Chapter A215

STREET SPECIFICATIONS

[HISTORY: Adopted by the Planning Board of the Town of Union Vale 6-4-1974, approved by Town Board 6-10-1974 (Ch. A93 of the 1983 Code); amended in its entirety 2-4-2010 by L.L. No. 11-2010. Subsequent amendments noted where applicable.]

GENERAL REFERENCES

| Building construction — See Ch. 105. | Subdivision of land — See Ch. 192. |
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| Notification of defects — See Ch. 169. | Zoning — See Ch. 210. |
| Scenic and rural roads — See Ch. 183. | |

§ A215-1. Purpose; completion of construction.

- A. It is the purpose of these specifications to establish minimum acceptable standards for the construction of public and private streets and related improvements within subdivisions in the Town of Union Vale, including, but not limited to, width, design, drainage, construction of base and pavement, curbs and sidewalks, monuments and street name signs. In the Town of Union Vale the standards for private streets will be the same as the standards for public streets.
- B. All streets, whether public or private shall be built according to the requirements of this Chapter. In the case of a proposed public street, construction of any street shall not be considered complete and the dedication of the right-of-way will not be accepted until the developer's professional engineer and the Town Superintendent of Highways shall have certified to the Town Board in writing that the construction of the street has been completed in accordance with the approved plans and the specifications and all other pertinent requirements which follow within this chapter. In the case of a proposed private street, construction of any subdivision street shall not be considered complete until the developer's engineer and the Town Engineer shall have certified to the Planning Board in writing that the construction of the street has been completed in accordance with the approved plans and the specifications and all other pertinent requirements which follow in this chapter.

§ A215-2. Certification by engineer; changes not shown on approved plan.

- A. In his written certification, as required above, the developer's professional engineer or qualified licensed land surveyor shall state clearly that he or his authorized representative has inspected all phases of the street construction and that all work has been completed in accordance with the approved plans and these specifications.
- B. If any work or changes due to field conditions occur that are not shown on the approved subdivision plan, such changes or work done must be incorporated on the approved subdivision plan and submitted to the Town Board at the time of dedication.

§ A215-3. Preparation and submission of street plan.

A plan of the proposed street shall be prepared by a qualified engineer or qualified land surveyor properly licensed by the State of New York. The plan shall clearly define the limits of the proposed right-of-way and shall include the location, widths, profiles and grades of proposed roadways, storm drainage, including culverts and other drainage structures, soil erosion controls and stormwater treatment, and the location of easements and utilities. The plan shall be submitted to the Town Superintendent of Highways and Town Engineer, and to the Dutchess County Commissioner of Public Works when any street drains toward or may otherwise affect a county highway, and to the Town Planning Board for review and approval under the applicable subdivision regulations of the Town. Such plan so submitted shall not be altered or amended after having been approved the Planning Board, unless an amended plan is resubmitted and approved as above. However, the developer shall, at his own expense, provide additional storm drainage facilities as may be ordered by the Town Superintendent of Highways if, during the progress of the work, in the opinion of the Town Superintendent of Highways, the Town Engineer and/or the Dutchess County Commissioner of Public Works, such additional structures or facilities are necessary to assure the durability of pavement, the future maintenance of the right-of-way or the safety of the public. If construction has not been

started within one year from the date of final approval by the Town Planning Board, the plan shall be resubmitted and approved as above.

§ A215-4. Performance and maintenance bonds.

Performance bond.

