

## TITLE IX: GENERAL REGULATIONS

### Chapter

90. STREETS AND SIDEWALKS

91. FIRE ALARM SYSTEMS



## CHAPTER 90: STREETS AND SIDEWALKS

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***GENERAL PROVISIONS***

**§ 90.01 DUMPING OF WASTE MATERIALS ON PUBLIC HIGHWAYS.**

Pursuant to the provisions of Conn. Gen. Stat. § 625, it is hereby enacted and resolved by the Selectmen of the town that no dumping or discarding of waste materials of any kind shall be permitted on the highways of the town, or on property of another within the town.

(Ord. passed 6-25-1993) Penalty, see § 90.99

***CONSTRUCTION OF DRIVEWAYS***

**§ 90.15 SUMMARY.**

This subchapter sets forth the policies, rules, procedures, standards and specifications of the town for the administration and enforcement of the construction of driveways.

(Ord. passed 5-17-1997)

**§ 90.16 SCOPE.**

It shall be unlawful for any person, firm or corporation to hereafter construct, reconstruct or otherwise alter any driveway abutting or intersecting any state highway, town street, lane or private lane before first filing a written application with the office of the First Selectman of the town and receiving a permit therefor.

(Ord. passed 5-17-1997) Penalty, see § 90.99

**§ 90.17 DEFINITIONS.**

For the purpose of this subchapter, the following definitions shall apply unless the context clearly indicates or requires a different meaning.

***ALTER.*** To change the elevation or location of a driveway.

**CONSTRUCT.** The building of a driveway or any portion thereof.

**DRIVEWAY.** Any area providing for vehicular access to or from a street.

**FIRST SELECTMAN.** First Selectman or authorized representative.

**RECONSTRUCT.** To remove or change the existing surface of a driveway.

**STATE HIGHWAY.** Route 133, Route 67, Route 67A or any other road under D.O.T. jurisdiction.

**TOWN LANE** or **PRIVATE LANE.** All other accessways and driveway corridors to two or more residences.

**TOWN STREET.** Any road within the town that has been accepted by the town or may be accepted into the town street system.  
(Ord. passed 5-17-1997)

## § 90.18 APPLICATION AND PLANS.

The application for construction of a driveway shall be in writing on forms provided by the Board of Selectmen and shall include:

(A) *Plans.* Two prints of the driveway plans drawn to a recommended scale of one inch equals 40 feet and shall include the following:

(1) Location of the intersection of the driveway with the state highway, town street, lane or private lane by distance to some permanent reference point;

(2) Length and width of driveway and proposed surface material. If the driveway is not to be paved, show length of proposed apron;

(3) Existing and proposed grades and percent of gradient along centerline of driveway by contour, spot elevations or profile. (Profile shall be at a recommended scale of one inch equals 40 feet horizontal, one inch equals four feet vertical);

(4) All lot lines and significant physical features of the lot such as stone walls, large trees, utility poles, rock outcroppings and the like, as they relate to the road and driveway;

(5) Existing street drainage along entire frontage of the lot such as culverts, leakoffs, ditches and the like, including invert elevations and direction of flow. If no street drainage exists in front of the lot, show

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the distance to the nearest downhill drainage structure, and the size and type of structure;

(6) Existing and proposed drainage on the lot including culverts, streams, intermittent watercourses, ditches, swales, foundation and gutter drains, curtain drains and general site drainage patterns (grading) as they relate to the road and driveway. Also show any drainage easements;

(7) Existing driveway sight lines and proposed sight lines and related improvements, if necessary;

(8) Proposed sedimentation and erosion control measures;

(9) Copy of permit from Town Conservation and Inland Wetlands Commission if driveway or drainage is in an area regulated by that agency; and

(10) Copy of zoning permit or affidavit of existence prior to zoning if driveway is to service a dwelling or other structure.

(B) *Fee.* The application fee shall be \$10 for each residence or farm served by a driveway, and \$50 for each driveway to a commercial, industrial or institutional building.  
(Ord. passed 5-17-1997)

### § 90.19 PERMIT PROCEDURES.

A driveway construction permit shall be issued in writing by the First Selectman subject to:

(A) *Plan revisions.* The completion of plans for the construction of the driveway and other improvements requested by the First Selectman, and thereafter approved by the First Selectman;

(B) *Inspection fee.* Payment to the town of an inspection fee equal to 5% of the cost of the driveway and other improvements based on cost estimates approved by the First Selectman;

(C) *Deposit.* To guarantee completion of the driveway as approved under the permit, a cash deposit in the amount deemed sufficient by the First Selectman. Under normal conditions, the cash deposit will be set between \$500 and \$1,000;

(D) *Time limit.* The permit shall be valid for a period of one year or such lesser period as the First Selectman may specify. Any permit which has expired may be renewed only upon reapplication and repayment of the fees; and

(E) *Hold harmless.* The applicant agrees to hold the town harmless against any action for personal

injury or property damages during the construction of the driveway.  
(Ord. passed 5-17-1997)

#### § 90.20 REVOCATION.

The First Selectman may revoke or suspend a driveway permit when the First Selectman determines that the work is not being carried out in accordance with the permit.  
(Ord. passed 5-17-1997)

#### § 90.21 RELEASE OR FORFEITURE OF DEPOSIT.

Upon the completion of the permit work in accordance with this subchapter and upon the issuance of a certificate of approval for the driveway, the permittee shall be entitled to the return of the cash deposit. In the event that the work is not completed in accordance with this subchapter, the permit issued and within the time period granted for completion or as extended, the cash deposit shall be forfeited to the town. But the permittee shall still remain liable for the completion of the permit work at his or her sole cost and expense. The town shall be allowed in its sole discretion after forfeiture of the deposit to do, or cause to be done, the work at the sole cost and expense of the permittee. Notwithstanding the above, the town shall have the right to utilize all deposits forfeited hereunder, to bring up to town standards any driveway that does not comply with this subchapter.  
(Ord. passed 5-17-1997)

#### § 90.22 DESIGN.

Driveways shall conform to the following requirements.

(A) *Intersection with streets.* Driveways shall intersect streets at or as near to a right angle as is practical.

(B) *Storm drainage.* Street drainage or existing storm flow within the street right-of-way shall not be changed or obstructed by a driveway and the applicant must provide, at his or her expense, suitable drainage structures and/or drainage pipes, a minimum 15-inch or larger, as approved by the First Selectman. Driveways shall not pass storm water onto the surface of any existing or proposed street. Where a driveway slopes down to the pavement in a town street, adequate provisions shall be made for the flow of storm water into the normal drainage pattern and not into the traveled portion of the street. Driveways intersecting with state highways shall conform to standards required by the state permit as far as state jurisdiction extends.

(C) *Grades.* Driveway grades shall not exceed:

(1) Five percent from the edge of the street pavement for a distance of not less than 25 feet. Generally, all driveways will pitch up from the edge of pavement to the property line. See standard details;

(2) Ten percent for residential uses. Grades steeper than 10% may be approved up to 12% by the First Selectman when the topography warrants the approval in order to prevent deep cuts and/or fills and will be in the best interests of the town. That portion of the driveway, approved by the First Selectman, which exceeds 10% shall have a compacted subgrade, an eight-inch compacted gravel base and not less than two inches of compacted bituminous concrete. Provisions shall be made for storm water runoff to prevent erosion or the concentration of storm water runoff onto adjacent property or streets; and

(3) Ten percent for commercial, industrial and institutional uses.

(D) *Apron.* A paved apron shall be provided from the street pavement to the street line and flared at the street to permit normal turning by vehicles using the driveway.

(E) *Width of driveway.*

(1) The traveled portion of the driveway shall be not less than ten feet wide for one residential lot (or farm). The width of all other driveways shall conform to the plan approved by the Planning and Zoning Commission in accordance with the zoning regulations of the town.

(2) Driveways over 400 feet in length shall be widened every 400 feet or less to a width of 18 feet for a distance of 30 feet so that a moving vehicle can pass a vehicle stopped in the widened area. The driveways will be required to provide, to the satisfaction of the First Selectman, a means for fire apparatus to turn around within the parcel served by the driveway and exit in a forward direction.

(a) The First Selectman may grant a waiver which would permit a driveway to serve not more than two residential lots when the applicant proves that each lot has a driveway corridor that conforms to all the requirements of this subchapter, the subdivision regulations and the inland wetlands and watercourse regulations.

