring property. During the hours from 10:00 pm to 7:00 am, the permit holder or contractor shall not use, unless otherwise specifically permitted by the awarding authority or awarding authority representative any tool, appliance or equipment producing noise of sufficient volume to disturb the sleep or repose of occupants of the neighboring property.

15. Debris and Litter. All debris and litter remaining from the street opening work site shall be removed by the permit holder or contractor in a timely manner.

16. Restoration of Pavement Markings. All permanent pavement markings (crosswalks, center lines, fog lines) which are damaged during street opening work shall be restored in kind by and at the expense of the permit holder.

17. Lawn Surfaces and Plantings. All lawn surfaces which are disturbed during street opening work shall be replaced with sod or six (6") inches of screened loam, lime, fertilized and re-seeded with good quality lawn seed. Any areas containing plantings shall be restored to their original condition with the same or similar plantings.

18. Erosion Control. The permit holder shall be responsible for all erosion control and for obtaining any necessary permits from the Conservation Commission. The permit holder or contractor shall protect drainage structures from siltation by whatever means required including but not limited to the installation of hay bales and/or filter fabric. In the event that a drainage structure becomes damaged from siltation as a result of the street opening work, the permit holder or contractor shall clean the structure before completing the temporary patch.

K. Required Construction Techniques

All street opening work and materials used therein must conform to the Mass. Highway Department's Standard Specifications for Highways and Bridges, 1995 edition, and with the Americans with Disabilities Act and the Architectural Access Board Regulations as currently in effect. In addition, the following specific requirements also apply. Exceptions to these requirements may be made in the discretion of the awarding authority or awarding authority representative at the time that the street opening work is in progress.

1. Excavation

Existing pavement shall be cut in neat, true lines along the area of the proposed excavation. Unstable pavement shall be removed over cave-outs and breaks and the sub-grade treated as the main trench. Pavement edges shall be trimmed to a vertical face and neatly aligned with the center line of the trench. Cut-outs beyond the limits of the trench lines must be normal or aligned parallel to the center line of the trench. Excavations shall be made in open cut. Trenches and excavation shall be braced and sheathed in accordance with the requirements of the Occupational Safety and Health Act (OSHA). Sections of bituminous or cement concrete sidewalks shall be removed to the nearest scoreline or approved cut edge.

2. Back-Filling and Compaction

Excavations shall be filled with approved backfill. Approved backfill consists of either Controlled Density Fill, suitable excavated material or gravel meeting M 1.03.0 or M 1.03.1 of The Standard Specifications. The permit holder may select which of these three to use in the excavation. Suitable excavated material shall mean previously excavated granular material but which does not include blacktop, clay, silt, organic material, concrete, roots, boulders or stones larger than four inches in diameter. If the

hole is to be filled with suitable excavated material, a backfill course shall be placed in approximately twelve (12) inch lifts of maximum compaction to four inches below asphalt grade (See Diagrams 1, 2, and 3). A base course consisting of four inches of processed gravel or equivalent (i.e. suitable excavated material containing no stones larger than one and one-half inch in diameter) shall then be placed on top of the backfill course. The backfill and base course shall be compacted to not less than ninety-five (95) percent of maximum dry density as determined by the modified Proctor Test in accordance with ASTM 1557 Method D. The permit holder if directed by the awarding authority or its representative will retain at its expense, a professionally qualified geotechnical consultant to perform this test. The results of this test shall be given to the Highway Superintendent.

If Controlled Density Fill is used as back-fill material, it must contain a minimum of 250 pounds of class F flyash or high air (25% plus) and be self-leveling. It must be Type 1E or 2E (very flowable). Flowable fill is to be batched at a ready mix plant and is to be used at a high or very high slump (1"- 12"). In lieu of the slump test, a 6" long, 3" diameter tube may be filled to the top and then slowly raised. The diameter of the resulting "pancake" may be measured and the range of the diameter shall be 9" to 14". It shall be flowable, require no vibration and after it is placed excavatable by hand tools and/or small machines.