- (1) Prior to the start of construction of any improved street, the developer shall deposit with the Town Clerk a performance bond of acceptable surety or shall deposit with the chief fiscal officer of the Town acceptable negotiable government bonds, cash or a certified check drawn upon a national or state bank, payable at sight to the Town Board, guaranteeing:
 - (a) That within two years the developer will complete all of the construction within the right-of-way, including roadbed, shoulders, sidewalks, curbs, gutters, storm drainage, etc., and all utilities, including hydrants and house connections for each lot, in accordance with the approved plan and these specifications.
 - (b) That, upon certification by the developer's professional engineer or licensed land surveyor and by the Town Superintendent of Highways that the construction of the street has been completed in accordance with the approved plans and specifications, the developer will dedicate the completed street to the Town for use as a public highway, free and clear of all liens and encumbrances. This guaranty of dedication shall apply to the owner of the property as well as the developer, where the two are not synonymous.
- (2) As a guaranty for the performance of the above requirements, the developer shall deposit, as heretofore set forth, a surety bond, negotiable government bonds, cash or certified check, the minimum total amount of which shall be determined by applying to the quantities or dimensions shown on the approved plan the rates per unit as established by the designated Town Engineer and Town Highway Superintendent.
- Maintenance bond. Prior to acceptance by the Town of the dedication of the street as guaranteed by Subsection A(1)(b) under performance bond above, the developer shall deposit with the Town Clerk a maintenance bond of acceptable surety or shall deposit with the chief fiscal officer of the Town acceptable, negotiable government bonds, cash or certified check drawn upon a national or state bank, payable at sight to the Town Board, guaranteeing that for a period of two years from the date of acceptance of the dedication of the street by the Town the developer will maintain the street to the standard of construction set by these specifications, normal wear and tear excepted. This shall be interpreted to mean that the developer will, at his own expense, repair and make good any defects or damage which may develop during this maintenance period as a result of faulty construction within the right-of- way or as a result of other construction by the developer off the right-of-way. During the maintenance period, the Town shall be responsible for snow and ice control, street cleaning, cleaning of culverts and catch basins and other work of a similar routine nature, provided that such work has in no way been caused by the developer's operations. The amount of the maintenance bond shall be at least equal to 20% of the performance bond.

§ A215-5. Insurance; release of performance bond.

- A. Also prior to acceptance by the Town of the dedication of the street, the developer shall file with the Town Clerk evidence that he has taken out, for the same period of time as the maintenance bond, an insurance policy in the amounts of \$1,000,000/\$2,000,000 for public liability and \$200,000 for property damage, naming as the insured the Town Board and/or the Town Highway Department and/ or the Town Superintendent of Highways.
 - B. The purpose of this requirement for insurance is to protect and defend the Town against any claims which may arise because of the operations of the developer or of possible defects in work performed by him.
 - C. Subsequent to the acceptance of the dedication of the street and after receipt of the maintenance bond and evidence of insurance by the Town, the Town Board shall release the performance bond.

§ A215-6. Classification of streets.

- A. The Town Planning Board shall determine and designate into which of the three following classifications each proposed subdivision street falls on the basis of one or more of the criteria hereinafter set forth:
 - (1) Collector streets.
 - (2) Commercial streets.
 - (3) Subdivision or rural-type public or private subdivision streets.
 - B. Final plans shall be drawn to show, and the developer shall construct each street in accordance with, the particular specifications for its designated classification, as also hereinafter set forth, as well as in accordance with the specifications common to all classifications.

§ A215-7. Criteria for determining classification.

A. Collector streets.

- (1) The proposed street is the direct and logical continuation of a street that carried 500 or more cars during a twelve-hour period, as shown on the latest traffic count.
- (2) The proposed street creates a shorter and more convenient through-traffic artery so that it can be reasonably expected that traffic will be diverted from other major streets to such an extent that it will reach at least 500 cars in 12 hours two years after opening.
- (3) The proposed street is the principal collector for 300 or more homes in the neighborhood.
- (4) The proposed street could logically be expected to become a major street because of future construction or other foreseeable circumstances.

B. Commercial streets.

(1) The proposed street is in an area zoned for commerce.

- (2) The proposed street is on or close to the dividing line between a residential and commercial area so that it may reasonably be expected to carry a substantial volume of commercial traffic.
- (3) The proposed street creates a shorter and more convenient route between a commercial area and a major traffic artery.
- (4) The proposed street, for any other reason, may be expected to carry a substantial volume of commercial or other nonresidential traffic.
- C. Rural-type public or private subdivision streets. (NB: This classification is intended to cover the majority of subdivision streets.)
 - (1) The proposed street shall not be or be reasonably expected to become a through, commercial or industrial street.
 - (2) The proposed street shall be a dead-end, loop or other minor street within a development.
 - (3) The proposed street is not or cannot reasonably be expected to become a continuation or extension of a street of one of the two above-described classifications. Should such be the case, the proposed street shall take the classification of the street of which it is a continuation or extension.
 - (4) The proposed street does not or cannot reasonably be expected to carry a substantial volume of traffic.
- D. Rural-type private subdivision streets. This classification is intended to cover proposed residential subdivision streets, which streets may be proposed to remain under permanent private ownership and maintenance responsibility, but built to town road specifications.

