

SECTION 5 - CONSTRUCTION REQUIREMENTS

5.1 GENERAL

5.1.1 It is the intent of these Regulations that no street or way through private property shall be accepted by the Town unless the same be previously constructed and completed in accordance with the Standard Cross Section (See Appendix, Schedules A and B), Street Layout Plan, Profile and the following specifications.

5.1.2 To insure high quality and uniformity of construction and unless otherwise specified, all the work and the materials used in the work to be done shall conform to the requirements of the "Commonwealth of Massachusetts, Highway Department, Standard Specifications for Highways and Bridges, 1995 Edition", as from time to time amended, hereinafter referred to as the "Standard Specifications", and the special provisions included hereinafter. Appropriate illustrations are found in "Commonwealth of Massachusetts, Highway Department, Construction Manual, Part 3, 1995" as from time to time amended.

5.1.3 Supplemental Specifications

5.1.3.1 Supplementing the aforesaid Standard Specifications, certain specifications or special provisions shall apply particularly to the work to be done hereunder. References in the following specifications, unless otherwise stated, are to the aforesaid Standard Specifications, amendments or addenda. When the requirements of these Rules and Regulations are stricter than the provisions of the Standard Specifications, the Rules and Regulations shall govern.

5.1.3.2 All references in the Standard Specifications, amendments or addenda to Commission, Department, Department of Public Works, Engineer, party of the First Part, etc., shall be construed to mean the Planning Board of the Town of Grafton or its duly authorized representative.

5.1.4 To facilitate reference where appropriate, each section in these specifications is noted with the paragraph number of the particular section as contained in the Standard Specifications. Where appropriate, references are also made to the Construction Manual. No departure from these regulations will be permitted without the approval of the Planning Board, working in conjunction with the Department Head involved.

5.1.5 Wherever in the documents referred to in 5.1.2 above, the following terms, or pronouns in place of them are used, the intent and meaning shall be interpreted by substitution as follows:

"Commonwealth" Commonwealth of Massachusetts

"Town" Town of Grafton

"Department" Department of Public Works; Town of Grafton

"Engineer" The Town Engineer of Grafton acting directly through an authorized representative acting within the scope of the particular duties entrusted to him.

5.1.6 The extent of work required shall be completed as shown upon approved plans, and shall be in compliance with the Standard Cross Section.

5.1.6.1 Offset stakes shall be set under the direction of a Registered Land Surveyor at twenty-five foot (25') intervals and at each sewage and drainage structure and at each hydrant to indicate the location and the exact amount of cut, fill or grade. The use of laser equipment for line and grade of sewers and drains is recommended.

5.1.6.2 Improvements to minimize adverse environmental impact, if required, shall be installed in accordance with all details as shown on the approved Definitive Plan, and all possible measures shall be taken during construction to minimize dust and/or erosion.

5.1.6.3 No earth shall be removed from the area shown on a Definitive Plan except in accordance with the approved plan.

5.1.7 Construction Approval

As each construction operation is completed, it shall be approved by the proper Town authority and/or utility company and the Planning Board or its agent prior to starting work on the succeeding operation.

5.1.8 The developer shall have the approved plans and profiles that are on file in the Planning Board office corrected and certified by his Engineer to show the actual as-built locations and profiles of all streets, ways and utilities and any changes authorized by the Planning Board. A minimum of three (3) swing ties from permanent structures shall be used to locate all manholes and catch basins, gates, ends of unconnected building connections and other appurtenances that may be buried or covered.

5.1.9 The developer shall have obtained the necessary approvals from the Board of Selectmen under Article 13 (Earth Removal) of the By-Laws of the Town of Grafton.

5.1.10 The developer shall obtain prior to the commencement of any construction all applicable permits including but not limited to: Zoning Permit, Conservation Commission Order of Conditions, Road Opening Permit, Sewer Connection Permit Special Permit, etc.

5.2 STREETS AND ROADWAYS

5.2.1 Grading and Preparation for Pavement

5.2.1.1 Clearing and Grubbing (MHD Section 101)

The entire area of each street or way shall be cleared and grubbed to remove all trees not intended for preservation, stumps, brush, roots, peat, organic matter, rocks or boulders and like material which may exist upon the surface.