The ingredients shall comply with the following:

Portland cement	AASHTO M85
Fly Ash	AASHTO M 295 Class F
Sand	M 4.02.02- ASTM C33 sand
Air	M 4.02.05

Type 1E and 2E must meet the following requirements:

Compressive	28 days	90 days
Strength	30-80 psi	100 psi ma.
Slump		10-12 inches
Air		1-30%

If Controlled Density Fill is used as back-fill material, it must fill the excavation to immediately below asphalt grade. The contractor must then plate the excavation with a heavy duty steel plate adequate to carry heavy traffic and wait twenty-four hours for the CDF to cure prior to applying the permanent patch .

If an excavation is back-filled with Controlled Density Fill in accordance with this by-law, then a temporary patch need not be installed but a permanent patch may be installed immediately. Permanent Patches installed over Controlled Density Fill shall consist of four (4) inches of bituminous concrete applied in a two and one-half inch base course and a one and one-half inch top course of bituminous concrete all installed in accordance with this by-law. If an excavation in a cement concrete public way is filled with Controlled Density Fill, then the provisions of paragraph 5 (a) of this by-law may be omitted, but the provisions of paragraph 5(b) and 5(c) must be complied with.

3. Temporary Patches

   a. Bituminous concrete

      Following proper compaction, a temporary patch which shall be the thickness of the existing asphalt pavement or a minimum of four inches

whichever is greater shall be applied. It shall consist of either cold patch or bituminous concrete plant-mixed hot asphalt aggregate. (See Diagrams)

b. Temporary patch to be maintained for one year.

A temporary patch that has been back-filled and compacted shall be maintained by the permit holder or contractor so that the patched surface and the surrounding area remain a single smooth unbroken plane for a period of time no shorter than one year after placement of the temporary patch.

4. Permanent patches

Except when installed over controlled density fill as described in paragraph 2 above, permanent patches shall be installed not less than twelve (12) nor more than eighteen (18) months from the date of installation of the temporary patch. Upon request by the permit holder or contractor, the awarding authority representative will inspect the temporary patch and determine if final settlement of the trench has occurred. The awarding authority representative will notify the permit holder or contractor within seven days of the inspection whether the permanent patch can be installed. Public utilities or municipal departments may schedule permanent patches to replace all temporary patches then within the permanent patch window without receiving prior approval from the awarding authority but must give the awarding authority and its representative not less than seventy-two (72) hours prior notice.

A permanent patch shall consist of one of the following: a) cold planing the temporary patch to a depth of one and one-half (1 ½") inches and then installing a minimum of one and one half (1 ½") inches of top course of bituminous concrete, or b) the excavation of the temporary patch in a bituminous concrete public way and replacement of this material with any additional processed gravel needed and two and one half (2 ½") inches of base course and one and one-half (1 1/2") inches of top course of bituminous concrete (See Diagrams 1 and 2) or (c) application of the infra-red process to the temporary patch, or d) the certification by the awarding authority representative made during the permanent patch window that the temporary patch in his reasonable judgment meets fully the standard of a permanent patch and thus requires no further work.

a. Cold Planing

If the cold planing method is used, the area to be cold planed must extend at least twelve (12") inches beyond all sides of the existing temporary patch. (See Diagram 2) This area must be cold planed to a depth of one and one-half (1 ½") inches. Any broken or irregular edges of existing pavement shall be cut away in straight lines leaving a sound vertical face at least twelve (12") inches back from all edges of the existing pavement. The permit holder must provide a dust control system capable of complying with environmental air quality standards during cold planing and sweep the public way following completion of the cold planing work. All abutting edges of the existing pavement will be painted with an asphalt emulsion immediately prior to the placement of the permanent patch . The permanent patch will consist of the application of a top course of a minimum of one and one-half (1 ½") inches of bituminous concrete plant-mixed hot asphalt aggregate. After raking and rolling, the grade of the permanent patch shall match the existing bituminous surface of adjacent

pavement The finished permanent patch shall be level having no depressions retaining water on any of the surface. All seams of the finished perimeter shall be sealed with penetrating asphalt emulsion.