§ A215-8. Construction specifications.

- A. Figures 2 through 5 show cross-sections of each of the four classifications of subdivision street. These give the required design, dimensions and construction details which are applicable to a particular classification.¹
- B. Table 1² is a comparative summary sheet which lists the major items of construction for all types of streets and may be useful as a check list of requirements. Thereafter are set forth the general and more detailed specifications for design and construction applicable to all streets.
- C. The developer shall design and construct streets which shall conform to both the specific and the general specifications.

§ A215-9. Driveway permits.

A. Except in the case of the presence of an existing driveway access location deemed in writing to be satisfactory by the agency of jurisdiction, i.e., the Town Highway Superintendent, the Dutchess County Department of Public Works or the New York State Department of Transportation, no building permit may be issued for the construction of a principal building or certificate of occupancy issued for commencement of the use of open land for nonagricultural purposes until a driveway or other highway access permit has been issued by the agency of jurisdiction and a copy thereof submitted to the Code Enforcement Officer.

B. Application for Town driveway permit. In addition to the requirement set forth above for a Town highway access permit, any person, firm or corporation desiring to build, construct or locate a driveway entrance or exit onto a Town highway of the Town of Union Vale or pave, repave or otherwise modify that portion of an existing driveway within the Town's right-of-way must first secure a permit for driveway construction from the Superintendent of Highways. In considering the application for such permit, the Superintendent of Highways may impose any restrictions or requirements that are deemed necessary to protect all property and maintain public safety within the Town right-of-way.

C. General requirements of construction.

- (1) The applicant shall bear all construction and material costs within the Town rightof-way and, before the permit for driveway construction is issued, deposit with the Superintendent of Highways an amount set forth in the permit.
- (2) The Town of Union Vale Superintendent of Highways shall be notified of any construction within the Town right-of-way at least 48 hours before commencing work. All work within the Town right-of-way must be acceptable to the Town of Union Vale Highway Superintendent.
- (3) In extreme conditions, if it is determined by the Town Engineer that entrance on private property is necessary to correct a potential problem, the applicant must sign a release allowing the Town Highway Department to enter said premises for a correction of said problem before a permit for driveway construction is issued. In any such event, the costs of this work will be borne by the applicant.

§ A215-10. Development of lots along existing Town roads.

The following conditions must be fulfilled to develop lots along existing Town roads:

- A. The area between the center line of the existing roadway and the new right-of-way must be cleared, grubbed and graded as described elsewhere in these specifications.
- B. The existing Town roadway may require improvements such as realignment, pavement widening and the installation of stormwater management measures to satisfy requirements of applicable typical road cross-sections.

§ A215-11. Development of right-of-way.

The developer shall establish and clearly mark on site the limits of the road right-of- way and easements, the center line and grades of the road pavement and the location and elevation of drainage and drainage structures in accordance with the approved plans. Such markers shall be maintained at the developer's expense until the construction of drainage, road pavement, curbs, sidewalks and shoulders has been completed, inspected and approved by the Town Superintendent of Highways and the Town Engineer.

§ A215-12. Clearing and grubbing.

- A. The developer shall clear the entire area within the limits of:
 - (1) The road right-of-way.
 - (2) Ditches.

- (3) Easement areas, where deemed necessary by the Town Engineer and Highway Superintendent.
- B. All ledgerock and rock outcroppings shall be removed to below the elevation of the lowest point of the roadbed and shall be done to afford proper site distance, drainage and runoff.
- C. All roots and stumps shall be grubbed, excavated and removed from the above areas.
- D. Where possible, the roadbed within the right-of-way may be realigned to afford the most practical construction of the roadbed, in the opinion of the Town Engineer and Highway Superintendent.

§ A215-13. Excavation, filling and rough grading.