5.2.1.2 **Excavation (MHD Section 120)**

The entire area of the roadway shall be excavated to remove all materials encountered within the right-of-way down to the true surface of the subgrade, or to suitable material in the areas where unsuitable material exists, in preparation for foundation of roadway, sidewalks, driveways and berms. Approved materials obtained from the excavation may be used in fills as required if, in the opinion of the Planning Board, they are suitable.

5.2.1.3 **Embankment (MHD Section 150)**

- a) When, in the opinion of the Planning Board, suitable material is not available within the limits of the roadway location to form the subgrade or sub-base, the Developer shall obtain suitable additional material from other sources and as may be approved by the Planning Board.
- b) Embankments within or adjoining the right-of-way shall be evenly graded and pitched at a slope of not greater than two (2) horizontal to one (1) vertical in fill. All such slopes shall be stabilized in accordance with the Specifications for the area between the roadway and sidewalk or roadway and boundary of the right-of-way. Where cuts are made in ledge, other slopes may be determined with the approval of the Superintendent of Streets and the Planning Board. Where terrain necessitates greater slopes, retaining walls, terracing, fencing or rip-rap may be used either alone or in combination to provide safety and freedom from Town maintenance, but must be done in accordance with plans filed with and approved by the Planning Board. The Town shall be responsible for maintenance (after Town Meeting acceptance) of only those slopes, retaining walls, terracing, fencing, rip-rap, etc., which lie within the respective layout lines.

5.2.1.4 **Grading (MHD Section 170)**

- a) The subgrade surface, fifteen inches (15") below the finished surface grade in minor streets in residential subdivisions, twenty-four inches (24") below the finished surface grade in major streets in residential subdivisions and in all streets in non-residential subdivisions shall be prepared true to the lines, grades and cross-sections given and properly rolled with not less than a ten (10) ton roller. All soft or spongy material below the subgrade surface shall be removed to depth determined by the Planning Board Engineer, and the space thus made shall be filled with special Gravel Borrow (Section M 1.03.0 Type a), containing no stones over six inches (6") in their largest diameter.
- b) The subgrade surface shall be transversely sloped to produce a crown of 1/4 inch per foot.

5.2.1.5 **Drainage Layer**

Any drainage layer shall be a 6 inch layer of crushed stone, 3/4 inch gradation, placed under the gravel sub-base, which extends from edge to edge of pavement on both sides of the road. At each side, the drainage layer shall terminate at a subdrain. The drainage layer shall include, above it and below it, a synthetic, non-woven geotextile fabric with geotextile opening size of 0.21 mm, or as appropriate for that soil.

5.2.1.6 **Gravel Sub-Base (Section 401)**

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- a) Gravel sub-base or foundation containing no stones having any dimensions greater than three inches (3") shall be spread on the surface of the sub-grade to a minimum depth of twelve inches (12") in conformity with the requirements of Section M. 1.03.0 Type a of the Standard Specifications for furnishing gravel borrow.
 - b) Prior to placing gravel, results of gradation testing shall be submitted to the Planning Board for review and approval. Maximum dry density shall be as determined by the Modified Proctor method (AASHTO test method T99).
 - c) Gravel sub-base or foundation shall be spread in two (2) layers, except on minor streets in a residential subdivision, on the surface of the sub-grade. The lower layer containing no stones greater than six inches (6") in greatest dimension shall be to a depth of twelve inches (12") on major streets. The upper layer containing no stones greater than two and one-half inches (2 1/2") in greatest dimension shall be to a depth of six inches (6").
 - d) A single layer containing no stones greater than four inches (4") in greatest dimension shall be to a minimum depth of twelve inches (12") on minor streets in a residential subdivision.
 - e) Each layer shall be rolled with not less than a ten (10) ton roller, and compacted true to line and grade, to 95% of maximum dry density. Any depressions that appear during and after rolling shall be filled with additional gravel and re-rolled until the surface is true.
 - f) At the time of paving, gravel shall be at optimum moisture content, and shall be at least 95% of maximum dry density.
 - g) Final grading, rolling, and finishing including the shaping, trimming, rolling, and finishing of the surface of the sub-base prior to application of gravel for surfacing of the roadway and base courses for walks and berms shall be in accordance with this section and as directed by the Planning Board and the Superintendent of Streets.
 - h) Gravel subbase surface shall be transversely sloped to produce a crown of 1/4 inch per foot.
 - i) At the conclusion of this step, the roadway shall be staked in all locations where permanent monuments are to be installed as provided in Section 5.11 Monuments.