b. Excavation

Any temporary patch that has been patched with cold patch must be excavated and replaced with a bituminous concrete base in accordance with this paragraph. If the excavation method is chosen and if additional cutting of the existing pavement is required, it shall be done in neat straight lines. Any broken or irregular edges of existing pavement shall be cut away in straight lines leaving a sound vertical face at least twelve (12") inches back from all edges of the existing pavement. (See Diagram 1 and 3). All abutting edges of the existing pavement shall be painted with an asphalt emulsion immediately prior to the placement of the permanent patch . The permit holder or contractor shall remove and dispose of all excavated material and thoroughly compact the surface of the sub-base.

Following excavation the permanent patch shall consist of a bituminous concrete base and top laid and rolled in two (2) courses. The binder (base course) shall be a minimum of two and one half (2 ½") inches in depth and the top course shall be one and one half (1 ½") inches in depth. The minimum total thickness of both courses, measured after rolling, shall be four (4") inches or equal to the material that was previously excavated. If after compaction, more than four (4") inches of permanent patch is needed in order to restore the excavated area to finish grade, additional bituminous concrete shall be used in the base course. The base course shall be placed and carefully raked and thoroughly rolled to the required thickness. The top course shall be placed to a grade that will match the existing bituminous surface after rolling. All seams of the finished perimeter shall be sealed with penetrating asphalt emulsion. The finished permanent patch shall be level having no depressions retaining water on any of the surface.

c. Infra-Red Process

If the infra-red process is utilized to install the permanent patch, the area to be repaired shall be thoroughly cleaned to eliminate all potential contaminants. An infrared heater shall be positioned over the area to be repaired for a period of time required to plasticize the existing pavement to a depth of one and one half (1 ½") inches. Oxidation of the pavement caused by improper heating techniques must be avoided. If this condition occurs, all oxidized material must be removed and replaced with Class I bituminous concrete meeting the Standard Specifications of the Mass. Highway Dept.

The softened area shall be inwardly reworked from approximately one (1') foot beyond all sides of the original temporary patch. This designated area shall be treated with a penetrating asphalt emulsion, uniformly scarified and raked to a

workable condition. For street crossings and/or trenches with jogs, the reworked area will be extended beyond the outermost jog in a straight line parallel with the opposite outermost jog. Under no circumstances may the infrared heat treatable patching mix that is used register a temperature under 200 degrees F.

After the paving mixture has been properly admixed and raked to grade, compacting shall be obtained by use of a steel-wheeled roller of sufficient weight to establish a uniform density comparable to that of the surrounding pavement surface within the work area. The finished permanent patch shall be level having no depressions retaining water on any of the surface. All seams of the finished perimeter shall be sealed with penetrating asphalt emulsion.

A petroleum resin sealant shall be applied consistently to the entire heated area by mechanical means or hand application at an approximate rate between .1 and .25 gallons per square yard. Actual rate will be determined on site by an approved absorption test method. A mineral filler will then be broadcast over the newly sealed area to absorb any excess liquid and prevent tracking and the area immediately opened to traffic.

d. Certification

If a permit holder seeks to qualify a temporary patch as a permanent patch , it must make the application for inspection set out above and specify in it its request for certification. The awarding authority representative will notify the permit holder within thirty (30) days of the request whether the temporary patch has been certified as a permanent patch . If it is not so certified, the permit holder shall forthwith cause a permanent patch utilizing one of the three remaining methods set out above to be utilized.

e. Newly Paved Roads

On newly paved roads, the awarding authority representative may require in addition to the placement of the permanent patch , that the permanent patch shall be treated by a process (infra-red, microwave or equivalent) that will ensure that the permanent patch is integrated into the existing bituminous surface in a seamless manner.

f. Final Inspection of Permanent Patch

Following completion of the permanent patch , the permit holder or contractor shall give notice thereof to the awarding authority representative who shall inspect the permanent patch . If the awarding authority representative is satisfied that the road has been restored to as good a condition as existed prior to the street opening work, he shall so note on the street opening permit and any refundable deposit securing that street opening work shall be refunded promptly to applicant. If the awarding authority representative determines that the permit holder is in default, the

awarding authority may proceed in accordance with Paragraph XIII, Remedies, of this by-law.

