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SITE DESIGN CRITERIA AND LAND DEVELOPMENT REGULATIONS

As Adopted by the Town Board on

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(Local Law 1-2017)

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**TOWN OF AVON
SITE DESIGN CRITERIA
AND LAND DEVELOPMENT REGULATIONS
CHAPTER 47**

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PART I: RULES AND REGULATIONS

ARTICLE I

GENERAL PROVISIONS

47-1 Citation of Rules and Regulations

These rules and regulations shall be known and may be cited as "The Town of Avon Site Design Criteria and Land Development Regulations" as adopted by the Town of Avon Town Board on February 23, 2017 (Local Law 1-2017).

47-2 Authority and Requirement of Plat Approval

In accordance with New York Town Law, Article 16, Section 271, the Planning Board of the Town of Avon is created by the Town Board. The Planning Board of Avon is empowered by provisions of New York Town Law, Article 16, and by the Town Board, to grant final approval of any subdivision plat or site plan of lands with or without streets or highways within the corporate limits of the Town of Avon. Such approval, in accordance with the procedures and regulations set forth below, is intended to follow applicable sections of New York Town Law.

47-3 Purpose

To carry out the purpose of the Town Law and the Planning Board, these rules and regulations are adopted by the Town Board, to provide for the future growth and development of the Town and to afford adequate facilities for the housing, transportation, distribution, comfort, convenience, safety, health and welfare of its population. Consistent with such purposes, these rules and regulations will provide for the orderly development of land use areas, the coordination of existing streets and public utilities with new service, the provisions of open spaces for passive and active recreation and the location of future sites for public buildings and commercial areas, all to the mutual benefit of the Town and its residents.

47-4 Definitions

- A. Words in the singular include the plural and words in the plural include the singular. The word "person" includes a corporation, unincorporated association and a partnership as well as an individual. The word "building" includes "structure" and shall be construed as if followed by the words "or part thereof". The word "street" includes "road", "highway" and "lane"; "watercourse" includes "drain", "ditch" and "stream". The words "shall" or "will" are mandatory, the word "may" is permissive.
- B. Unless otherwise expressly stated, the following terms shall, for the purpose of these regulations, have the meaning indicated.

AGRICULTURAL DATA STATEMENT — An identification of farm operations within an agricultural district located within 500 feet of the boundary of property upon which an action of approval is pending per Town Law 283-a.

ACCESSORY USE — A use customarily incidental and subordinate to the main use or building and located on the same lot therewith. In no case shall such accessory use dominate, in area, extent or purpose, the principal lawful use or building.

ALLEY — A public or privately owned service way less than 24 feet in width providing a secondary means of access to abutting properties.

ALTERATIONS — As applied to a building or structure, a change or rearrangement in the structural parts or in the exit facilities or an enlargement, whether by extending on a side or by increasing in height; or the moving from one location or position to another.

ALTERATIONS, STRUCTURAL — Any change in the supporting members of a building or structure such as bearing walls, columns, beams or girders.

BASEMENT — A story partly underground and having more than 1/2 of its floor-to-floor height above the average level of the finished grade of the building.

BLOCK — An area bounded by streets.

BUILDER — A person who obtains a building permit for construction of a structure on an approved site.

BUILDING — Any structure having a roof supported by columns, piers or walls, including tents, lunch wagons, trailers, dining cars, camp cars or other structures on wheels, and intended for the shelter, housing or enclosure of persons, animals or chattel.

CLEAR SIGHT TRIANGLE — An area of unobstructed vision at a street intersection defined by lines of sight between points at a given distance from the intersection of street right-of-way lines.

CODE ENFORCEMENT OFFICER — An appointed official designated by the Town Board to administer and enforce the provisions of the New York State Uniform Fire Prevention and Building Code (Uniform Code), provisions of the Zoning Ordinance and other rules and regulations set forth of the Town of Avon.

COMPREHENSIVE PLAN – Current Comprehensive Plan as adopted by the Town Board.

CONTRACTOR — A person acting for the developer to construct the required improvements of the project. The contractor is responsible to perform the work in conformance with the approved plans subject to a review by Town officials.

CROSSWALK — A right-of-way, municipally or privately owned, at least 10 feet in width, which traverses an area to furnish access for pedestrians.

DEDICATION — The deliberate appropriation of land by its owner for any general and public uses, reserving to himself no other rights than such as are compatible with the full exercise and enjoyment of the public uses to which the land has been devoted.

DEVELOPER — A person holding title to a parcel of land to be developed or subdivided. Commitments and/or requirements for development are solely between the Town and the developer.

DOUBLE FRONTAGE LOTS — A lot, having at least two sides fronting on separate streets which do not intersect while adjoining the lot.

EASEMENT — The lands created through authorization by a property owner for the use by another and for a specified purpose of any designated part of the property.

FINAL SUBDIVISION PLAT — A drawing prepared by a registered professional which complies with prescribed regulations and statute for recording in the Livingston County Clerk's Office.

GRADING PLAN — A plan showing all present and proposed elevations for storm water drainage and disposal.

HALF OR PARTIAL STREET — A street generally parallel and adjacent to a property line, having a lesser right-of-way than normally required for satisfactory improvement and use of the street.

INSPECTOR/OBSERVER — An agent of the Town empowered to observe the construction progress of the project and its compliance with the approved plans.

IMPROVEMENTS — Those physical additions and changes to the land that may be necessary to produce usable and buildable land areas. This may include but is not limited to grading, water supply, sewage disposal, storm water disposal, lighting, landscaping, etc.

LETTER OF CREDIT — Financial security required to insure the installation of improvements as shown on the approved plan subject to possible dedication to the Town.

LOT — A parcel of land intended for transfer of ownership or site development that is presently occupied or capable of being occupied by a principal building or use and uses accessory to the principal building or use.

PLAN — A part of any Comprehensive Study prepared for the Town that addresses future land use considerations.

OPEN SPACE or OPEN AREA — Any space or area of undeveloped land characterized by natural scenic beauty, existing openness and natural condition exclusive of undevelopable lands such as wetlands, steep slopes, or other environmentally sensitive areas. A variety of open space forms is encouraged and may include but is not limited to formal squares and parks, informal natural areas, passive and active recreation areas, treed and open fields, agricultural lands used in agricultural production.

PLANNING BOARD — The word Board or the words Planning Board or Town Planning Board shall mean the Town of Avon Planning Board. When Town Board is meant, it will be stated as Town Board.

PRELIMINARY PLAT — The Preliminary drawing or drawings indicating the proposed manner or layout of the subdivision, to be submitted to the Planning Board of its consideration and meeting the requirements of Article VI.

RIGHT-OF-WAY — Land opened for use as a street, crosswalk or utility corridor.

SET BACK OR BUILDING LINE — The right angle distance within a property defining the required minimum distances between any structure and the street or the side or rear property lines of a parcel right-of-way.

SIGHT DISTANCE — The distance of visual sight available for access to a dedicated right-of-way from any parcel of land to be developed.

SITE PLAN — A drawing prepared by a registered professional for review by the Planning Board for the development of an existing lot or parcel without any new subdivision of land.

SEQR — State Environmental Quality Review - part of the NYS Environmental Conservation Law applicable to land development per 6NYCRR Part 617.

SKETCH PLAN — An informal plan in accordance with these specifications indicating existing features of a parcel of land and its surroundings and the general layout of a proposed land improvement.

SPDES (STATE POLLUTION DISCHARGE ELIMINATION SYSTEM) — Program authorized by the Environmental Conservation Law issuing permits for stormwater discharges from construction activities.

SPDES GENERAL PERMIT — SPDES General Permit for Construction Activities (GP-0-15-002) issued January 29, 2015 (or latest revision), pursuant to Article 17, Titles 7, 8 and Article 70 of the Environmental Conservation Law, authorizing stormwater discharges from construction activities.

STREET — A general term used to describe a right-of-way, municipality or privately owned, serving as a means of vehicular and pedestrian travel, and utility services. The streets are classified by function as follows:

1. Commercial/Industrial Road - A road connecting area centers serving a large volume of local and truck traffic serving areas within the B-BT, and I.
2. Residential/Subdivision Road - A new development serving primarily a neighborhood with relatively low volumes of traffic.
3. Private Drive - An area serving a limited number of parcels maintained by Legal agreement of the parcel owners and not to be dedicated to the Town.

SUBDIVISION — The division of any parcel of land into two or more lots, plots, sites or other division of land for the purpose, whether immediate or future, of transfer of ownership or building development and shall include resubdivision; provided, however, that the public acquisition by purchase of strips of land for the widening or opening of streets shall not be included within this definition nor subject to these regulations. Refer to provisions of Chapter 113: Subdivision of Land.

SUPERINTENDENT OF WATER AND SUPERINTENDENT OF HIGHWAYS — Those Town department heads who are directly in charge of their respective departments and shall assume the operation and maintenance of their respective portions of a development upon dedication to the Town.

SWPPP (STORM WATER POLLUTION PREVENTION PLAN) — A plan prepared by a licensed professional in conformance with the requirements of SPDES General Permit, for the control of erosion, sedimentation, water quality and water quantity of stormwater runoff during and after construction activities.

TOTAL HOLDINGS MAP — A map of the contiguous parcels, including the land to be developed, owned by a person applying for development approval.

TOWN ATTORNEY — A person or firm engaged by the Town to review and prepare necessary documentation as required for districts, easements, letters of credit, dedication, surety or other legal matters.

TOWN BOARD — The Board as elected by the residents of the Town who acts on behalf of the residents of the Town of Avon for the betterment, protection and welfare of the community.

TOWN ENGINEER — A person or firm engaged by the Town to review the project plans and to make recommendations to the Town so the best interests of the Town shall be preserved in conformance with the standards herein established.

ZONING PERMIT — A permit issued by the Code Enforcement Officer stating the purpose for which a building or land is to be used in conformity with the uses permitted and all other requirements under the Town of Avon Zoning Ordinance and Town Code for the zone in which it is located or is to be located.

Throughout these regulations one will find reference to publications of other agencies or testing methods such as:

- AASHTO — American Association of State Highway and Transportation Officials.
- ANSI — American National Standards Institute, Inc.
- ASTM — American Society for Testing and Materials.
- AWWA — American Water Works Association.
- NYSDEC — New York State Department of Environmental Conservation.
- NYSDOH — New York State Department of Health.
- NYSDOT — New York State Department of Transportation.

References for these designations are widely accepted and readily available for the specifics and details that may be required for a design situation.

- 47-5 Reserved**
- 47-6 Reserved**
- 47-7 Reserved**
- 47-8 Reserved**
- 47-9 Reserved**

ARTICLE II

PROCEDURES

47-10 Summary of Procedures

- A. The basic procedures as summarized hereafter are those as outlined in the various aspects of Town Law, specifically but not limited to Town Law 261-b, 271, 274-a, 274-b, 276, 277, 278, 279, 280, 281, and 283-a. The applicant or designated representatives should be aware of the approval process as outlined in the various sections of the Town Law or as modified herein.
- B. Town approval of any subdivision or site plan shall be evidenced by a Final Plat containing all the required signatures, filed in the Livingston County Clerk's Office. This approval shall be pre-requisite to the issuance of any building permit or certificate of occupancy for the use of any land. Such approval shall hereafter be initiated and processed in accordance with the following basic procedure. (Building Zoning Department Action Charts, Appendix FF)
- C. The Town of Avon has a two-step approval process which includes Preliminary and Final Approvals. All plans submitted to the Town Building and Zoning Department shall be clearly marked for the requested action by the Planning Board and failure to submit a complete package of information will be cause for rejection by the Planning Board.
- D. The developer may, prior to the formal approval process, file a sketch plan with the Planning Board Clerk which shall be discussed by the Planning Board with the developer at the next available meeting for purposes of classification, initial discussion concerning the layout, availability of utilities, services and responsibilities. No formal action will be taken by the board for a concept discussion and this process is not required by the Town.
- E. An application for all plan approvals shall be submitted to the Town of Avon Building and Zoning Department, Planning Board Clerk. With this application the appropriate checklist noted in Article V shall be completed and submitted. Items on the checklist that are not germane to the application should be qualified.
- F. Concurrent with the preliminary phase of the approval process, the applicant must comply with the Requirements of the New York State Environmental Quality Review Act (SEQR). A SEQR flow chart has been provided within to assist the applicants in the approval process. (See SEQR Flow Chart, Appendix EE)
- G. All subdivisions and site plans will require Preliminary Overall Approval from the Planning Board prior to the granting of Final Approval for individual phases, if any, for the project. Once an application has received preliminary approval, the applicant

may make application for final approval through a complete submittal to the Planning Board Clerk.

47-11 Conceptual Review Procedure

Conceptual reviews with the Planning Board affords the applicant an opportunity to prescribe ideas regarding a specific project, gauge the Planning Board's initial reaction, and learn more about what (if any) concerns they may have or special features they may like to see.

Article III, Section 113-4 of the Town Code will provide the procedures for establishing a concept review with the Planning Board. Any procedural questions shall be directed to the Building and Zoning Department.

47-12 Minor and Major Subdivision Procedure — Preliminary Plan

The developer shall prepare and submit a complete application including the proposed Preliminary Plan containing information as outlined in these regulations, Preliminary Subdivision Plat Checklist (Appendix GG), and in accordance with the Town Code Section 113, to the Building and Zoning Department Planning Board Clerk for distribution.

The Planning Board Clerk shall distribute them to the Planning Board members, Town Department Heads and Consultants, Agencies having jurisdiction, and if necessary to the Livingston County Planning Agency pursuant to Section 239-n of the General Municipal Law.

The application shall be scheduled and advertised for a public hearing within 62 calendar days after receipt of the complete application by the Planning Board Clerk. A notice of the public hearing shall be published at least 5 calendar days prior to the meeting in a newspaper of general circulation in the Town. At the hearing, all interested parties shall be given the opportunity to be heard. If verbatim minutes of the public hearing are requested by the developer or an aggrieved Property owner, the cost of such minutes shall be borne by the requester.

The Planning Board shall receive comments, questions and recommendations, on the proposed Preliminary Plan and shall discuss such with the developer.

The Planning Board shall comply with the provisions of the State Environmental Quality Review Act (SEQR) under Article 8 of the Environmental Conservation Law and its implementing regulations as codified in 6NYCRR 617 before proceeding to preliminary motions of approval. Within 62 calendar days of the close of the public hearing, unless such time limit is extended by mutual consent of the developer and the Board, the Planning Board may either approve, conditionally approve with or without modifications or disapprove the Preliminary Plan. In the event of disapproval, the grounds of such disapproval shall be specified in the

resolution. The Planning Board may waive, when reasonable, any requirements or improvements for the approval, approval with modifications or disapproval of subdivisions submitted for its approval. Any such waiver, which shall be subject to appropriate conditions, may be exercised in the event any such requirements or improvements are found not to be requisite in the interest of the public health, safety, and general welfare or inappropriate because of inadequacy or lack of connecting facilities adjacent or in proximity to the subdivision.

47-13 Minor and Major Subdivision Procedure — Final Plan

The applicant shall submit a complete application containing information as outlined in these regulations, Final Subdivision Plat Checklist (Appendix HH), and in accordance with Section 113 of the Town Code. The application shall be provided the Building and Zoning Department Planning Board Clerk for final approval following preliminary approval. The procedure for final approval is parallel to the process for preliminary approval as outlined in Section 47-12 except the Planning Board may waive the Public Hearing at their discretion.

The Planning Board may, in acting on a Final Plat, make their approval subject to specific conditions set forth by the approval resolution and the plat may not be filed with the Livingston County Clerk, but must await the signature of the Planning Board Chairman which shall be affixed only after the foregoing conditions have been met to the Board's satisfaction. The developer shall have 180 calendar days to meet the conditions, extendable by the Board up to two additional 90 calendar day periods if in the Board's opinion particular circumstances warrant such extension.

47-14 Site Plan Procedure

The applicant shall submit a complete application to the Building and Zoning Department Planning Board Clerk for site plan approval and shall include drawings, maps or other relevant documents that present the necessary information, in compliance with the Article V Plan Requirements detailed in these regulations and the associated site plan check list (maps and drawings submitted as a part of site plan approval applications shall be prepared by a New York State licensed engineer, architect, landscape architect or surveyor with exemption and shall be certified by the seal or signature of such engineer, architect or surveyor).

All site plans will require Planning Board approval and they must be prepared in accordance with these regulations except that items relating to boundary data may be omitted if the parcel designation has previously been filed with the Livingston County Clerk's Office. Modification of previously approved site plans may be reviewed and approved administratively at the discretion of the Planning Board Chairman, Code Enforcement Officer, and Town Engineer.

Within 60 days of the receipt of an application for site plan approval, the Town Planning Board shall act on it. If no decision to deny such an application is made

within said sixty-day period and upon completion of all other requirements by the applicant, the site plan shall be considered approved. The sixty-day time limit for action on the site plan may be extended by mutual consent or agreement of the Town Planning Board and the applicant. The Planning Board's action shall be in the form of a written statement to the applicant stating whether or not the site plan is approved, disapproved or approved with conditions. The Planning Board shall incorporate a statement of findings into the decision and must clearly state the reasons for the action being taken.

No modification of existing stream channels, filling of lands with a moderate-to-high susceptibility to flooding, grading or removal of vegetation in areas with a moderate-to-high susceptibility to erosion or excavation for construction of site improvements shall begin until the developer has received site plan approval. Failure to comply shall be construed as a violation, and, where necessary, site plan approval may require the modification, restoration or removal of unapproved site changes.

Site plan approval cannot be granted for any project until all necessary variances from the Town Zoning Board of Appeals have been granted, approvals required by the Town Board have been granted, and any required review or referral has been received from the Livingston County Planning Department in accordance with the provisions of § 239-m of the General Municipal Law.

Upon approval of the site plan the Town Planning Board shall ensure that, to the maximum extent possible, the minimum requirements of the Town of Avon Town Code, and applicable sections of these regulations have been met. The Town Planning Board may impose additional restrictions or conditions on applications for site plan approval if it determines that such restrictions or conditions are necessary to ensure project conformance with generally accepted planning, engineering and design standards and criteria, to minimize the project's adverse impact on adjacent land uses, transportation network or other physical or environmental features or are directly related to the health, safety or general welfare of the community. Upon approval of the site plan and payment by the applicant of all fees and reimbursable costs due to the Town, the Planning Board shall endorse its approval on a copy of the final site plan and shall forward such copy to the Code Enforcement Officer, who shall then issue a zoning permit to the applicant if the project conforms to all other applicable requirements.

Upon disapproving an application, the Planning Board shall inform the Code Enforcement Officer, and he shall deny a zoning permit to the applicant. The Planning Board shall also notify the applicant in writing of its decision and its reasons for disapproval. A copy of the appropriate minutes may suffice for this notice

Expiration of site plan approval. Such site plan approval will automatically terminate two years after the same is granted unless significant work has been commenced on the project.

47-15 Offers of Cession

The subdivider shall tender offers of cession in a form certified as satisfactory by the Attorney for the Town of all land included in streets, highways or parks, not specifically reserved by him. Approval of a Plan by the Planning Board shall not constitute an acceptance by the Town Board of the dedication of any street, highway, utility, park or other public open space.

47-16 Installation of Improvements

Upon the request of the Town Board and/or the Planning Board, an irrevocable Letter of Credit or Performance Surety so as to assure the proper and timely completion of the required improvements and protection of the site and neighboring properties is to be provided. The developer shall submit an irrevocable Letter of Credit or Performance Surety once final approval has been granted and all the required signatures are placed on the plans, and prior to the issuance of zoning permits. The irrevocable Letter of Credit and Performance Surety is a financial security in a form acceptable to the Town and shall be submitted to cover the cost associated with all proposed improvements shown on the plans, such as utility and drainage improvements, construction observation, erosion control, grading, site stabilization, stormwater management, green infrastructure and all other areas the Town deems necessary. The final amount of security will be reviewed and approved by the Town Engineer.

47-17 Financial Responsibility — Irrevocable Letter of Credit/ Performance Bond

- A. A Letter of Credit/ Performance Bond furnished for the installation of the required improvements shall be in the amount reviewed by the Town Engineer and approved by the Attorney and shall be satisfactory to the Town Board as to form, sufficiency and manner of execution. The Letter of Credit/ Performance Bond shall be issued in favor of the Town of Avon and shall assure the complete installation of the required improvements within such period, not longer than three years. The Letter of Credit/ Performance Bond shall be issued to the Town for an initial minimum period of one year. Extensions of Letter of Credit/ Performance Bond shall be provided to the Town in the event that the construction of the project exceeds the timeframe noted in the Letter of Credit/ Performance Bond.
- B. The following guarantees will be required for the development in the Town.
 1. Letter of Credit/ Performance Bond

An irrevocable Letter of Credit/ Performance Bond shall be submitted by the developer to ensure the installation of improvements in an amount estimated by the developer's Engineer, reviewed by the Town Engineer, and approved by the Town Board.

The amount shall include but not be limited to the following items:

- a) Total estimated construction cost of all utilities, laterals, water and sewer services, roads, gutters, earthwork, erosion and sediment control, etc.
- b) Minimum 10 percent contingency factor.
- c) Engineering and construction observation charges will be a minimum of 5 percent based on the project complexity and construction schedule.
- d) Street signs and surveyor's monuments.
- e) Maps.
- f) Record drawings of installed facilities.

2. Maintenance Bond

Upon completion of the construction and as a condition of dedication to the Town, a Maintenance Bond shall be provided by the developer, reviewed by the Town Engineer and accepted by the Town Board guaranteeing the project against faulty workmanship or materials for a period of two years following the acceptance date by the Town. Maintenance Bonds shall be written by a surety licensed to do business in New York State and shall be in the amount of 10 % of the final construction cost of each dedicated improvement. Bonds shall be approved as to form and content by the Attorney for the Town prior to any dedication procedure. Individual portions of the project, i.e., sanitary system, water system, may be bonded with their individual acceptances by the Attorney for the Town.

A Maintenance Bond for the pavement, gutters and drains, and/or sidewalks will not be accepted until the entire project is ready for dedication.

A Maintenance Bond for final road top pavement will be for two years from the time of topping and acceptance.

47-18 Time Limit for Filing

The approval by the Planning Board of a plat showing lots, blocks or sites, with or without streets or highways, or the approval by the Board of the development of a plat or plats already on file in the office of the Livingston County Clerk or the Certificate of the Avon Town Clerk as to date of submission for which no hearing was duly held, or the date of the hearing for the approval or disapproval of such plat as the case may be, and the failure of the Planning Board to take action thereon

within the time prescribed, shall expire 62 calendar days from the date of the signing of the plan by the Planning Board or of such certificate, unless within such 62 calendar day period such plat or a section thereof shall have been duly filed or recorded by the owner in the office of the Livingston County Clerk.

If the owner shall file only a section of an approved plat, within such 62 calendar day period, such section shall encompass at least 10 percent of the total number of lots contained in the approved plat and the approval of the remaining sections of the approved plat shall expire unless said sections are filed before the expiration of the exemption period to which such plat is entitled under the provisions of the Town Law. In the event the owner shall file only a section of such approved plat in the office of the Livingston County Clerk, the entire approved plat shall be filed within 30 calendar days of the filing of such section with the Avon Town Clerk.

47-19 Formation of Special Districts

Between the interval of preliminary and final approvals of the subdivision plat, the developer shall petition the Town Board for the creation of the districts or extensions as necessary for a given development. They may include:

Districts or extensions could be necessary for sanitary sewers, water mains, stormwater disposal, sidewalks, lighting, or any particular creation for a specific development.

In order to preserve the continuity and format of the application of the districts to the various governing authorities, the Attorney for the Town and Town Engineer shall review the necessary documents and maps and the Town Clerk will be responsible for publication and filing requirements. All costs for the formation of these districts shall be paid for by the developer to the Town within 30 calendar days of its receipt of a bill therefore.

Required improvement districts must be extended or created by the Town Board before the signature of the official of the Planning Board may be affixed to the approved subdivision plan.

47-20 Easement Procedure

If easements are required on a project, the Town has established a procedure to facilitate the process and has a detailed handout for applicants to follow.

In summary, all proposed easements must be submitted to the Town's Building and Zoning Department with map, description, easement form, Transfer Gains Affidavit and filing fees. The Town will assign a control number and the complete package will be submitted to the Attorney for the Town for review.

Once approved the easement will be filed in the Livingston County Clerk's Office by the Attorney for the Town and proof of such filed with the Town Clerk.

Proof of easement filing with the Livingston County Clerk's Office must be provided to the Town Clerk prior to Final Planning Board signature of any Site Plan or Subdivision Plat.

47-21 Pre-Construction Meeting/Construction Observation

Before any construction begins on a subdivision or facilities to be dedicated to the Town, a pre-construction meeting must be held to address the Plans and intended improvements. The pre-construction meeting must be coordinated by the applicant and it is the applicant's responsibility to ensure that all necessary parties are in attendance, i.e. all approving agencies and utility companies. Furthermore, it is imperative that a written construction schedule be supplied at the pre-construction meeting. The installation of improvements and development of any land shall be subject to construction observation at all stages by representatives of the Town. For such purposes free access shall be accorded and requested information shall be promptly submitted. All costs of construction observation, including testing of materials, shall be paid for solely by the developer. A sufficient sum shall be provided by the developer in either the Letter of Credit or cash for the project observation costs.

Note: The pre-construction meeting may be held prior to obtaining all agency approvals, however, no construction will be permitted until such time that all required approvals are obtained.