5.2.2 Pavement

5.2.2.1 Pavement Materials

Pavement materials for all roadways in a subdivision shall be Class I, Bituminous Concrete, Base Course Type I-1 (Section 460). Cape Cod (low profile) berms, where applicable, shall be constructed of Surface Course material. The material and construction methods for laying pavement shall conform to the Standard Specifications.

5.2.2.2 Placing Pavement

- a) Pavement of major streets shall be plant mixed and laid hot to a finished depth of six inches (6") as follows: two (2) two-inch (2") courses of binder mix, then two (2) one-inch (1") courses of finish mix. Each course shall be compacted with no less than a ten (10) ton roller.

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- b) Pavement of minor streets in a residential subdivision shall be plant mixed and laid hot to a finished depth of four-and-one-quarter inches (4 1/4") laid in two (2) courses consisting of two-and-three-quarter inches (2 3/4") of binder mix, then one-and-one-half inches (1 1/2") of finish mix. Each course shall be compacted with no less than a ten (10) ton roller.
 - c) Sediment basins shall be constructed where necessary to detain runoff and to trap sediment during construction.
 - d) Safe off-site disposal of runoff shall be provided, including the increased runoff resulting from construction.
 - e) Permanent vegetation and erosion control structures, where necessary, shall be installed as soon as possible.
 - f) The construction of the wearing or top surface of any street shall not proceed until the structural foundations for buildings on each lot to be served by that street have been completed.
 - g) Paving shall occur only between March 30 and November 15 of any year.
 - h) Asphalt shall not be placed on material which the Town determines to be frozen, frosted, saturated, or otherwise unsuitable.
 - i) Paving shall occur only under suitable conditions. Air temperature shall be at least 34° F. Paving shall not take place while rain, snow, sleet or any other precipitation is falling, or immediately following any such precipitation.
 - j) Any pavement surface exposed for more than nine (9) months, except for finish course deemed acceptable by the Town, shall require a tack coat of asphalt emulsion prior to placing any additional asphalt layer(s). Tack coat shall be bituminous asphalt emulsion formulated in accordance with M3.03.0, at a rate of 0.2 gallons per square yard.
 - k) Any exposed asphalt surface subject to placement of a further course of asphalt, except for finish course deemed acceptable by the Town, shall receive a coating of liquid bituminous sand seal coat, no less than annually, until finish course pavement acceptable to the Town has been placed. Such coating shall consist of liquid bituminous asphalt applied at a rate of 0.25 to 0.3 gallons per square yard, with a sand cover of fine granular material composed of hard, durable particles, clean of organic matter, applied at a rate of 20 to 25 pounds per square yard. Such coating shall be applied only when air temperature is at least 40° F.
 - l) If the binder or finish pavement is removed, excavated or damaged, the trench shall be covered with a poured reinforced concrete slab to the lines, grades and dimensions approved by the Superintendent of Streets. Pavement repair shall be by sealing all patch areas with an asphaltic sealer; application of a non-woven adhesive polymer asphalt membrane over joints in the "binder", placed with wearing side up; the pavement shall then be treated with asphalt emulsion prior to placing asphalt on it.

5.3 UTILITIES

5.3.1 General

5.3.1.1 All materials and installation methods used shall conform to the standards of the appropriate utility company or to these Regulations, whichever is stricter. All underground services shall be installed, and individual lot services carried to the front lot lines/edge of right of way prior to completing pavement foundation/gravel sub-base work.

5.3.1.2 Excavation for Structures (MHD Section 140)

Excavation for structures, including foundations for drains, sewers, gas and water pipes, walls and other structures shall be made to the depth indicated on the Definitive Plan or established by appropriate utility. Rocks (to a point five feet (5') beyond the edge of the pipe at the property lines) and encountered in trench excavation determined to be Class B shall be removed as directed by the Superintendent of Streets.