- A. The developer shall complete the shaping of the road right-of-way, streams and ditches and easement areas to the line and grade as shown on the approved plan and as otherwise may be directed by the Town Superintendent of Highways. All unsuitable or unstable materials shall be completely excavated and removed from the right-of-way, and all rocks or boulders larger than six inches in diameter shall be excavated at least eight inches below the finished subgrade of road pavement, drainage or drainage structures, curbs and sidewalks.
- B. Where fills are necessary to complete the required line and grade or to backfill trenches or other excavation, the materials incorporated in the work shall be acceptable to the Town Superintendent of Highways and shall be placed in layers not exceeding eight inches in depth, each layer to be thoroughly compacted by rolling with a three-wheel, sheepsfoot, pneumatic tire or padded wheel roller or by impact rammer or vibrator equipment in areas inaccessible to power rollers. A compaction shall continue until the fills are firm and unyielding.
- C. The rough grade of the road pavement, curb and sidewalk areas shall be completed to within one inch above or below the finished subgrade as shown on the approved cross section of the right-of-way improvement.
- D. Earth shoulders and flow line of ditches and gutters shall be maintained in satisfactory condition at the developer's expense at all times during the course of construction of the subdivision and until such time as the Town Board has accepted dedication of the right-of-way.
- E The areas between the curbline and the right-of-way line must be graded and seeded in order to prevent erosion.

§ A215-14. Storm drainage: excavation, laying and backfilling.

A. The width of the trench in which the pipe is placed shall be sufficient to permit thorough tamping of the backfill under the haunches and around the pipe. Where rock, in either boulder or ledge formation, is encountered, it shall be removed below grade and replaced with suitable materials in such a manner as to provide an earth cushion having a thickness under the pipe of not less than eight inches, and where there are excessively heavy fills over the top of the pipe, the Town Superintendent of Highways may specify that an earth cushion up to 1/2 inch in thickness per foot of fill be placed over the top of the pipe. In no case shall the top of any drainage pipe be less than 18 inches below the finished grade of the pavement. Where soft, spongy or other unstable soil is encountered at the grade

established, all such unstable soil under the pipe and for a width of one diameter on each side of the pipe shall be removed and replaced with run-of-bank gravel or other acceptable material. In all cases, the bed shall be thoroughly compacted and shall provide a firm foundation for the pipe. See Figures 6A and 6B.³

- B. Pipe shall be laid to true line and grade on the prepared bed of the trench. All connections for making field joints in stormwater pipe shall be silt-tight; field joints in corrugated metal pipe shall consist of corrugated metal bands so constructed as to lap on equal portions of each of the culvert sections to be connected. All joints in making field connections of reinforced concrete pipe shall be filled with Portland cement mortar.
- C. Backfilling of trenches shall be done in accordance with the subsection on fills under § A215-13, Excavation, filing and rough grading.
- D. Any additional drainage facilities not shown on the approved plan and which may be ordered by the Town Superintendent of Highways shall be constructed by the developer at the developer's expense and in accordance with these specifications.

§ A215-15. Pipes.

- A. Storm drain and culvert pipe may be reinforced concrete or high density polyethylene pipe (HDPE), with a minimum diameter of 15 inches. Storm pipe specifications include the following:
 - (1) N-12 high density polyethylene (HDPE) pipe of a 15" minimum pipe size
 - (2) 15- through 60-inch (300 to 1500 mm) pipe shall meet AASHTO M294, Type S or SP, or ASTM F2306.
 - (3) Manning's "n" value for use in design shall be 0.012.
 - (4) If over 60" pipe is necessary, it should be specified by the design engineer.
- B. Storm drain and culvert pipe shall conform to the appropriate sections of the current Standard Specifications, New York State Department of Transportation, Design and Construction Division, with the following exceptions:
 - (1) All collars or connecting bands used with corrugated piping shall have a minimum width of 12 inches; connection bolts shall have a minimum length of six inches.
 - (2) All reinforced concrete pipe shall be manufactured with slip or bell and spigot ioints.
- C. The material of construction and location of use of all storm drain and culvert pipe shall be approved by the Town Superintendent of Highways and the Town Engineer prior to construction or installation.
- D. All storm drain main lines are to be laid out to the extent practical so that they will not be under proposed roadways or streets. If possible, storm drain main lines should be designed to be installed on the high side of the right-of-way.

§ A215-16. Construction requirements for catch basins and curb inlets.