(b) The traveled portion of a driveway serving not more than two residential lots shall be not less than 18 feet in width and conform to all other provisions of this subchapter. The First Selectman shall attach appropriate conditions and require the guarantees as may be necessary to protect the public interest.

(F) *Sight distance.* Sight lines shall be a minimum of 150 feet, but the First Selectman may reduce this requirement in the case of hardship.



(G) *Culverts.* All culverts and bridges under the driveway shall be provided if needed in the opinion of the First Selectman, and shall be capable of carrying Fire Department vehicles.

(H) *Parking in right-of-way.* Construction of a parking area on the street right-of-way is prohibited.

(I) *Location.* Driveways shall be confined between lines projected from the frontage corners of the property perpendicular to the center of the highway, but this requirement, in cases of hardship, may be waived in writing by the First Selectman.

(J) *State highway permit.* If the driveway is to be on a state highway, a written permit from the Department of Transportation, Permit Encroachment Division, located in Thomaston, Connecticut, is required before the Town Building Inspector can issue any driveway permit for a driveway from the state highway.

(Ord. passed 5-17-1997)

## § 90.23 CONSTRUCTION.

(A) A driveway constructed within the street right-of-way under a permit shall be subject to inspection by the First Selectman or authorized representative. The right is reserved by the First Selectman to require the changes, additions and relocations as in the opinion of the First Selectman may be necessary for relocation, reconstruction or maintenance to provide protection to life and property.

The applicant shall give the First Selectman at least 72 hours notice before installation of any driveway to facilitate his or her scheduling of inspection.

(B) All paved aprons, as specified in § 90.22(D) above, shall have a compacted subgrade, a six-inch compacted gravel base and two inches of compacted bituminous concrete or four inches of concrete. No driveway apron is to be installed with an overlap of pavement onto or over a town road. The two pavement edges are to be cut and blended together so as to obtain a smooth junction with no protrusions.

(C) If any driveway installation requires the removal of a portion of a cable or metal beam railing within the street right-of-way, proper replacement and anchoring of the safety railing on each side of the driveway shall be provided.

(D) Gravel driveways beyond the street line shall have a compacted subgrade and eight inches of compacted gravel.

(E) Drainage structures shall be constructed in accordance with §§ 90.35 through 90.45 to the town.

(F) During construction the applicant shall not create a hazard to the traveling public and shall furnish

the protective devices or police protection as the First Selectmen may require at the applicant's expense.

(G) Erosion and siltation control requirements are applicable to all construction work which causes disturbance to the existing ground surface. All control measures shall be constructed and maintained during construction in accordance with the *Erosion and Sediment Control Handbook*, latest edition, Soil Conservation Service, United States Department of Agriculture.

(Ord. passed 5-17-1997)

#### § 90.24 PERMITS AND CERTIFICATES.

(A) No building permit shall be issued by the Building Inspector for the construction of any building or structure for which a new driveway is necessary until a driveway permit has been issued as required by this subchapter. No certificate of occupancy shall be issued by him or her for the use or occupancy of any building or structure until the driveway therefor has been approved by the First Selectman or authorized agent.

(B) For the approval, plans drawn and certified by an engineer or surveyor licensed in the state showing the final driveway grades in conformity with the approved permit, must be submitted to the Building Inspector.

(Ord. passed 5-17-1997)

### *CONSTRUCTION AND ACCEPTANCE OF STREETS*

#### § 90.35 TITLE AND STANDARDS.

(A) *General.* This subchapter sets forth the policies, rules, procedures, standards and specifications of the town for the administration and enforcement of the construction and maintenance of streets.

(B) *Title.* This subchapter is entitled "Ordinance Pertaining to the Construction and Acceptance of Streets" and may hereinafter be cited as the "Road Ordinance".

(Ord. passed 5-17-1997)

#### § 90.36 DEFINITIONS.

For the purpose of this subchapter, the following definitions shall apply unless the context clearly

indicates or requires a different meaning.

**AGENT.** The Board of Selectmen can by resolution designate an agent or agents to be responsible for the inspection and supervision of construction as carried out under this subchapter, who would be responsible for the issuance of permits and performance of duties under the direction of the Board.

**BOARD.** The Board of Selectmen of the Town of Bridgewater.

**DRIVEWAYS.** Connecting to public streets, shall be constructed in accordance with these regulations and §§ 90.15 through 90.24, and only after the issuance of a driveway permit by the Board of Selectmen.

**FORM 814.** The State of Connecticut Department of Transportation Standard Specifications for Roads, Bridges and Incidental Construction (Form 814A) dated 1995, as amended, and are hereby made a part of this Road Ordinance and hereafter referred to as Form 814.

**STANDARD DETAILS.** Drawings of town standard details for streets, storm sewers and other construction, which are part of these regulations, may be procured at the office of the Board of Selectmen.

**STANDARDS, SPECIFICATIONS AND DRAWINGS.** Where conflict occurs between or within regulations, standards, specifications and drawings, the more stringent or higher quality requirements shall be assumed to apply, except that the Board of Selectmen shall make the final decision as to which stipulation will provide the best work and will be most consistent with design intent.

**STREET.** A proposed public or private highway, street or road in a subdivision or resubdivision approved by the Planning and Zoning Commission. **STREETS** shall be classified in accordance with the standards contained in the Town Plan of Development adopted by the Commission.  
(Ord. passed 5-17-1997)

## § 90.37 APPLICATION PROCEDURE.

(A) *Applicability.* The provisions hereof are applicable to the construction of streets in an approved subdivision.

(B) *Maps.* Maps showing rights-of-way for streets and highways and rights-of-way and easements for drainage and other improvements shall be prepared in accordance with the standards for a subdivision map specified in the subdivision regulations. Construction plans for streets, drainage and other improvements shall be prepared in accordance with the standards for construction plans specified in the subdivision regulations as the same may from time to time be amended. All maps shall be prepared by and shall bear the name, seal and signature of a land surveyor and/or engineer licensed as such by the State Board of Registration for Connecticut Engineers and Land Surveyors of the state, and in accordance with the

“Minimum Standards for Survey and Maps” dated June 21, 1996 of the Department of Consumer Protection, State of Connecticut, as amended.

(C) *Computations.* Sufficient computations to permit the Board or Town Engineer to check drainage design. The computations shall consider the entire upstream watershed and the downstream area affected by the storm water runoff and shall be accompanied by a drainage map showing upstream watershed and the downstream area affected by the storm water runoff. The design for the drainage system shall be based on the provisions of § 90.40(B) below.

(D) *Applications for road construction permit.*

(1) Application for a road construction permit shall be made in writing to the Board of Selectmen and shall include the following documents:

(a) Two copies of the maps and plans as specified in division (B) above and the computations provided for in division (C) above;

(b) A fee of \$100; and

(c) In the event that the proposed construction is within or relates to an existing town street and/or other town improvement, evidence of worker's compensation and contractor's liability insurance in amounts and with carriers acceptable to the Board of Selectmen with the town named as an insured shall be presented.

(2) When a revision is made at the request of the Board or proposed by the applicant to the maps or plans submitted under division (D)(1) above, two copies of the revised plans or maps shall be submitted to the Board of Selectmen.

(E) *Permit procedures; issuance.* A road construction permit shall be issued in writing by the Board of Selectmen subject to:

(1) The completion of plans for the construction of streets, drainage and other necessary plans requested and approved by the Board of Selectmen and which also may be required to be approved by the Planning Commission;

(2) Payment to the town an inspection fee equal to 3% of the cost of streets, drainage and other improvements, based on cost estimates approved by the Board of Selectmen, but in no case shall the fee be less than \$100;

(3) All road construction or reconstruction and all excavation on or under a town highway or

right-of-way and all proposed subdivision roads built within the town shall be filed with a performance guarantee in an amount equal to 100% of the cost of the work. The cost of the work shall be estimated by a licensed professional engineer to be paid for by the Developer and the amount shall be specified by the Selectmen and approved by Town Counsel for any road improvements or construction of any road in the town; and

(4) A written agreement, in form satisfactory to Town Counsel, permitting entrance by the town onto the land shown on the subdivision plan for the purposes of inspection and of installing the required improvements in the event of the failure of the Applicant to make improvements or properly to maintain them until the town has assumed responsibility for them, and the written agreements shall provide that the developer, on demand, shall execute and deliver to the town a warranty deed or certificate of title to the area of the street or streets and easements shown on the subdivision plan as approved, including any strips reserved for future street purposes.