5.3.1.3 Backfilling for Structures and Pipes

- a) All backfilling shall consist of granular mineral soil material (excluding organic matter, building rubble, solid waste, boulders larger than 18 inch in any dimension, or any other deleterious material) uniformly distributed and thoroughly compacted. When suitable backfilling materials cannot be obtained from excavation, the material shall consist of satisfactory borrow.
- b) Mechanical tampers shall be used in compacting backfill for trenches, and in hard to reach areas around masonry.
- c) No backfill whatever shall be placed on or against structures, pipes, or other masonry, until permitted by the Planning Board. Fill shall be formed of successive layers not more than six inches (6") in depth, uniformly distributed and each layer thoroughly compacted.
- d) No load greater than eight (8) tons shall be moved over any pipe until a fully compacted backfill of at least two feet (2') has been placed over the top of the pipe. Compliance with this requirement is not to be construed as relieving the Contractor of any responsibility concerning damage to the pipe.
- e) Material used for backfilling to a point two feet (2') over the pipe shall contain no stones larger than three inches (3') in greatest dimension.
- f) Backfill below the haunches shall be placed in six inch (6") layers and compacted simultaneously on both sides of the pipe with railroad tampers or approved mechanical rammers which shall not come in contact with the pipe. Backfill above the haunches shall be placed in six inch (6") layers and compacted as directed. Backfill material shall be moist prior to and during compaction.
- g) Backfill material for the pipe bedding shall consist of gravel borrow, screened gravel, or crushed stone no greater than one- and-a-half-inch (1 1/2") gradation to twelve inches (12") over the crown of the pipe. The material excavated from the trench may be used for the pipe bedding if it is of acceptable grade gravel and approved by the Planning Board. If directed by the Planning Board, backfill material above the pipe bedding shall consist of gravel borrow. Backfill material for sewer pipe bedding

shall consist of screened gravel to twelve inches (12") over the crown of the pipe, as required by the Board of Sewer Commissioners.

- h) In all cases the filling material shall be thoroughly compacted. Puddling the backfill will not be permitted.

5.3.2 Sewerage

Sewers shall be installed in the center of the street as nearly as practicable at a minimum depth of seven feet six inches (7' 6") of cover in the traveled way.

On site sewage disposal facilities shall be installed and constructed in conformity with the Rules, Regulations and Requirements of the Board of Health. Due consideration should be given to surface and subsurface soil conditions, drainage and topography in the location of such on-site facilities.

5.3.3 Water

5.3.3.1 The rules and regulations of the appropriate water utility shall be consulted for detailed requirements (including pipe, fittings, hydrants, gas valves, service connections) and handling, storage, installation, inspection, testing and connection with existing installations.

5.3.3.1 The Developer shall make main and service connections, complete with all the required appurtenances thereto, and, prior to acceptance of the road by the town, shall maintain the installation in accordance with the regulations of the appropriate water utility.

5.3.4 Gas

If gas is to be installed within a subdivision, the appropriate utility shall be notified by the Developer upon approval of the Definitive Plan so that installation of gas mains may be completed without undue delay. All construction shall be in accordance with the requirements of the utility company.

5.3.5 Electric

Electric lines shall be installed underground as specified by the Planning Board in accord with regulations of the appropriate utility. Service shall be supplied to each lot and each street light before the subgrade is prepared.

5.3.6 Telephone

Telephone lines shall be installed in underground conduits in conformity with MHD Sections 801 and 813.

5.3.7 Other Utilities

5.3.7.1 Other utilities shall be installed in underground conduits in accordance with MHD Sections 801 and 813 or as required by the utility company or department. Telephone, and, if any,

cable television and the fire alarm system shall be installed underground and may be in the same trench with vertical and/or horizontal separation as approved by the Planning Board. Service shall be provided to each lot before the subgrade is prepared.

- 5.3.7.2 With the approval of the Planning Board, these other utilities may be located in the same trench with the electric power wiring.

5.4 DRAINAGE (MHD Section 200)/STORMWATER MANAGEMENT

Adequate disposal of surface and sub-surface water shall be provided.