47-22 Methods of Release of Financial Security

A. Letters of Credit

The procedure required for the release of funds is as follows:

1. Submission of periodic construction estimates by the contractor to the developer and the design engineer.
2. The site shall be reviewed by the Town's and developer's agents to review the comparison of the work complete to the monetary value of the requested release of funds.
3. The developer's Engineer, developer, and Town Engineer shall approve in writing up to 90 percent of the total amount of an item. (See Appendix A for Letter of Credit Release Form.)
4. The Town Engineer shall then submit the proposed Letter of Credit Release to the Town Building and Development Office and Town Clerk to be placed

on the next available Town Board agenda for approval. Once authorized by the Town Board, the Town Fiscal Officer shall sign the Letter of Credit Release Form for the final authorization of release of funds from the Letter of Credit. Approval by the Town officials for authorized periodic payments is not to be construed as acceptance of the work completed to date.

5. Partial release from the Letter of Credit may be granted by the Town Board as individual components of the subdivision development are completed. This shall not be construed as final acceptance of the work by the Town.

If the required improvements are not completely installed within the period fixed or extended, the Town Board may declare the Letter of Credit in default and collect the amount payable there under. Upon receipt of such amount, the Town shall cause to install such improvements as were covered by the Letter of Credit and as commensurate with the extent of building development that has taken place in the subdivision, not exceeding in cost, however, the amount collected upon the Letter of Credit.

B. Release of Retainage

Retainage release shall be considered by the Town Board only after a final inspection has been completed, systems have been tested and found acceptable by the Town's representatives, dedication process completed, and a two-year maintenance bond in the amount of 10% of the construction costs for those items dedicated to the Town has been accepted by the Town Board.

C. Release of Maintenance Bond

Release of Maintenance Bond shall be authorized by the Town Board upon final review of the project site by Town authorities and written recommendation is received. This review will be completed at least one month before the expiration of the Bond.

47-23 Applicability of Regulations

The regulations contained in these specifications for the design and construction of land development shall apply to all public works improvements within the Town of Avon. The Planning Board, with due cause and justification, can waive requirements set forth in these regulations by a majority vote of the Board. Reasons supporting such waiver shall be duly recorded in meeting minutes at such time any waivers are granted.

47-24 Zoning Permit Procedure

A Zoning Permit is generally required to initiate a zoning application and review. Permits are required to establish a use for a property, or to make improvements to it,

and may be made by an owner or an individual with a contractual interest in the property, such as a lessee, contractor, or agent.

When a Zoning permit application is submitted to the Code Enforcement Officer, a zoning review will be initiated, and an approval or denial will be issued. It is strongly encouraged to schedule a pre-application meeting with the Building and Zoning Department, in order to walk through the permitting and approval process.

Zoning and land use regulations determine the types of uses and development allowed in each zoning district, as well as many detailed aspects of a development, such as accessory uses, parking standards, landscaping/buffering, and dimensional regulations.

The Code Enforcement Officer will also specify if the proposal will require certain approval processes, such as area or use variances, special use permits, special permits, site plan approvals and subdivisions.

47-25 Special Use Permit Procedure

A special use permit allows a landowner to obtain a tract of land for a use that does not fall directly under the permitted usage for that specifically zoned area. Each zoning district under Article III: Zoning District Regulations of the Zoning Ordinance have specific permitted principal uses or uses that are permitted “by-right” and provides uses that are allowed with the issuance of a special use permit.

Article VI, Section 130-35 of the Town Code has specific standards for uses not otherwise permitted in Chapter 130 of the Town Code. Article IX, Section 130-45(B) of the Town Code outlines the appropriate steps for obtaining a special use permit. Please keep in mind that a special use permit shall be a prerequisite to the issuance of a building permit.

All applications for special use permits, shall be submitted to the Building and Zoning Department, where the Code Enforcement Officer will review for completeness.

47-26 Reserved

47-27 Reserved

47-28 Reserved

47-29 Reserved

ARTICLE III

DEVELOPMENT REQUIREMENTS

47-30 General

Land shall be suited for the purpose for which it is to be developed and the developer's Engineer shall certify to such on the plans submitted for approval.

The Planning Board shall review proposed developments on their individual merit and their contribution to the Town.

The subdivider shall strive to comply with standards of good planning and adhere to the specification codes and ordinances of the Town as well as those rules of agencies having jurisdiction over any particular phase of a development.

47-31 Flood Land, DEC Wetland and Federal Wetlands

Land subject to flooding and land deemed by the Planning Board to be uninhabitable shall not be plotted for residential occupancy, nor for such other uses as may involve danger to health, life or property or aggravate the flood hazard, but such land within the area of the Plan shall be set aside for such uses as shall not be endangered by periodic or occasional inundation.

47-32 Street Layout

- A. Development plans shall conform to the Town's Comprehensive and/or Area Plan and any other Master Plans for the Town as shall have been prepared and adopted by the Planning Board or Town Board.
- B. Streets in a new development shall be designed to provide connectivity between existing or future neighborhoods/developments. This would include provisions for the extension and/or continuation of streets into and from adjoining properties or areas. The design shall consider techniques to prevent or discourage 'cut thru' vehicular traffic and excessive speeds.
- C. If a portion of the tract is not subdivided, suitable access and street openings for such an eventuality shall be provided.
- D. Streets shall be logically related to the topography and acceptable planning/engineering criteria to produce usable lots and reasonable grades.
- E. Where a subdivision abuts or contains an existing or proposed major traffic street, the Planning Board may require marginal access streets, rear service alleys, reverse-frontage lots or such other treatments as will provide protection for abutting

properties, reduction in the number of intersections with the major street and separation of local and thru traffic.

- F. New half or partial streets will not be permitted except where essential for reasonable subdivision of a tract in conformance with the other requirements and standards contained herein, and where, in addition, satisfactory assurance for dedication of the remaining part of the street can be secured.
- G. Wherever a tract to be subdivided borders on an existing half or partial street, the other part of the street shall be plotted within such tract,
- H. Dead-end streets shall be prohibited, except as stubs to permit future street extension into adjoining tracts or when designed as a cul-de-sac.
- I. Reserve strips which control access to right-of-way or utility easements are prohibited.
- J. Street names shall be submitted by the developer for approval to the Livingston County 911, Livingston County Highway Department, United States Postal Service and others designated by the Town Board to avoid duplications or use of similarly sounding or spelled names. House numbers shall follow the practice established by the Town. A street which is a continuation of an existing one shall retain the same name. Private drives shall have names different from the dedicated road they have access from.

Private street signs, of the same specifications as those of the Town Highway Department, shall be erected at each intersection by the Highway Department and paid for by the developer.

47-33 Street Intersections

- A. Streets shall be laid out to intersect as nearly as possible at right angles. No street shall intersect another at an angle of less than 75 degrees.
- B. Multiple intersections involving a junction of more than two streets shall be avoided. Where this proves impossible, such intersections shall be designed with extreme care for both pedestrian and vehicular safety.
- C. Streets entering opposite sides of another street shall be laid out either directly opposite one another or with a minimum off-set of 250 feet between their centerlines.
- D. Where a subdivision abuts or contains an existing street of inadequate right-of-way width, additional right-of-way width will be required.

47-34 Cul-de-Sac Streets

- A. Cul-de-sac streets, permanently designed as such, should not exceed 1,200 feet in length and designated to be generally offset turnarounds per Appendix E & F to allow for effective snow removal and lot placement.
- B. Hammer head sections may be proposed as per Appendix G to be used at the end of a cul-de-sac in lieu of the circle due to design considerations. If they are temporary they shall be constructed to Town road specifications except for the top course which will not be required.

47-35 Blocks

- A. The length, width and shape of blocks shall be determined with due regard to the following:
 - 1. Provision of adequate building sites
 - 2. Zoning requirements
 - 3. Topography
 - 4. Requirements for safe and convenient vehicular and pedestrian circulation and access
 - 5. Utility service and the operation and maintenance of same
- B. All blocks in a subdivision shall have a minimum length of at least 500 feet with a maximum length of 1,200 feet. Such blocks containing individual lots shall be at least two lot depths in width, except where reverse frontage may be employed along existing roads or highways. Modifications of the above requirements are possible in commercial and industrial developments.
- C. In large blocks, with interior parks, or where access to a school, shopping center, or other community facilities is necessary, a crosswalk with a minimum walk 6 feet in width shall be provided.

47-36 Lots

- A. The minimum lot size and frontage shall be controlled by the provisions of the Zoning Regulations of the Town of Avon at the time the applicant receives final approval.
- B. All lots shall abut a dedicated street with a minimum fee title parcel width of 25 feet. Multiple lots using a common driveway under legal agreements may require less than 25 feet per lot.
- C. Double frontage lots should be avoided except where employed to prevent vehicular access to major traffic streets or required by other design parameters. A planting

screen easement of at least 20 feet wide through which there shall be no right of access shall be provided between the abutting existing roadways or highways and the homesite.

- D. Corner lots shall be 1-1/2 times the width of the average lot of the subdivision and a depth consistent with that of other lots in the subdivision.
- E. Where either or both water supply and sanitary sewage disposal are provided by individual on-lot facilities and evidence indicates that the requirements of the Zoning Regulations are not adequate, the Planning Board may require tests and designs, in accordance with the rules and regulations of the State Department of Health and/or Department of Environmental Conservation, undertaken at the expense of the developer, to determine the adequacy of the proposed lot size and existing grade and soil conditions. Such tests and designs shall be subject to the review of the Town's Consultants and Department Heads.
- F. Where commercial subdivisions are proposed to be served by either or both on-lot sanitary sewage disposal and water supply facilities, the lot area and dimensions required to prevent health hazards shall be subject to individual review and determination by the Planning Board and the New York State Department of Health and/or Department of Environmental Conservation.
- G. Depth and width of parcels laid out or reserved for non-residential use shall be sufficient to provide satisfactory space for off-street parking and unloading as required by the provisions of the Zoning Ordinance.
- H. Lots for development shall not be subdivided so that the depth of the lot is greater than three times the lot width at the right-of-way line. For flag lots the lot width shall be that at the proposed building line.
- I. Optimal sight conditions conforming to minimum safe stopping distance per "Geometric Design of Highways and Streets". AASHTO latest edition should be met when developing ingress/egress for a lot or lots.
- J. When applicable, any plot of land 10 acres or more shall be designated so that a 60 foot wide road may be constructed for future subdivision.

47-37 Building Lines

The minimum building set-backs shall be controlled by the provisions set forth in the Zoning Regulations of the Town of Avon and the Building Code of New York State.

47-38 Utilities

If sewer, water, gas, electrical, street lighting, cable TV or other public utility facilities are proposed, their location and installation shall be coordinated so that they may be operated and maintained at minimum cost.

47-39 Easements

- A. Easements shall be provided for all utilities of a width necessary for installation, repair and/or replacement of said utility. The depth, type, size and location of a utility in addition to soil conditions will be considered when establishing an easement width. All easements shall be appropriately executed and filed prior to the issuance of any building permits.
- B. To the fullest extent possible, easements shall be centered on the utility and located along rear or side lot lines.
- C. No structure shall have its foundation built less than 10 feet from any easement line.
- D. Where a development is traversed by a watercourse, the applicant shall provide to the Town at no cost a drainage easement or right-of-way conforming substantially with the line of such watercourse and of such width as will be adequate to preserve natural drainage and maintain the same based on the Town's Stormwater Drainage Study.

47-40 Alleys

Alleys are prohibited in residential developments. In commercial or industrial districts, alleys shall be a minimum width of 22 feet. Where such alleys dead end, they shall be provided with a turnaround having an outside roadway diameter to allow emergency vehicle access.

47-41 Cluster Residential Development

The approval of any cluster subdivision development by the Planning Board shall be subject to the conditions set forth in Town Law Section 278 and Chapter 113, Subdivision of Land of the Town Code. The purpose of cluster development shall be to enable and encourage flexibility of design and development of land in such a manner as to preserve the natural and scenic qualities of open lands.

47-42 Reservation and Dedication of Lands for Public Use

- A. In reviewing subdivision plans, the Planning Board will consider the adequacy of existing or proposed community facilities to serve the additional dwellings proposed by the subdivision. The layout of the proposed subdivision shall be in general

conformity with the features or developments proposed in the Town's Comprehensive Plan and any other Master Plan in effect at the time of the submission of the proposed plat.

- B. To meet the requirements of 47-3 of the Site Design Criteria and Land Development Regulations, and Town Law, the Planning Board may request the reservation and dedication of at least 10 percent of the area of land to be subdivided for park, playground, recreation, open land or other public purposes. In locating lands to be reserved and dedicated, the Board shall consider preservation of special environmental and geographic features, unsuitability of certain lands for building purposes, future expansion of public use areas, the most appropriate type of public land use for the area and the conditions necessary to preserve access, use and maintenance of such lands for their intended purpose.
- C. Prior to such lands being dedicated to the Town, a Phase I Environmental Site Assessment shall be completed by the applicant at their expense.
- D. In the event that the Planning Board, upon consultation with the Town Board, determines that reservation of land of adequate size and suitable purpose cannot be practically located in a proposed subdivision, or that said reservation would not appropriately serve the locale, the Board may condition its approval of a subdivision upon payment to the Town of a sum as set forth by the Town Board. The amount shall be available for use by the Town for neighborhood, playgrounds or other recreation purposes, including the acquisition of property.

47-43 Erosion Sediment Control

A. General

It is the Town's intent to control soil movement by employing effective erosion and sediment control measures before, during and after site disturbance.

Erosion and sediment control measures, both temporary and permanent, must be designed per the SPDES General Permit and presented for approval to the Planning Board prior to any site development or soil disturbance. A Stormwater Pollution Prevention Plan (SWPPP) may be required and shall be prepared in accordance with the NYSDEC requirements and approved by the Town Engineer prior to any site development or soil disturbance.

The Planning Board and its designated representatives will evaluate submitted erosion and sediment control design plans against the most current edition of "New York State Standards and Specifications for Erosion and Sediment Control".

B. Vegetative Controls

To attain the Town's goals, vegetative measures should be used in a site design to control surface water runoff, provide soil stabilization methods and entrap soil sediments generated from the forces of erosion.

1. Site slopes shall be graded to be stable and provide control of any surface or subsurface water prior to vegetative plantings.
2. Site disturbance, especially in sensitive areas, shall be kept at a minimum. Designs shall limit the removal of existing trees, hedge rows and indigenous plant cover.

Physiographic features such as drumlins, wetlands and forested areas shall be retained in their natural form.

3. The Site developer shall take whatever action is necessary to establish a stabilized vigorous stand of vegetative cover on all disturbed site soils within 7 calendar days after construction activities have ceased, unless otherwise authorized in the SWPPP.

If phasing is necessary to meet these conditions, the developer shall present such in the development plans presented for Town review.

C. Structural Controls

Some projects may require erosion and sediment controls that will be permanent in nature. If these measures are required to be constructed, they must be fully functional before upland site disturbance begins as determined by the Town. Such structures may include but are not limited to such features as siltation traps, ponds, diversion swales or dikes.

D. Maintenance Measures

It is imperative that both the vegetative and structural components as constructed be periodically reviewed and maintained for optimum erosion and sediment control.

Facilities must be cleaned, repaired and/or replaced as necessary to meet the original design criteria established in the project approval.

1. Dedicatable Projects:

If the project under consideration involves possible dedication of constructed facilities to the Town, the developer/owner must include sufficient funds in the maintenance bond to cover the projected cost of such facilities for a two year period.

2. Private Projects:

If a project is under consideration without dedicatable facilities to the Town, the Site owner is responsible to make sure the erosion control facilities are constructed and properly maintained. Final acceptance of the erosion control facilities is necessary for the Town to issue a Certificate of Occupancy.

E. Penalty

The Town is empowered to assess reasonable penalties to a Site owner for failure to properly construct, operate and maintain an approved soil erosion and sedimentation control plan. The penalties shall be as follows:

1. The Site owner shall be charged for the Town's costs for, but is not limited to, cleaning ditches, swales, drains or streams that require such due to the failure of the Site owner to properly construct, operate and maintain site erosion and sedimentation control devices.
2. No further reviews of such project shall be conducted by the Town until all payments for the Town charges have been satisfied and/or satisfactory completion of the required erosion and sediment control measures has occurred by the Site owner.

47-44 Reserved

47-45 Reserved

47-46 Reserved

47-47 Reserved

47-48 Reserved

47-49 Reserved

ARTICLE IV

SITE IMPROVEMENTS

47-50 General

The developer of a parcel of land shall make improvements to the parcel in accordance with the approved plans or the minimum standards required in these regulations as applicable to a specific project.

Where certain standards of development are not set forth they shall be established by the Planning Board, following their review of the particular situation.

In many cases, alternate improvement standards may be permitted if the Planning Board deems them equal in performance characteristics for the proposed use intended, with the approval of the Town Board as a deviation from an adopted regulation. Additional or higher design standards of improvements may be required in specific cases where the Planning Board believes it necessary to create conditions essential to the health, safety, morale and general welfare of the citizens of the Town.

47-51 Road Construction

- A. The Town of Avon has established basic guidelines for the classification of roads to be constructed in the Town. The guidelines are listed in these regulations under Article VII.
- B. All streets or roads developed in the Town shall be constructed to at least the minimum standards as set forth in the specifications or as shown on plans approved by the Town for a given project.
- C. Due to the general soil conditions within the Town and normal construction sequences for development, it is deemed to be in the best interests of the Town that following procedures be followed:
 - 1. Binder material shall not be placed prior to the completion and approval of all underground utilities including the private utility services and a review of the road base by the Town.
 - 2. The weather and seasonal limitations as specified under the Standard Specifications of New York State Department of Transportation shall apply for placing of bituminous mixtures.

Restrictions (1) and (2) imply completion of all underground systems well in advance of the developer's schedule for paving.

3. No Certificates of Occupancy will be issued unless a proper road surface as herein specified has been constructed and accepted by the Superintendent of Highways.
4. Upon completion of the binder pavement and all other items related to the completion of a project, the Town may elect to accept for dedication the completed facilities if (1) an acceptable two year maintenance bond is submitted to the Town; and, (2) the developer presents a sum of money to complete the top pavement course. The amount of money to be transferred to the Town will be established by the Superintendent of Highways. This sum shall be sufficient to cover the cost of labor and materials to cause the proper installation of the top course.

It is the intent of this option by the Town to allow the developer to offer the project for dedication before the final pavement is installed. This option will allow the developer to substantially complete the related construction in the developed area prior to installing the top course. In this manner the area will receive a new pavement top that is less susceptible to marring or patching as a result of normal construction activity.

In general, the final top course must be installed by the developer within one (1) year of the placement of binder course, unless a specific waiver of this time period is obtained (in writing) from the Superintendent of Highways.

Before the expiration of the maintenance bond and before the final top is applied, the Town and the developer will hold a final site review to assess any damages or repairs that may be necessary by the developer under the maintenance agreement. Once top course has been installed and a two year maintenance bond posted, final acceptance of all roadway improvements shall be approved by the Superintendent of Highways.

D. Driveway Culverts

The installation of driveway culverts requires the approval and a permit for culvert location, size and material from the State, County or Town Highway Department having jurisdiction over a given road. New driveway culvert installation shall be the responsibility of the developer/land owner following the receipt of a permit. All culverts must be a minimum of 12" in diameter, minimum 20' in length and include end sections. All driveway culverts shall have a minimum cover of 1 foot.

The Town reserves the right to install, remove and/or replace driveway or roadway culverts along any existing road to properly transmit surface drainage as determined by the Town Engineer and the Superintendent of Highways. In the event of a culvert replacement, the Town will restore the driveway surface with asphalt, unless otherwise agreed to with the homeowner.

47-52 Sidewalks

The Planning Board may require the applicant to install sidewalks on one or both sides of the street or provide a 10' wide sidewalk easement to allow for future installation.

47-53 Storm and Surface Drainage

In general, all development projects shall be required to provide for the adequate conveyance of storm drainage through the development. The natural drainage patterns are to be followed as much as possible. Drainage systems shall be sized to accommodate the future potential runoff based on the probable land use and the ultimate developments of the upland watershed area.

Unless otherwise dictated or approved by the Town, the developer shall be responsible to ensure the post-development stormwater discharge peak flow rates from the developed area are equal to or less than existing stormwater discharge peak flow rates from proposed area of development. The Town reserves the right to require a developer to implement drainage improvements such that post development stormwater, runoff quantities and peak flow rates from the site are less than those under existing conditions.

Many stormwater discharges from construction activities with the Town will require authorization under the New York State Pollution Discharge Elimination System (SPDES) permitting program. All development within the Town must satisfy both local and state regulations. Where requirements imposed by the SPDES General Permit are more restrictive than corresponding requirements in these regulations, the provisions which are more restrictive shall govern.

In addition to drainage improvements within proposed development, the developer shall also be responsible for costs of any downstream and/or off-site improvements determined by the Town to be necessary to effectively and adequately accommodate post-development stormwater, runoff quantities and peak flow rates from the proposed development. Stormwater management facilities shall be designed in accordance with and sized in conformance with the latest edition of the "New York State Stormwater Management Design Manual."

The "New York State Stormwater Management Design Manual" describes acceptable stormwater management practices (SMPs) to meet water quantity and water quality treatment goals. The Planning Board shall, upon a recommendation from the Town Engineer, approve the SMP(s) implemented in a particular development. Where conditions warrant, the Planning Board may require specific or additional SMP(s) to be implemented.

The following points should be considered in the design of storm drainage facilities.

- A. Lots shall be laid out and graded to provide positive drainage away from buildings.
- B. Storm sewers, culverts and related installations shall be provided:
 - 1. To permit unimpeded flow of natural watercourses.
 - 2. To insure adequate drainage of all low points.
 - 3. To intercept storm water runoff along streets at intervals reasonably related to the extent and grade of the area drained.
- C. Discharge of sump pumps or roof leaders shall be directed to the storm sewer network and not to roadside gutters or channels.
- D. In the design of storm sewer systems, special consideration shall be given to avoidance of problems which may arise from concentration of storm water runoff over adjacent properties. Surface swales or channels serving multiple lots shall have a catch basin or field inlet to serve every third lot.
- E. The Town requires the completed construction and the design engineer's certification of all surface drainage improvements and erosion control measures on a development before any building permits are issued.

47-54 Sewage Disposal Systems

Where the public sanitary sewer system, in the opinion of the Planning Board, is reasonably accessible, sanitary sewers and appurtenances shall be designed to adequately serve all units with connections to the public system. The design and installation of said sewers shall be subject to the approval of the Planning Board and other appropriate agencies.

Where lots cannot be served by the extension of an existing public sanitary sewer, the developer shall obtain the approval of individual subsurface disposal systems by the appropriate agencies.

Once the individual disposal systems are installed they shall be inspected by a licensed professional and certified to the Town Building and Zoning Department as to the installation relative to the approved plans. The Town assumes no liability for the performance of individual disposal systems.

In areas not presently served by public sanitary sewers, the Planning Board may require, in addition to installation of temporary individual on-site sewage disposal

facilities, the installation and capping of sanitary sewer mains and house connections if studies of the Board indicate that extension of public sanitary sewer trunks or laterals to service the property subdivided appears probable or necessary to protect the public health.

47-55 Water Supply

The developer shall provide and dedicate to the Town a complete municipal water distribution system. The design and installation of said system shall be subject to the approval of the Planning Board and jurisdictional agencies. Excess size of the facility may be considered by the Town at the time of plan submission for future development consideration or to improve hydraulics within the system, the Town would then consider financial contribution for the upsizing of such facility.

47-56 Landscaping

- A. Adequate site landscaping shall be required of the developer on any lands developed in the Town. A landscape plan will designate type, number, location and height of all plant species with appropriate planting procedures. Should there be seasonal limitations on planting, the amount of the landscaping will be held within the Letter of Credit.
1. Visual impacts shall be considered for planting on sight distances.
 2. The trees are to be a minimum of 15 feet from the edge of any right-of-way and/or easement.
 3. There shall be no underground utilities within 15 feet of any proposed tree.
 4. The trees shall be a minimum of 2" caliper and of a variety that will be medium to small in stature, do not generally have a wide-spreading root system and do not generally have a large-spreading trunk base.

47-57 Monuments

Permanent reference monuments shall be set at final grade at all corners and angle points of the boundaries of any subdivision plan and at all street intersections and such intermediate points as may be required per Appendix H. These markers shall be set by a licensed land surveyor and certified to the Town as true and accurate before a Certificate of Occupancy is issued.

47-58 Street Signs

Permanent street signs (on either dedicated Town roads or private roads), of the same specifications as those of the Town Highway Department, shall be erected at each intersection by the Highway Department and paid for by the developer.

Private drives shall have names different from the dedicated road they have access from.

47-59 Street and Site Lighting

The Planning Board may require adequate street, sidewalk or site lighting to be installed. Such a system shall be coordinated with the electrical utility corporation and designed to keep light from illuminating areas outside of the developed site. Such design shall utilize cut-off “shoe box” fixtures with luminaries appropriate for the use of the given area or site. Within a residential development the Board may consider a low wattage decorative fixture such as a colonial style lamp.

Intersection street lights will be required at the developer’s expense with all new subdivision entrance roads at the main road or thoroughfare.

47-60 Electric, Telephone, Cable TV or Other Buried Cable Utility

In every development, provisions shall be made for service from the private utility supply systems. All utilities serving a subdivision including street lighting systems, shall be underground, rather than on poles, standards or towers. Underground conduit and cables shall be installed per the regulations of the Public Service Commission and a minimum of 2 feet below any drainage way.

47-61 General Site Consideration

General site conditions including pedestrian and vehicular access and circulation, provision and location for handicapped access; location, arrangement, size, architectural features and design of buildings including to scale color renderings of all non-residential facilities; lighting; signage and the protection of adjacent properties and general public against noise, glare and unsightliness, or other objectionable features will also be considered by the Board.

47-62 Parking Areas & Surface Requirements

All parking areas, passageways and driveways, except when provided in connection with one-and two-family residential uses, shall be surfaced with a dustless, durable, all-weather pavement such as asphalt or Portland cement. Parking areas shall be so graded and drained as to dispose of all surface water accumulation. The Planning Board may alter this requirement at the time of site plan approval when surface water drainage or other special requirements exist. Appropriate screening and landscaping including landscaped islands as deemed appropriate by the Planning Board will also be required. All non-residential facilities shall provide the required number of handicapped parking spaces and layout in compliance with the NYS Building Code and the outlines set forth by the American with Disabilities Act.