(F) *Permit procedures; length of permit.* The road construction permit shall be valid for a period of time that the Board of Selectmen deems necessary for the completion of construction. Permits may be extended for a period not to exceed one year upon written approval of the Board of Selectmen. Upon the expiration of the extended time period, the Board shall either: require reapplication for the uncompleted work; or pay for the completion of the work by calling the performance guarantee.

(G) *Performance guarantee.* The applicant shall execute an agreement and file a performance guarantee in the form of an irrevocable letter of credit or cash with the Board, the guarantee to be in an amount and with surety and conditions satisfactory to the Board, securing to the town the actual construction, installation and completion of all improvements to the satisfaction of the Planning and Zoning Commission and Board of Selectmen including without limitation, streets, drainage and placing of monuments, within a period not to exceed two years from the filing of the guarantee. The guarantee shall be in form and amount and with a surety acceptable to the Board, the Planning and Zoning Commission and Town Counsel.

(H) *As-built plans.* Upon the completion of any road, drainage or other improvements, that applicant shall file with the Board the following:

(1) The applicant's land surveyor, licensed to practice in the state, shall certify the installation and precise location of monuments to a Class A-2 accuracy by noting the monuments and their location on the linen transparency or polyester film construction plans and by signing (original signature) and sealing (embossed seal) the plans;

(2) The applicant's land surveyor and engineer, licensed to practice in the state, shall certify on the linen transparency or polyester film construction plans and profiles the location and elevation of all required improvements and by signing (original signature) and sealing (embossed seal) the plans and profiles to show "as-built conditions";

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(3) A certification, signed and sealed by an engineer licensed to practice in the state that the engineer has inspected all construction work and all improvements have been completed in accordance with plans and profiles approved by the Board and the standards and specifications of this subchapter;

(4) All mathematical and control data necessary to reproduce any and all street and easement lines on the ground and all bench mark locations and elevations; and

(5) One linen transparency or polyester film of the as-built drawings and four prints of the as-built drawings.

(I) *Reduction or release of performance guarantee.* Before the reduction or release of the performance guarantee provided for in division (G) above:

(1) The streets, street improvements and street drainage shall have been inspected and approved by the Board of Selectmen or its agent;

(2) As-built plans shall have been filed with the Board pursuant to division (H) above, and approved by the Board;

(3) For the release of the performance guarantee the applicant shall execute an agreement and file a maintenance performance guarantee for maintenance of streets, drainage and other improvements.

(a) The guarantee shall be in form and amount and with surety acceptable to the Planning and Zoning Commission, the Board and Town Counsel.

(b) In the case of improvements which are not to be offered for acceptance by the town, the maintenance guarantee must be in effect for a period of 24 months from the release of the performance guarantee.

(c) In the case of improvements which are to be offered for acceptance by the town, the maintenance guarantee shall be in effect for a period of 24 months from the release of the performance guarantee or until acceptance of the improvement by the town, whichever period is lesser.

(4) For the reduction of the performance guarantee, the applicant shall execute a new agreement as specified in division (G) above.

(J) *Acceptance of streets.* One year after the release of the performance guarantee, a petition may be made in writing to the Board of Selectmen for the acceptance of a street by the town meeting. The petition shall be signed by the owner(s) of the street and shall include the following:

(1) A copy of a map to be filed in the Town Clerk's office showing all street and drainage rights-of-way;

(2) Warranty deed and certificate of title for the rights-of-way of the street and drainage structures and of any easements in support thereof. Deed and certificate of title shall include:

(a) A waiver of mechanic's liens of title insurance insuring against mechanic's liens;

(b) Letter from the Tax Collector indicating full payment of taxes due; and

(c) Any other certificates and documents required by Town Counsel.

(3) Upon receipt of the required documents, the Board shall refer the documents to the Planning and Zoning Commission for their review under Conn. Gen. Stat. § 8-24, as amended, not less than 35 days before the next regular town meeting. The Board shall then place the petition for acceptance on the call of the next regular town meeting provided however that all requirements of this subchapter and, if applicable, the subdivision regulations have been fulfilled.

(K) *Liability insurance.* The manufacturer's and contractor's liability insurance specified under division (D)(3) above shall include no less than the following:

(1) Public liability limits of \$1,000,000/\$1,000,000 aggregate;

(2) Property damage limits of \$500,000/\$500,000 aggregate including blasting and underground damage resulting from the use of mechanical equipment, on work covered by this document;

(3) Coverage with respect to all subcontractors doing any part of the work covered by the permit;

(4) If the policy is changed or cancelled during the policy period, the policy shall provide that written notice will be given to the First Selectman of the town at least 15 days before the effective date of the change or cancellation period;

(5) The town shall be named as an additional insured; and

(6) Additional coverage as requested by the Board.

(L) *Inspection procedures.* The Board of Selectmen or its authorized agent, and where appropriate, the Planning and Zoning Commission, shall have free access to the construction work at all times and shall be authorized to take material samples, corings and other tests as deemed necessary to determine compliance with the standards of these regulations. They may require the applicant at his or her own expense, to have

the tests made and certified by a state licensed professional engineer.

(M) *Notification.*

(1) The applicant or contractor for the street, drainage or other subdivision improvements shall notify the Board of Selectmen in writing of his or her intention to start any construction project at least five days prior to starting the work. Should the applicant or the contractor close down the construction project for a period exceeding one week, due to weather conditions or other cause, the applicant or the contractor shall notify the Board of Selectmen in writing of the closing; he or she shall notify the Board in writing of his or her intention to resume the work.

(2) In addition, the applicant or the contractor shall give timely written notice to the Board of Selectmen for inspection purposes at least 48 hours before each of the following stages of work:

- (a) Commencement of site clearance and after the construction work has been staked out;
- (b) Commencement of excavation and grading of streets and installation of embankments;
- (c) Commencement of installation of drainage and other utilities;
- (d) Commencement of backfilling structures and drainage pipes, facilities and other utilities;
- (e) Prior to commencement of the subbase on compacted subgrade;
- (f) Commencement of placement of the processed aggregate on the subbase of a street;
- (g) Commencement of placement of the binder course of bituminous concrete on base;
- (h) Commencement of placement of the surface course of bituminous concrete on binder course;
- (i) Commencement of installation of curbs;
- (j) Completion of installation of guard rails, signs, street lighting, street trees, topsoil, seeding and other improvements;
- (k) The Board of Selectmen or its agent reserves the right to inspect all work at any time and without notice; and
- (l) Depending on the individual project, the Board may require inspections at other times and



the Board reserves the right to inspect the project, without notice, at any time.

(3) The Board of Selectmen or its agent shall have two working days in which to inspect the completed work in each of the above stages of the project prior to approving the work. No work shall be commenced on succeeding stages of construction until the required inspections have been made and approval given in writing by the Board of Selectmen.

(4) The Board of Selectman may issue a stop work order and may suspend the road construction permit if, in its judgment, any construction project or any stage thereof is not being carried out in accordance with this subchapter or if unforeseen field circumstances are encountered for which the approved plans are insufficient; the Board shall withdraw the order and reinstate the permit when it determines that there is compliance with this subchapter.

(N) *Barricades and protection.* When any excavation is made within the right-of-way of any town street, the applicant or his or her contractor shall provide a railing or suitable barricade so as to enclose the excavation material placed in the right-of-way. The railing or barricade shall be continued and maintained during the whole time the excavation is exposed or open. A sufficient number of lighted flashing warning lights approved by the Board of Selectmen shall be provided for public safety, to be affixed to some part of the railing or barricade or in some other proper manner over or near the excavation and excavated material, and so kept from the beginning of the twilight of the evening through the whole of the night, and every evening and night during the time the excavation shall be open, exposed or in state of repair. The applicant or his or her contractor shall comply with any order of the Board or its authorized agent for provision of the barricades and shall furnish a town constable or a state trooper in uniform when so ordered.

(O) *Rights of safe passage.* The applicant or his or her contractor shall provide safe and convenient passage for public travel around or over any excavation in a town street or highway and shall keep the passage free from earth, stones, trenches or any other materials which may hinder travel of pedestrians or vehicles. The applicant or his or her contractor shall comply with any order of the Board of Selectmen or its authorized agent for protection of safe passage. Street gutters shall not be obstructed in any manner so as to prevent or retard flow of water there.