The following specifications and drawings show the minimum acceptable construction for typical catch basins and curb inlets. Whenever, in the opinion of the Town Superintendent of Highways, ground conditions or other circumstances require it, larger or heavier materials, additional materials, reinforcing or other modifications and improvements in design and construction shall be made as directed by the Town Superintendent of Highways at any time prior to paving.

§ A215-17. Location of catch basins.

Catch basins shall be constructed at all points of change of slope or alignment and at all junction points. At no time shall catch basins be spaced farther apart than 300 feet on slopes less than 3%, 250 feet on slopes from 3% to 6% and 200 feet on slopes over 6% in steepness. The approval of the Town Highway Superintendent and Town Engineer is required for the location and design of catch basins.

§ A215-18. Catch basins: excavation and concrete base.

Plans for the design and construction of all catch basins, including matters related to excavation and concrete bases, are subject to the approval of the Town Superintendent of Highways. In any event, under this chapter the minimum acceptable design and construction of any catch basin shall be as shown on Figure 7.⁵

§ A215-19. Catch basin walls.

Plans for the design and construction of all catch basins, including catch basin walls, are subject to the approval of the Town Superintendent of Highways. In any event, under this chapter the minimum acceptable design and construction of any catch basin shall be as shown on Figure 7.6

§ A215-20. Installation of pipes.

- A. Concrete walls around all pipes entering or leaving the catch basin shall be cut to fit the contours of the pipes as closely as possible. Remaining interstices between the pipe and the catch basin structure may not exceed two inches and shall be solidly filled with mortar for the full thickness of the wall. No blocking or bricking of openings shall be allowed. Ends of all pipes shall be cut flush with the inside surfaces of the catch basin walls.
- B. When the diameter of the effluent pipe is greater than that of an influent pipe, the elevation of the top of the influent pipe shall be no lower than the elevation of the top of the effluent pipe.
- C. When the diameter of the effluent pipe is the same as or smaller than that of an influent pipe, the elevation of the invert of the influent pipe shall be no lower than the elevation of the invert of the effluent pipe. In no case shall the top of any influent pipe be more than five feet above the invert of the effluent pipe.

§ A215-21. Curb inlets.

A. All catch basins shall be capped with curb inlets having a minimum frame opening of 30 inches by 48 inches. Curb inlets shall be similar or equal to Syracuse Castings Pattern No. 3408 bicycle-proof, or equivalent, as designated by the Town Superintendent of Highways.

- B. Curb inlets shall be installed so that the top of the grating is one inch below the adjacent asphalt surface. The grate shall be installed with a slope that matches the road crown.
- C. Curb-front openings on all curb inlets shall have, centered in the opening, a solid horizontal bar to prevent the ingress of small children. This bar shall be part of the casting or solidly welded in place subsequent to manufacture.

§ A215-22. Steps for catch basins.

Catch basins having a depth of greater than 48 inches from the finished surface to the top of the concrete base shall be provided with steps. Steps shall be of aluminum or plastic. They shall be solidly set in the masonry at the time of construction and shall extend all the way through the wall. The steps shall extend 4 1/2 inches inside the wall of the catch basin. The top step shall not be more than 18 inches below the finished surface, and thence to the base, steps shall be no more than 18 inches apart.

§ A215-23. Fine grading; curbs and sidewalks.

- A. Before fine grading or construction of curbs and sidewalks is started, all storm and sanitary sewers and all utilities, including house connections and hydrants, shall have been installed, and all fill and backfill shall have been thoroughly compacted to the satisfaction of the Town Superintendent of Highways.
- B. After completion of the rough grade and prior to the laying of the foundation course, the subgrade shall be shaped to line and grade and thoroughly compacted with an approved self-propelled roller weighing not less than 10 tons. All hollows and depressions which develop under rolling shall be filled with acceptable granular material and again rolled, this process to be continued until no depressions develop. The subgrade shall not be muddy or otherwise unsatisfactory when the foundation course is laid upon it. Any soft or unstable portions of the subgrade which develop under the roller shall be completely excavated and removed from the right-of-way and shall be replaced with acceptable granular material and the area regraded and compacted as above.
- C. Fine grade shall conform to the prescribed width of pavement and shall extend equidistant from the center line of the road right-of-way and shall conform to the typical cross section of the road pavement and to the approved line and grade.

§ A215-24. Foundation course.