47-63 Parking Space Guidelines

In applying the requirements for adequate off-street parking, required by the provisions of Article VII, Section 130-36 of the Avon Town Code, the following guideline standards shall be taken into consideration, as appropriate:

A. Residential Uses

1. Residential Dwellings: two (2) spaces for each family or dwelling unit.
2. Rooming Houses, Lodging Houses: one (1) space for each two (2) beds.

B. Commercial Uses

3. Automobile or Machine Sales and Service: one (1) space for each 300 square feet of floor area.
4. Banks, Businesses and Professional Offices: one (1) space for each 200 square feet of floor area.
5. Dance Halls and Assembly Halls (without fixed seats; exhibition halls, except church assembly rooms in conjunction with auditorium): one (1) space for each 100 square feet of floor area used for assembly or dancing.
6. Funeral Home or Mortuaries: one (1) space for each four (4) seats in the auditorium.
7. Medical and Dental Clinics or Offices: one (1) space for each 200 square feet of floor area.
8. Motels and Hotels: one (1) space for each living or sleeping unit.
9. Restaurants, Café and Nightclub: one (1) space for each 200 square feet of floor area.
10. Retail Stores, Shops, etc.: one (1) space for each 200 square feet of floor area.

C. Recreation and Entertainment Uses

11. Auditorium: one (1) space for each seat.
12. Bowling Alleys: five (5) spaces for each alley, plus the necessary space as set forth in Section 130-36 of the Avon Town Code for affiliated uses such as bars, restaurants or other commercial uses.
13. Theaters, Assembly Halls, other than Schools: one (1) space for each five (5) seats.

D. Community Service Uses

14. Churches: one (1) space for each five (5) seats in places of worship.
15. Hospitals: one (1) space for each three (3) beds.
16. Libraries, Museums or Galleries: one (1) space for each 600 square feet of floor area.
17. Sanitariums, Convalescent Homes, Homes for the Aged, Children's Homes: one (1) space for each three (3) beds.

E. Industrial Uses

18. Manufacturing Plants, Research or Testing Laboratories, Bottling Plants: one (1) space for each 300 square feet of floor area.
19. Wholesale Establishments or Warehouses: one (1) space for each 3,000 square feet of floor area.

Whenever there is a change in use or an increase in floor area or other unit of measurement and such change and such increase creates a need for an increase of more than 10% in the number of required off-street parking spaces, as determined by the requirements in this section, additional off-street parking spaces shall be provided in accordance with this section for that addition or change in use.

The size of off-street parking spaces shall be 10 feet wide by 20 feet long for all side parking or eight feet wide by 23 feet long for all parallel parking. Additional off-street parking requirements and loading space requirements are set-forth in Section 130-36 of the Avon Town Code.

In the case of a use not specifically mentioned above, the requirements for off-street parking facilities to which said use is similar shall be set forth by the Code Enforcement Officer.

47-64 Open Space

At least 30 percent of the lot area to be developed shall remain open and unused. This open area may include areas for landscaping, stormwater retention or detention, in-ground septic systems, underground utilities, screening and fencing. The open area shall not be paved or used for parking, storage, buildings or accessory buildings nor shall it include wetlands, steep slopes or other environmentally sensitive areas.

47-65 Front Setback Modification

The Planning Board, at their discretion, can modify the required front setback to the average of the neighboring adjacent properties in a residential district.

47-66 Reserved

47-67 Reserved

47-68 Reserved

47-69 Reserved

ARTICLE V

PLAN REQUIREMENTS

47-70 General Provisions

All submittals requiring Planning Board and Zoning Board of Appeals action shall be submitted to the respective Board's Secretary. All Planning Board submittals shall be submitted at least 21 calendar days (3 weeks) prior to a scheduled Planning Board meeting. All Zoning Board of Appeals submittals shall be submitted at least 21 calendar days (3 weeks) prior to a scheduled Zoning Board of Appeals meeting. The submittal package shall include ten (10) copies of all plans, sketches and/or exhibits, and three (3) copies of any engineering reports and/or studies.

Before plans are submitted to the Planning Board and Zoning Board of Appeals for review they shall be checked by the Building and Zoning Department and/or the Town Engineer according to the following lists for the various phases of plan development.

Incomplete submittals shall be cause for rejection by the Planning Board and Zoning Board of Appeals until they comply with the listed items.

A Planning Review Committee (PRC) may be required prior to presentation to the Planning Board and/or the Zoning Board of Appeals. The PRC will provide a written report with recommendations and the Zoning Permit application to Planning Board and/or Zoning Board of Appeals and the applicant/design professional within five days prior to a Board meeting. A written response to all PRC comments may be required by the applicant/design professional for each report submitted to the Board.

Planning Board meetings are held on the first Tuesday of each month. The deadline for submitting Planning Board Applications is 21 calendar days (3 weeks) prior to a scheduled Planning Board meeting.

Zoning Board of Appeals meetings are held on the fourth Monday of each month. The deadline for submitting Zoning Board of Appeals Applications is 21 calendar days (3 weeks) prior to a scheduled Planning Board meeting.

If a referral application is subject to county review, the Planning Board and/or Zoning Board of Appeals Clerk will send a copy of the application and a Livingston County Planning Board Zoning Referral Application.

Livingston County Planning Board and Planning Department referral meetings are held on the second Thursday of each month. Referral applications are due the first Wednesday of each month.

47-71 Concept Plan

The Concept plan shall be a schematic representation of existing conditions and proposed improvements including:

- a. Scale (no smaller than 1" = 100')
- b. Title ('Sketch') and name of development
- c. North point, scale and date
- d. Name(s) of the record owner(s), developer(s) and their addresses
- e. Name of Design Professional responsible for preparation of plan
- f. Zoning District(s) and limitations
- g. Property boundary with dimensions
- h. General location plan (1" = +2,000')
- i. Name(s) of adjacent owners
- j. Area and tax account number of property(ies) involved
- k. Total Holdings Map - where the sketch plan covers a portion of the applicant's holdings, at a minimum a tax map shall be submitted showing the proposed development on the overall parcel and its effect on future development.
- l. General topography (5' contour intervals) on U. S. C. and G. S. datum
- m. Indication of any significant existing natural features (i.e., streams, ridges, treelines)
- n. Indication of all existing utilities, roads, houses, etc.
- o. Schematic indication of development, utilities, roads, etc.
- p. Agricultural data statement

47-72 Preliminary Plan

In addition to the requirements for a Concept plan, the following shall be included:

- a. Scale (no smaller than 1" = 50'), title ('Preliminary') and name of development
- b. Property boundaries with bearings and distances on NYS Plane Coordinate System, Central NAD 83 Zone
- c. Existing and proposed topography (2' contour intervals maximum)
- d. Zoning setbacks and restriction lines
- e. Topography datum NAVD 1988
- f. Benchmark based on NAVD 1988 datum
- g. All existing natural features: watercourses, tree masses, wetlands, floodplains, etc.
- h. All existing buildings, culverts, utilities with dimensions, sizes and inverts with other significant man-made features
- i. All existing property lines, easements or other encumbrances on the property, certified by a licensed land surveyor per a recent survey and the purpose for which the easements or right-of-way were established
- j. Percolation and deep test holes and locations with results (if applicable)

- ___ k. Special information as requested by the Planning Board at sketch plan stage
- ___ l. Where the Preliminary Plan covers only a part of the applicant's entire holdings, a sketch plan shall be submitted of a prospective street and utility layout for the remainder of the property
- ___ m. Sight distances for access to the parcel or proposed streets (required and provided)
- ___ n. Design reports for multi-lot subdivisions
- ___ o. Location and approximate dimensions and sizes of development improvements
- ___ p. Preliminary designs of stormwater facilities, culverts, pump stations, bridges, sewers, road sections, etc.
- ___ q. Proposed location, size and width of easements, parks, right-of-way, public areas or parcels of land to be dedicated or reserved for public use

47-73 Final Plan

In addition to the requirements for the Preliminary Plan, the following will be included:

- ___ a. Size of the plan shall be acceptable for filing in the Livingston County Clerk's Office
- ___ b. Scale (no smaller than 1" = 50'), title ('Final') and name of development
- ___ c. Name, seal and signature of the registered professional(s) responsible for the plan.
- ___ d. Street lines, lot lines, right-of-way, easements and areas dedicated or proposed to be dedicated for public use
- ___ e. Sufficient data to determine readily the location, bearing and length of every street, lot and boundary line shown on the plan
- ___ f. All dimensions shall be shown in feet and in hundredths of a foot
- ___ g. The length of all straight lines, radii, lengths of curves and tangent bearings for each street
- ___ h. The proposed setback line from each street or property line
- ___ i. Names of streets within and adjacent to development as approved by Livingston County 911, County Highway Department, Postal Service, and others designated by the Town Board
- ___ j. Location of permanent reference monuments
- ___ k. Lot numbers and area of each lot to the right-of-way
- ___ l. Existing contours (2' maximum depending on topography):
- ___ m. Proposed finish garage floor elevations
- ___ n. Lowest architectural opening elevations in designated flood zone areas
- ___ o. Spot elevations of swales, etc.
- ___ p. Note on all final plans: "Placement and arrangement of building, waste disposal system, driveway, utilities and drainage will not be changed without prior approval of the Town of Avon Building and Zoning Department."
- ___ q. Location, size, invert elevations, type and class of pipe on all sanitary and storm sewer systems

- ___ r. Location, sizes and types of pipe for all water mains, location of all valves, hydrants, blowoffs, etc.
- ___ s. Profiles with detailed information of all streets, storm sewers, sanitary sewers and water main crossings
- ___ t. Design and plan details of all special construction (culverts, bridges, headwalls, etc.)
- ___ u. Engineering calculations required to substantiate proposed designs
- ___ v. Landscaping plan with planting schedule if required by the Planning Board
- ___ w. Details required to specify special conditions, materials or methods of construction
- ___ x. Indication of approval from any jurisdictional agencies
- ___ y. On all subdivisions and site plans, signature lines must appear for project approval by the Superintendent of Highways, Water Utilities Superintendent, Stormwater Management Officer, and Town Engineer. The Planning Board Chairman shall also sign every plan once all approval criteria are met
- ___ z. An affidavit that the applicant is the owner or equitable owner of the land proposed to be developed
- ___ aa. A statement signed by the owner to the effect that the subdivision as shown on the final plan is made with his full consent and that it is desired to record the same
- ___ bb. An affidavit stating that the applicant will install all improvements shown on the final plan at his own expense
- ___ cc. Easements, Descriptions, Legal Covenants, etc.
- ___ dd. The final map shall contain on its face a certification that the developer will comply with all Federal and State laws, rules and regulations for the development of the subject property
- ___ ee. Stormwater Pollution Prevention Plan.

- 47-74 Reserved**
- 47-75 Reserved**
- 47-76 Reserved**
- 47-77 Reserved**
- 47-78 Reserved**
- 47-79 Reserved**

ARTICLE VI

ADMINISTRATION

47-80 General Provisions

For the purpose of enabling and encouraging flexibility of design and development of land in such a manner as to promote the most appropriate use of land, to facilitate the adequate and economical layout of streets and utilities and to preserve the natural and scenic qualities of open lands, the Planning Board, simultaneously with the approval of a Plan, may in appropriate cases modify applicable provisions of the zoning ordinance in accordance with Town Law 278 providing:

- A. The Town Board authorizes the Planning Board to act on a specific application.
- B. The owner makes written application for such modification.
- C. The Planning Board adopts rules and regulations setting forth the criteria of an application.
- D. The modifications would not result in greater number of dwelling units or building plots than are permitted if the land were subdivided into lots conforming to the minimum lot size and density requirements of the zoning ordinance applicable to such land. Two plans will be required for the Planning Board to review:
 - 1. Conventional layout meeting all zoning regulations of the Town, and other development regulations,
 - 2. Modified plan meeting applicant's intent of development.
- E. No modifications granted by the Planning Board may change the permitted uses of such lands as set forth in the Town's Zoning Regulations.
- F. The Planning Board shall record in its minutes the grounds for granting any modification and note the date of such modification and the nature thereof on the final subdivision plan to be recorded in the Office of the County Clerk. The Town Clerk shall make appropriate notations and references of such modification on the official Zoning Map of the Town.

47-81 Hardships

Where the Planning Board finds that because of unusual circumstances of shape, topography or other physical features of a proposed development extraordinary hardship may result from strict compliance with these regulations, the Planning Board may specifically waive portions of these regulations with Town Board approval so that substantial justice may be done and the public interest secured;

provided that no such waiver shall be granted which will have the effect of nullifying the intent and purpose of these regulations or any other pertinent rules, regulations or ordinances of the Town of Avon.

47-82 Large Scale Development

The standards and requirements of these regulations may be modified by the Planning Board with Town Board approval in the case of a plan and program for a new community or a neighborhood unit, which in the judgment of the Planning Board provides adequate public spaces and improvements for the circulation, recreation, light, air and service needs of the tract when fully developed and populated and which also provides such covenants or other legal provisions as will assure conformity to the achievement of the plan.

47-83 Conditions

The Planning Board may permit modifications to the requirements herein provided such conditions as will, in its judgment, secure substantially the objectives of the standards or requirements so modified.

47-84 Amendments

The rules and regulations as set forth above may be amended, altered or revised by the Planning Board from time to time, after public hearing and subject to the approval of the Town Board per Section 271 of the Town Law.

47-85 Validity

Should any section or provision of these rules and regulations be declared by a court of competent jurisdiction to be invalid, such decision shall not affect the validity of the rules and regulations as a whole or any other part thereof.

47-86 Fee Schedule

The Town of Avon has a Fee Schedule on file at the Town Clerk's Office. Copies of this Schedule are available and any fees due the Town must be paid in full before approvals are considered.

47-87 Reserved

47-88 Reserved

47-89 Reserved

PART II
CRITERIA FOR DESIGN AND CONSTRUCTION

ARTICLE VII

GENERAL PROVISIONS

47-90 Purpose

The purpose of these specifications is to provide minimum criteria for the design and construction of improvements within the Town which, upon the satisfactory completion thereof, may be offered for dedication to the Town of Avon for perpetual operation and maintenance. The information contained in Part 2 is to be used in conjunction with Part 1 of these Regulations.

The criteria established is intended to provide minimum standards which may be upgraded to serve the best interests of the Town of Avon. The information in this document is provided to aid in the submission of material in a uniform manner and attempt to expedite the various review and approval procedures.

This criteria shall govern in all areas of private, public, industrial and commercial development and/or areas that will involve the connections to existing municipal systems in the Town.

47-91 Responsibility

It is the responsibility of the developer to insure preparation of plans sufficient to meet the standards and requirements herein incorporated. Said plans shall be prepared by a design professional, licensed in the State of New York, who shall have experience in design of land development.

The Town and/or its representatives shall review the proposed plans as to their compliance with the standards and conditions encountered while meeting the best interests of the Town.

It is the responsibility of the contractor, acting for the developer, to construct the facilities in conformance with the approved plans and the Town standards.

Construction observation shall be provided by the Town or its designated representative to review construction as it is being performed.

The final results of the project remain the prime responsibility of the developer and until the development is satisfactorily approved by the Town and/or its representatives, said development shall not be accepted for dedication.

47-92 Building Permits

Building permits shall not be granted until:

1. An approved subdivision plan is filed in the office of the Livingston County Clerk and Town Clerk.
2. Drainage improvements are completed as shown on such plan and certified by the design engineer to the Town Building and Zoning Department.
3. All utilities and improvements are dedicated to and accepted by the Town Board.
4. Easements effecting the development of a parcel are filed in the office of the Livingston County Clerk and notification, of such received by the Town.
5. A site plan has received final approval of the Planning Board and Items 2 and 3 above are addressed.

47-93 Reserved

47-94 Reserved

47-95 Reserved

47-96 Reserved

47-97 Reserved

47-98 Reserved

47-99 Reserved

ARTICLE VIII

DESIGN CRITERIA & MATERIAL SPECIFICATION

47-100 General Information

The materials intended to establish the degree of excellence are herein included and deemed to be of satisfactory quality for installation within the Town. When new materials may be made available, their use may be permitted in limited test sections with the restriction that should these materials prove unsatisfactory through the test period as established by the Town, they shall be removed and replaced with those herein called for at no expense to the Town.

47-101 Sewage Disposal Systems

A. Private Disposal Systems

Private disposal systems must conform to the minimum requirements established by the New York State Department of Health per Individual Residential Wastewater Treatment Systems Design Handbook – 1996 (Reprinted 2012) and/or the Department of Environmental Conservation Design Standards for Wastewater Treatment Works (2014) and as expanded herein:

1. Percolation and deep hole tests must be certified by the design professional to the Town using a predetermined certificate as follows:

I, _____, certify to the Town of Avon that the soil percolation and deep hole test data shown hereon was obtained by a qualified representative of our firm who has been properly trained to perform and record these tests in accordance with the methodology outline in NYS Department of Health Individual Residential Wastewater Treatment Systems Design Handbook – 1996 (Reprinted 2012). The tests accurately represent the soil conditions on the proposed site.

The proposed subsurface sewage disposal system(s) has (have) been designed based on the field test data and is in strict compliance with New York State Department of Health Design Handbook referenced above.

signature/date

2. All private sewage disposal systems shall be designed for individual homes containing a minimum of three bedrooms.
3. The minimum length of leach line shall be 200 L.F.

4. Installation of individual subsurface disposal systems must be certified to the Town of Avon by a licensed professional as compared to the approved plans before a Certificate of Occupancy will be issued.
5. Any installed system must be completely backfilled and graded within 24 hours of inspection and acceptability by a design professional.
6. No subsurface disposal system will be installed under adverse weather conditions.
7. There will be no driving or parking over the area of the subsurface disposal system.
8. The area of the leach field system will be final graded and seeded as soon as possible after construction to shed surface water.

B. Alternate Systems

Alternate systems must be submitted for review by the New York State Department of Health with the following additional restrictions by the Town of Avon:

1. Fill limits shall include a future expansion area.
2. Evapo-transpiration areas are not acceptable for new construction.
3. Fill systems require professional certification of percolation tests in the in-situ fill and placed fill after it has been in place for at least six months and over at least one winter season.

C. Public Sanitary Sewers

Minimum requirements shall be as established by Livingston County Water and Sewer Authority, or other Sewer Authority having jurisdiction, the New York State Department of Environmental Conservation and the latest edition of the "Recommended Standards for Waterwater Facilities" (Ten States Standards). Where these standards differ, the more restrictive shall govern.

47-102 Sanitary Sewers Material Specifications

Materials used in the construction of sanitary sewers shall be in accordance with the requirements of the Livingston County Water and Sewer Authority, or other Sewer Authority having jurisdiction.

47-103 Storm Drainage Systems

All development projects shall be required to provide for the adequate conveyance of storm drainage through the development. The natural drainage patterns are to be followed as much as possible. Storm sewer systems shall be sized to accommodate the future potential runoff based on the probable land use and the ultimate development of the upland watershed area based on the Town's Comprehensive Plan.

All development projects shall be required to obtain coverage with the SPDES General Permit. Where conditions imposed by the SPDES General Permit are more restrictive than comparable restrictions imposed by these regulations, or any other Town ordinances, the provisions which are more restrictive shall govern.

A. Stormwater Sizing Criteria

All stormwater sizing shall be in conformance with methods outlined in the latest edition of the "New York State Stormwater Management Design Manual".

B. Stormwater Management Practices – Watershed Control Law

The latest edition of the "New York State Stormwater Management Design Manual" outlines acceptable stormwater management practices (SMPs) to meet water quantity and water quality treatment goals. The Planning Board shall, upon recommendation from the Town Engineer, approve the SMP(s) implemented on a particular development. Where conditions warrant, the Planning Board may require specific or additional SMP(s) to be implemented.

C. Storm Sewer System

1. Inlets

a. Catch Basins

- (1) Catch basins shall be placed at all low points and intersections with maximum spacing of 300 feet. Catch basin leads shall only be connected to the storm sewers at manholes.

b. Storm Sewer Manholes

- (1) Storm sewer manholes shall be designed to accommodate the pipes entering and exiting the structures.
- (2) A schedule of manhole diameters shall be provided on the final plan.

2. Conveyance

a. Natural Channels and Open Swales

- (1) Natural channels are generally preferred alignments for major components of a residential drainage system. However, the utilization of open channels shall be evaluated as to the ease and cost of maintenance, safety hazards and aesthetics. The channels may require special invert or side design to properly convey water while keeping the maintenance cost minimal.
- (2) Backyard swales shall be designed with minimum side slopes of 1 on 4 and a minimum longitudinal slope of 1.0 percent. Field inlets shall be generally provided every third lot or a maximum of 300 lineal feet at all low points and where swales intersect.

b. Storm Sewers

- (1) Minimum pipe size - 12 inch diameter
- (2) Minimum velocity when flowing full - 3 fps
- (3) Maximum manhole and catch basin spacing - 300 lineal feet.
- (4) In general, street drainage shall be in closed conduit. When gradient and tributary runoff require conduit greater than 36 inches in diameter, then open channel design may be considered.
- (5) Culverts shall be designed to accommodate the design storm for the drainage area but shall be checked for the next highest increment of storm return interval to evaluate the possible complications. Headwater and/or tailwater calculations will be required to determine ponding that may occur. In general, the use of multiple culverts is discouraged because of maintenance problems. Inlets and outlets of culverts shall be protected from erosion or turbulence problems by the use of riprap, headwalls, energy dissipaters, etc.
- (6) Storm Sewers are to be of the following materials:
 - a) *Reinforced Concrete Pipe* - Shall be supplied in conformance with ASTM C76-15a Class II. Joints shall be of the bell and spigot type with compression type joint ASTM C443-12.

- b) *Polyvinyl Chloride (PVC) Pipe* - Shall meet the requirements of ASTM D3034-15e1 or ASTM F679-15, minimum wall thickness SDR 35 with elastomeric gasket joint, ASTM D3212-07 or ASTM F794-03 (2014) for ribbed gravity pipe. PVC pipe shall not be used as driveway culverts.
 - c) *Corrugated Steel Pipe* - All pipe shall be coated inside and outside and have joints made with connecting bands. Thickness gauge will be dependent on the load conditions, except that 16 gauge shall be the minimum allowable thickness.
 - d) *Corrugated Polyethylene Tubing (HDPE)* - Pipe shall be smooth lined (smooth bore) and shall conform to the requirements of ASTM F2648/F2648M-13. Joint shall be soil-tight and gaskets shall meet the requirements of ASTM F477-14. Fittings shall conform to ASTM F2306/F2306M-14e1. HDPE shall not be used as driveway culverts.
- c. Storm Laterals
- (1) Gravity laterals shall be a minimum of six (6) inches in diameter. Sump pumps with check valves and roof leaders shall discharge to storm laterals or, in the absence of storm sewers, to splash pads directed to side or rear yard drainage swales.
 - (2) Laterals shall be of the following material:
 - a) Corrugated steel pipe shall be coated inside and outside and have joints with connecting bands. Thickness gauge will be dependent on the load conditions, except that 16 gauge shall be the minimum allowable thickness.
 - b) PVC conforming to ASTM D3034-15e1, minimum 4 inches in diameter with fabricated tees and wyes.
 - c) HDPE shall conform to ASTM F405-13 with fabricated tees and wyes.
- d. Catch Basin Leads
- Shall be a minimum of 12 inches in diameter.

1. Reinforced Concrete Pipe.
2. Polyvinyl Chloride Pipe.
3. Corrugated Steel Pipe.
4. High Density Polyethylene Pipe.

e. Outfalls

Points of discharge shall be recognized drainage courses, which may require the developer to acquire downstream easements for dedication to the Town.

f. Stormwater Management Facilities

All facilities shall be designed in accordance the latest edition of the “New York State Stormwater Management Design Manual” and the SPDES General Permit requirements.

g. Drainage Easements

The minimum easement width shall be 20 feet, but the actual width acceptable to the Town will consider all those factors previously listed.

47-104 Manholes and Manhole Ladders

A. Manholes

Precast reinforced concrete sections shall be manufactured in accordance with ASTM Specification C478-15a. Riser sections shall have tongue and groove ends and super "O" joints and gaskets conforming to ASTM C443-12. Manhole bases may be pre-formed or poured in the field. Roof slabs shall be precast structural concrete, reinforced for H-20 loading and 30 percent impact loading. A 24 inch diameter hole shall be eccentrically located in the roof slab. In place of preformed openings in base sections, flexible manhole sleeves may be cast directly into the base walls may be used with compatible pipe material.

All manholes shall be sealed inside and outside completely with two coats of heavy-duty water repellent protective coating which complies with ASTM Specification D450/D450M-07(2013)e1, Type B.

Manholes constructed of other materials shall be considered for approval following a review of said manhole construction. In specifying these manholes, the developer's Engineer shall submit adequate design data and/or shop drawings to substantiate the materials.

B. Manhole Ladders and Steps

Manhole ladders or steps shall be provided in all sanitary and storm manholes and shall be constructed of one of the following materials.

1. Non-corrodible, aluminum magnesium alloy ladders, with intermediate supports at 5 foot intervals
2. Forged aluminum with drop front design and grooved tread surface.
3. Cast iron as manufactured by Neenah R-1982-F.

Steps shall be cast into the walls of riser sections and shall be aligned in each section to form a continuous ladder with rugs equally-spaced vertically in the assembled manhole at a distance of 12 inches apart.

47-105 Frames and Covers**A. Sanitary Manhole Frames and Covers**

Shall be as required by Livingston County Water and Sewer Authority or other Sewer Authority having jurisdiction.

Watertight sanitary manhole frames and covers shall be provided where inflow may occur.