(P) *Suspension of work.* All work shall be suspended if the contractor fails to provide adequate directional or warning devices to control and protect both vehicular and/or pedestrian traffic.  
(Ord. passed 5-17-1997)

## § 90.38 STREET DESIGN.

The following standards shall apply to the construction of streets.

(A) *Right-of-way.* Streets shall have a minimum width of 50 feet for the right-of-way for local streets

and a minimum width of 60 feet for the right-of-way for collector streets.

(B) *Turnaround.*

(1) A turnaround with a minimum radius of 100 feet for the right-of-way shall be provided at the closed end of all dead-end streets.

(2) The width of the travelway, based on the classification of street specified in division (C) below, within the turnaround shall be centered on a radius of 60 feet. The circle inside the pavement shall be suitably landscaped.

(C) *Width of travelway.*

(1) Streets shall be designed with the following width of pavement centered between street lines and measured between curb faces:

- (a) Local street: 22 feet;
- (b) Collector street: 26 feet; and
- (c) Turnaround: see division (B) above.

(2) The recommended travelway width means that on-street parking is prohibited on all local streets and that parking may be permitted on one side of collector.

(D) *Gradient.*

(1) The minimum grade for all streets shall be 1% except that a minimum grade of from 0.5% to 1% may be established for 100 feet or less and at tangents of vertical curves.

(2) The maximum grade for any street shall not exceed the following:

- (a) All streets: 7%; and
- (b) Turnarounds: 3%.

(3) Grades steeper than 7% for all streets, but not to exceed 10%, may be approved by the Board of Selectmen when the topography warrants the approval in order to prevent deep cuts or fill, and the Board finds that the street will provide safe and convenient circulation and has been designed in a manner capable of public use and maintenance by the town.

(4) Grades between 7% and 10% shall not be more than 400 feet in length between the beginning and end of successive vertical curves.

(E) *Vertical curvature.* Appropriate vertical curves for transition, including super-elevated curves meeting acceptable engineering standards, shall be established on all streets and street intersections to insure adequate sight distance in accordance with the classification of the street. Except at intersections, vertical curves shall provide a minimum sight distance of 200 feet along the edge of pavement. Where any street approaches an intersection at a grade of 4% or more, a transition area having a maximum grade of 2% shall be provided for a minimum of 50 feet measured from the right-of-way line of the street intersection.

(F) *Horizontal alignment.*

(1) Connecting curves between tangents shall be provided for all deflection angles in excess of five degrees.

(2) Suitable tangents shall be provided between curves, and the minimum radius of curvature at the centerline of streets shall be as follows:

(a) Local street: 150 feet; and

(b) Collector street: 300 feet.

(G) *Intersections.*

(1) New road intersections shall be at least 200 feet from any existing intersection, or other proposed intersection, or shall be part of an existing or proposed intersection.

(a) Maximum intersection sight distances shall be as follows:

350 feet	For 30 mph design speed
425 feet	For 35 mph design speed
475 feet	For 40 mph design speed
525 feet	For 45 mph design speed
575 feet	For 50 mph design speed

(b) Greater distances may be required if the Board of Selectmen, in its sole discretion, shall so determine.

(c) The sight distance shall be measured with the stopped driver located 20 feet behind the

intersecting street edge of pavement to the center of the proposed travelway for traffic approaching from the left and right. The sight distance shall be based on a height of eye of three feet. No obstructions shall be located within this sight zone.

(2) Roads shall intersect at 90-degree angles where feasible. Where unusual topographic conditions warrant, the Board of Selectmen may, through written approval, allow modification of this standard, but no intersection shall be at an angle of less than 60 degrees.

(3) At street intersections the radii at the face of the curb shall be as follows:

- (a) Local street to local street: 25 feet;
- (b) Local street to collector street: 30 feet; and
- (c) Collector street to collector street: 30 feet.

(4) The street line radius shall be a minimum of 14 feet inside the curb radius for local street intersections and 17 feet inside the curb radius for local street to collector street intersections and collector street to collector street intersections.

(H) *Cross sections.* Local streets and collector streets shall be designed with a cross section in accordance with drawings in § 90.45 below, which drawings are hereby made a part of this subchapter.

(I) *Condition of existing town streets.* An application for road construction permit must demonstrate, to the satisfaction of the Board, that existing town streets providing access to the proposed subdivision are adequate. For the purpose of this section, an **ADEQUATE TOWN STREET** is one which provides safe and sufficient access and egress to the proposed lots in the proposed subdivision for the number and type of vehicles expected to utilize the access, taking into account, among other things, both existing and anticipated future traffic flow and volume in relation to the width of traveled surface, number of intersections and driveways, condition of surface and other conditions and standards for streets set forth in the subdivision regulations and this subchapter pertaining to the construction and acceptance of streets in the town. Unless the Board finds that existing town street(s) providing access to the proposed subdivision are adequate, it shall deny the application for a road construction permit.

(J) *Street improvements.* A subdivision application must show all proposed work on town street(s) providing access to the proposed subdivision to meet the requirements of the subdivision regulations and this subchapter, together with a statement of the proposed method of meeting the cost of the work. Where a subdivision, in the opinion of the Board, requires expenditures to improve existing town streets to conform to the subdivision regulations and the requirements of this subchapter and the applicant is unwilling to make the expenditures and post performance bonds secured by letters of credit or cash collateral, in form and

substance satisfactory to the Board, the Board shall disapprove the subdivision unless the Board of Selectmen, the Board of Finance, and town meeting have approved the expenditures.

(K) *Conforming existing street rights-of-way to town plan of development.*

(1) If any existing town street right-of-way is less in width than as shown on the plan of development, the subdivision shall provide not less than one-half of the added width required by the plan of development as measured by the centerline of the street right-of-way. The applicant's conveyance to satisfy this division (K) shall be by warranty deed, in form and substance satisfactory to Town Counsel, conveying sufficient land to the town so that the street(s) can be widened (and/or straightened) to the width specified herein. Where the future width of street is not otherwise indicated on the plan of development, it shall be 50 feet.

(2) The requirements of this division are in addition to those set forth in the subdivision regulations and shall not, in any way, be construed or interpreted to impose upon the town any obligation to improve or widen any town street.

(L) *Intersections with existing town streets.* All intersections with existing streets shall have plan, profile, and typical sections of existing roadway each side of the intersection, and the sight distances shown in accordance with division (G) above.

(Ord. passed 5-17-1997)

## § 90.39 CONSTRUCTION.

Streets shall be constructed in accordance with the following standards and procedures:

(A) *Survey and field layout.* Instrument surveys shall be made, maintained and recorded as follows:

(1) A centerline survey of the street shall be run in the field and suitable construction ties established to all control points. Stations shall be established to all control points. Stations shall be established at 50-foot intervals and at all points of curvature and points of tangency. The beginning of this line shall be designated at Station 0+00 and shall be the intersection point of the proposed centerline with the centerline of the connecting street. Offset hubs shall be provided as part of the centerline survey.

(2) A construction stake shall be placed perpendicular to the tangent, or radial in the case of curves, at each station on both sides of the streets and clear of all construction. The construction stake shall be marked with the station offset to centerline and cut and fill to profile grade as measured from the top of the stake.

(3) A stake sheet showing the stations, profile grade, stake offsets and grades, and cuts or fills

shall be prepared and presented to the Board of Selectmen before construction starts.

(4) Permanent bench marks shall be established throughout the duration of the project and recorded with the Board of Selectmen throughout the length of the project at 1,000-foot intervals or as directed by the Board. The datum for bench marks shall be town, state or United States datum; an assumed datum may be used only with the permission in writing from the Board.

(5) Grade stakes, construction stakes and bench marks shall be protected and preserved until the construction work is approved by the Board of Selectmen.

(B) *Clearing and grubbing.*

(1) The entire area of the right-of-way required to be graded in accordance with the standard cross section shall be cleared of trees, stumps, brush, roots, large rocks, ledge and other unsuitable materials, except that trees suitable for street trees shall be left standing as directed by the Board of Selectmen or shown on the approved construction plans.