5. Special Rules for Cement Concrete Roadways

Any excavation in a cement concrete public way or public way with a cement concrete base with a bituminous concrete surface shall be backfilled as described in Paragraph 2 and temporarily patched as described in paragraph 3. Immediately prior to the installation of a permanent patch , the following shall be done:

a. the temporary patch and sufficient back-filled material shall be removed.

b. a six-(6") inch reinforced concrete slab shall be laid over the back-filled trench extending one (1') foot beyond all edges of the trench surface and allowing for four (4") inches of bituminous concrete to be installed above the slab. The slab shall have steel reinforcing for tensile strength in accordance with good engineering practices. The permit holder or contractor shall install a temporary heavy duty steel plate adequate to carry heavy traffic over the trench until the concrete slab shall have adequately cured.

c. once the concrete slab shall have cured, there shall be installed a four (4") inch layer of bituminous concrete applied in a two and one-half (2 ½") inch base course and a one and one-half (1 ½") inch top course all in accordance with Diagram 3 and generally in accordance with this by-law.

6. Shoulders

Suitable excavated material shall be placed in layers not to exceed six (6") inches in depth and compacted. shoulders shall be re-constructed to their existing condition and either loamed with six (6") inches of loam, limed, fertilized and seeded with roadside grass mix or covered with four (4") inches of wood chips as directed by the awarding authority representative.

7. Sidewalks

Any excavation in a concrete or bituminous concrete sidewalk shall require that the entire sidewalk area containing the trench be replaced. Any concrete sidewalk section that is excavated or damaged by the excavation must be replaced in its entirety. Suitable excavated material or gravel shall be placed in layers not to exceed six (6") inches in depth and compacted. All sidewalk areas will be installed by the permit holder or contractor in conformance with the ADA and the Architectural Access Board Regulations currently in effect. Bituminous concrete sidewalks shall have two (2) courses (two [2"] inches of binder and one [1"] inch of top) of bituminous concrete plant-mixed hot asphalt aggregate applied to and rolled to create a pavement surface consistent with the adjacent bituminous concrete surface. Concrete sidewalks shall have four (4") inches of poured concrete applied to finish grade. The concrete shall be placed in alternate slabs nine (9) meters in length except as otherwise ordered. The slabs shall be separated by transverse pre-formed expansion joint filler thirteen (13) millimeters in thickness. Concrete driveway openings shall have six (6") inches of poured concrete applied to finish grade. Pre-formed expansion joints will be installed against buildings, walls, steps, foundations or existing concrete block.

8. Curb and Berm

Any curbing or berm which is damaged or removed as part of the street opening work shall be properly replaced in kind. The use of cast-in-place concrete curbing is prohibited. All salvageable granite curb that is removed from the public way and is excess is the property of the Town and shall be delivered to the highway department by the permit holder or contractor.

9. Wheelchair Ramps

Existing wheelchair ramps which are damaged or removed under street opening work shall be reconstructed in kind and in conformance with the ADA and the Architectural Access Board Regulations that are currently in effect.

10. Curb Cuts

Any curb cut within a public way cannot exceed the following dimensions unless specifically approved by the awarding authority representative:

Single family dwelling- sixteen (16') feet
Multi-family dwelling- eighteen (18') feet
Two family dwelling- eighteen (18') feet
Commercial property- twenty-four (24') feet

Driveway entrances into public ways must butt into and not overlap the edge of the existing roadway hardened surface. The driveway must be graded in such a manner that no ponding of water occurs within the public way and in accordance with the Architectural Access Board Regulations. Driveways shall not be located on small radius curves and shall be positioned as to provide maximum sight distance and safety.