B. Sanitary Cleanout Covers

Cast iron per Neenah R-1974-A frame and cover marked "SEWER", or equal.

C. Storm Manhole Frames and Covers

Shall be Neenah R-1723 or East Jordan Casting No. 1203 with a vented cover or other approved equal. The inside diameter for clearance shall be a minimum of 24 inches.

D. Catch Basin Frames and Grates

Shall be rectangular, galvanized (ASTM A123/A123M-15) and sized to fit gutter inlets or field inlets. The gutter grates shall be NYSDOT Section 604-2 with NYSDOT Standard Sheet drawing 655-01(rectangular) size No. 6 to fit the catch basin inside dimensions of 24" x 24". The minimum field inlet shall be to fit a field inlet of 24" x 24" inside dimension.

Catch basin manholes shall be set to allow a NYSDOT Section 604-2 with NYSDOT Standard Sheet Drawing 655-01(rectangular) or 655-04 (reticuline) to be installed.

Frames and grates shall be as specified in NYSDOT Standard Sheet drawing 655-06 and Section 655 (or the latest applicable revision) of the NYSDOT Standard Specification Manual. All grates shall be bolted to the frames.

47-106 Water Mains

All work performed and materials furnished for the purpose of supplying a development with potable water shall comply with these standards, the Livingston County Department of Health, and the latest edition of the “Recommended Standards for Water Works (Ten States Standards). Where these standards differ, the more restrictive shall govern.

A. Design

Water supply systems shall be designed to provide adequate domestic usage and fire protection. Where public water supply is not accessible, an alternate private supply shall be furnished which conforms to the New York State Health Department regulations.

All main and service sizing shall be substantiated by the design engineer using updated flow data provided by the Town Water Department.

All water mains shall be a minimum of eight (8) inches except:

1. Where mains are part of a major transmission distribution network, the Town may require a larger size main.
2. Where project demands allow a smaller main while still providing adequate fire and domestic flows. In no case will the Town accept for dedication a main smaller than four (4) inches in diameter.

B. Watermain Materials

1. *Ductile Iron (DIP) Pipe* - Shall conform to AWWA C-151, minimum allowable thickness shall be Class 52. Pipe shall be cement lined in accordance with AWWA C104 and shall have rubber gasket push-on joint in accordance with AWWA C-111.

DIP installation shall include: The developer or his engineer must submit certified results of the Ductile Iron Pipe Research Association’s (DIPRA) Ten Point Soil Test prior to commencing construction. Testing shall be

conducted by a qualified soil-testing laboratory, and the results shall be submitted to the Town.

The DIPRA Ten Point soil test shall be taken along the route of the proposed water main at a maximum spacing of 500 feet with a minimum of one test in developments less than 500 feet long, in all wetlands, fill areas and railroad beds (existing or abandoned) that the water main route crosses or occupies, at the elevation of the top of the proposed water main, and referenced on the report by station number.

The developer's engineer shall certify that the samples tested are from the site referenced on the form and were taken along the pipe route at the appropriate depth. The certification may be done on the form or in a separate letter from the developer's engineer.

Upon submission of a satisfactory soil testing report, the Town Engineer will make the determination as to whether or not a main will require polyethylene encasement, and the limits of such encasement. Water mains installed in soils with DIPRA Point Totals of 10 or greater shall be wrapped in polyethylene. Polyethylene encasement shall be installed in accordance with the Town specifications. The developer may choose to wrap the entire main in polyethylene in lieu of soils testing as per Appendix AA. In this case, a note stating this shall be placed on the plans.

- a. Polyethylene wrap specifications:
 - 1) Polyethylene tube: AWWA C-105
 - 2) Thickness: 8 mils.
 - 3) Pigmentation: natural when exposure to ultraviolet light such as sun will be less than 48 hours. Pigmentation shall be 2.0 to 2.5% well-dispersed carbon black with stabilizers when exposure to ultraviolet light will be 2 to 10 days.
 - 4) Polyethylene: virgin polyethylene produced from Dupont Alathon or USI Petrothene resins.
 - 5) Method of manufacture: extruded tube form.
 - 6) Closure Tape: Polyken 910 General Utility Tape or 3M Scotchrap 50 all-weather corrosion protection tape, 2" wide, plastic backed, adhesive tape.
2. *Polyvinyl Chloride (PVC) Pipe* - Shall conform to AWWA C900-07 for pipe sizes 4-inch through 12-inch and AWWA C905-10 for pipe sizes 14-inch through 48-inch. Minimum class shall be 150 (DR 18) with elastomeric gasket joints, integral bell and rubber rings locked in place.

PVC pipe installation shall include either:

- a. Six inch wide metallic detectable warning tape placed over the center of the pipe on top of the 12 inch safety cover as manufactured by Instock Now, Inc.
- b. Solid copper wire (#10 gauge minimum) insulated with high density polyethylene per ASTM D1248-05 attached to the pipe at 5 foot intervals with plastic ties with a minimum of 150# tensile strength. Wire shall be attached to all cast fittings, hydrants and valve boxes to make a continuous traceable system.

C. Fittings

1. Ductile iron shall meet AWWA C111 Specifications, minimum Class 250; with mechanical or push-on joint, except for hydrant branches, which shall be mechanical joint. Pipe and fittings shall be cement lined in accordance with AWWA C104. Bolts and nuts shall be high-strength, low alloy steel.
2. PVC shall meet specifications of AWWA C900 for sizes 4-inch through 24 and AWWA C905 for sizes 14-inch through 48-inch made from PVC Compound with a cell classification 12454-B (ASTM D1784) with gasket joints meeting ASTM D3139.

D. Hydrants

Hydrants shall be spaced to comply with ISO requirements but at a maximum 500 foot intervals in subdivisions and 600 foot intervals in open spaces.

Hydrants shall be manufactured in accordance with AWWA C502. Hydrants shall be manufactured for 5 foot bury with break-away flange construction and 6 inch mechanical joint inlet. They shall open left and be painted yellow bodies, bonnet, and nozzle covers. Hydrants shall be three way with 2-1/2 inch hose nozzles and one 4-1/2 inch pumper connection with National Standard threads. Main valve openings shall be 5-1/4 inch with the total unit consisting of the tee, guard valve, hydrant and adaptors.

The Kennedy Guardian K81D is the approved hydrant in the Town of Avon.

Flushing Hydrant Blowoffs shall be 2 inch self-draining, non-freezing with 5 foot bury, with all bronze parts designed to connect to a 2 inch main line outlet as manufactured by GIL Industries, Inc., Model Slim Line 2.

E. Valves

Valves shall be located such that no more than 30 dwelling units and no more than two hydrants need be out of service for repair of a water main. Valves shall generally be provided at intersections and shall be no more than 800 feet apart along the water main.

Additional valves may be required at creek and/or railroad crossings depending on network configuration and permit requirements.

Gate valves shall conform to AWWA C509-09, Resilient-seated wedge type epoxy coated gate valves with a non-rising stem. They shall be of the 350 psi test class with a minimum working pressure of 250 psi. Valves shall be open left manufactured by U.S. Pipe, Mueller or an approved equal. Stainless steel bolts and nuts shall be utilized.

The valve ends shall depend on the type of pipe used and the particular use intended.

Valves shall be furnished with a screw type valve box, 5-1/4 inch inside diameter with covers marked with "WATER".

If the valves are buried deep they must have an extension stem that can be reached with a 6 foot valve box key.

F. Anchoring Fittings

Anchoring pipe in accordance with ANSI/AWWA C104/A21.4-08 shall be employed to anchor all hydrants to gate valves. The anchoring pipe shall be coal tar coated, cement lined and provided with a rotating gland. There should be a minimum 18 inches between hydrant and gate valve. These anchoring pipes shall be as manufactured by Clow, Tyler or approved equal.

G. Restrainers

Shall be manufactured of high strength ductile iron pipe and incorporate a full 360 degree support around the pipe. They shall be as manufactured by Uni-Flange series 1300, 1350, 1360 depending on the specific use.

H. Dead End Mains

Provide 2 inch blow-off units at the end of all "dead end" mains.

I. Water Services

Provide minimum of 1 inch water service to the right-of-way line of all individual lots or where an easement is provided (the service shall extend to the easement line). All services under dedicated roads shall be Type K copper without line couplings.

Water Service Material (1 inch):

1. Corporations stop shall be Mueller H-15008 compression type.
2. Curb stops shall be Mueller H-15209 Mark II compression type.
3. Curb boxes shall be Mueller H-10314, 5 feet long with stainless steel rods and stainless steel keys.
4. Copper pipe shall be Type "K" ASTM B88.
5. Plastic pipe shall be copper tube size (CTS) polyethylene ASTM D2737, PE3408 per AWWA C901 (only used from curb box to unit and a #10 gauge solid copper tracer wire insulated with high density polyethylene per ASTM D1248 shall be included from the curb box to the structure). When polyethylene pipe is used for water service piping, the plain end of all pipe connections shall have an internal 304 stainless steel stiffener. Stiffener shall have a permanent outside diameter, which fits into the pipe inside diameter to reinforce and maintain concentricity of the pipe.
6. All services tapped into PVC mains shall utilize two bolt stainless steel saddles or brass saddles with brass U-bolts, with triple "O" ring seals as manufactured by Cascade Style CSC2 or equal.
7. Any services larger than 1" shall meet the minimum specifications of the Water Superintendent.

J. Meter Pits (for individual services)

Meter pits shall be installed when the water service length is greater than 100 feet from the edge of pavement of a given road.

K. Meter Pits for Individual Services

Individual meter pits, where required, shall be either Mueller or Ford Plastic 20 inch diameter, Double Lid Style with Wabash cover W2. Cover shall be equipped to receive attachments for radio-read water meters.

L. Thrust Blocks

Shall be cast in place 3000-psi concrete to dimensions as shown in Appendix V.

47-107 Grading**A. General**

The finished grading on developed lands shall provide for the effective removal of stormwater runoff to a drainage system.

In general, the design engineer shall try to establish a finished grade at the structure line to permit a minimum of 2.0 percent grade away from the structure to the drainage system.

Drainage shall generally be to side or rear lot swales provided:

1. Swales are of a proper cross-section to permit ease of maintenance by the individual owner.
2. Easements are provided for access and/or maintenance where necessary.
3. Finish grade at right-of-way line shall be not more than 2 feet above finish grade at centerline and the driveway slope within the lot shall not be greater than 12 percent. A leveling area of 3 percent maximum grade adjacent to the right-of-way shall be provided which is a minimum of 30 feet in length from the edge of the street pavement.
4. Where multi-lot grading is proposed, all swales required for positive drainage will be installed prior to the issuance of a building permit.

B. Grading Plan

A grading plan shall be submitted, with the final plan for any development, showing at a minimum the following items:

1. Existing contours.
2. Proposed finish contours.
3. Spot elevations of proposed finish grades at key locations.
4. Garage floor elevations.
5. Minimum elevations of any architectural opening where flood hazard areas exist.
6. Culvert invert elevations.

7. All elevations shall be established from USC&GS datum and the plan shall show a site benchmark.

47-108 Roads & Pavements

The following designations will be used by the Town to classify roads and their respective design criteria:

- Commercial/Industrial
- Residential/Subdivision
- Private (1 lot)
- Private (2 or more lots)

A. General Requirements

The design engineer shall consider the proposed use of the road when preparing a road design. The following criteria are listed as minimum standards to be considered by the designer. It is the intent of these requirements to obtain a road and a base that is stable and capable of supporting H-20 loading to the sites.

1. Commercial/Industrial

- Provides access to established commercial and industrial areas.
- Provides access to local roads.
- High volume car/truck/tractor trailer traffic.

Minimum Design Standards:

- a) Mirafi 1100N Nonwoven Polypropylene Geotextile Fabric, or equal.
- b) One (1) 12" thick layer of crushed stone transitioning from a No. 4A to an equal mix of Nos. 1 & 2 (NYSDOT Gradation Table 703-4).
- c) Asphaltic concrete courses shall be: 4 inches of 37.5 F9 Base Course HMA, 80 Series Compaction (NYSDOT Item No. 402.378902). 3 inches of 25 F9 Binder Course HMA, 80 Series Compaction (NYSDOT Item No. 402.258902). 1 inch of 9.5 F2 Top Course HMA, 80 Series Compaction (NYSDOT Item No. 402.098202).

Note: Binder course is to be installed even with gutter, if top course is delayed till the following year.

- d) Stabilized shoulder installed per Appendix C or a concrete gutter per Appendix I.

2. Residential/Subdivision

- Densities as permitted by the zoning ordinance
- Design speeds of 30 MPH or less
- Individual driveways at regular intervals
- Usually no effect on overall Town traffic pattern

Minimum Design Standards:

- a) Mirafi 1100N Nonwoven Polypropylene Geotextile Fabric, or equal.
- b) One (1) 12" thick layer of crushed stone transitioning from a No. 4A to an equal mix of Nos. 1 & 2 (NYSDOT Gradation Table 703-4).
- c) Asphaltic concrete courses shall be: 3 inches of 25 F9 Binder Course HMA, 80 Series Compaction (NYSDOT Item No. 402.258902). 1 inch of 9.5 F2 Top Course HMA, 80 Series Compaction (NYSDOT Item No. 402.098202).

Note: Binder course is to be installed even with gutter, if top course is delayed until the following year.

- d) Concrete gutter per Appendix I, or stabilized shoulder per Appendix C.

3. Private (non-dedicated and one user)

- Has fee ownership on a dedicated street.
- Has no effect on overall Town traffic pattern.
- Design speed of 30 MPH or less.
- Maintenance by homeowner.
Meet NYS Fire Code.

Minimum Design Standards:

- a) Mirafi 140N Nonwoven Polypropylene Geotextile Fabric, or equal.
- b) One 9 inch lift of Type 2 crusher-run stone (NYSDOT Item No. 304.12), at a minimum.
- c) One 3 inch lift of asphalt binder course.
- d) A private drive off a dedicated road shall:
 - (1) Be designed to keep surface water flows from entering the travel way of the dedicated street.
 - (2) Provide soil erosion measures on the site as it is being developed.
 - (3) Provide an adequately sized culvert with end sections or headwall treatment.

- (4) Finish grade and seed the area immediately upon completion of the private drive base.
 - (5) Provide a paved surface from the edge of the existing pavement at least 30 feet toward the developed site.
 - (6) No private drive should exceed a slope greater than 3 percent from the edge of the pavement to a point 30 into the property being developed.
 - (7) Maximum grade within the development site shall be 12 percent.
4. Private (non-dedicated and two or more users)
- Has fee ownership on a dedicated street.
 - Low volume of traffic.
 - Has no effect on overall Town traffic pattern.
 - Design speed of 30 MPH or less.
 - Maintenance covered by deed agreement or Homeowner's Association depending on number of units.
 - Meet NYS Fire Code.

Minimum Design Standards:

- a) Mirafi 140N Nonwoven Polypropylene Geotextile Fabric, or equal.
- b) One 9 inch lift of Type 2 crusher-run stone (NYSDOT Item No. 304.12), at a minimum.
- c) One 3 inch lift of asphalt binder course.
- d) A private drive off a dedicated road shall:
 - (1) Be designed to keep surface water flows from entering the travel way of the dedicated street.
 - (2) Provide soil erosion measures on the site as it is being developed.
 - (3) Provide an adequately sized culverts with end sections or headwall treatment.
 - (4) Finish grade and seed the area immediately upon completion of the private drive base.
 - (5) Provide a paved surface from the edge of the existing pavement at least 30 feet toward the developed site.

- (6) No private drive should exceed a slope greater than 3 percent from the edge of the pavement to a point 30 into the property being developed.
- (7) Maximum grade within the development site shall be 12 percent.

NOTE: All depths are compacted thicknesses.

B. Road Characteristics & Materials

Each of these roads has basic characteristics which may be varied to be consistent with unique proposals of development and construction. The individual variations of the conditions will not be permitted if they sacrifice design safety or maintenance of a proposed road type. Standard roads shall comply with the typical cross sections shown on Appendices B, C, and D.

1. Sub-Base and Base Courses

- a) Crusher run stone shall conform to NYSDOT Specification Section 304-2, Type 2 (304.12).
- b) Aggregate shall conform to NYSDOT Gradation Table 703-4, size as specified.
- c) NYSDOT Standard Specification Section 304-2.02 Type 4 (304.14) gravel may be substituted for crushed stone (NYSDOT Gradation Table 703-4) if acceptable subsoil conditions exist with the approval of the Superintendent of Highways and Town Engineer. The design engineer shall submit data justifying the use of gravel over specific subsoil conditions.

2. Bituminous Pavement

- a) Base course shall conform to NYSDOT specification Section 402, 37.5 F9 Base Course HMA, 80 Series Compaction (402.378902).
- b) Binder course shall conform to NYSDOT Specification Section 402, 25 F9 Binder Course HMA, 80 Series Compaction (402.258902).
- c) Top course shall conform to NYSDOT Specification Section 402, 9.5 F2 Top Course HMA, 80 Series Compaction (402.098202).

3. Tack Coat

Shall conform to NYSDOT Specification Section 407. The grade shall depend on the specific use intended.

4. Premoulded Bituminous Joint Filler

Shall conform to NYSDOT Specification Section 705-07.

5. Underdrains

Shall be 4 inch perforated SDR-35 PVC per NYSDOT 706-15 or High Density Polyethylene Tubing per AASHTO M252-09.

Mirafi is required to be provided under roadways unless determined otherwise by the Town Highway Superintendent.

47-109 General Road Design Considerations

A. Right-of-Way

1. Minimum width 60 feet for dedicated roads.
2. Private drive width depends on design constraints.
3. Private underground utilities to be located on easements beyond right-of-way limit.

B. Horizontal Alignment

The following factors shall be incorporated into the design of each road type:

1. Sight distance must conform to minimum safe stopping sight distance per "Geometric Design of Highways and Streets". AASHTO Latest Edition.
2. Clear sight at intersections
3. No centerline intersection angles less than 75 degrees. Angles less than 85 degrees may require special consideration.
4. Minimum centerline radius of 150 feet.
5. Road pavement intersections shall have a minimum of 35 foot radius.
6. Cul-de-sacs should not exceed 1,200 feet in length and end with a turnaround (see Appendices E and F).
7. Access to future developments will be provided to property lines.
8. Tangent sections shall be used between curves to maintain the proper flow of traffic at design speeds.

C. Vertical Alignment

1. The minimum length of vertical curves shall be based upon current AASHTO policy covering selection of vertical curve length based upon stopping sight distance, passing sight distance, riding comfort, and headlight

sight distance. Vertical curves are required whenever changes in grade exceed 1 percent.

D. Road Grades (dedicated)

1. Minimum - 0.7 percent with shoulders; 0.5 percent with gutters.
Maximum - 8 percent - Maximum grade may exceed 8 percent for short distances with engineering justification and Town approval.

E. Leveling Areas

Leveling areas shall be incorporated at all intersections for a minimum distance of 100 feet from the edge of the pavement and the grade shall not exceed 3 percent.

F. Fire Department Requirements

All common driveways regardless of length and individual driveways, which are longer than 500 feet, shall be constructed to support HS-20 loading and provide an emergency pull off area that is 30' x 80' at intervals of 250' for emergency access clearance from the edge of the driveway to any obstruction. Plans and details of such driveways shall be submitted to the Fire Department for review.

G. Road Widths

Class	Pavement Width	Edge Treatment	Drainage
Commercial/ Industrial	24' min.	5' shoulder, gutter	Surface swale, underground conduit
Residential/ Subdivision	22'	4' shoulder, gutter	Surface swale, underground conduit
Private (one lot)	14'	None	None
Private (two or more lots)	14'	3' shoulder	Surface swale, underground conduit

H. Special Considerations

1. Surface Swale - Runoff to be directed to underground conduit via catch basins with swale. Note that in lieu of gutters, the prescribed shoulder treatment will be required.
2. Underdrains - Underdrains are required with the development of all dedicated roads. The method used shall be subject to the review and approval of the Town Engineer and the Superintendent of Highways.

3. Frontage Development - Where frontage development is to be approved along collector roads, the Planning Board may require that the roadside swale be enclosed in conduit along the fronts of the development. Such conduits shall be of the proper size to accommodate anticipated flows as previously outlined. A parallel access road may also be considered by the Planning Board and discussed during sketch plan submittal.

47-110 Driveway Culverts

- A. Shall be provided along existing road frontage lots to properly convey roadside drainage. The culverts shall be installed to the proper grade to allow the natural flow of water. All culverts installed shall be subject to the review of the Superintendent of Highways having jurisdiction on the road.
- B. Minimum of twelve (12) inch diameter unless they are a part of a larger drainage course which may require larger diameter pipes.
- C. The culverts shall extend a minimum of five (5) feet beyond the edge of the access driveway and be provided with end sections or headwalls. The slope from the driveway to the culvert end section shall be graded and seeded to maintain the slope stability.
- D. Elevations to be set by NAD 83.
- E. Culverts shall have a minimum of twelve (12) inches of cover.

47-111 Concrete Gutters and Sidewalks

- A. Concrete
 1. Shall be a minimum of 4" thick and 4000 psi (28 day strength) Class A concrete conforming to NYSDOT Specification 609.
 2. Air entraining admixture conforming to ASTM Specification C-260.
 3. Bituminous expansion material shall conform to NYSDOT Specification 705-07.
 4. Curing and sealing compound - conforming to ASTM C-309, Type I, Class B for curing and sealing.
 5. Testing is required by the Town as outlined in Section 4.14, C.
 6. See Appendix I and R

47-112 Monuments

- A Monuments per Appendix H shall be located at:
- P.C. and P.T. of all horizontal curves along one side of the right-of-way.
 - Maximum of 1,000 feet along one side of right-of-way line.
- B Monuments shall consist of one-half inch (1/2") diameter reinforcing rod embedded in concrete four inches (4") in diameter by thirty inches (30") deep as shown in Appendix GG. Manufacturer shall be Berntsen, 3/4"x3" rod, cap marked Town of Farmington R.O.W.
- B. All monuments shall be shown on finished plans.
- C. Monuments shall be set as a minimum at all exterior corners of the subdivision, on one side of each street and at all changes of direction in the right-of-way.
- D. Maximum of 1,000 feet at one side of the right-of-way.
- D. Monuments shall be set by a licensed land surveyor before the final Letter of Credit Release.
- E. Monuments shall be constructed as shown in Appendix H.

47-113 Equivalents

The mention of apparatus, articles or materials by name and such specific description of same as is made herein is intended to convey to the developer and their contractor an understanding of the degree of excellence required. The Town shall be the sole judge of the qualifications of the offerings and will determine all questions regarding the conformance of any offer outside the specifications.

For any project it will be assumed that the developer will furnish the exact materials specified on the plans and specifications unless the developer files with the Town of Avon to any use in the development, the names and complete description of each article which he proposes to substitute for approval by the Town Board.

Any costs incurred by the Town or its representatives associated with the verification of substitute equipment and materials will be the responsibility of the developer.

47-114 Reserved Land for Future Use

Where land areas are reserved for future connections to adjacent parcels, all improvements, i.e., sanitary, storm, water, roads, will be constructed to the common property line.

ARTICLE IX

INSTALLATION OF IMPROVEMENTS

47-115 General Information

A. Pre-Construction Meeting

A pre-construction meeting shall be requested by the developer and scheduled through the Town Building and Zoning Department prior to the start of construction of a development. The developer, his contractor and design engineer shall meet with all private utility representatives; Town Department Heads and project observers to discuss the overall project, its impacts and schedules. A schedule of construction shall be presented in writing at this meeting by the site contractor as well as copies of the fully approved drawings.

Prior to scheduling a preconstruction meeting, the developer shall obtain a checklist from the Town Building and Zoning Department, identifying all items that the developer must bring to the meeting.

B. Meaning of Drawings

The contractor shall abide by and comply with the true intent and meaning of all drawings and of the specifications taken as a whole. If the contractor believes that the construction indicated on the project drawings will not, when executed, produce safe and substantial results or if it appears that there is any discrepancy in the drawings, it is his duty to immediately notify the developer's engineer, in writing, and to thereafter proceed only upon written order of the Town.

C. Protection of Property and Work

1. **Conduct of Operations** - The contractor shall conduct his operations to prevent damage to trees, garden plots, shrubbery, pipe lines, conduits, buildings and other structures. The contractor shall use all necessary precautions to protect the work and adjacent structures of all kinds during construction and shall so conduct his operations that at no time shall the work or such structures be endangered.
2. **Responsibility and Damage** - The developer shall be responsible for all parts of his work, temporary or permanent, until the project is complete and shall thoroughly protect all work, finished or unfinished, against damage from any cause as all work is at the contractor's risk until the same is accepted by the developer. The use of part or all of the work by the Town as provided for in these specifications shall not relieve the developer of this responsibility. The contractor shall be responsible for damage to life and property due to his operations and shall provide all necessary guards, rails, night lights, etc.

D. Construction Schedule

The developer shall provide a construction schedule showing the order in which work will be completed at the pre-construction meeting. The schedule shall be reviewed at the pre-construction meeting and revised if necessary. No work will begin until a schedule acceptable to the Town is on file with the Town.

E. Permits

The developer shall secure all necessary permits from the Town including Highway, Water and/or any other agency who may have authority over any work prior to the start of construction.

F. Existing Utilities or Structures

Before construction begins near any existing utility or structure, the contractor shall notify the appropriate owner of his intention and their instructions as to the protection of their property must be followed. Before commencing work, the contractor shall determine the exact location of any structure or underground utility in order that the contractor's project will not damage or disrupt these facilities.

The contractor shall take necessary precautions to prevent entry of mud, debris, etc. into existing utilities or onto streets near the site.

All existing underground facilities shall be checked for damage before backfilling. In the event a facility is damaged, the owner of that facility shall be notified by the contractor so as to insure an acceptable repair and/or replacement.