(2) All large rocks, boulders, felled trees, stumps, brush and other objectionable materials shall be removed from the street right-of-way and shall be deposited and suitably covered at those locations on the property shown on the approved construction plans or approved off site location. All topsoil shall be temporarily stored at those locations shown on the approved construction plans.

(C) *Preparation of subgrade.* The subgrade will be prepared as follows.

(1) All trees and roots shall be stripped to below the base course of the pavement and for the full width of the pavement. All soft spots, peat, loam, organic material, spongy soil, boulders, ledge and other unsuitable material shall be removed and replaced by material conforming to State Department of Transportation Standard Specifications Form 814, § M.02.07. Where ledge rock is encountered, it shall be removed to a depth of 18 inches below subgrade, and the area backfilled with gravel and compacted.

(2) Embankments shall be constructed of suitable fill material deposited in successive layers not exceeding 12 inches in depth after compaction; embankments to an elevation of three feet above free water surface at the time of filling shall be constructed of rock and/or free draining material conforming to Form 814, § M.02.07. No stone over five inches in its greatest dimension shall be placed within 18 inches of the elevation of the subgrade.

(3) The subgrade shall be compacted by the use of power rollers of at least 16 tons, or by other suitable equipment approved by the Board or its agent. The subgrade shall be brought to a uniform surface to conform to the shape of the required cross section.

(4) Where rock fill is used, construction methods shall be in accordance with the provisions of subarticle 2.02.03-5 of Form 814.

(5) The finished surface shall be smooth and even and shall not vary more than one-half inch from the standard cross section of established grade. Any deviation from this cross section or established grade shall be corrected by cutting or filling followed by repeated rollings until a well-compacted surface is obtained.

(6) The contractor shall protect the subgrade from damage. At all times the subgrade surface shall be kept in a condition that it will drain readily and correctly. The subgrade shall be checked for compliance with specifications before any remaining road construction material is placed upon it.

(D) *Subbase.* The subbase shall be constructed as follows:

(1) The subbase material shall be crushed gravel or crusher-run stone in accordance with Article M.02.02 and M.02.06 of Form 814.

(2) Construction methods shall be in accordance with § 2.12 of Form 814. The compacted thickness of the subbase shall be 12 inches after compaction. All drainage and utilities buried within the paved area shall be installed and tested to insure proper functioning prior to installation of the subbase.

(3) All compacting shall be done with a power roller weighing not less than ten tons or equivalent vibratory roller or compactor. Rolling shall proceed in a longitudinal direction beginning at the gutter line and proceeding toward the center. Sufficient overlap with the inside roller wheel shall be maintained to avoid any unrolled areas. Rolling shall be continued until the material is well keyed and does not creep ahead of the roller.

(4) The final surface shall not vary more than three-eighths-inch from the established grade and standard cross section.

(5) The subbase shall not be constructed during freezing weather or in a wet or frozen subgrade.

(6) Should the subgrade beneath the subbase become churned up and mixed with subbase material at any time the contractor shall remove the mixture and replace it with new subbase material to the required thickness shown on the plans or as previously required by the Board of Selectmen. The replaced subbase material shall be compacted to the required minimum density.

(7) The subbase shall be checked for general compliance with the specifications before any remaining road construction material is placed upon it.

(E) *Processed base.* The processed base shall be constructed as follows.

(1) The base material shall conform to the requirements of subarticle M.05.01-1, M.05.01-2 and M.05.01-3, Form 814.

(2) Construction methods shall be in accordance with § 3.04 of Form 814. The aggregate shall be spread uniformly upon the prepared subbase directly from approved spreaders or stone boxes to a depth of not less than four inches after final compaction. Power graders shall not be permitted to spread the aggregate base except with the permission of the Board of Selectmen. After the aggregate is spread, it shall then be thoroughly compacted; and during the compacting, water shall be applied from an approved watering device by a vertical spray delivering a flushing stream. The compacting and wetting shall be continued until the voids in the aggregates have been reduced to a minimum obtainable. The compacting shall be continued until the course is thoroughly compacted to a firm and uniform surface satisfactory to the Board of Selectmen. Should any irregularities of surface develop during or after the compacting of the course, it shall be remedied by loosening the material already in place and removing or adding coarse aggregate as required after which the entire area, including the surrounding surface, shall be compacted, broomed and wetted and the compacting continued until it is compacted satisfactorily to a uniform surface.

(3) All compacting shall be done with a power roller weighing not less than ten tons or an equivalent vibratory roller or compactor. The compacting shall begin at the sides, overlapping the shoulders for a distance of not less than six inches and progress toward the center, parallel with the centerline of the pavement, uniformly lapping each preceding tract and covering thoroughly the entire surface. Areas of super-elevation and special cross slope shall be compacted beginning at the low edge and proceeding toward the high edge or as directed by the Board of Selectmen.

(4) The final surface shall not vary more than one-half-inch from the established grade and standard cross section.

(5) The processed base shall be checked for general compliance with the specifications before any remaining road construction material is placed upon it.

(F) *Pavement.* On the prepared and approved processed base there shall be constructed two courses of bituminous concrete as follows.

(a) The binder course shall conform to the requirements of Class 1F § M.04 of Form 814; and the surface course shall conform to the requirements of Class 1, § M.04 of Form 814.

(b) No bituminous surfacing work shall be performed between October 15 and April 15, except with the written consent of the Board of Selectmen.

(c) All roadway pavements shall be laid using an approved, self propelled paving machine.



Pavement shall be compacted using a steel-wheeled roller weighing not less than ten tons.

(d) Permanent paving shall be placed only when the underlying surface is dry, when the atmospheric temperature in the shade is above 40°F, and when the weather is not foggy or rainy, provided however, that the Board of Selectmen may permit, in case of sudden rain, the placing of mixture then in transit from the plant if laid at proper temperature and if the roadbed is free from pools of water. The permission shall in no way relax the requirements for quality of the pavement and smoothness of surface. No material shall be laid upon a frozen base course or when wind conditions are such that rapid cooling will prevent satisfactory compaction. No load shall be sent out so late in the day that spreading and compaction cannot be completed during daylight.

(e) Before placing the permanent surfacing, the exposed edges of the existing pavement shall be completely cleaned of all surface dirt and debris.

(f) The contractor shall check all manholes, catch basins or other appurtenant structures for proper alignment and elevation before placing any pavement and after paving has been completed.

(g) The contact surfaces of manholes, catch basins or other appurtenant structures in the pavement and the exposed edges of the existing pavement shall be painted thoroughly with a thin uniform coat of bituminous material immediately before any bituminous concrete is placed against them.

(h) It is the intent of the Board of Selectmen that the existing town roads shall be restored to a condition equal to this subchapter or better than that in which they were prior to construction, whichever is the most restrictive.

1. The work to be performed on existing roads shall be done after a suitable period has elapsed for settlement of the backfilled trenches and when approved by the Board of Selectmen.

2. Where directed by the Board of Selectmen, existing roadway pavement which cannot be used in the restoration of the road shall be scarified, removed and disposed of by the contractor.

3. All manhole covers, catch basin frames, valve boxes or similar structures shall be raised to final grade prior to placing the binder course.

4. Prior to paving over trenches, the contractor shall cut the existing pavement back in two neat parallel lines on either side of the trench so as to expose 12 inches of undisturbed subgrade. He or she shall then pave over the backfilled trench and the two cut-back areas.

- (i) Any part of the pavement damaged by traffic or other causes occurring prior to its final acceptance shall be repaired or replaced in a manner satisfactory to the Board of Selectmen. The contractor shall protect the pavement against both public traffic and the traffic caused by his or her own employees and

agents.

(G) *Curbs.*

(1) Bituminous concrete curbs shall be constructed on the outer edge of the completed pavement, except as specified hereinafter. Curbs shall be machine formed, having a cross section approved by the Board of Selectmen, a height of six inches and a base width of nine inches. The curb material shall conform to § M.04, Class 3 of Form 814, and construction shall conform to § 8.1 5 of Form 814.

(2) Where driveways exist or are planned, depressed curbing must be installed.

(a) The surface of the pavement where the curbing is to be constructed shall be cleared of all loose and foreign material, shall be dry and shall be coated with an R.C.2 or other bitumen just before placing the material.

(b) The material shall be properly compacted to the required cross section by use of a suitable machine specifically designed for the purpose.