5.4.1 Basins, Manholes and Inlets (MHD Section 201)

- 5.4.1.1 The Standard depth of catch basins shall be four feet (4') below the invert of the lowest drain. Manholes shall be constructed to the required depth at each junction point and shall be as shown on the plan. Basin and inlet grates shall be of a type approved by the Superintendent of Streets.
- 5.4.1.2 Catch basins, curb inlets and manhole structures shall be constructed of precast reinforced concrete. The top section of any such structure shall be eccentric, with eccentricity perpendicular to the direction of flow.
- 5.4.1.3 Manhole covers shall have the word "Drain" in three inch (3") letters cast across the center and, at no time shall any such cover be raised above the pavement level.
- 5.4.1.4 A leveling course of sewer brick shall be installed under the frame on precast manholes and catchbasins. The leveling course shall consist of a minimum of two (2) layers of brick and a maximum of twelve inches (12"). The frame shall be sloped to match the slope of the finished road surface.
- 5.4.1.5 Steps shall be installed in manholes and be spaced twelve inches (12") on center or sixteen inches (16") on center if radial concrete blocks are used. Steps shall be steel reinforced copolymer polypropylene plastic. Copolymer polypropylene shall be Type II, grade 16906 meeting ASTM designation D2146-78. Steel reinforcing shall be three eighths of an inch (3/8") diameter, grade 60 conforming to ASTM Specification A-615-79 and shall be continuous throughout the rung. The portion of the legs to be imbedded in the precast section shall have fins and be tapered to insure a secure bond.
- 5.4.1.6 A concrete or brick masonry invert shelf with channel shall be installed to a height of eight-tenths (0.8) the diameter of the largest pipe.
- 5.4.1.7 Modifications to precast structures shall be made by coring.
- 5.4.1.8 Corbels of manholes shall be eccentric, not concentric.
- 5.4.1.9 Size of manhole opening shall be a minimum of twenty-four inches (24").

5.4.2 Culverts, Storm Drains and Sewer Pipes (MHD Section 230)

- 5.4.2.1 All drain and culvert pipes shall be reinforced concrete pipe at least twelve inches (12") inside diameter.
- 5.4.2.2 At least four feet (4') of cover will be required over drain pipes. Where special conditions of topography and/or hydrology are deemed to justify the Board's approval of pipe with less than four feet (4') of cover, the Board may require other materials or methods of construction to meet such conditions.
- 5.4.2.3 Sewer pipes and appurtenances shall be designed, installed and of materials as required by the Sewer Commissioner.

5.4.3 Sub-Drains (MHD Section 260)

- 5.4.3.1 Subdrains shall be 6 inch perforated SDR 35 PVC or SCH 40 PVC pipe, bedded in crushed stone, of 3/4 inch gradation, in a two (2) foot wide drain trench filled with such crushed stone. Crushed stone shall extend horizontally and vertically to meet either the drainage layer or the gravel sub-base of the road. Crushed stone shall be wrapped in a synthetic, non-woven geotextile fabric, with geotextile opening size of 0.21 mm or as appropriate for the soil type. Subdrains shall be 48 inches below finish grade as measured at the invert of the pipe, and shall be located outside the edge of pavement (but within the road right of way) on both sides of the road.
- 5.4.3.2 Cleanouts shall be located not more than 150 feet from each receiving structure, and shall have cast iron covers set to finish grade.

5.5 SIDEWALKS

Sidewalks shall be constructed of concrete (such as Portland Cement) conforming to MHD specification M4.02.00, and in accordance with the requirements of Sidewalks, Wheelchair Ramps and Driveways (MHD Section 701). The cross slope shall be one-fourth of an inch (1/4") per foot of width to provide for proper drainage.

5.6 TRAILS, BIKEWAYS AND WALKWAYS

- 5.6.1 Where bikeways and walkways are required they shall be constructed in accordance with the specifications for sidewalks above, (MHD Section 701) except for the design standard requirement of Section 4 above. Where bikeways and walkways intersect with sidewalks, leveling areas shall be shown in detail on the Definitive Plan for the subdivision.
- 5.6.2 For the full length of each bikeway and walkway there shall be a crown equivalent to one-quarter inch (1/4") per foot of width to provide for proper drainage. Leveling areas at intersections with sidewalks shall be shown in details.
- 5.6.3 Existing trails shall be used, wherever possible. New trails or relocated trails shall be constructed with surface and drainage characteristics which, in the opinion of the Board, shall be satisfactory for horseback riding.