A. After the fine grade has been constructed to the satisfaction of the Town Superintendent of Highways, the developer shall furnish and place a foundation course of approved run-of-bank gravel, crusher run stone or crusher run gravel to the depths as called for in these specifications. All materials acceptable for this course shall be hard, durable and sound and shall be well graded from coarse to fine, the maximum diameter of the large particles not exceeding 2/3 of the thickness of the compacted foundation course, and 90% to 100%, by weight, of the particles shall be of such size as will pass through a four-inch-square hole, not more than 70% by weight pass the No. 40 mesh sieve and not more than 10% by weight pass the No. 200 mesh sieve.

- B. The materials shall be placed on the finished subgrade by means of mechanical spreaders and shall be thoroughly compacted by rolling with a self-propelled tenton roller. Water shall be added to the materials in such amounts as the Town Superintendent of Highways may consider necessary for proper compaction. After compaction, the course shall be true to grade, and cross sections, and any depressions shall be eliminated by the use of additional granular materials thoroughly rolled in place. In all cases, the foundation course must be so thoroughly compacted that it will not weave under the roller.
- C. In order for the foundation course to be determined acceptable by the Town Superintendent of Highways, the developer must:
 - (1) Demonstrate through required compaction tests in a number and at locations specified by the Town Engineer 95% maximum density as determined by ASTM D698, Standard Proctor Density.
 - (2) Document through presentation of a preliminary as-built drawing that installed catch basin locations, pipe sizes and slopes, road location and profile are in accordance with approved design plans.

§ A215-25. Base course.

- A After the foundation course has been completed to the satisfaction of the Town Superintendent of Highways in the manner stated within above § A215-24, Subsection C, asphaltic concrete conforming to the current specifications of the New York State Department of Transportation for base course, NYSDOT Type 3 Binder, shall be uniformly spread by a self-propelled mechanical spreader equipped with tamping bars and a heating unit in sufficient depth as to provide a finished compacted thickness after rolling equal to that specified for a penetration macadam base course. The base material in place shall be thoroughly rolled with a ten-ton roller. The base course installation shall occur between April 15 and November 15 of any given calendar year.
- B. After compaction, the top surface of this course shall not extend above the theoretical elevation for this course, and when tested with a straightedge 16 feet in length, any depressions over 1/4 inch below the theoretical grade line shall be satisfactorily eliminated.

§ A215-26. Surface course.

- A. After the asphaltic concrete base course has been completed to the satisfaction of the Town Superintendent of Highways, including satisfactory repair of any conditions identified by the Highway Superintendent in the binder, curbing, drainage, shoulders, etc., a one- or two-course bituminous concrete wearing course shall be constructed conforming to New York State Department of Transportation specification for binder course and/or top course, NYSDOT Type 6F.
- B. After the base course has been thoroughly cured and cleaned of all foreign material, a bituminous concrete binder course and/or bituminous top course shall be uniformly spread by a self-propelled mechanical spreader with tamping bars and heating unit in sufficient depth as to provide a finished compacted thickness after

- rolling as called for in these specifications and the approved plan. The course or courses shall be thoroughly rolled with a ten-ton roller.
- C. Where a two-course wearing surface is required and in the event that the binder course has been subject to traffic for an extended period of time, prior to the installation of the top surface course the binder course must be thoroughly cleaned of all foreign material and a tack coat of asphalt emulsion must be applied to the surface at the rate of 1/10 to 1/20 gallons per square yard.
- D. Extreme care shall be exercised in the placing of bituminous concrete to ensure that all longitudinal joints shall be lapped in the placing of adjoining strips and that all lateral joints are trimmed before continuing with the placing of additional materials on that strip.
- E. The final wearing course(s) shall not be constructed until at least 95% of the buildings have been constructed and any damage to the base course has been corrected to the satisfaction of the Highway Superintendent.

§ A215-27. Curbs.

- **A.** Asphaltic berms or concrete curbs may be required to manage storm drainage. If required by the Town, such asphaltic berms or concrete curbs shall be constructed on both sides of the street as shown on Figures 2 through 5 and be of the material and dimension described in Figures 1, 8A and 8B.
- B. Where required by the Town Superintendent of Highways, six-inch HDPE perforated pipe suitable for H2O loading shall be laid in three-fourth-inch crushed stone under all curbs as shown on Figure 8B.8 The underdrain shall be so graded that any water under the curbs will drain to the nearest catch basin where the underdrain shall be connected.