G. Facilities for Observation

The contractor shall furnish all reasonable facilities and aid to the construction observers for safe and convenient footways, scaffolds, ladders, etc., that may be needed for the examination and review of any part of the work. The Town of Avon may stop work when the contractor has no responsible agent on the project or if the Town feels that the contractor is not performing the work in the best interests of the municipality. Disorderly, intemperate and incompetent persons shall not be allowed on the project. The employees who neglect or refuse to follow the construction observer's instructions shall be permanently removed from the project by the contractor. Failure to conform to these controls may warrant refusal of the municipality to consider the development for dedication.

H. Layout

It shall be the responsibility of the developer to have the work carefully laid out by qualified surveying or engineering personnel in a manner that will assure accurate completion of the work.

I. Defective Work

The review of the work shall not relieve the developer of any of their obligations to comply with the specifications. Any defective work shall be made good and any unsuitable materials which have been previously overlooked by the Town or its representatives shall be removed and replaced. If the work or any part thereof shall be found defective at any time before the final acceptance of the project, the developer shall make good such defect in a manner satisfactory to the Town.

47-116 Grading

Completion of grading per the grading plan to within 1 foot of design grade shall precede any trench excavation. Such grading shall include house "pads", removal of enough material to form the "box" for road base, surface drainage channels, required temporary situation basins, etc.

Construction brush and debris will not be buried on the site. Wood materials shall be cut, chipped, mulched or removed from the site and deposited in a permitted construction/demolition landfill.

47-117 Trench Excavation

A. Excavation

Under this term will be included all excavation in trenches and pits, together with all backfilling and embankments that may be needed for the laying of the utilities and appurtenances or that may be necessary for the laying, changing and construction of any water, sewers, conduits, culverts, drainage ditches or water courses, or for any other incidental work that may be required or ordered by the Town or its representative.

It is the contractor's sole responsibility to make sure that all work shall be conducted in strict accordance with the Federal Safety Standards of OSHA.

B. Width of Trenches

The trenches shall be of such width as may be required by the design engineer to insure proper laying and handling of the pipes and appurtenances, proper tamping and backfilling operations. In all cases, trenches should be kept as narrow as possible. The contractor shall be responsible to provide sheeting/bracing or other requirements to insure the safety of his workmen in conjunction with the proper installation of the pipe.

C. Depth of Trenches

In general, the trenches shall be excavated to such a depth to properly install utilities to the grade established in the field by the design engineer. The depth of the excavation shall allow the proper bedding material to be placed under the pipe.

Any extra excavated depth by the contractor shall be filled with compacted crushed stone to the proper grade required.

Utilities shall be designed to prevent damage from frost penetration or surface forces. Water mains and services shall be generally buried with 5'-0" of cover infields but at least 6'-0" when they cross existing or proposed roads.

D. Tunneling

Work shall generally be conducted in open trenches or excavations, with proper protection. Tunneling shall be done only in areas specifically called for by the design plans with design details approved by the Town.

E. Blasting

Whenever necessary to resort to blasting for making the excavations, the trench shall be covered in a form to prevent fragments of rock from being thrown out. Only experienced, licensed workmen shall be employed in the handling and uses of explosives. All blasting operations shall be conducted in strict accordance with existing ordinances, regulations and specifications relative to rock blasting, storage and use of explosives.

F. Bailing and Draining

The contractor shall furnish a sufficient pumping plant and shall provide and maintain, at his own expense, satisfactory drainage whenever needed in the trench and other excavations during the progress of the work and up to final inspection. No structures shall be laid in water. Water shall not be allowed to flow or rise upon any concrete or other masonry or flow on adjacent lands. All water pumped or bailed from the trench or other excavation shall be conveyed in a proper manner to a suitable point of discharge and may require temporary siltation traps.

G. Bottom of Trench

The bottom of the trench shall be carefully graded and formed according to the directions of the design engineer, before any structures are laid thereon. When other instructions or design are not indicated, all trenches shall be excavated in a straight line. In hard pan, boulder formations or rock, the excavation shall extend at least 6 inches below the bottom of the pipe and a carefully compacted bed of crushed stone

screenings placed in the bottom of the trench up to the level of the spring line of the pipe. See Appendix DD for specific material bedding requirements.

It is the intention of this specification to achieve not less than Class "B" pipe bedding.

H. Suitable Bedding and Safety Backfill Material

It shall be the responsibility of the contractor to generally utilize material excavated from the trench in order to provide the required backfill to meet the listed specifications unless crossing an existing or proposed road. Should the nature of the soil be such that the contractor is unable to meet the above requirements by selecting, with reasonable care, from the excavated material, he shall provide the following materials, if so ordered by the Town or its representative:

- Sand, stone or concrete cradle when the trench bottom does not provide sufficient bearing capacity or when specification requires specific bedding for certain utilities.
- Sand encasement shall be ordered by the Town when the trench is excavated in rock, boulders, or hard pan and none of the material above this level is suitable for backfilling the pipe.

47-118 Pipe Installation

A. Line and Grade

All pipes and appurtenances of whatever character shall, when set, conform to the alignments and grades required by the design engineer. All of the required special castings and other fixtures that are indicated upon the plans, or that may be required during the progress of the work, shall be installed in their proper positions. Minimum grades for gravity sewer shall be:

Nominal Pipe Size	Minimum slope in Feet per 100 Feet
4-inch	2.00
6-inch	1.00
8-inch	0.40
10-inch	0.28
12-inch	0.22
14-inch	0.17
15-inch	0.15
16-inch	0.14
18-inch	0.12
21-inch	0.10
24-inch	0.08
27-inch	0.067

30-inch	0.058
33-inch	0.052
36-inch	0.046
39-inch	0.041
42-inch	0.037

B. Laying Pipe and Castings

The contractor shall use suitable tools and appliances for the safe and convenient handling and laying of all utilities and appurtenances. All pipes and castings shall be carefully examined by the contractor for defects and no pipe or casting which is known to be defective shall be laid. If defective pipe or castings should be discovered after being laid, these shall be removed and replaced with sound pipe or castings. The pipes shall be cleaned before they are laid and shall be kept clean until they are accepted with the completed work. All ends of the pipes shall be watertight capped to exclude water and debris from entering the pipes.

Sewers shall be built to the lines and grades between manholes as shown on the project drawings. The contractor shall provide sufficient grade control to properly install the pipe and appurtenances. Sewer pipe shall be laid upgrade with spigots placed in the direction of flow. All pipes shall be fitted together to form a smooth, even invert. Pipes disturbed after laying shall be removed and re-laid.

After the pipe has been placed and adjusted to line and grade, the bed shall be trimmed to support the pipe for its entire length. Material used for bedding shall be thoroughly compacted under the bottom and the haunches of the pipe. The trench shall then be backfilled to above the top of the pipe and carefully compacted to hold the pipe in position.

C. Cutting Pipe

Whenever it may be necessary to cut any straight pipe it shall be completed by skilled workmen with proper tools, in such manner as will not cause any cracking of the pipe.

47-119 Storm Manhole Construction

A. General

Manholes shall be constructed of the size, type and at the locations shown on the Plans, or as designated by the design engineer in the field.

The manhole bed shall be excavated level and include a minimum of 6 inches of crushed stone.

Manhole risers and flat slab covers shall be precast reinforced units. Manhole bases may be precast "Monobase" or field poured with 3,500 concrete psi.

Eccentric cone sections may be used on the top of manhole riser sections if the inside height dimension from the bench wall to the bottom of the eccentric section exceeds 8 feet.

Interior and exterior concrete surfaces shall be sealed by the supplier and touched up or recoated by the contractor with approved bitumastic coal tar sealer.

Manholes shall be cored before installation of any pipe into the manhole. Pipe shall be sawcut after installation and not "chipped off".

All openings and joints in the manhole sections shall be completely filled once the sections are set, with non-shrink grout* and after initial set, waterproofed on the inside and outside with a coal tar coating.

*NOTE: When PVC is used all openings around pipes shall be completely filled with 100 percent epoxy non-shrink grout.

Before each barrel of the manhole is set, the joint shall be cleaned and the barrel correctly aligned, so that the steps form a continuous ladder. The first step shall be no more than 30 inches below finished grade and continue to the top of the bench wall.

It is the intent of these specifications to construct first-class manholes which will exclude all ground water, by means of carefully constructed foundations, tight barrel joints and the coating of the inside and outside of the manholes.

B. Frames and Covers, or Grates

The frames shall be firmly set in a bed of not less than one full inch of cement mortar and adjusted to the finished grade. The manhole frame may be set directly on the concrete roof slab, providing the top will be at the proper grade; otherwise, precast concrete spacers or bricks shall be mortared to the roof slab to raise the frame to the proper grade. A maximum of three courses of spacers or bricks shall be used to adjust the frames and grates to the proper grade.

C. Benches

Benches shall be constructed in all manholes. The bench may be constructed of cast-in-place concrete and shall be depth of the pipe.

D. Drop Manholes

Drop Manholes are not permitted.

E. Shallow Sewer Manholes

Where any manhole is less than 4 feet from invert to bottom of roof slab, the contractor is to provide a manhole as shown in Appendix O. The roof slab shall be precast structural concrete reinforced to withstand a concentrated H-20 load plus 30 percent impact. The slab shall be formed to fit into the ends of the vertical pipe and shall have a full bearing for its entire circumference.

F. Sealing of Manholes

All manholes shall be sealed with two coats of sealer as applied by the manhole manufacturer to the entire interior and exterior surfaces in minimum dry thickness of 11 mils per coat. Application shall be in accordance with the coating manufacturer's recommendations and shall be certified thereto by the suppliers. Before placement in the field, abraded areas shall be touched up with two coats by the contractor. Covers and other exposed surfaces shall also be coated in the field. Improper materials or mil thickness shall be cause for rejection of manhole sections.

47-120 Catch Basins

Gutter inlets shall be constructed as shown in the Appendix J or as shown on the plans for special conditions. Catch basins shall be constructed of precast concrete structures.

All catch basins shall be coated inside and outside with two coats of heavy duty coal tar sealer.

47-121 Sewer Laterals and Water Services

Sewer laterals and water services shall be installed to the right-of-way (or easement) line for all lots, with the cleanout or curb box installed at or near the right of way or easement line. The end of each service shall be watertight and located with a stake extending 4' minimum above finish grade. The stake shall be color coded in conformance with NYS Code Rule 753-4.7 (Industrial Code 53) to denote the type of service they represent.

47-122 Hydrants and Valves

A hydrant unit shall consist of a hydrant, guard valve, mechanical joint tee and anchor pipes.

Before hydrants or valves are installed they shall be checked to determine if they are in the proper working order.

Hydrants shall be set plumb with the break flange 3 inches above the finished grade. Hydrant weeps shall be surrounded by at least 10 cubic feet of crushed stone or gravel. If the ground water is higher than the drainage plug, the plug shall be closed and the crushed stone eliminated.

Valve boxes shall be placed plumb over the operating nut of the valve and adjusted to the final grade.

All hydrants shall be painted yellow and all valve box covers shall be painted blue.

47-123 Backfilling and Finishing

A. General

Trenches shall be immediately backfilled following the installation of utilities unless specifically changed in writing by the design engineer and approved by the Town. The roadways and sidewalks shall be left unobstructed, with their surface in a safe passable condition. The trench shall be tamped sufficiently to prevent settlement of or damage to existing or newly installed structures.

B. Backfill Immediately After Approval

Only select earth material shall be deposited around the utility and appurtenances covering them by hand for a depth of at least 12 inches above the pipe. This earth shall be thoroughly tamped as it is being placed so as to fill the lower portion of the trench thoroughly to give utilities a Class B bed for their entire length.

C. Restrictions as to Materials

No rock or frozen materials shall be placed in trenches within existing or proposed streets. Such material may be used in fields where immediate compaction is not necessary and at least 2 feet of select fill has been placed over the pipe.

D. Backfilling, Pavement Crossings

All utility lines or laterals that cross existing or proposed streets shall be backfilled with crusher run stone conforming to NYSDOT Specification Section 304-2 Type 2 (304.12). At the discretion of the Superintendent of Highways, native trench material may be used for backfill in lieu of crusher-run.

Material shall be compacted in lifts of 1 foot maximum to the elevation of the road subgrade. From there the backfill shall conform to the material specifications for individual road sections.

E. Cleaning Up

As the work progresses or as directed by the design engineer, all rubbish or refuse, unused materials and tools shall be removed at once from along and near the trench line construction.

Rough clean up along the route shall immediately follow installation procedures. Large spoil banks will not be permitted in developed areas.

Final clean up and landscaping shall proceed immediately after the installation, testing and approval of the facility.

Erosion control measures must be maintained throughout the construction process and removed only upon the approval of the Town.

In all cases, the project site shall be restored to a condition equal to or better than that which previously existed.

47-124 Compaction

Compaction densities specified herein shall be the percentage of the maximum density obtainable at optimum moisture content as determined and controlled, in accordance with AASHTO T99 (ASTM D698-12e2). Field density tests shall be made in accordance with AASHTO T238 and T239 (ASTM D6938-15).

Each layer of backfill shall be moistened or dried as required and shall be compacted to the following densities, unless otherwise specified.

A. Select Fill

Under all existing or proposed roads, driveways, parking areas	95%
All other areas	85%

B. Methods and Equipment

Methods and equipment proposed for compaction shall be subject to the approval of the Town. Compaction by rolling or operating heavy equipment over fill areas shall be conducted in a manner by which injury to existing utilities and structures shall be avoided. Any pipe or structure damaged thereby shall be replaced or repaired as directed by the Town at the expense of the developer.

C. Testing

1. Field density tests may be ordered by the Town as necessary and will be paid for by the developer.

2. The developer shall furnish all necessary samples for laboratory tests and shall provide assistance and cooperation during field tests. The developer shall plan his operations to allow adequate time for laboratory tests and to permit taking of field density tests during compaction.

Any areas found to be below required compaction densities shall be removed and replaced with new material at the developer's expense. The methods of operation and/or the backfill materials shall be changed to meet required compactions.

Inadequate compaction shall be cause for the Town to issue a stop work order on a project.

47-125 Testing of Underground Utilities

A. General Information

Upon the satisfactory completion of the installation of the underground utilities, the contractor shall proceed to test each of the installed facilities as here in specified. All utilities shall be pretested by the contractor before the Town is to witness the final tests. No test will be accepted unless witnessed by the Town. Records and date of these tests shall be submitted to the municipality as part of the record drawing information.

Water or test required of the developer during any procedures will be paid for by the developer. All hydrants for water supply or testing use shall be operated only by the Town Water Utilities Department.

B. Sanitary Sewers

Sanitary sewers shall be tested in accordance with the requirements of the Livingston County Water and Sewer Authority, or other Sewer Authority having jurisdiction.

C. Storm Drains

All storm sewers shall be flushed clean by the contractor and the lines shall be lamped with the Town.

D. Water Mains

1. Pressure Tests

The entire system, including services to the curb stops, shall be pressure tested at a minimum 1.5 times the working pressure or 150 psi whichever is

greater for a period of two hours. The test pressure shall not fluctuate during the test period. No high pressure test will be allowed when temperature is less than 32 degrees, unless a heated shelter is provided for test equipment. This test shall be performed in accordance with AWWA C600-10. The pressures at the point of testing shall be related to the highest elevation of the main.

2. Disinfection

Upon completion of the pressure testing the main shall be disinfected in accordance with AWWA C651-05 as applicable.

3. Samples

After flushing of the newly disinfected main, the developer shall obtain samples of water and submit them to a laboratory approved by the New York State Department of Health. Upon the receipt of a satisfactory laboratory report, this information together with the Town Engineer's Certificate of Construction shall be submitted to the Livingston County Department of Health for approval. Upon receipt of the Approval of Completed Work from the Health Department, the water system shall be considered complete and may be accepted for service by the Town.

E. Defective Areas

In any areas where satisfactory results of applied tests cannot be obtained, the defective portion of the system shall be located and replaced with new material. That portion of the system shall then be retested until satisfactory results are obtained.

47-126 Roads, Gutters and Sidewalks

A. General Information

The contractor shall not proceed to construct any surface improvements until the underground system has been installed, tested and approved by the Town.

Careful attention shall be given by the contractor to obtain the necessary compaction densities as specified. All surface improvements shall be constructed to the shape and dimensions as shown on the typical sections or on the approved plans. A greater road width and base may be required in those areas where particular soil conditions or traffic patterns require special considerations.

47-127 Roads**A. Sub-grade**

The sub-grade shall be graded to remove all unsatisfactory or unstable material. Where material is removed below the sub-grade elevation, suitable granular material shall be used to bring the road to proper sub-grade. Where ground water or poor soil conditions exist, the developer shall be required to install perforated underdrain and crushed stone weeps to drain the base. The entire sub-grade surface shall be thoroughly compacted according to NYSDOT Standard Specification 203-3.12.

Fabric filter material may be required by the Town to stabilize the base or sub-base before the contractor proceeds to install same.

No movement shall be observed in the sub-grade material as the roller passes. When the sub-grade is completed, the contractor shall so notify the Town Superintendent of Highways and the Town Engineer for a base determination. Upon the review and written approval of the sub-grade by the Superintendent of Highways and the Town Engineer, the base material may be placed.

B. Base Material

Approved base materials shall be uniformly deposited and compacted in layers with a roller, according to NYSDOT Specifications. Rolling shall begin at the sides and continue toward the center and shall continue until there is no movement of the course ahead of the roller. After compaction, the top surface of this course shall not extend above the theoretical elevation for this course and when tested with a straight-edge 16 feet in length, any bump or depression over 1/4 inch from the theoretical grade line shall be satisfactorily eliminated.

When the base has been prepared to the satisfaction of the Superintendent of Highways, the developer may place the binder course. If base conditions are changed as determined by the Superintendent of Highways before the binder is placed, he may order the developer to seal the stone with a rapid sealing liquid asphalt emulsion as specified in NYSDOT Standard Specification Section 702-6, Asphalt Emulsion Tack Coat with 0.5 gallons per square yard as determined by the conditions and not more than 24 hours prior to placement of binder asphalt.

If the compaction of the base is questionable by the Superintendent of Highways, it may require re-rolling or stone replacement by the developer.

C. Bituminous Pavement

1. Binder shall be placed and compacted to a minimum finished layer thickness or 3 inches with a self-propelled asphalt spreader and rolled according to NYSDOT Specifications 403-3.03. Before applying the top course, any

irregularities in the binder course shall be eliminated but at no time will "cold patch" or "winter mix" be allowed on the binder for repair work.

2. Before the surface course is placed, the binder will be cleaned and inspected by the Superintendent of Highways to determine the condition of the pavement. It may be necessary to apply a tack coat at the rate of 0.1 gallon/square yard before placing the surface.
3. Surface Course shall be placed and compacted to a minimum finished layer thickness of 1 inch with a self-propelled asphalt spreader and rolled in accordance with NYSDOT Specifications 403-3.03.

D. Temporary Road Construction

Where construction sequences preclude the specified road construction items and these requirements for Certificates of Occupancy, a temporary road consisting of the specified road section less top surface course may be constructed.

This temporary road shall be reviewed by the Superintendent of Highways and approved in writing prior to the issuance of any Certificate of Occupancy. The Town Board may accept dedication of the road if sufficient monies remain in the financial guarantee to top the road in the next year.

E. Continuation of Existing Road

When construction of a road is continued from an existing road or previously developed section, the pavements shall be joined with a triangular cut of at least 15 feet from edge of the pavement to the centerline of the old pavement. The intent of this provision is to eliminate any grade difference and make a smooth riding transition.

All pavement joints shall receive a tack coat before placing the binder or top course.

F. Stabilized Shoulders

Stabilized shoulders shall be constructed to the dimensions shown on the typical sections in Appendix C. Construction methods shall conform to NYSDOT Specification 410-3.01. The base course shall consist of a wedge of crusher run stone with a single surface treatment.

G. Underdrains

Underdrains shall be installed in conformance with NYSDOT Standard Specification Section 605 and underdrain filter material Type 1 per NYSDOT Specification 605-2.02.

47-128 Concrete Gutters and Sidewalks**A. Concrete Gutters**

1. Concrete gutters shall be a minimum of 6 inches in depth and constructed true to the shape, line and grade on a thoroughly compacted base. The gutters may be constructed using a slip form method or in-place formwork.
2. Joints between sections shall be placed every 10 feet at right angles to the flow line and must be "wet struck" 1/8 inch wide and 3/4 inch deep. Full depth bituminous expansion joints shall be placed every 50 feet and at all structures or inlets.
3. Gutters shall be broom finished before the joints are struck and the finish shall be consistent throughout the project.
4. Gutters shall be cured and sealed by spraying with an approved curing and sealing compound at the rate recommended by the manufacturer.
5. One coat of curing and sealing compound shall be applied when the work is complete and another coat after the gutters have set for 48 hours.
6. The use of burlap or coverings for curing or protection is not acceptable until after the concrete has been sprayed and set.
7. The gutters, prior to final paving, shall be flooded and checked for horizontal and vertical line and grade and finish. If any gutters are found to be constructed in an unacceptable manner by the Superintendent of Highways, they shall be removed and replaced.
8. Gutter replacements shall conform to the existing gutter regarding finish and color.

B. Concrete Sidewalks

1. Minimum 4 inches in depth and constructed true to shape, line and grade. Sidewalks installed through driveways shall be 5 inches in depth and be reinforced with 6"x 6" wire mesh (10 gauge). If location of driveway is unknown, sidewalks shall be 5" in depth throughout.
2. Minimum width shall be 5 feet or to match existing.
3. The base shall be thoroughly compacted crusher run stone with a thickness of 6 inches. The base material shall extend 6 inches outside each edge of the concrete sidewalk.

4. A cross slope of 1/4 inch per foot shall be maintained for positive drainage.
5. Construction joints shall be wet struck at 5 foot increments and be 3/4 inch deep. Full depth bituminous expansion joints shall be placed every 25 feet and at all castings.
6. Sidewalks shall be broom finished and have troweled edges with a corner radius of 1/4 inch. The finish shall be consistent throughout the project.
7. Two coats of approved curing and sealing compound shall be applied. One coat immediately following the finish work and the second coat 48 hours later.

C. Testing

1. The contractor shall obtain in accordance with ASTM C31/C31M-10 two samples from every other truck delivering concrete to the site and have the samples compression tested by an independent testing laboratory.
2. Results of these tests shall be submitted to the Superintendent of Highways.

47-129 Monuments

The monuments shall be installed at those locations shown on the approved final plan and as located in the field by a Licensed Land Surveyor. They shall be installed to a depth of at least 30 inches below finished grade with the top surface to be flush with finished grade. Upon the installation of the monuments the location shall be certified to the Town by a Licensed Land Surveyor as to their accuracy.

47-130 Final Grading

Upon satisfactory completion of the utilities and roads, the entire area within the right-of-way shall be raked and graded to the approved plans.

The site contractor shall be responsible to fine grade the right-of-way and maintain erosion control. In those areas where home construction has started, clean up and site maintenance will then become the responsibility of the builder.

Debris and spoil banks created during the development (not home construction) of the site shall be entirely removed and/or disposed of from the site. No burying of debris or material shall be allowed on approved or proposed building lots.

47-131 Final Cleaning

During the time period between initial installation and testing and acceptance for dedication, debris and/or sediment may accumulate in the utility systems. The

developer shall be responsible to flush and remove this debris from the system prior to the final inspection for dedication.

47-132 Signs

Street and traffic signs shall be supplied and installed by the Town of Avon Highway Department in accordance with standards outlined in the Manual of Uniform Traffic Control Devices (State of New York, Department of Transportation, Division of Traffic and Safety).

Signs and posts shall be ordered by the Highway Department for consistency throughout the Town. Upon receipt of signs, they shall be placed in the field by the Highway Department with sign, post and installation cost the responsibility of the developer.

47-133 Reserved

47-134 Reserved

ARTICLE X

REQUIREMENTS FOR DEDICATION AND PROJECT ACCEPTANCE

47-135 General

All construction within the right-of-way or lands to be dedicated to the Town shall be complete with final site reviews and written approvals of the construction by the following:

1. Superintendent of Water Utilities
2. Building and Zoning Department
3. Superintendent of Highways
4. Town Engineer

In addition to the field review, the Town Attorney shall notify the Town in writing that all legal aspects of the project have been satisfied.

47-136 Monuments

Monuments shall have been set in their required locations and certified to the Town.

47-137 Grading

Final grading shall be completed within the right-of-way and all spoil removed from the site.

47-138 Street Signs

All street and traffic signs shall be properly set in their designated locations.

47-139 Record Drawings

Record drawings and all testing results shall be supplied to the Town Building and Zoning Department and are subject to its review and approval at least 15 calendar days prior to any dedication procedures.

Record maps shall be prepared by a licensed professional. Upon approval, a reproducible, mylar version, along with a digital copy, shall be submitted to the Town's Building and Zoning Department. The digital copy shall contain files usable in the Town's GIS/GPS system for locating dedicated infrastructure in the field. The record drawings shall contain, at a minimum, the following information:

- A. The horizontal and vertical position of new utilities to be dedicated to the Town of Avon shall be related to the New York State Plane Coordinate system Central Zone, North American Datum, 1983 horizontally and North American Vertical Datum

1988. The coordinate positions (x,y,z) shall be clearly delineated on the record drawings. Positions requiring coordinates shall include, but not limited to, all manholes, drainage inlets, end sections, clean outs, valves, curb boxes, hydrants, pump stations, points of utility connection to existing, and dead ends. Maximum horizontal positional error to be no greater than $0.5' \pm$, vertical error shall be no greater than $0.10' \pm$.

- B. The locations, sizes, elevations, lengths, slopes and invert and top elevations of all structures in storm and sanitary sewer systems.
- C. The elevations of any drainage swales and drainage structures to be dedicated to the Town.
- D. The locations including ties to all valves, curb boxes and hydrants to permanent structures.
- E. The locations at the property or easement line of each individual lot -
 - 1. Sanitary Lateral Cleanouts
 - 2. Storm Lateral
 - 3. Water Service Curb Box
- F. The location of any right-of-way monuments.
- G. Any other significant details affecting the operation or maintenance of any system by the Town.
- H. The location of all facilities shall be tied to visible and reproducible objects.