5.7 CURBS AND BERMS

- 5.7.1 Granite curbs shall be installed in accordance with the construction methods outlined under Curb, Curb Inlets, Curb Corners and Edging (MHD Section 501).
- 5.7.2 Bituminous concrete berm shall be Type I, low profile "Cape Cod" berm or Type II, as designated by the Planning Board and shall be installed in accordance with the requirements of Curb and Edging (MHD Section 500) and Figure 112.10 of the Construction Standards.

5.8 HIGHWAY GUARD FENCES AND WALLS

Guard fences, rails and walls shall be installed wherever determined necessary by the Planning Board and/or the Superintendent of Streets to provide needed protection to the public. When provided, they shall be constructed in accordance with the relevant portions of Highway Guard Fences and Walls (MHD Section 600) of the Standard Specifications. Construction details of all fences, rails and walls will be shown on the Definitive Plan for the subdivision.

5.9 GRASS PLOTS

5.9.1 Grass shall be used unless other ground cover is approved by the Planning Board.

5.9.2 Seeding

- 5.9.2.1 The areas to be seeded shall be covered with loam to a depth of four inches (4") in accordance with Loam Borrow Processed Planting Material or Topsoil, Rehandled and Spread (MHD Section 751).
- 5.9.2.2 Grass seed conforming to Seed (MHD Section M6.03.0) shall be placed in accordance with Seeding (MHD Section 765) at the rate of four (4) pounds per one thousand (1000) square feet over the area to be grassed.
- 5.9.3 The slope of the grass plot shall be as shown on the profiles and standard cross-sections, Schedules A and B.

5.10 TREES, SHRUBS AND GROUND COVER

5.10.1 Street trees of nursery stock conforming to the standards of the American Association of Nurserymen of the species approved by the Grafton Tree Warden and/or each street in a subdivision, except where the Definitive Plan shows trees to be retained which are healthy and adequate.

A list of recommended street trees and shrubs is available in Schedule D. The list provides suggested street trees and shrubs that are suitable for this area and available at local nurseries.

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- 5.10.2 Except as otherwise provided, all cut bankings shall be planted with low growing shrubs or vine and wood chipped to a minimum depth of six inches (6") or seeded with a deep rooted perennial grass to prevent erosion.
 - 5.10.3 Planting methods, including wrapping, staking and guying shall be in accordance with Planting Trees, Shrubs and Ground Cover (MHD Section 771)
 - 5.10.4 Tree wells, if necessary, shall be designed and constructed in accordance with Plate 502.1.0 of the Construction Manual.
 - 5.10.5 All deciduous street trees shall be clear of any branches from the approved grade level to a point seven feet (7') above ground level.
 - 5.10.6 All reasonable care shall be exercised to preserve the trees in the subdivision.
 - 5.10.7 The Developer will be liable for all trees so planted as to their erectness and good health after planting and until the release of all guarantees.

5.11 MONUMENTS

- 5.11.1 Monuments shall be a standard permanent granite of not less than five feet (5') in length and not less than six inches (6") in width and breadth and a one-half inch (1/2") diameter hole one and one-half inches (1 1/2") deep shall be drilled in the center of the top surface and filled securely with a lead plug. (Section 710).
- 5.11.2 Said monuments shall be installed at the time of final grading with the top flush with the top final graded surface. (Plates 506.1.0 and 506.2.0 Construction Manual).
- 5.11.3 Notwithstanding Sections 5.11.1 and 5.11.2 above, monumentation for designated open space areas, and easements (access, drainage, open space, etc.) on individual lots, shall be set at least 4 feet 6 inches into the ground and shall extend at least 3 feet 6 inches above finish grade.
- 5.11.4 No permanent monuments shall be installed until all road construction which would destroy or disturb the monuments is completed.

5.12 STREET SIGNS

- 5.12.1 From the time of rough grading until such time as each street is accepted by the Town as a public way, the sign posts at the intersection of such street with any other street shall have affixed thereto a sign of design, materials and construction satisfactory to the Planning Board, designating such street, or portion thereof, as a private way.
- 5.12.2 Street signs, of a design approved by the Board, shall be installed at all intersections.
- 5.12.3 No street sign, temporary or permanent, shall be installed showing a name or in a manner other than as approved by the Grafton Planning Board.