§ A215-28. Driveways.

- A. The developer shall so design, lay out and construct all driveways, both within and without the limits of the right-of-way, that the latest models of modern cars may enter and leave the right-of-way without difficulty.
- B. The developer shall install all driveway entrances according to the dimensions and specifications shown on annexed Figure 9. Any modification will have to be authorized in writing by the Town Superintendent of Highways. All necessary driveway entrances within the subdivision shall be constructed at the time of the construction of the curbs.

§ A215-29. Sidewalks.

As required, the developer shall construct four-inch-thick reinforced Portland cement concrete sidewalks on streets as shown on Figures 2, 3 and 4, and in detail on Figure 10. Concrete shall be of a one-to-two-to-three mix, air-trained with Durex or equivalent, one course, properly screeded and finished to true grade with a wooden float, and shall be

^{2.} Editor's Note: All figures are included at the end of this chapter.

^{3.} Editor's Note: Figure 8B is included at the end of this chapter.

cured, all to the satisfaction of the Town Superintendent of Highways.

§ A215-30. Intersections.

The developer shall construct all street intersections in accordance with Figure 11A, except in the case of a new street intersecting an existing narrow road when it shall be modified as shown on Figure 11B.

§ A215-31. Street name and traffic signs.

- A. The developer shall furnish and install a four-way street name sign at every intersection made by the streets he constructs. Signs and posts shall conform dimensionally to Figure 12A and otherwise in their design and installation to the standards established within the NYSDOT Manual of Uniform Traffic Control Devices (MUTCD).
- B. The developer shall also furnish and install stop signs, stop bars, dead end signs, and all other regulatory or advisory signs that may be required on the streets he constructs. Signs and posts shall conform dimensionally to Figure 12B and otherwise in their design and installation to the standards established within the NYSDOT Manual of Uniform Traffic Control Devices (MUTCD).

§ A215-32. Monuments.

- A. Monuments shall be set on all right-of-way lines of streets, at all street intersections, angle points, points of curve and subdivision corners and all easements or where ordered by the Town Superintendent of Highways. There shall be a clear foresight and backsight to adjacent monuments on the right-of-way line or lines on which a monument is set.
- B. Monuments shall be 36 inches long, five inches square at the top tapering to six inches square at the bottom, and shall have centered in the top a three-eighths-inch or one-half-inch drill hole, a three-eighths-inch or one-half-inch steel rod slightly protruding or some other permanent and satisfactory center mark. Monuments shall be of cut granite, free from imperfections, or of concrete and as approved by the Highway Superintendent. See Figure 13.
- C. Monuments shall not be set before final grading has been completed, nor shall they be set while frost is in the ground. They shall be set so that the top is flush with the finished grade. They shall be so set and tamped as to prevent settlement or shifting.
- D. The developer's engineer and/or licensed land surveyor shall certify that the location of all monuments is accurate before acceptance of the street by the Town Board.

§ A215-33. Easements.

- A. The developer shall dedicate to the Town, by recordable instrument, all easements as shown on the approved plan.
- B. All drainage easements must have a minimum width of 30 feet and shall include the right to enter upon said property for the purposes of installing, maintaining and

repairing the pipe or pipes as placed in such easements. It is the policy of the Town that all storm drainage be enclosed in drainage pipe, and all easements shall contain a provision for the right to install underground pipes and to discharge stormwater therein. The developer shall install, a minimum of 20 feet from the catch basin into the easement, pipe of sufficient size to provide for present and future runoff.

- C. Where it is proposed that stormwater be drained from the street or highway or from other lands of the developer to the perimeter of the developer's property, easements shall be provided in recordable form and free and clear of all liens from the adjoining owners, permitting the discharge of stormwater drainage onto such adjoining lands.
- D. Where it is proposed that stormwater be drained from the street or highway or from other lands of the developer depicted on a subdivision plat or site plan and either retained or detained within a stormwater pond, adequate fencing of any stormwater pond shall be designed and installed as a required improvement. Such fencing shall be of post-and-rail design with associated welded wire mesh as shown on Figure 14.
- E. The developer shall provide an attorney's certificate of title indicating that the above-mentioned easements and rights to discharge surface water are free and clear of all liens.