47-140 Maintenance Bonds

The submission and acceptance of the two year Maintenance Bonds for all improvements to be offered to the Town for dedication. Maintenance Bonds shall be written by a surety licensed to do business in New York State and they shall be in the amount of 10 percent of the final construction cost. Bonds shall be approved as to form and content by the Attorney for the Town prior to any dedication procedure.

47-141 Final Release of Funds

Upon signature recommendation of the design engineer, owner, Town Engineer, receipt of the Attorney for the Town's written opinion of legal status, receipt of two year Maintenance Bond, record drawings accepted by the Town Departments and a final field review report, the Town Board shall authorize release of monies retained in the Letter of Credit.

APPENDIX: A
DATE: MAY 2016

MRB |group

ENGINEERING/ARCHITECTURE/SURVEYING, P.C.
145 Culver Road, Suite 160, Rochester, N.Y. 14620

TOWN OF AVON

LETTER OF CREDIT RELEASE

PROJECT NAME _____ ESTIMATE NO. _____

DATE _____
MRB PROJECT NO. _____

Total Construction To Date \$ _____
Less Retainage \$ _____
A. Construction Value To Be Released \$ _____
B. Engineering Costs \$ _____
C. Construction Observation Costs \$ _____
D. Other Costs \$ _____
Amount Previously Released Through Estimate No. _____ \$ _____
Amount Authorized For Release \$ _____

LETTER OF CREDIT INFORMATION

1) Original Amount \$ _____
2) Authorized For Release Per Estimate Nos.
_____ \$ _____
_____ \$ _____
_____ \$ _____
_____ \$ _____
_____ \$ _____
Subtotal \$ _____
* Balance Remaining In Letter Of Credit Through This Statement \$ _____

* The balance amount shall be sufficient to insure satisfactory completion of the remainder of the development.

Project Engineer

Developer

Municipal Engineer

Fiscal Officer

Date

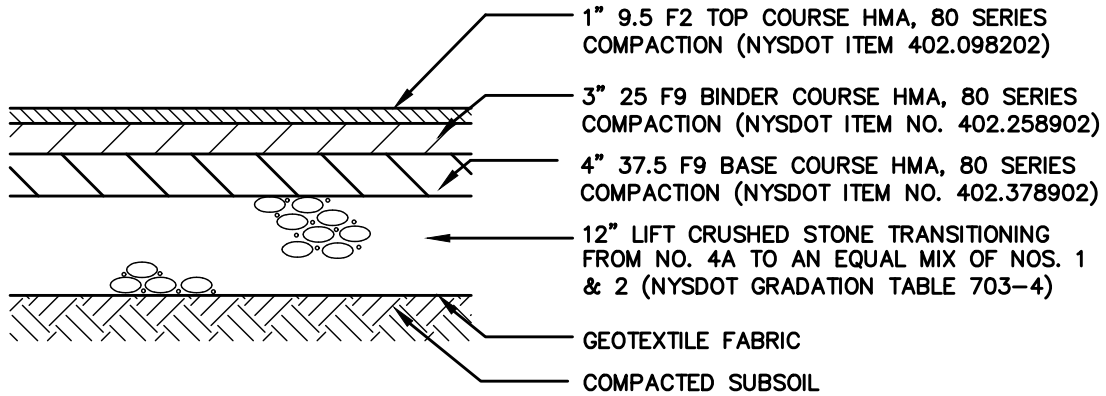
Date

Date

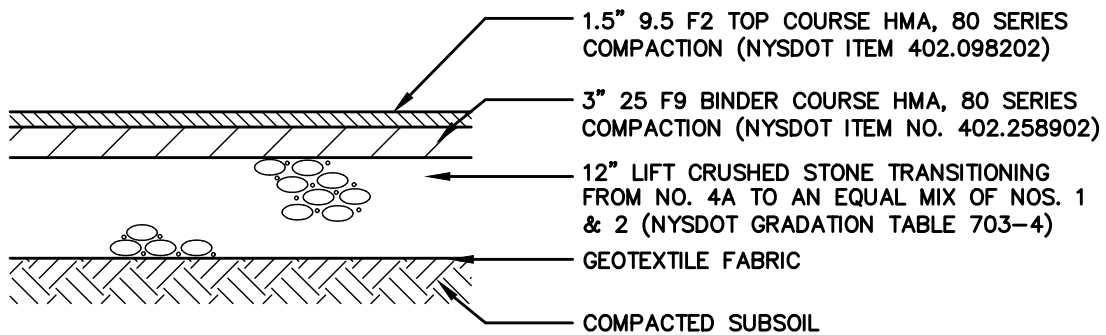
Date

LETTER OF CREDIT EXPIRES _____

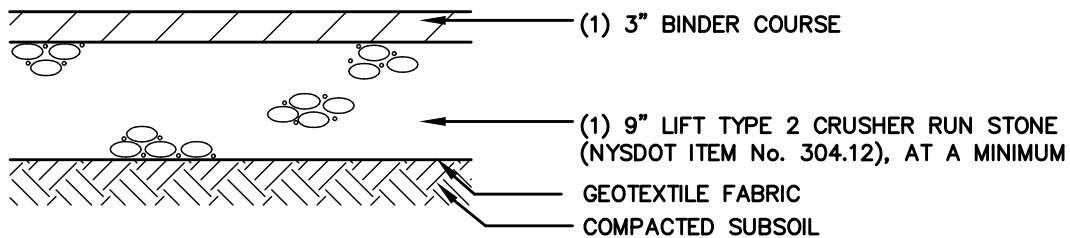
TOWN OF AVON



COMMERCIAL \ INDUSTRIAL ROAD



RESIDENTIAL \ SUBDIVISION ROAD



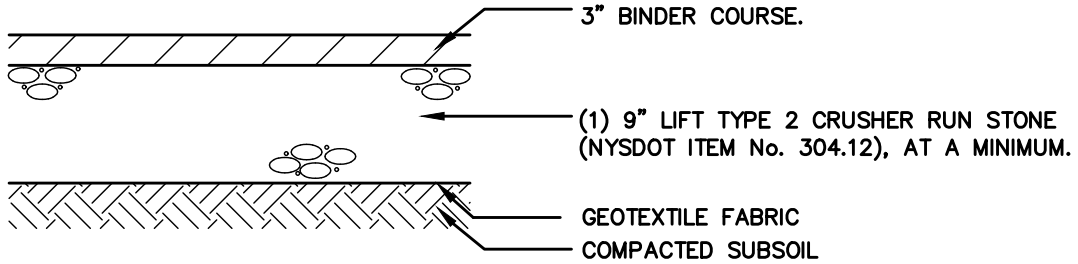
PRIVATE DRIVE (1 LOT)

NOTE: ALL DEPTHS ARE COMPACTED THICKNESSES

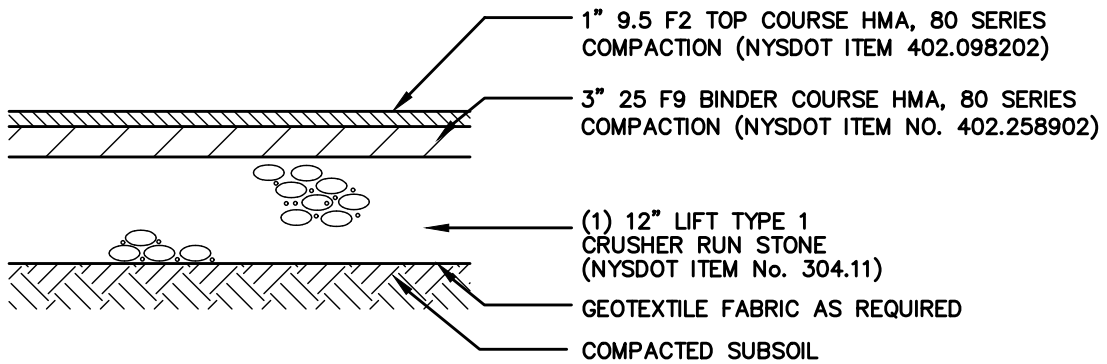
PAVEMENT CROSS SECTION (TYP.)

(N.T.S.)

TOWN OF AVON



PRIVATE DRIVE (2 OR MORE LOTS)



4' STABILIZED SHOULDER

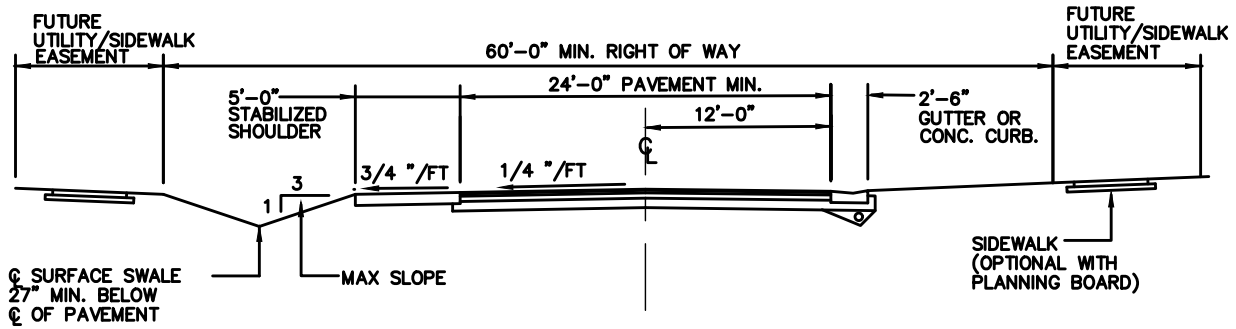
NOTE:

1. USE 2" 25 F9 BINDER COURSE, 80 SERIES COMPACTION AND 1" 9.5 F2 TOP COURSE, 80 SERIES COMPACTION FOR RESIDENTIAL AREA.
2. ALL DEPTHS ARE COMPACTED THICKNESS

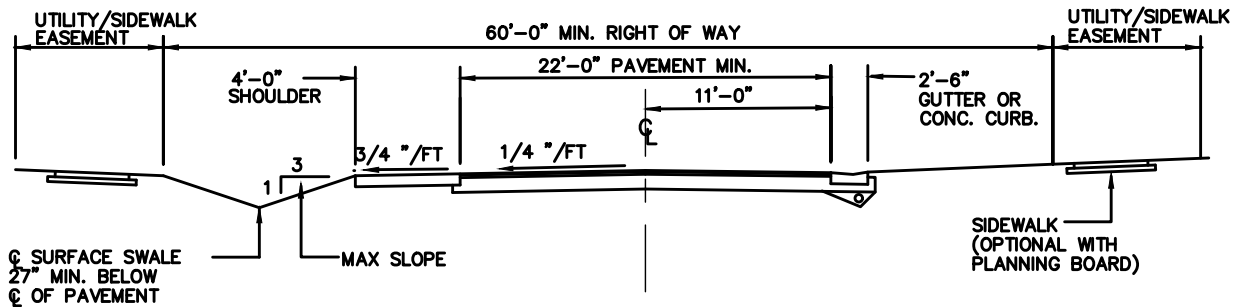
PAVEMENT CROSS SECTION &
STABILIZED SHOULDER SECTION (TYP.)

(N.T.S.)

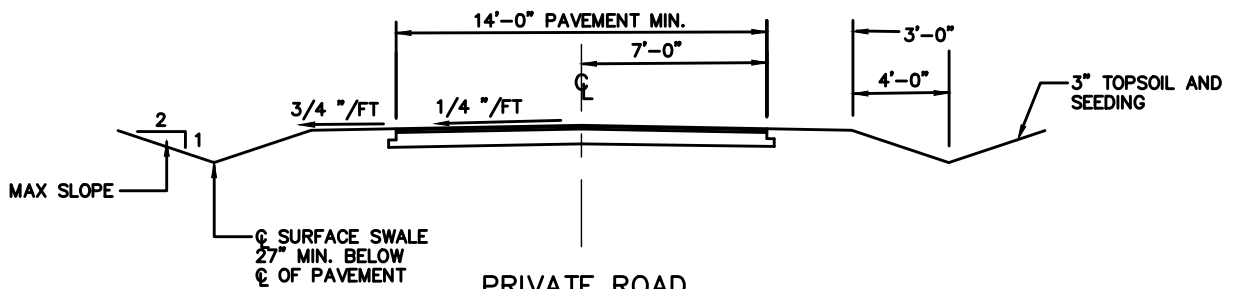
TOWN OF AVON



COMMERCIAL/INDUSTRIAL ROAD



RESIDENTIAL/SUBDIVISION ROAD

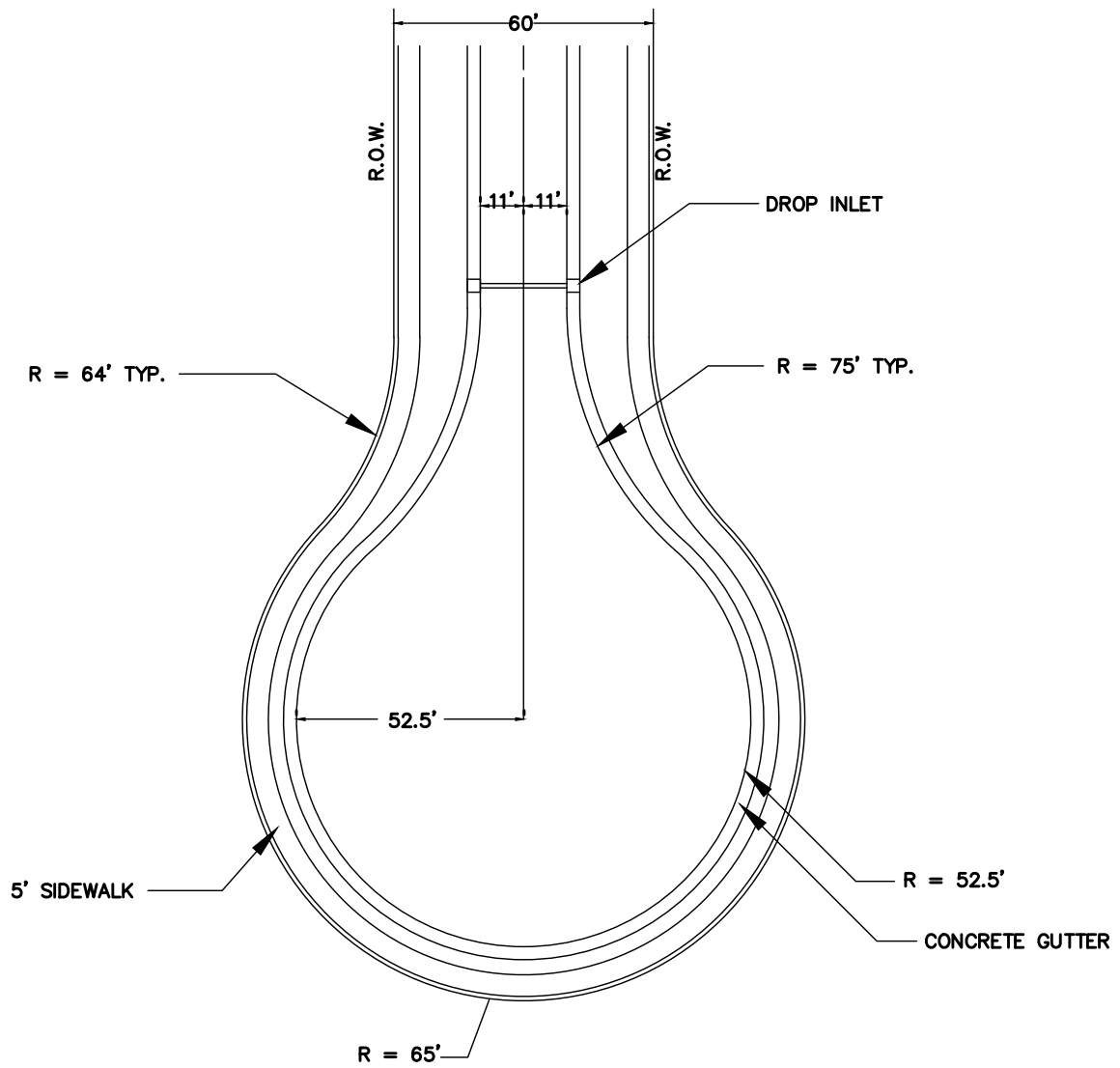


PRIVATE ROAD

TYPICAL ROAD CROSS SECTIONS

(N.T.S.)

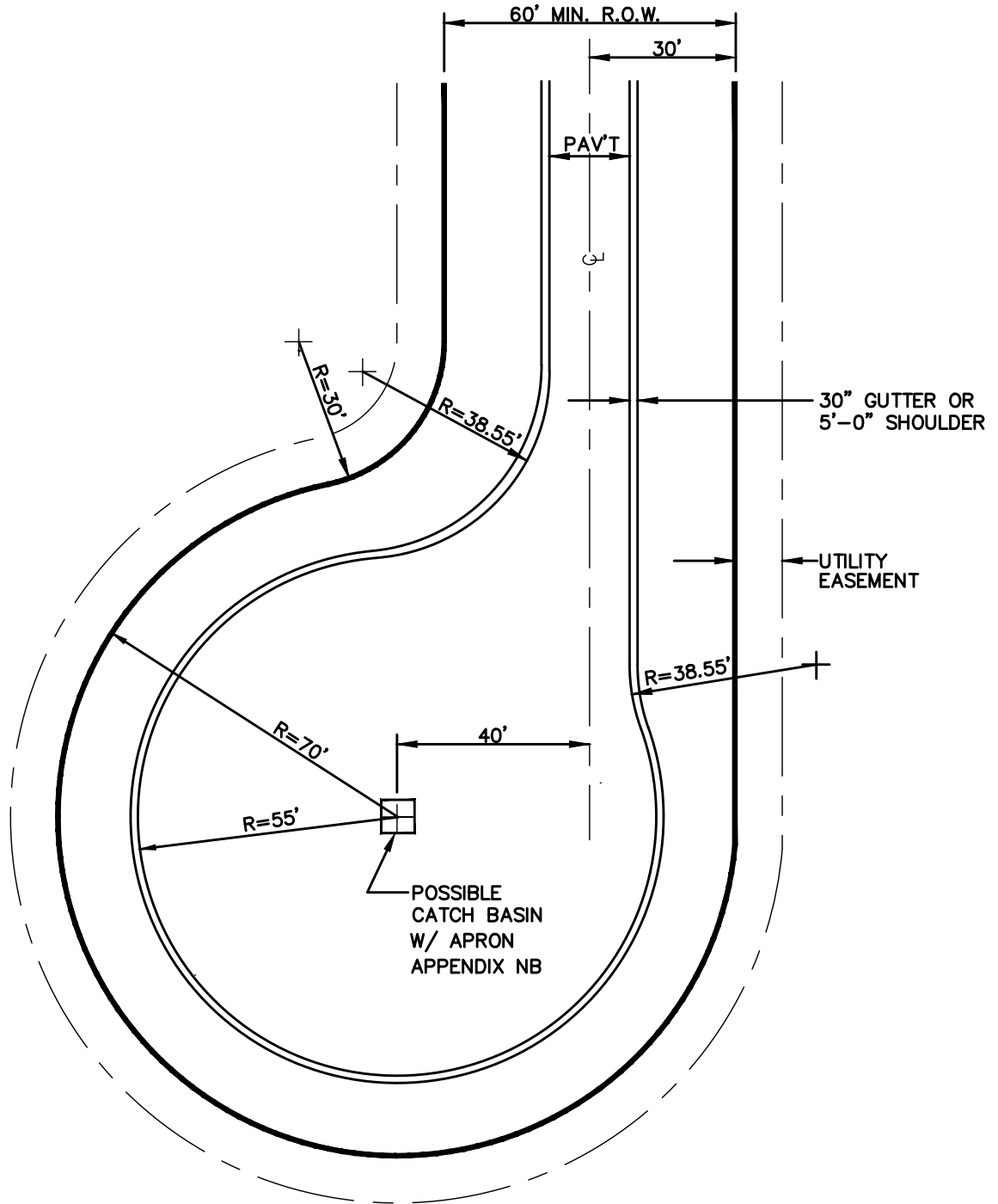
TOWN OF AVON



NOTE: NO DROP INLETS WITHIN PAVEMENT AREA. A THIRD DROP INLET SHALL BE INSTALLED AT THE END OF THE CUL-DE-SAC

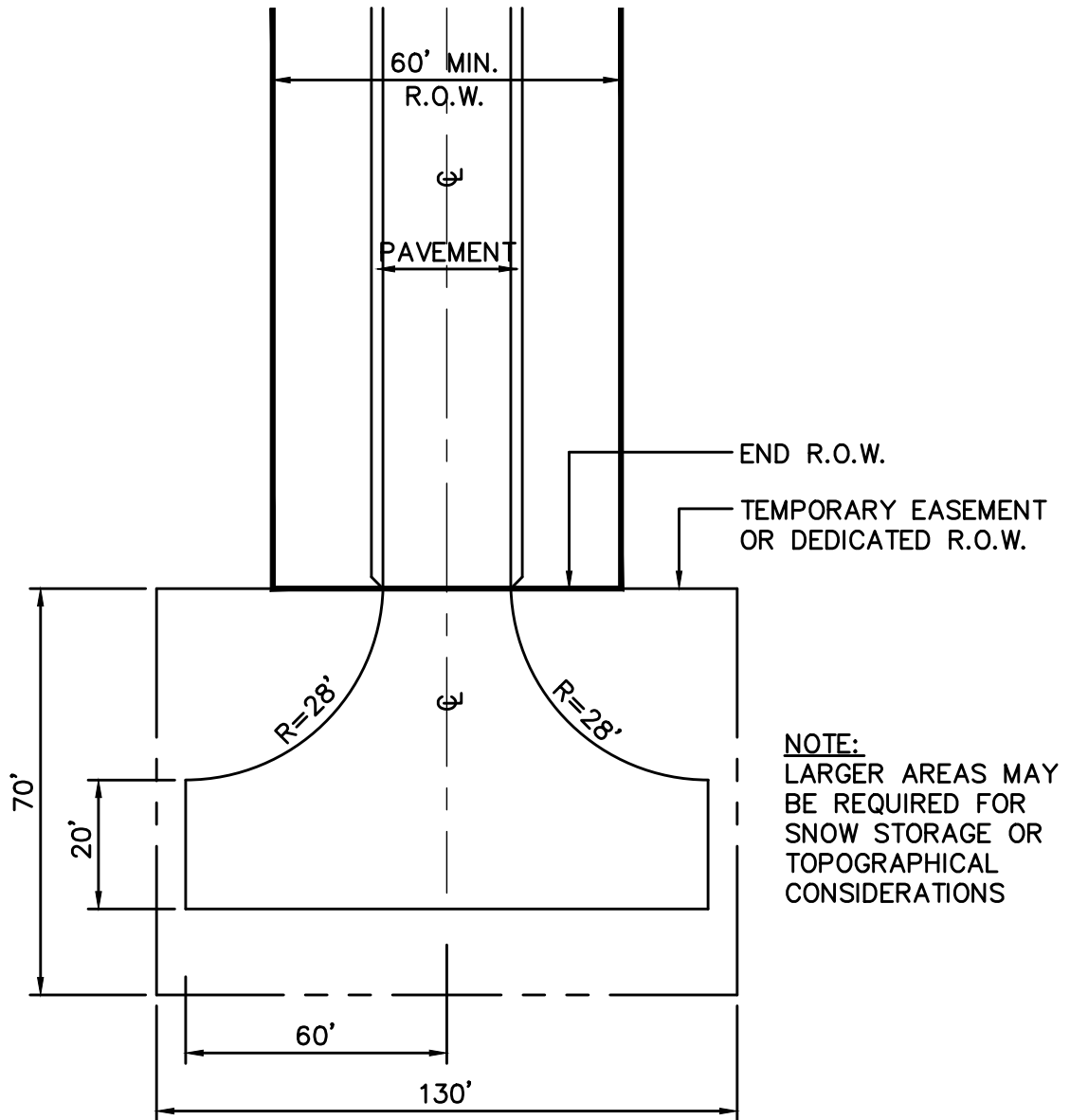
CUL-DE-SAC PLAN
N.T.S.