L. Suspension and Revocation

The awarding authority or awarding authority representative, if it believes a default has occurred, can suspend immediately for up to twenty-one (21) days a street opening permit by communicating such suspension to any of the permit holder, licensed contractor, or any of their respective representatives at the job site.

The awarding authority may revoke a street opening permit granted hereunder after notice and hearing if it shall reasonably determine that a default has occurred. Permit holder shall be given not less than five (5) days prior written notice of the time and place of the hearing and shall have the opportunity at the hearing to present evidence. Any person aggrieved by the decision of the awarding authority may appeal such decision to the appropriate court of competent jurisdiction or to the extent applicable law provides, to the Department of Telecommunications and Energy.

M. Remedies

If a permit holder or licensed contractor shall be in default as defined herein, the awarding authority may:

1. Suspend or revoke the street opening permit as provided in XII above. If the street opening work has commenced but is not completed at the time of a suspension or revocation, the awarding authority can order the street opening work to be completed by another licensed contractor. The cost of which is paid for from the permit holder's refundable deposit account or by permit holder if the refundable deposit is insufficient or does not exist.

2. Suspend or revoke the licensed contractor's public works construction license pursuant to the public works construction by-law.

3. Assert the Town's legal remedies.

II. Public Works Construction License

A. Introduction

From time to time, it is necessary to excavate a public way in order to install, repair, or remove utilities or install or realign a driveway with the possibility of removing curbing and/or fencing. It is desirable that persons working in or under a public way have the necessary skills to perform this work in a competent manner so that public ways are maintained to protect the health and safety of all persons traveling on them. This by-law is adopted under authority granted by M.G.L. Chapter 40, Section 21.

B. General

No person or entity may become a licensed contractor unless it shall:

1. be in the general contracting business, and
2. be qualified to do business in the Commonwealth, and
3. be qualified, in the reasonable judgment of the awarding authority, by experience, training of personnel, financial resources, and previously demonstrated, satisfactory performance of the entity, and/or those individuals who control it, to perform street opening work in public ways in the municipality, and
4. have completed the licensing process described below.

A license applicant may demonstrate its compliance with (3) above by presenting to the awarding authority evidence that it holds a current "Pre-Qualification Rating" issued by the Massachusetts Highway Department pursuant to 720 CMR 5.00 which, in the reasonable judgment of the awarding authority, is sufficient in terms of Class of Work, Maximum Capacity Rating and Single Capacity Rating (all as defined in 720 CMR 5.00) to demonstrate sufficient capacity to perform anticipated street opening work. A license applicant whose public works construction license has been suspended or revoked in the three (3) year period preceding the date of the current application may not demonstrate compliance with (3) above using this method.

Public works construction licenses are valid from the date issued until December 31 of the year in which issued unless sooner suspended or revoked. A public works construction license must be renewed each year.

C. Application Procedure

The license applicant shall file on forms designated by the awarding authority a completed and signed application at the offices of the awarding authority (with a copy delivered to the highway department). The license application shall be accompanied by any and all certificates, certificates of

insurance demonstrating compliance with (V) hereafter, and other items specified in the application or reasonably requested by the awarding authority. It shall also be accompanied either by evidence that license applicant is currently and appropriately "pre-qualified" pursuant to 720 CMR 5.00 or by such evidence of license applicant's compliance with the provisions of III (3) above as awarding authority reasonably may require. The license application shall also be accompanied by the license application fee.

The highway department shall promptly review the application and make written recommendations thereon.

The awarding authority shall make a prompt determination on the license application in accordance with the standards set out in III above.