§ A215-34. Open ditches and swales.

In those situations where the conditions of soils and topography and the amount of stormwater runoff to be accommodated combine to make possible the conveyance of stormwater within either open ditches or swales, the applicant shall submit design plans for the proposed open ditchers or swales, including associated rip rap material and construction specifications, for review and approval by the Town Highway Superintendent and the Town Engineer. The design plans shall be accompanied by engineering demonstration of both hydraulic capacity and the adequacy of proposed stabilization measures.

§ A215-35. House drains.

Stormwater discharge from roof and cellar drains shall in no case be allowed to flow onto the street right-of-way. With the approval of the Town Superintendent of Highways and the Town Engineer, in writing, these drains may be connected to the street stormwater pipe. Such connections must however be made prior to the start of fine grading of the streets.

§ A215-36. Cul-de-sac streets.

Wherever a temporary or permanent dead end is allowed on a subdivision street, a turnaround shall be constructed. This turnaround and associated right-of-way shall take the form of a circle and shall be designed and constructed as shown on Figure 15. The temporary type of construction shall be used only when authorized by the Town Planning Board because of the foreseeable future extension of the street. The circular-shaped turnaround shall be completely paved with no centerisland.

§ A215-37. Grades and tangent curves.

Streets shall be so designed that finished tangent curves will not be less than 1% or more than 10%. Every change in grade shall be effected with a vertical curve of sufficient length to ensure adequate stopping sight distance and to provide for smooth transition. These vertical curves shall be designed in accordance with the graph shown on Figure 16 which is based on New York State standards for speeds of 30 miles per hour. Figure 17 further depicts minimum standards for side street approach grades.

§ A215-38. Guide rail.

The developer shall furnish and install guide rail on any public or private subdivision street as deemed required by the Town Superintendent of Highways and/or the Town Engineer upon application of the design guidelines set forth within the MSHTO Roadside Design Guide and Chapter 10 of the New York State Highway Design Manual. In the case of rural-type streets with less than 400 vehicles AADT, Guidelines for Geometric Design of Very Low Volume Roads, AASHTO 201, may also apply. See Figure 18 for depiction of preferred guide rail design, recommended clear zone and critical (i.e., maximum) side slope conditions that should be avoided or otherwise mitigated through installation of guide rail.

§ A215-39. Snow removal and storage.

No snow removed from adjacent driveways or other developed areas shall be deposited upon the right-of-way of either a public or private street or within any Town easement area unless such easement area is specifically designated on the approved subdivision plat and/or site plan for snow storage.

§ A215-40. Interpretation of specifications.

The final decision as to the interpretation of any part of these street specifications shall rest with the Town Superintendent of Highways.

§ A215-41. Severability.

In the event that any part or parts of these street specifications for subdivisions or of any ordinance or regulations which may govern or otherwise affect them is for any reason modified or invalidated, the other portions of said specifications not affected thereby shall remain in full force and effect.

§ A215-42. Inspections.

- A. The developer shall afford the Town Superintendent of Highways the opportunity to inspect the work in order that he, the Superintendent, may assure himself that these minimum specifications are being complied with. Such inspections shall occur at the following listed places in order of construction, and the developer shall give the Town Superintendent of Highways at least two days' notice of such expected completions and shall not proceed to the next order of work until the Town Superintendent of Highways has approved the work inspected.
 - (1) Upon completion of the subgrade.

- (2) Upon completion of the foundation course, at which time the developer shall furnish the Town Superintendent of Highways with men and equipment to dig, or have dug, test holes to establish and confirm the depth and quality of the foundation course.
- (3) Upon beginning of paving operations.
- B. The Town Superintendent of Highways, or his representatives, shall be given access to the work at all times in order that he may inspect the work as it progresses.
- C. The Town Superintendent of Highways shall coordinate all such required inspections with the Town Engineer, whose fees will be reimbursed by the developer to the Town pursuant to the terms of the required escrow agreement set forth within Town Code Chapter 128, Fees, Land Use.

§ A215-43. Supersession of conflicting provisions.

In the event that these street specifications are in conflict with other rules and regulations in effect in the Town in the matter of the design and construction of either public or private streets, these street specifications will be considered to supersede all others.