(c) After completion of the curbing, traffic shall be kept at a safe distance for a period of not less than 24 hours and until the curbing has set sufficiently to prevent injury to the work.

(d) The requirements of Conn. Gen. Stat. § 7-188a shall apply wherever applicable.

(3) At all intersections stone curbing shall be installed conforming to § 8.13 of Form 814 from the point of curvature to the point of tangency. Material for stone curbing shall conform to Article M.12.06.

(H) *Slopes.*

(1) Cut or fill slopes beyond the shoulder area or street line shall not exceed one foot of rise or fall for each three feet of horizontal distance; but the Board of Selectmen may require a variation in the degree of slope to whatever extent is necessary to maintain the stability of the bank under the particular conditions.

(2) All areas which fail to show a uniform stand of grass, for any reason whatsoever, shall be reseeded and the areas shall be seeded repeatedly until all areas are covered with a satisfactory growth of grass. All earth surfaces of slopes, and areas that have been disturbed in any way due to grading and construction of the streets, shall be covered with a minimum of four inches of topsoil and suitably seeded or planted to prevent soil erosion.

(3) The Board of Selectmen may require the removal or lowering of embankments adjacent to street intersections in order to assure adequate sight distance at the intersection. No cut or fill sections beyond the right-of-way shall extend into property outside the subdivision or property not owned by the Applicant, unless appropriate slope rights are obtained for the town; in the absence of the slope rights, appropriate retaining walls shall be constructed within the subdivision to prevent encroachment upon adjoining property.

(I) *Guide posts.* Guide posts shall be installed along all streets where there will be an embankment with a depth of four feet or more within 20 feet of the proposed pavement. Posts shall conform to Form 814, § M.10.02 and shall be installed in accordance with Form 814, § 9.10 spaced six feet on center with a minimum tip diameter of six inches and a minimum length of seven feet with three and one-half feet set in the ground.

(Ord. passed 5-17-1997)

#### § 90.40 STORM DRAINAGE DESIGN.

Storm drainage for streets shall be planned and designed in accordance with the following standards.

(A) *General.* Sufficient pipe shall be installed to carry existing water courses in the street right-of-way and to drain both the proposed street or streets and extensions thereof or other streets which, based on topography, will be served by the same drainage system. No open ditches or channels shall be provided in the street right-of-way unless: sufficient additional right-of-way, in excess of the minimum standard width, is provided so as to maintain the standard cross section; and proper provision is made for protective guide posts or rails. Street drainage systems shall take into account the effects upon downstream systems, shall be coordinated with general drainage requirements-for the use and development of the abutting land and shall provide for the following:

(1) Use and protection, and improvement if needed, of the natural drainage system;

(2) Interception of channel drainage coming from any adjoining property or street;

(3) Protection of locations in use or proposed, necessary for on-site sewage disposal and water supply facilities; and

(4) Prevention of flooding and soil erosion.

(B) *Runoff calculations.*

(1) The method to be used in determining runoff for drainage areas is the S.C.S. (Soil

Conservation Service) TR #55 and/or TR #20. All computations shall include the TR-55 Curve Number Computations, Tc and Tt through Subarea Computations, Graphical Discharge Method, Tabular Discharge Method for each drainage and subdrainage area and the Storm Volume for Detention Basins when applicable. All storm drainage facilities shall be designed based on the following storm return frequency criteria.

(a) *Drainage system.* All drainage systems, within the subdivision and which are not part of an established drainage course, shall be designed for a storm return frequency of 25 years.

(b) *Cross culverts.* All culverts not part of an established drainage course crossing any street shall be designed for a storm return frequency of 50 years.

(c) *Minor streams (less than 1,000 acres).* All minor streams shall be designed for a storm return frequency of 100 years.

(d) *Major streams (more than 1,000 acres).* All major streams shall be designed for a storm return frequency of 100 years.

(2) The applicant's consultant shall provide the Commission with drainage computations and drainage map, specified in division (B)(1)(c) above to determine the adequacy of storm water systems, including the spacing of catch basins and the need for double basins in roadway sags.

(C) *Pipe design.* Pipes shall be sized so that the headwater depth divided by the diameter of the pipe shall be one and one-fifth or less at peak flow. The minimum grade for storm drains shall be 1% unless otherwise permitted by the Board. The minimum pipe size shall be 15 inches. The minimum cover over pipe shall be four feet from the invert, but in no case shall be less than two feet over the top of pipe. Culverts under streets shall extend to the edge of the right-of-way.

(D) *Point of discharge.*

(1) The discharge of all storm water that has been collected or otherwise artificially channeled shall be into suitable natural streams or into town or state drainage systems with adequate capacity to carry the discharge.

(2) Otherwise there shall be no discharge onto or over private property within or adjoining the subdivision unless: proper easements and discharge rights have been secured by the applicant; the easements and rights are transferable to the town; and there will be adequate safeguards against soil erosion and flood danger.

(3) No storm water shall be diverted from one watershed to another. Discharge shall be made in a manner that protects streams, ponds, swamps and wetlands from pollution.

(E) *Discharge into public street.* Any and all discharge of water into a public street from private lands, including waters directed to a street by virtue of changes in grades on the private lands, is subject to the review and approval of the Board prior to the initiation of construction. Minor drainage of storm water or seepage, including roof drains, foundation drains, water from sump pumps, driveway drains and the like, shall be connected to any existing storm drains in the street. Where storm drains do not exist in the street, the landowner shall solicit the advice of the Board as to how the drainage must be treated to avoid public nuisance. The Board may require that the property owner submit plans prepared by an engineer licensed to practice in the state.

(F) *Drainage structures.* Catch basins, manholes and other drainage structures shall be provided at all changes in horizontal and vertical alignment. The length of pipes shall not exceed 300 feet between structures; and catch basins shall be provided in order that surface water will travel without interception not more than 300 feet.

(G) *Access to drainage structures.* Access shall be provided, based on the standards in §§ 90.15 through 90.24, to all drainage structures not located within a public street but located within an easement specified by § 90.41(D) below. The Board of Selectmen may require other improvements it deems necessary to prevent unauthorized use of the access drive.

(Ord. passed 5-17-1997) Penalty, see § 90.99

## § 90.41 DRAINAGE CONSTRUCTION.

Storm drainage shall be constructed in accordance with the following standards.

(A) *Pipe.* Pipe shall be generally laid in straight lines between structures. All storm drainage pipe shall be reinforced concrete Class IV in accordance with the requirements of Article M.08.01-6 of Form 814, except when fill heights require Class V. In general, underdrains shall be installed on the uphill side of the road. Asphalt coated corrugated metal pipe with paved inverts may be approved by the Board where clearance is limited by existing utilities or where uneven support has been verified.

(B) *Methods.* Storm drainage pipe shall be laid in accordance with the following procedures.

(1) Prior to laying pipe, the trench shall be excavated to the required depth, the bottom of which shall be graded to afford a uniformly firm bearing for the pipe throughout its length. Where rock is encountered, it shall be excavated to not less than six feet below the bottom of the trench; and this depth shall be refilled with crushed stone and thoroughly tamped and shaped. Where the nature of the foundation material is poor, it shall be removed and backfilled with gravel or crushed stone approved by the Board of Selectmen, or its agent. A minimum of a six-inch thick layer of compacted crushed stone, not larger than

three inches, shall be provided under the storm drainage pipe and up the side of the pipe to a depth of 12 inches in the trench before additional backfill is added.

(2) All pipe shall be carefully laid, true to the lines and grades given, hubs up and with the ends fully entered into adjacent hubs. Construction must be accomplished in dry conditions.

(3) Line and grade stakes shall be set by a state licensed land surveyor or professional engineer and shall be maintained in good order until the work has been inspected and approved by the Board of Selectmen. Where necessary, three batter boards shall be maintained in place at all times when laying pipe and shall not be spaced more than 30 feet apart.

(4) In sandy, silty or other soil in which there is a danger of washing or cave-ins, the joints of concrete pipe shall be thoroughly wetted and caulked.

(5) The interior of all pipe shall be cleaned of dirt and other deleterious materials, and kept clean as the next section of pipe is laid. During the progress of work, the exposed ends of the pipe shall be provided with an approved temporary watertight cover fitted to the pipe so as to exclude undesirable matter. Covers shall be kept in place except when pipe is being installed.

(6) All reinforced concrete pipe joints shall be sealed with a cold-applied bituminous sealer approved by the Board.