5.13 STREET LIGHTS

- 5.13.1 Street and pedestrian lights shall be installed to conform to the type and style specified by the Planning Board and the Board of Selectmen.
- 5.13.2 Street and pedestrian light stanchions shall be of a type specified by the Board of Selectmen and the Planning Board and shall be located in the grass plot or median
- 5.13.3 Prior to the issuance of a Certificate of Occupancy (CO) for any lot within the subdivision, a certification shall be submitted to the Building Inspector that all approved streetlights have been installed and energized from the nearest intersection of any subdivision way and an existing street providing access to the subdivision on said subdivision way up to, and within three hundred feet (300') beyond, said lot(s).

5.14 COMMON DRIVEWAYS

Common driveways shall be graded, and a one inch (1") course of binder and a one inch (1") course of wearing surface applied, in accordance with Section 5.2 of these Regulations to at least the minimum required width.

5.15 CLEANUP

- 5.15.1 No later than October 31 of each calendar year, the developer shall stabilize all exposed soils and other vulnerable or sensitive areas in a manner acceptable to the Conservation Commission and the Planning Board. No additional disruption may occur except in accordance with the approved construction plan.
- 5.15.2 No lot shall be considered complete until all stumps, brush, roots and like material and all trees, rocks, and boulders not intended for preservation by the Subdivider shall have been removed and disposed of in a manner and place satisfactory to the Planning Board. Any fire hazard shall be removed promptly to the satisfaction of the Fire Chief. This paragraph does not authorize the removal, including severing and stripping, of soil loam, sand, or gravel on such lot.

5.16 MAINTENANCE OF IMPROVEMENTS

- 5.16.1 For the purpose of protecting the safety, convenience and welfare of the Town's inhabitants, for the provision of adequate access to all of the lots in a subdivision by ways that will be safe and convenient for travel, for reducing the danger to life and limb in the operation of motor vehicles, for securing safety in the case of fire, flood, panic and other emergencies, under the authority of MGL Ch. 41, Section 81-M as amended, the Applicant or his successor shall provide for the proper maintenance and repair of improvements during the period of construction, and until the Town votes to accept such improvements. In conformance with the requirements of Section 81Q, the Board shall require that the applicant guarantee the maintenance of the streets and appurtenances in the subdivision by posting with the Town a maintenance security in a form and in an amount sufficient, in the determination of the Board, to secure said maintenance until the subdivision is accepted by the Town. Such maintenance shall include all services typically provided by the Town on public ways.

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- 5.16.2 Such maintenance shall include snow removal beginning from the time of occupancy of an individual owner or tenant other than the Developer until such time as the Town agrees to remove snow or accepts the way.
- 5.16.3 The Applicant shall provide the Town an easement over the right-of-way of all streets, which will run until the acceptance of streets as a public way, which easement shall be for the maintenance, repair and operation of public utilities. The easement shall be accompanied by a conveyance of a right of ownership to the Town of all appropriate utilities within the boundaries of the easement.

5.17 PROVISION FOR COMPETENT SUPERVISION

- 5.17.1 The Developer shall provide competent full-time supervision during the development of the subdivision. If at any time it becomes apparent to the Planning Board that the supervision is not satisfactory, the Board may order the discontinuance of the development until competent supervision is provided.
- 5.17.2 Dependent on the work schedule and the scope of the work, the Planning Board may require that the Developer shall provide a full-time Clerk of the Works on site during the critical construction phases, such as laying pipe, compacting, backfilling, laying finish surfaces and other operations determined by the Planning Board. The Clerk of the Works shall be hired by the Planning Board and paid for by the Developer in accord with Section 2.5.

5.18 SCHEDULE OF PROJECTED WORK

The developer shall submit a schedule of the projected work, by major categories of work, to the Planning Board for review and approval four (4) weeks prior to the start of construction. The schedule shall be by calendar weeks and address each category in Section 5, Construction Requirements. The Schedule shall be adjusted periodically to reflect the actual work progress and related modifications to the schedule.

5.19 TRAFFIC SIGNS

Prior to any lot development, the developer shall install, and thereafter maintain, traffic signs such as STOP signs of the type and in locations as approved by the Board of Selectmen and the Massachusetts Highway Department until acceptance of the road by the Town.