TOWN OF AVON



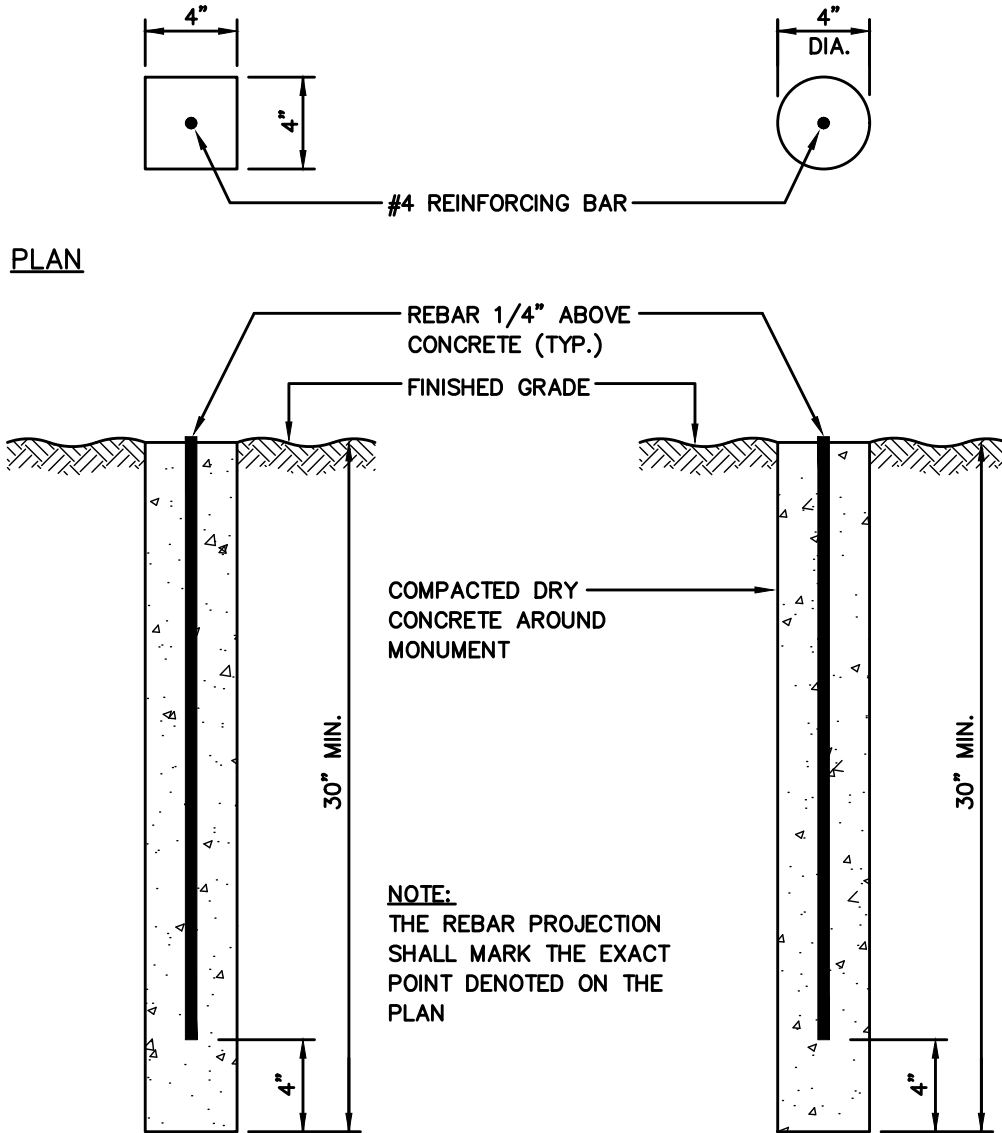
OFFSET CUL-DE-SAC PLAN
(N.T.S.)

TOWN OF AVON



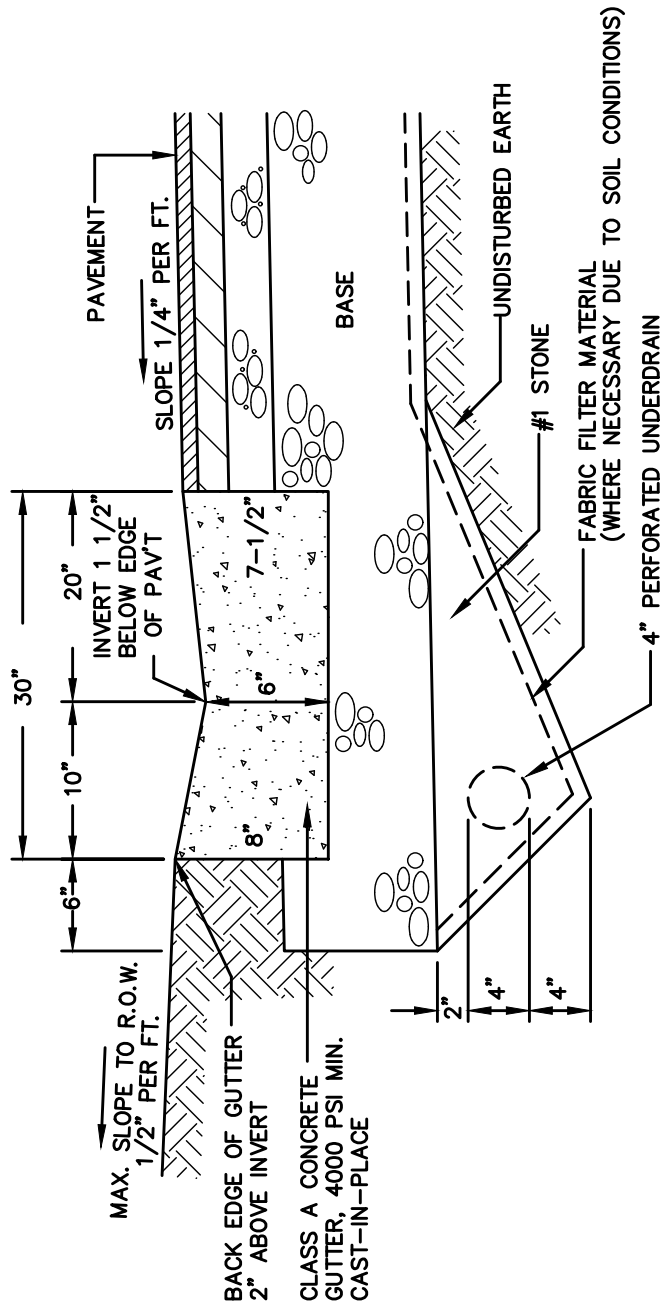
HAMMER HEAD TURN-AROUND
(N.T.S.)

TOWN OF AVON



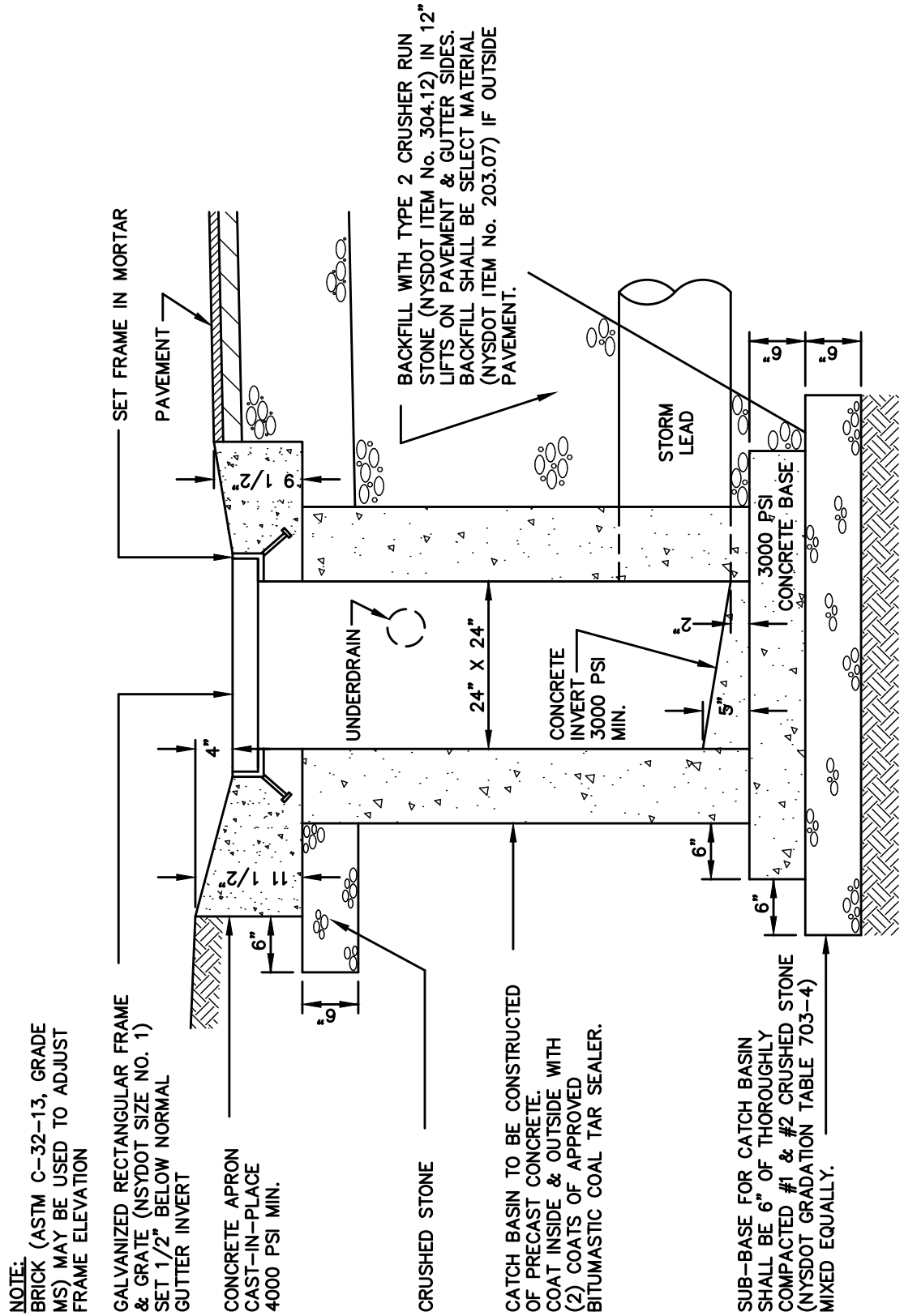
MONUMENT
(N.T.S.)

TOWN OF AVON



GUTTER DETAIL
(N.T.S.)

TOWN OF AVON



GUTTER INLET DETAIL
(N.T.S.)

NOTE:
BRICK (ASTM C-32-13, GRADE MS) MAY BE USED TO ADJUST FRAME ELEVATION

GALVANIZED RECTANGULAR FRAME & GRATE (NYSDOT SIZE NO. 1) SET 1/2" BELOW NORMAL GUTTER INVERT

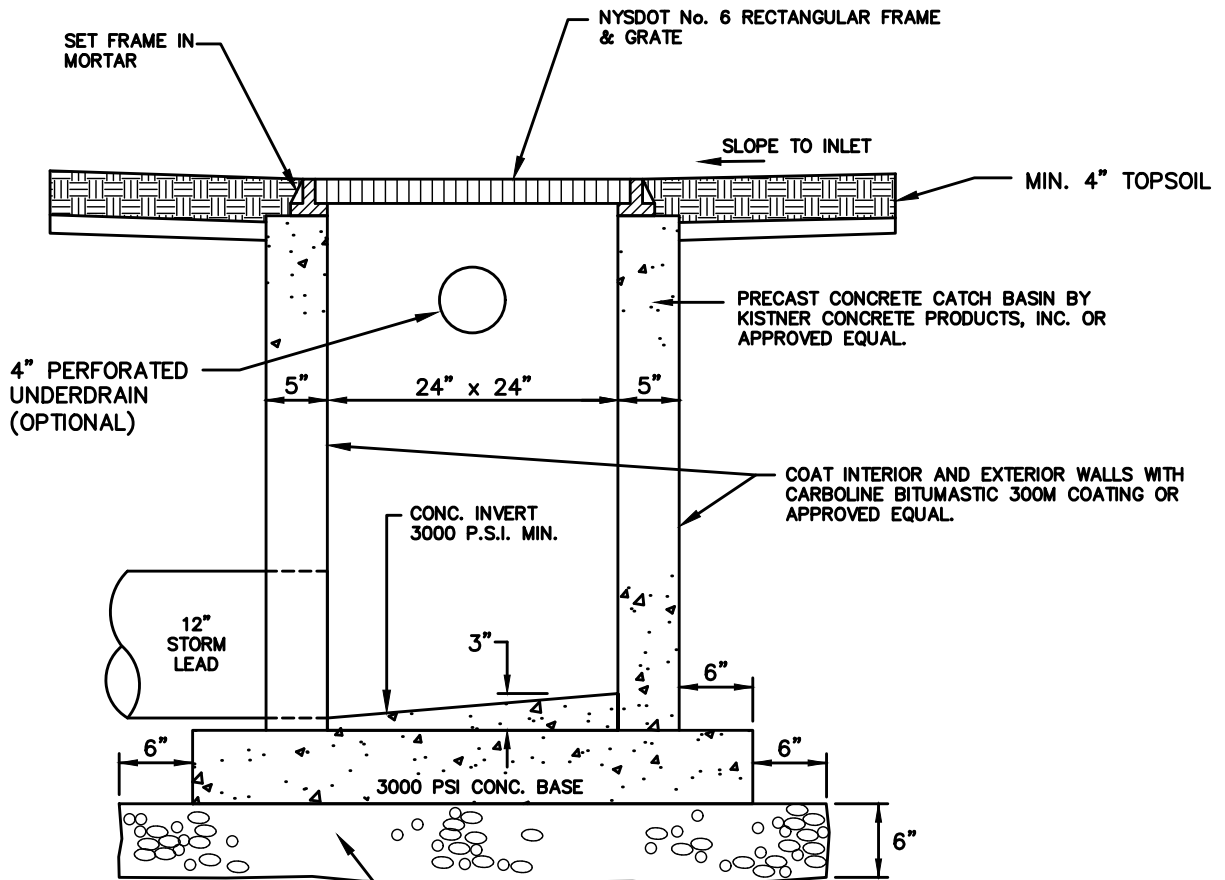
CONCRETE APRON CAST-IN-PLACE 4000 PSI MIN.

CRUSHED STONE

CATCH BASIN TO BE CONSTRUCTED OF PRECAST CONCRETE. COAT INSIDE & OUTSIDE WITH (2) COATS OF APPROVED BITUMASTIC COAL TAR SEALER.

SUB-BASE FOR CATCH BASIN SHALL BE 6" OF THOROUGHLY COMPACTED #1 & #2 CRUSHED STONE (NYSDOT GRADATION TABLE 703-4) MIXED EQUALLY.

TOWN OF AVON

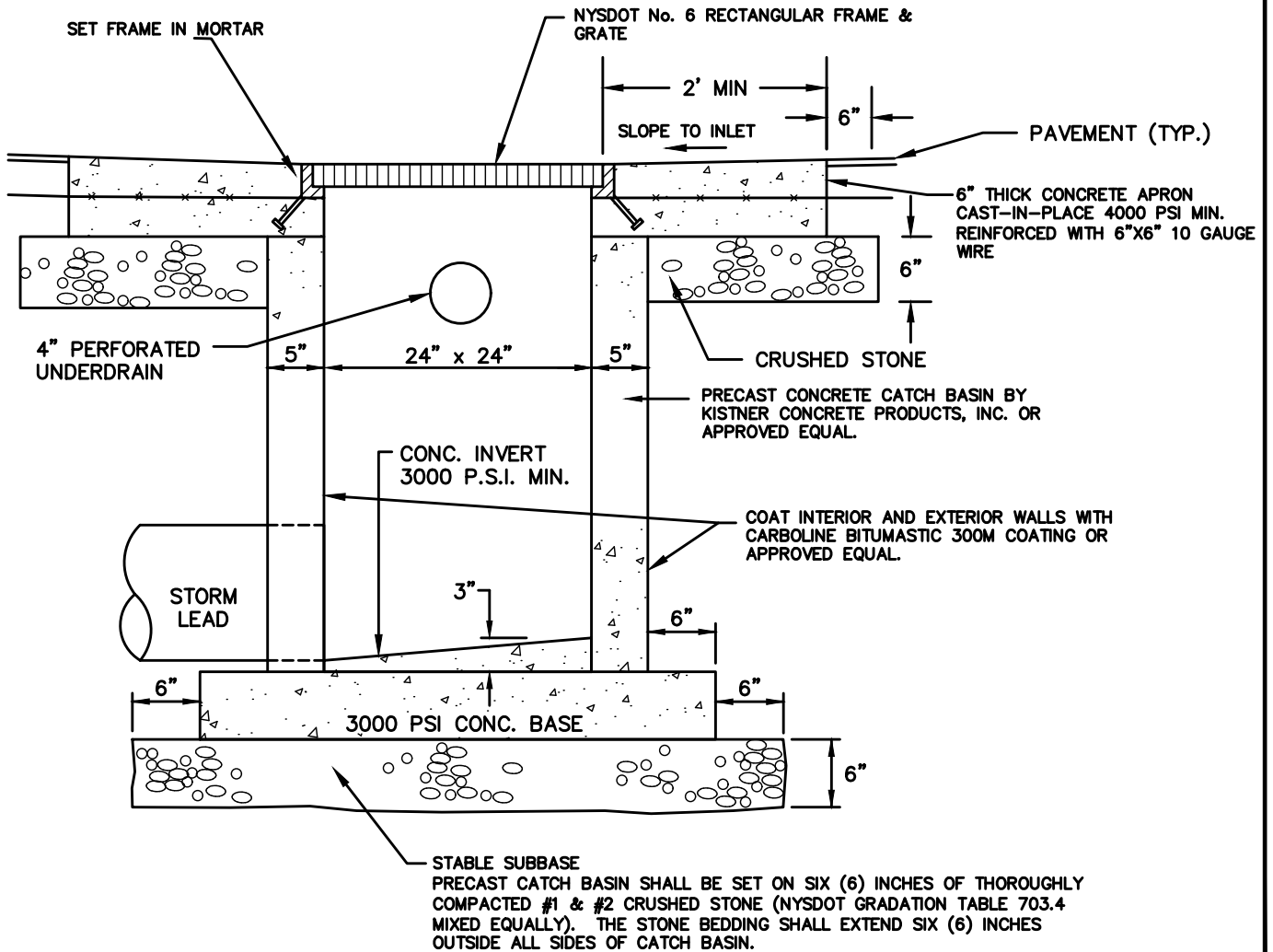
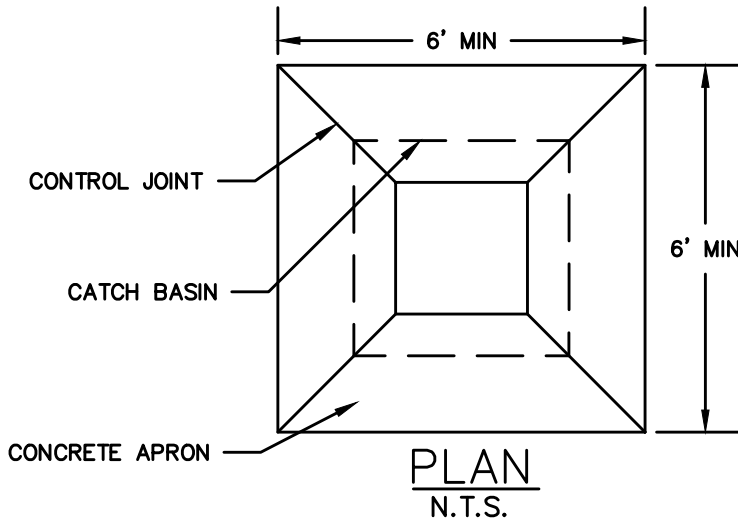


STABLE SUBBASE
PRECAST CATCH BASIN SHALL BE SET ON SIX (6) INCHES OF THOROUGHLY COMPACTED #1 & #2 CRUSHED STONE (NYSDOT GRADATION TABLE 703.4 MIXED EQUALLY). THE STONE BEDDING SHALL EXTEND SIX (6) INCHES OUTSIDE ALL SIDES OF CATCH BASIN.

FIELD INLET DETAIL

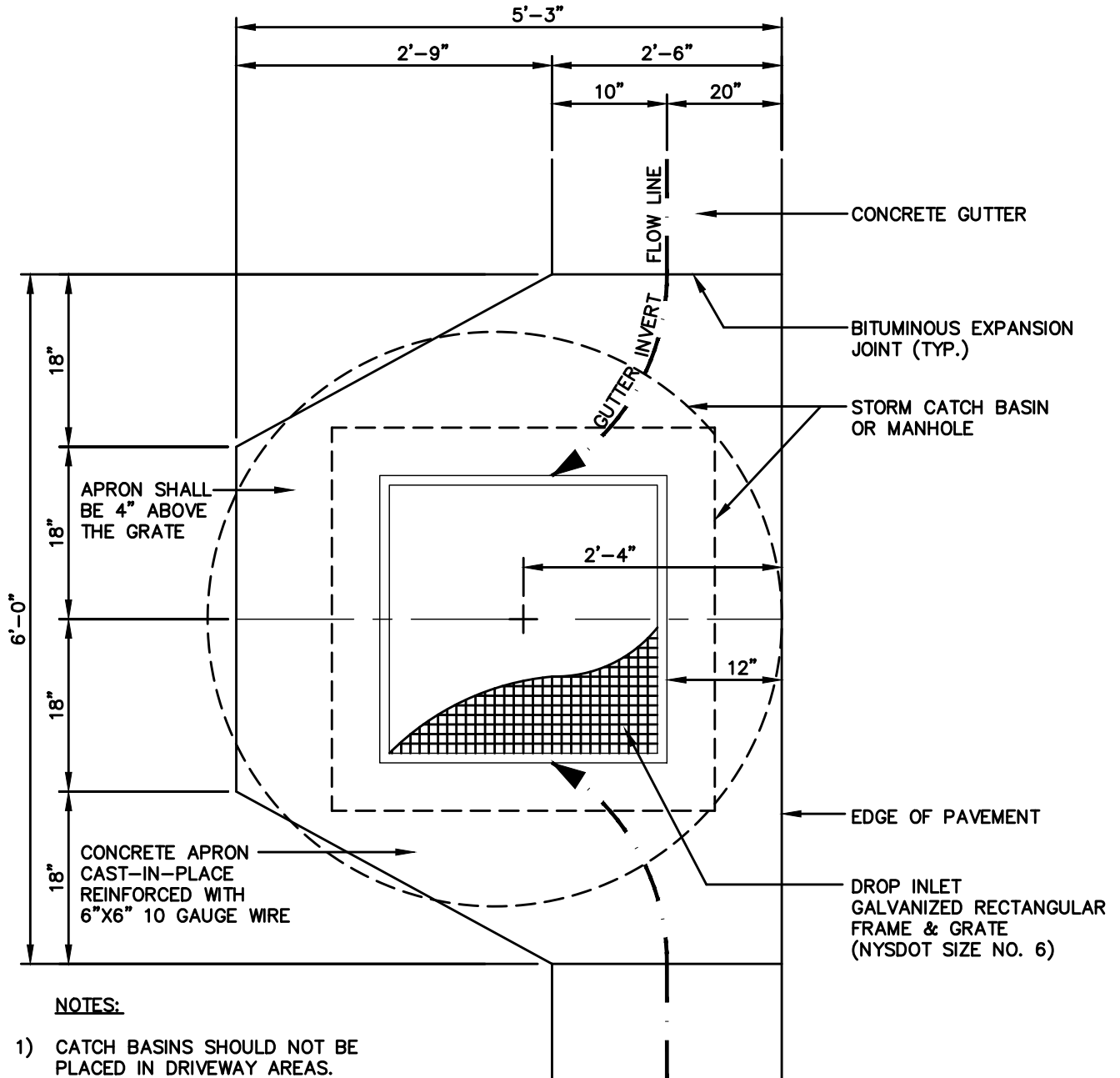
N.T.S.

TOWN OF AVON



DROP INLET DETAIL
 N.T.S.

TOWN OF AVON

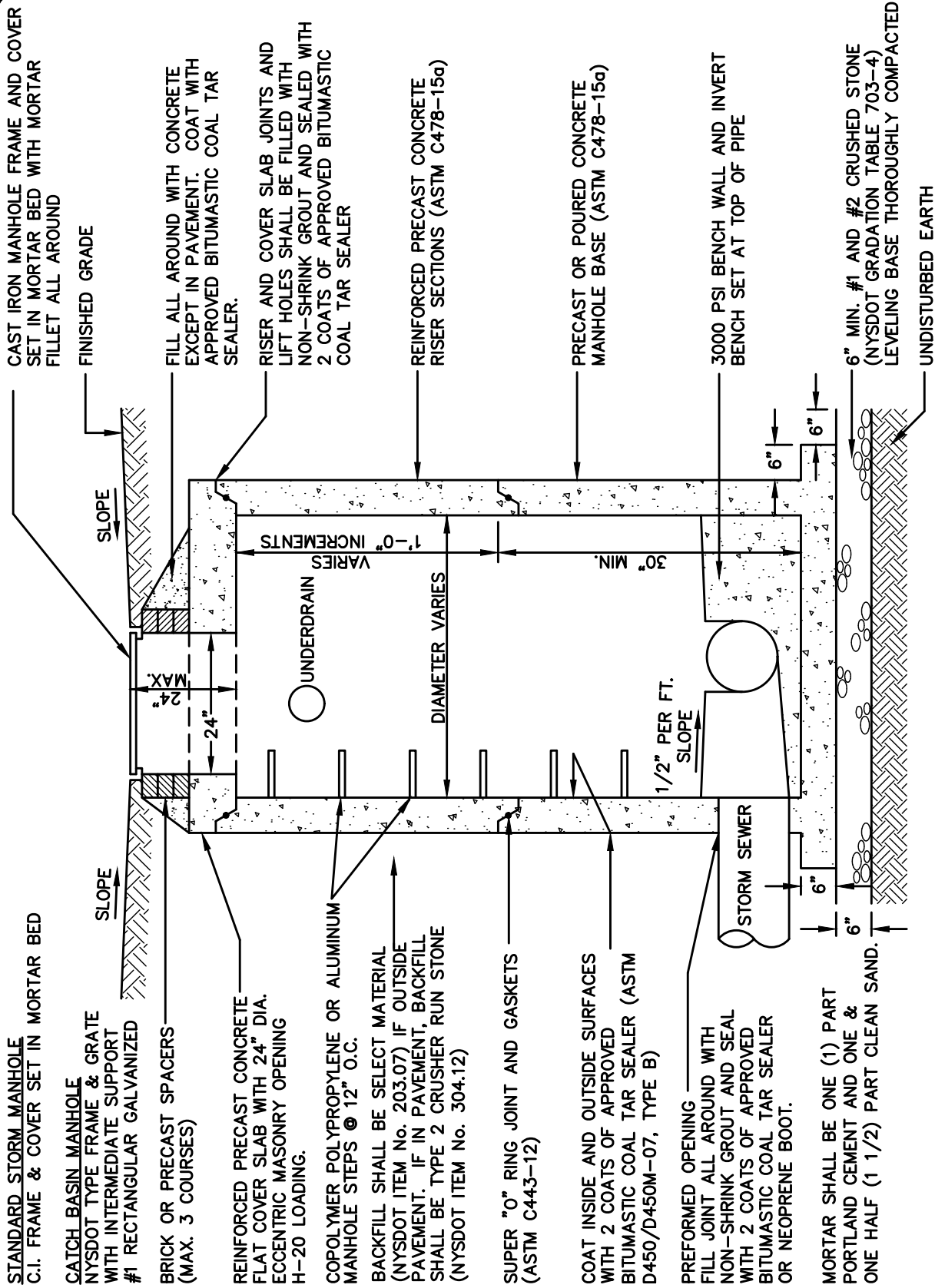


NOTES:

- 1) CATCH BASINS SHOULD NOT BE PLACED IN DRIVEWAY AREAS.
- 2) SPECIAL DESIGN MAY BE REQUIRED FOR STEEP GRADE SECTIONS.