(7) The backfill around the pipe and to a depth of at least eight inches on top of pipe shall consist of crushed stone where the drainage pipe is necessary to serve as an underdrain for the street or to control the water table; the remainder of the trench may be backfilled with bank run gravel upon approval of the Board of Selectmen. Trenching, backfill and compaction shall conform to § 2.05 of Form 814.

(8) "Riprap" conforming to the requirements of Form 814, § 7.03 and M.12.02, shall be placed at inlets, outlets, in channel beds at bends or curves as required to prevent scouring, erosion and/or siltation of streams and culverts. Computations shall be submitted for sizing riprap.

(9) The inlets and outlets of all exposed drainage culverts shall be protected by concrete or mortared stone headwalls, endwalls and, where necessary, appurtenant wingwalls. All endwalls shall conform to the requirements of Form 814, § 5.06.

(10) Catch basins, manholes, drop inlets, endwalls and other related drainage structures shall be constructed in accordance with Form 814, § 5.07.

(C) *Tributary drainage to a state system.* Where drainage is tributary to a portion of a State Department of Transportation drainage system, the holder of the road permit shall obtain the approval of the State

Department of Transportation for the drainage and shall submit the approval to the Planning and Zoning Commission with the other required documents.

(D) *Easements.* Permanent easements, of a nature acceptable to the Town Counsel, shall be deeded to the town in all cases where drainage pipes or ditches cross or abut lands other than a street right-of-way. A minimum width of 20 feet shall be required and the easements shall be clearly defined on the final subdivision plan placed on file in the land records.

(E) *Right to drain required.* Where drainage waters are discharged directly or indirectly onto adjacent landowners, the holder of the road permit shall secure and deed to the town a right to drain, acceptable to the Town Counsel, and counsel of the landowner.

(F) *House and foundation drains.* House and foundation drains in no case shall be permitted to discharge onto the highway. These drains shall be connected to catch basins or beyond the limits of the right-of-way prior to construction of the bituminous concrete.

(Ord. passed 5-17-1997)

## § 90.42 SIDEWALKS.

Where sidewalks are to be installed, as determined by the Board of Selectmen and the Planning Commission, they shall be constructed of Portland cement concrete or bituminous concrete as follows.

(A) *Width and location.* Sidewalks shall be a minimum of four feet in width and shall be located within the street lines with one edge abutting the property line. The requirements of Conn. Gen. Stat. § 7-118a shall apply whenever applicable.

(B) *Bituminous sidewalks.* Bituminous concrete sidewalks shall be laid on a six-inch gravel base, tamped and rolled, and three inches thick after compaction. The bituminous materials used shall conform to Form 814, § M.04 Class 2, and the construction shall conform to § 9.22.

(C) *Concrete sidewalks.* Portland cement concrete sidewalks shall be laid on a six-inch bank run gravel base, tamped and rolled; and shall be constructed of concrete four inches in thickness. Materials shall conform to Form 814, § M.03.01 for Class "C" concrete and shall be constructed in accordance with Form 814, § 9.21.

(Ord. passed 5-17-1997)

## § 90.43 EROSION CONTROL.

Soil erosion and sediment control measures shall be installed and maintained in accordance with any approved plans or permit and with the following standards.

(A) Erosion and siltation control requirements are applicable to all construction work which causes disturbance to the existing ground surface. All control measures shall be constructed and maintained during construction in accordance with the standard details, drawings, this section and the Erosion and Sediment Control Handbook, latest edition, Soil Conservation Service, United States Department of Agriculture.

(B) All embankments shall be mulched with hay as soon as practical after formation. The embankment formation operation shall not proceed more than 500 feet in front of the mulching operation unless approved by the Board of Selectmen. The initial application of hay shall be at a rate equal to 110 bales per acre. Subsequent applications as necessary or ordered shall be at sufficient rate to minimize erosion of the previously formed embankments.

(C) All streams and wetlands within 50 feet of a proposed construction activity shall be protected with a continuous filter fence or closely butted row of hay bales prior to commencing work in those areas.

(D) All runoff from disturbed areas is to be controlled and filtered. Hay bales or broken stone filters are to be installed at discharge locations shown on the drawings. Additional hay bales and/or mulch may be required during construction as site conditions dictate, or as ordered.

(E) Erosion controls are to be installed and operational as soon as possible in a given section of roadway before proceeding on to another.

(F) In the event that the contractor shall schedule construction such that storm sewers are installed prior to constructing the downstream facilities they are tributary to, the contractor shall provide an energy dissipater at each discharge end of the pipe. The energy dissipater shall be a mat of intermediate riprap approximately ten feet wide by ten feet long.

(G) When crossing streams, flow is to be carried through or around construction in temporary pipes or properly prepared rip-rapped channels. Culverts indicated in contract drawings are to be installed as soon as possible.

(H) The collection and conveyance of runoff at the top of the embankments shall be provided for as the work progresses. Methods include, but are not limited to: temporary piping, broken stone lined swales, installation of permanent drainage structure as work progresses.

(I) During construction of a road, the road bed is to be graded to form interception dikes as shown or ordered and to route flow in a gutter where indicated on drawings or as directed. Interceptors are to be maintained in good working order throughout the construction period.



(J) Accumulated sediment is to be periodically removed and disposed of in a manner approved by the Board of Selectmen.

(K) All catch basins or drop inlets are to be protected with hay bales.

(L) As needed or as ordered, a broken stone chute shall be installed to convey collected stormwater down cut and fill slopes to avoid erosion of these slopes. Hay bales and stone filters shall be installed at the bottom of these chutes to filter and disperse the flow.

(M) Riprap or energy dissipaters are to be placed as shown on the construction drawings, or as directed.

(N) If changes in construction methods or schedules occur which would, in the opinion of the Board of Selectmen, adversely affect the designed erosion controls, construction shall not proceed until the revised erosion control plans have been approved by the appropriate town commissions and the Board of Selectmen.

(O) All equipment shall be operated and all construction activities performed so as to minimize pollution. Any operations which would increase erosion during rain storms shall cease unless proper erosion and sedimentation controls have been installed and approved by the Board of Selectmen.

(P) The Board of Selectmen shall be given sufficient notice of impending shutdowns to enable them to examine the project so that the contractor can install additional erosion and sedimentation protection as directed by the Board of Selectmen.

(Ord. passed 5-17-1997)

#### **§ 90.44 STREET SIGNS, UNDERGROUND UTILITIES, CLEANUP AND THE LIKE.**

(A) *Street signs.* Street name signs shall be installed at all street intersections in locations approved by the Board of Selectmen. Those signs shall be of a design and material approved by the Board of Selectmen.

(B) *Monuments and pins.* Monuments shall be provided on both street right-of-way lines at the beginning and termination of each street and at each deflection or tangent point in between. Monuments shall be made of prestressed concrete or granite and shall be not less than five inches square by 30 inches in length with a suitably marked top. Each monument shall be set in place after all street construction is completed with the marked point set on the point of reference and shall be installed in a manner conforming to standards of the State Association of Land Surveyors. In addition to required monuments, iron pins, not less than three-quarter-inch in diameter and 36 inches in length consisting of a suitable rod or pipe, shall be placed: at each point of intersection of a lot line and the right-of-way line of a street; and at all other lot corners; and shall be installed in a manner conforming to standards of the State Association of Land Surveyors. Monuments may be substituted for iron pins. Pins, however, are not required at each change in

direction of an irregular lot line, such as along a stream or stone wall.

(C) *Underground utilities.* The contractor's attention is directed to the underground utilities which may be in the vicinity of the work of the project. He or she must cooperate with the utility company in protecting these utilities.

(D) *Dust control.* The contractor shall spread the calcium chloride in accordance with the manufacturer's instructions. Under dry conditions the road surface shall first be moistened. The contractor shall remove all excess materials from the site at the end of each working day.

(E) *Cleanup.* General clean up, grading, sweeping, picking up of surplus materials and the like, shall not be delayed until the end of the project. The contractor shall schedule his or her work in a manner so as to allow sufficient time in each work day to accomplish this work. Roadway surfaces are to be swept by hand or by machine to alleviate dust problems. The use of power sweepers or drag brooms shall be carefully controlled. Where heavy concentrations of material exist on the road surfaces, the contractor shall clean by hand or by machine the material in advance of sweeping.