If the license application is favorably considered, a public works construction license shall promptly be issued. If the license application is not favorably considered, awarding authority shall communicate in writing to license applicant the reasons its application was not favorably considered. The awarding authority may establish streamlined procedures for renewal applications.

D. Insurance[1]

Each licensed contractor shall acquire and continually maintain while licensed hereunder liability insurance coverage on all personnel and equipment to be used in the street opening work which insurance is to be with insurance companies licensed to do business in the Commonwealth of Massachusetts and shall contain the following coverages and be in the following minimum amounts:

Commercial General Liability Insurance including operators, independent contractors, complete operations, XCU hazards, broad form property damage and personal injury.

General Aggregate:	$2,000,000.00
Products and complete operations:	
Aggregate	$2,000,000.00
Each occurrence	$1,000,000.00
Personal & Advertising Injury	$1,000,000.00

Automobile Liability Insurance – covers owned, non-owned and hired vehicles

Combined Single Limit	$1,000,000.00
Or	
Bodily Injury Liability	
Each Person	$ 500,000.00
Each Accident	$1,000,000.00
Property Damage Liability	$ 250,000.00
Worker's Compensation and Employer's Liability	
Bodily Injury by accident	$ 100,000.00 each accident
Bodily Injury by disease	$ 500,000.00 policy limit
Bodily Injury by disease	$ 100,000.00 each employee

[1] ATM May 10, 1999, Article #13.

The licensee agrees to maintain at the licensee's expense all insurance required by law for its employees, including disability, workers compensation and unemployment compensation.

Certificates of Insurance shall provide for at least thirty (30) days notice to the awarding authority of cancellation or material change. The name of the awarding authority shall be listed as an additional insured on the Certificate of Insurance to be provided by the applicant. The awarding authority is not responsible for any loss or damage whatsoever to the property of the licensee.

E. Suspension and Revocation

The awarding authority or representative, if it believes a violation has occurred, can suspend immediately for up to twenty-one (21) days a public works construction license by communicating such suspension to licensed contractor or any of its representatives at the job site.

The awarding authority may revoke a public works construction license granted hereunder after notice and hearing if it shall reasonably determine that a violation of this by-law has occurred. Licensed contractor shall be given not less than five (5) days prior written notice of the time and place of the hearing and shall have the opportunity at the hearing to present evidence. No license applicant may re-apply for a public works construction license during the twelve (12) month period following a revocation. Any person aggrieved by the decision of the awarding authority may appeal such decision to the appropriate court of competent jurisdiction.

STREET OPENING BY-LAW ATTACHMENT- FEE SCHEDULE[1]

ITEM	AMOUNT
Application Fee	$ 100.00
Inspectional services after normal working hours	$ 50.00 per hour
To open to center of public way	$1,500.00
To open across the public way	$2,000.00
To open trench in unpaved shoulder (parallel to street)	$ 16.00/sq.ft.
To open trench in paved shoulder (parallel to street)	$ 25.00/sq.ft.
Curb Cut for driveway (no granite curb)	$1,000.00
Curb Cut for driveway (with granite curb)	$1,500.00
Newly Paved Roads (Infrared or equivalent)	
To center of public way	$1,000.00
Across public way	$1,500.00
To open a sidewalk (includes 3 sq. yrds.)	
Bituminous concrete sidewalk	$1,000.00
Concrete sidewalk	$2,000.00
To excavate a sidewalk (over 3 sq. yds.)	
Bituminous concrete sidewalk	$ 15.00/sq. ft., min. $1,000.00
Concrete sidewalk	$ 25.00/sq. ft., min. $1,500.00
Curbing	
Bituminous concrete curb	$ 20.00/lin. ft.
Granite curb R & R	$ 35.00/lin. ft.
Granite curb	$ 70.00/lin.ft.

Note: The actual amount of each refundable deposit shall be reasonably determined by the awarding authority to be sufficient to secure applicant's performance under this by-law.

[1] ATM May 14, 2007, Article #15.