(F) *Utility warning tape.* A warning tape, not less than four inches in width, identifying each buried utility, shall be placed not less than two feet above each utility during backfilling of the trench.  
(Ord. passed 5-17-1997)

#### § 90.45 TYPICAL STREET CROSS SECTION.

The drawing of a typical street cross section is hereby adopted by reference, a copy of which shall be kept on file in the office of the Town Clerk.  
(Ord. passed 6-16-2003)

#### § 90.99 PENALTY.

(A) Any person violating any provision of this chapter for which no specific penalty is prescribed shall be subject to § 10.99.

(B) Any person, firm or corporation violating the provisions of § 90.01 shall be fined not more than \$100 for each offense.

(C) The Board of Selectmen may institute any appropriate action or proceedings to enforce the provisions of this subchapter or to prevent, restrain, enjoin, correct or abate any violation of this subchapter, as may be authorized by law. Any person, firm or corporation who shall construct, provide, move, alter or

reconstruct any driveway or other motor vehicle travelway that is subject to §§ 90.15 through 90.24, except under a valid driveway permit, shall be fined no more than \$25 for each day that the violation continues.  
(Ord. passed 6-25-1993; Ord. passed 5-17-1997)

## CHAPTER 91: FIRE ALARM SYSTEMS

### Section

- 91.01 Purpose
- 91.02 Definitions
- 91.03 Permit required; application and fee
- 91.04 Audible signal cutoff device required
- 91.05 Specifications
- 91.06 Automatic dialing equipment
- 91.07 Maintenance and testing
- 91.08 Payment of fines; data
- 91.09 Failure to pay fines
- 91.10 Municipal nonliability
- 91.11 When effective; existing alarm systems
  
- 91.99 Penalty

### § 91.01 PURPOSE.

The purpose of this chapter is to provide for the public safety and welfare by reducing the number of false alarms, providing for the effective deployment of Fire Department personnel, reducing the hazard to the public and members of the Fire Department which occurs during responses to false alarms and promoting the responsible use of fire alarm devices.

(Ord. passed - -)

### § 91.02 DEFINITIONS.

For the purpose of this chapter, the following definitions shall apply unless the context clearly indicates or requires a different meaning.

***ALARM BUSINESS.*** To engage in the supplying, installation, maintenance or servicing of fire alarm devices or systems.

***ALARM SYSTEM.*** Any device which, when activated by fire, heat or smoke, automatically transmits a telephone signal or audio or visual signal to which the Town Fire Department is expected to respond. Excluded from the scope of this definition are devices designed and intended solely to alert or signal any persons within the premises in which the device is installed.

***AUTOMATIC DIALING DEVICE.*** Any alarm system which automatically sends over regular telephone lines, by direct connection or otherwise, a prerecorded voice message or coded signal indicating the existence of a fire emergency.

***DEPARTMENT.*** The Bridgewater Fire Department.

***FALSE ALARM.***

(1) ***ERROR OR MISTAKE.*** Any action by any alarm system permit holder owning, leasing, operating or controlling an alarm system installed in any dwelling, building or place in the town or any action by any agent or employee of, or anyone in privity with the person, which results in the unintentional activation of the alarm system when no fire emergency exists.

(2) ***INTENTIONAL MISUSE.*** Any intentional activation of an alarm system when no fire emergency is in progress.

(3) ***MALFUNCTION.*** Any unintentional activation of any alarm system caused by a flaw in design or installation of or the improper maintenance of the system. This shall not include any activation caused by violent conditions of nature or other extraordinary circumstance, not reasonably subject to the control of the alarm system permit holder.

***PERSON.*** Any person, firm, corporation or other entity.  
(Ord. passed - -)

## **§ 91.03 PERMIT REQUIRED; APPLICATION AND FEE.**

(A) No person shall install or operate an alarm system within the town until an application has been filed with the First Selectman of the town and a permit authorizing the installation and operation of the alarm system has been issued by the First Selectman or his or her designated representative.

(B) The application shall include the name, telephone number and address of the alarm user and at least two other persons who shall have access to the alarm system in order to reset the system or disconnect the same when necessary.

(C) The application shall contain other information as may be requested by the First Selectman or the Town Fire Department.

(D) A fee of \$10 shall be paid to the town upon the filing of the application.  
(Ord. passed - -) Penalty, see § 91.99

#### **§ 91.04 AUDIBLE SIGNAL CUTOFF DEVICE REQUIRED.**

All alarm systems, as defined in this chapter, which sound an audible signal which may be heard outside of the protected premises shall be equipped with a device which shall limit the duration of that audible signal to not more than 15 minutes.

(Ord. passed - -)

#### **§ 91.05 SPECIFICATIONS.**

No alarm system shall be installed or used within the town, unless the system meets the specifications promulgated by the National Fire Protection Association and the specifications contained within the State Building Code and the National Electric Code. Necessary electrical permit may be obtained from the Town Building Official. The system must also be listed by the Underwriters' Laboratories, Inc.

(Ord. passed - -) Penalty, see § 91.99

#### **§ 91.06 AUTOMATIC DIALING EQUIPMENT.**

No automatic telephone dialing device shall be interconnected to any number maintained by the Town Fire Department or the state police. The provisions of this section shall not apply to alarm systems installed in buildings owned or leased by the town, the state or the United States of America. Alarm systems used in the buildings may be interconnected by automatic telephone dialing devices to a number maintained by the Town Fire Department or Police Department with the prior written approval of the Chief of the Department.

(Ord. passed - -)

#### **§ 91.07 MAINTENANCE AND TESTING.**

(A) Alarm users shall be responsible for maintaining their alarm systems in good working order.

(B) No alarm system shall be tested without prior notification to and permission from the Town Fire Department and the Town Police Department.

(Ord. passed - -)

#### **§ 91.08 PAYMENT OF FINES; DATA.**

Fines may be paid during normal town business hours at the Town Hall or may be sent in. Data information is also subject to these hours.

(Ord. passed - -)

#### **§ 91.09 FAILURE TO PAY FINES.**

If any person fails to pay within 30 days any fine or charge imposed, interest shall accrue at the highest rate allowed by law. A lien may be obtained on the property protected by the alarm system if any person fails to pay any fine or charge within 60 days, in addition to criminal enforcement which might be initiated for delinquent fines.

(Ord. passed - -)

#### **§ 91.10 MUNICIPAL NONLIABILITY.**

(A) Notwithstanding the provisions of this chapter, the town and Fire Department, their departments, officers, agents and employees shall be under no obligation whatsoever concerning the adequacy, operation or maintenance of any alarm device or of alarm monitoring facilities.

(B) No liability whatsoever is assumed for the failure of the alarm devices or monitoring facilities or for failure to respond to alarms or for any other act or omission in connection with the alarm devices. The Fire Department and the town will be held harmless for entering the alarm permit holder's home if the owner and key holders cannot be contacted.

(Ord. passed - -)

#### **§ 91.11 WHEN EFFECTIVE; EXISTING ALARM SYSTEMS.**

This chapter shall take effect on the twenty-first day following its adoption and publication as required by law. Alarm systems in existence on the effective date of this chapter shall be disconnected and rendered inoperable within 60 days following the effective date of this chapter unless a permit is obtained from the First Selectman or his or her designated representative authorizing the continued use and operation of the alarm system.

(Ord. passed - -)

**§ 91.99 PENALTY.**

(A) There are hereby imposed the following penalties upon an alarm user whose system transmits a false alarm:

(1) For the first false alarm: written notice;

(2) For the second false alarm within 12 months of the first date: a written notice and a violation fine of \$100; and

(3) For each subsequent false alarm: written notice and a violation fine of \$150.

(B) The failure of the alarm user to correct the malfunctioning system and/or respond to this notification shall result in the suspension or revocation of the alarm user's permit by the First Selectmen or his or her designee.

(C) Any person who performs or causes to be performed any of the following acts shall be subject to a fine pursuant to Conn. Gen. Stat. § 7-148 not to exceed \$150 for each such act:

(1) Intentional causing of a false alarm;

(2) Failure to register an alarm system or give notice of changes in registration information as required by this chapter; each day of the failure shall constitute a separate violation; and

(3) Use of an automatic dial alarm or an exterior audible alarm device in violation of the provisions of this chapter; each day of the use shall constitute a separate violation.

(Ord. passed - -)