GUTTER INLET APRON DETAIL
 (N.T.S.)

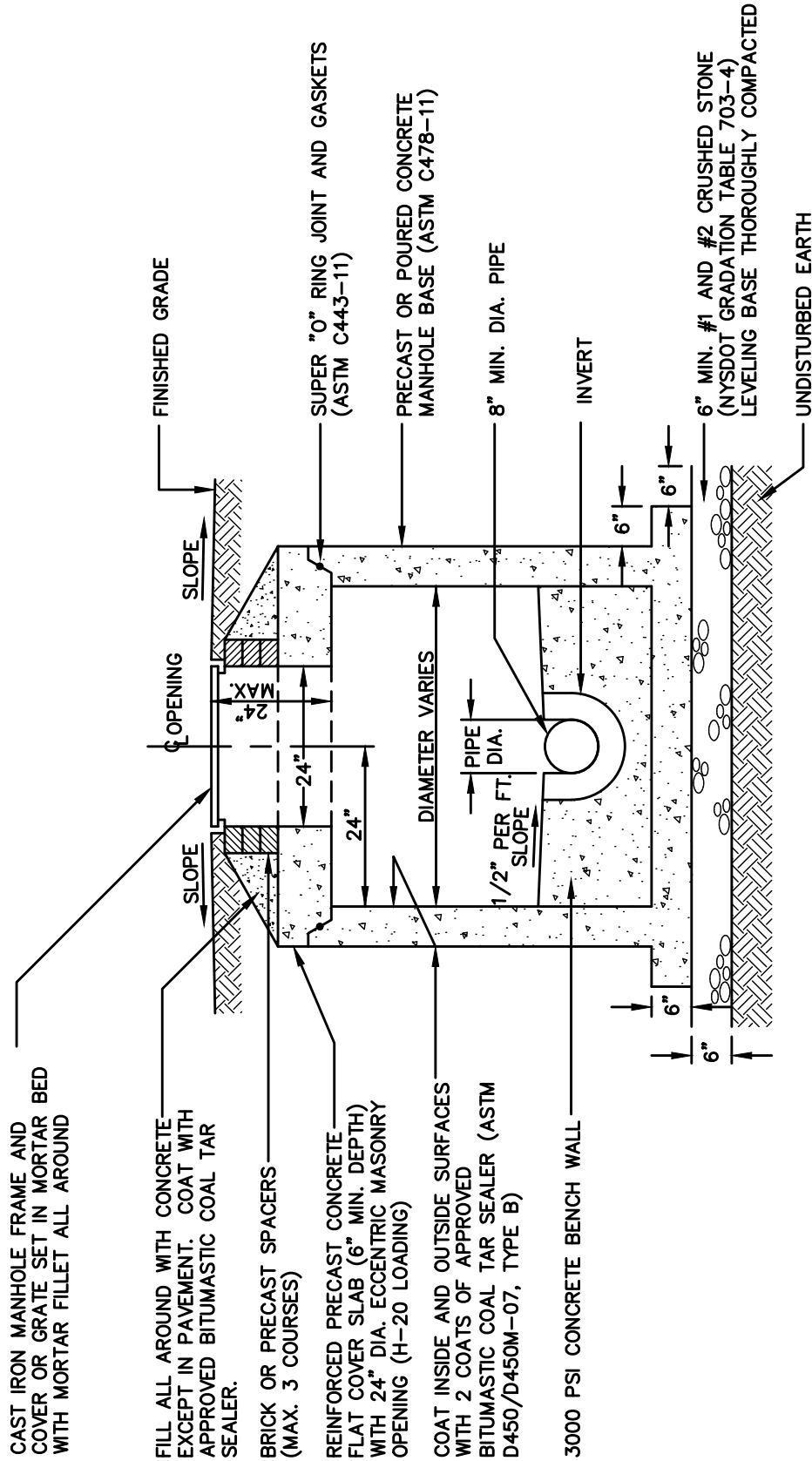
TOWN OF AVON



STORM SEWER MANHOLE AND CATCH BASIN MANHOLE

(N.T.S.)

TOWN OF AVON



NOTES:

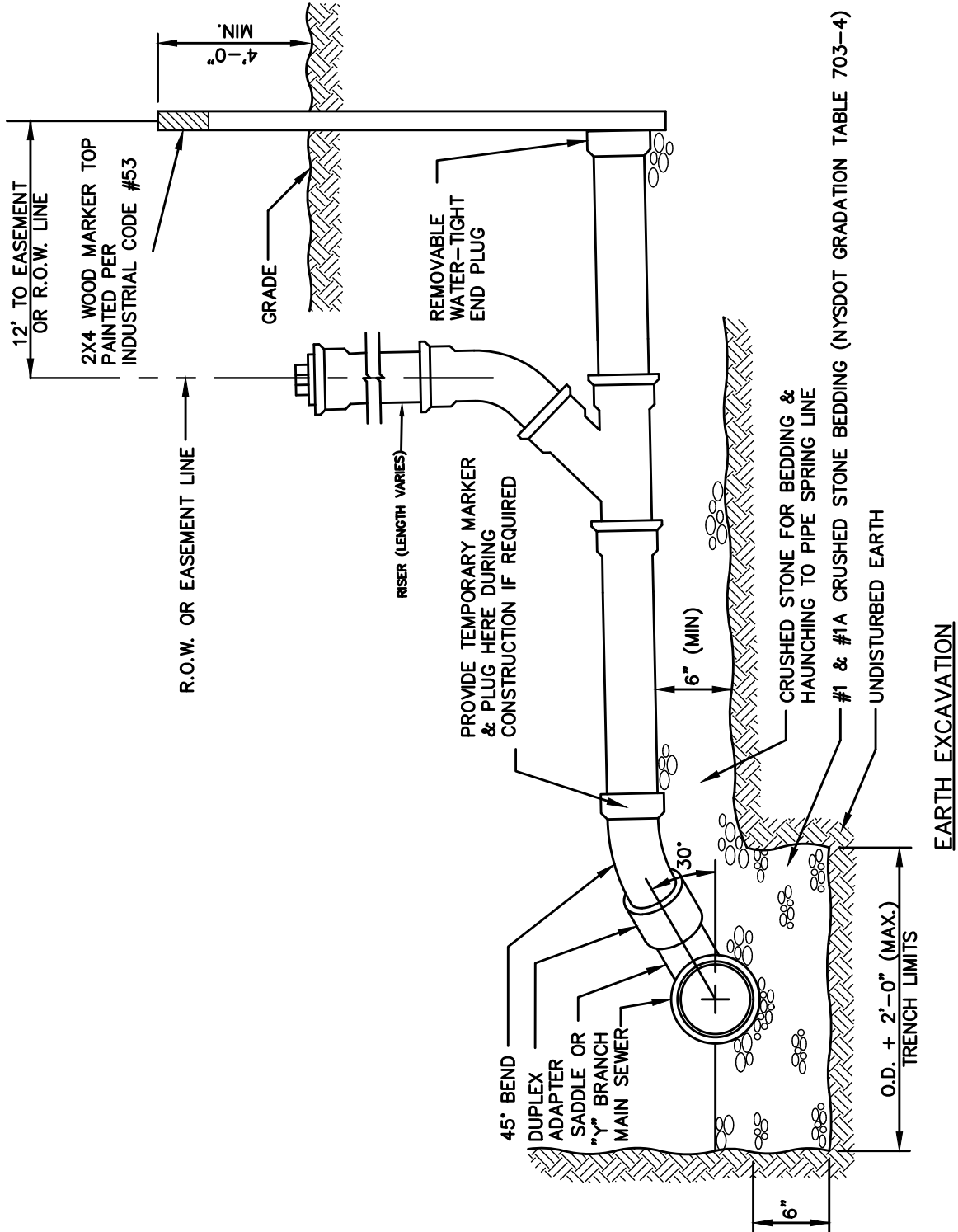
1. RISER AND COVER SLAB JOINTS AND LIFT HOLES SHALL BE FILLED WITH NON-SHRINK GROUT AND SEALED WITH 2 COATS OF APPROVED BITUMASTIC COAL TAR SEALER.
2. BACKFILL SHALL BE SELECT MATERIAL (NYS DOT ITEM No. 203.07) IF OUTSIDE PAVEMENT. IF IN PAVEMENT, BACKFILL SHALL BE TYPE 2 CRUSHER RUN STONE (NYS DOT ITEM No. 304.12)

SHALLOW SEWER MANHOLE

(LESS THAN 4' DEEP)

(N.T.S.)

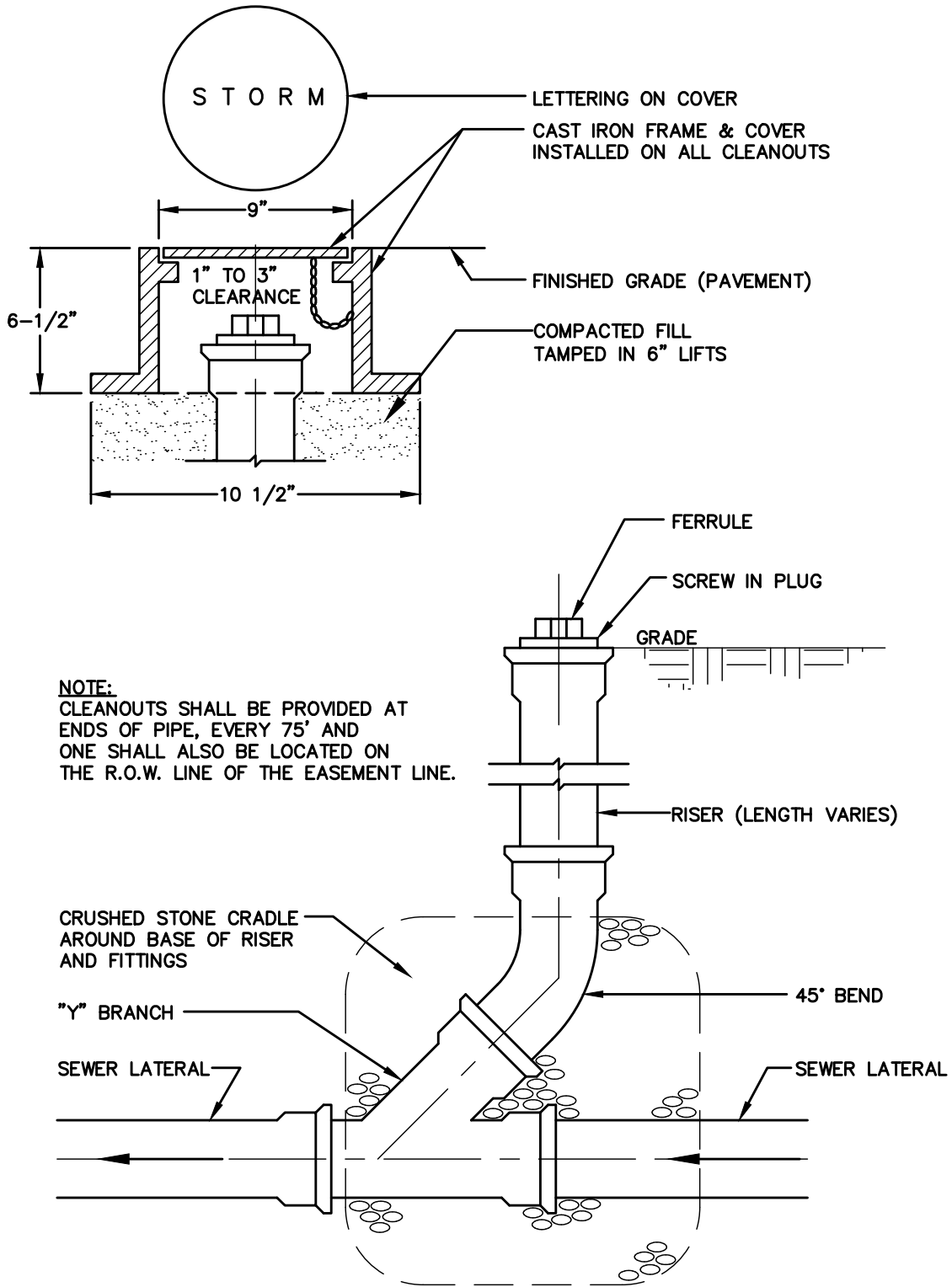
TOWN OF AVON



STORM LATERAL DETAIL

(N.T.S.)

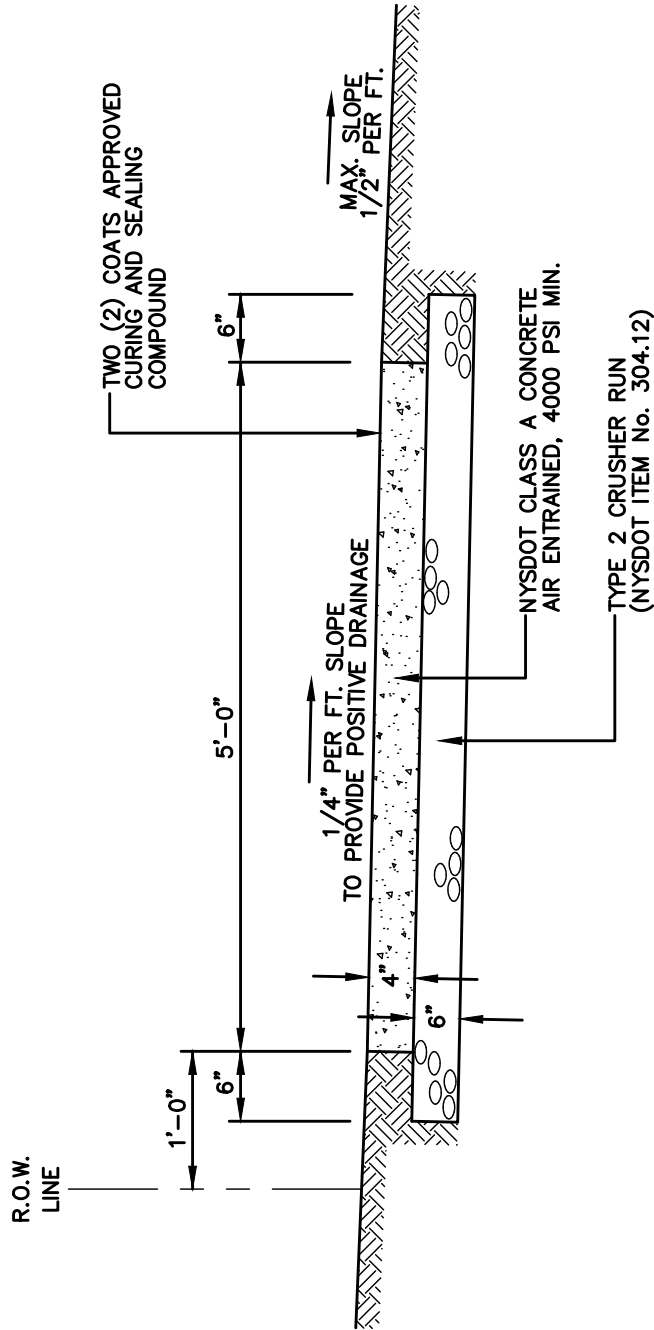
TOWN OF AVON



STORM CLEANOUT DETAIL

(N.T.S.)

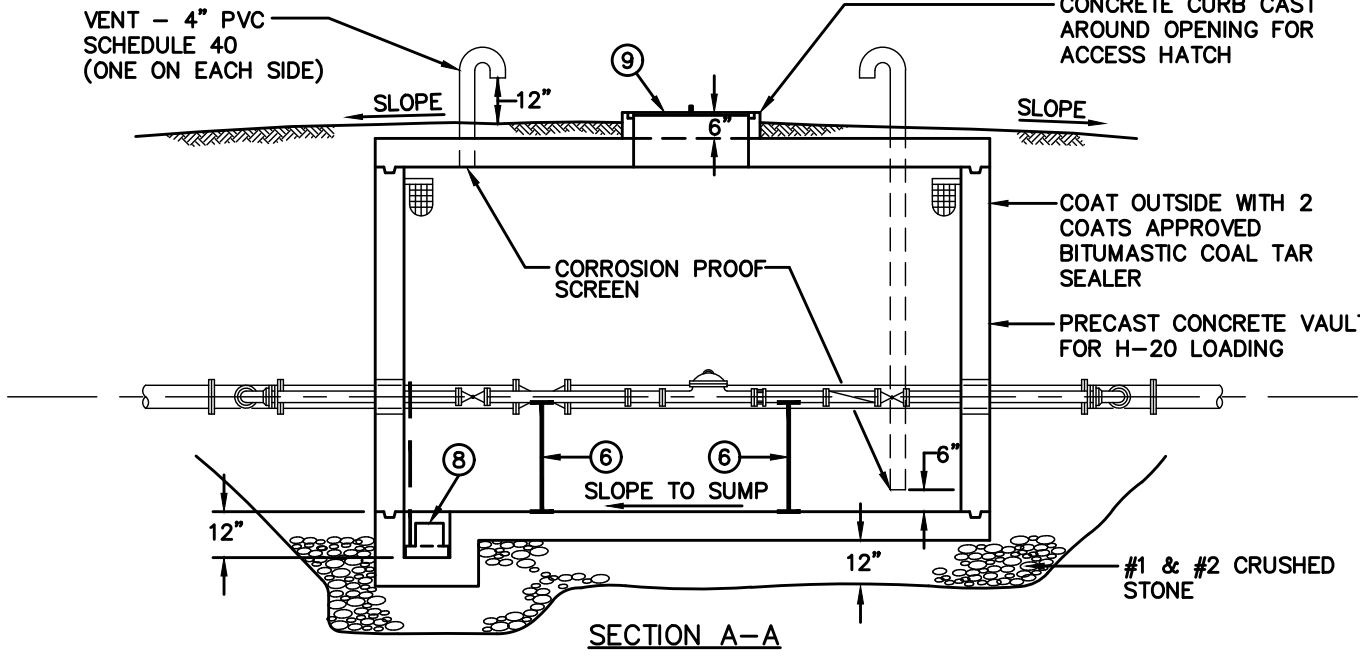
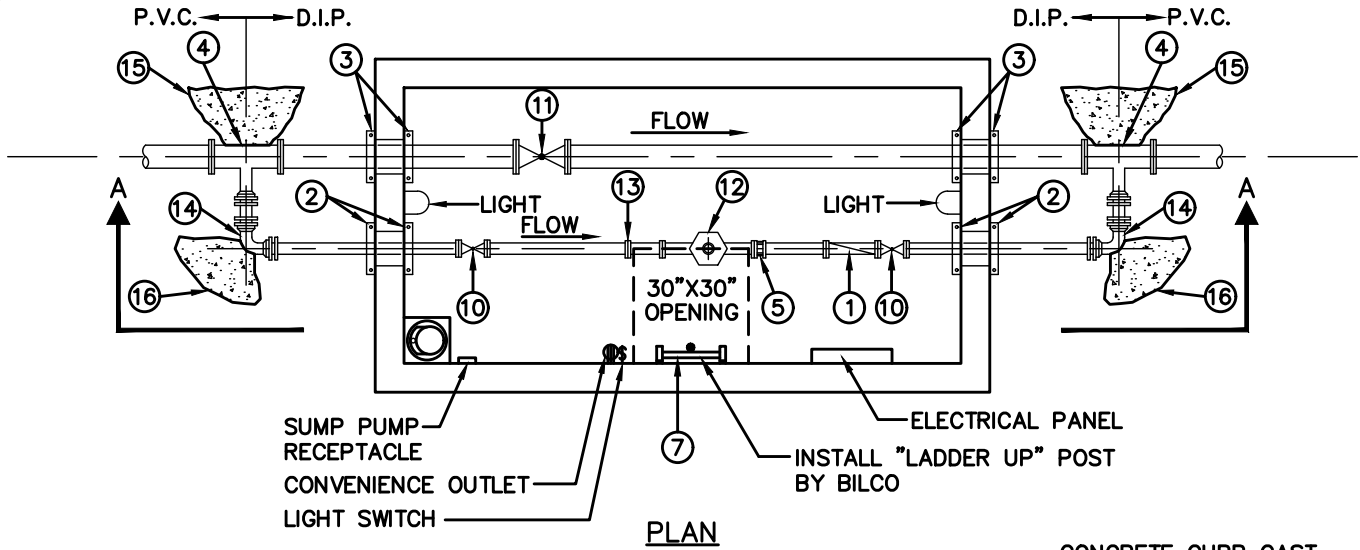
TOWN OF AVON



NOTE:
CONCRETE SIDEWALKS THROUGH DRIVEWAYS SHALL BE INCREASED TO A 5" THICKNESS AND SHALL INCLUDE 6"x6" WIRE MESH (10 GAUGE) FOR REINFORCEMENT.

SIDEWALK DETAIL
(N.T.S.)

TOWN OF AVON

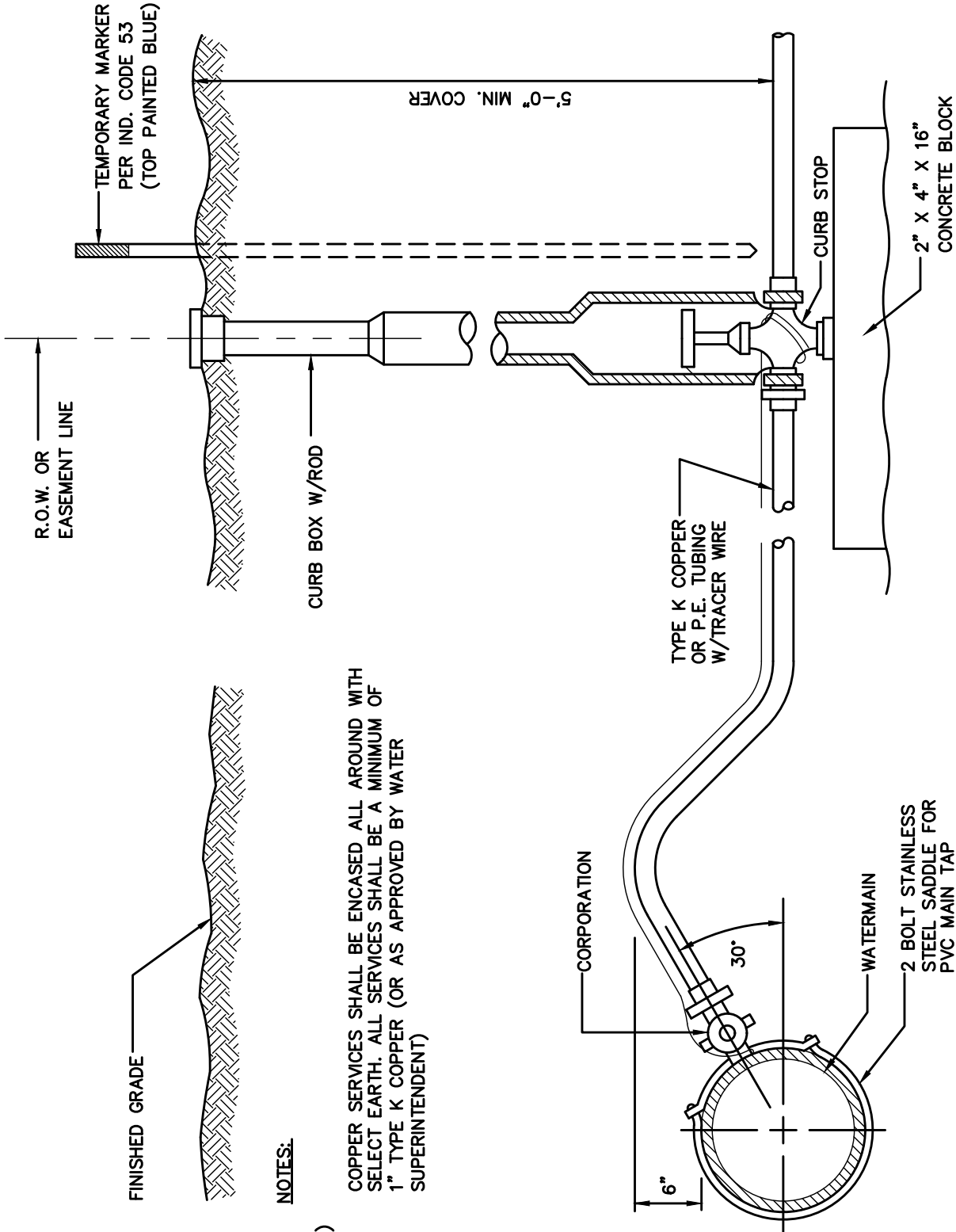


NOTE:
 THE INTERIOR OF THE METER VAULT SHALL BE CONSIDERED A WET, CORROSIVE LOCATION. ALL ELECTRICAL RACEWAYS, BOXES, PANELS AND DEVICES SHALL BE WATERTIGHT AND CORROSION RESISTANT.

- | | |
|--|---|
| ① SWING CHECK VALVE (FL-FL) | ⑨ BILCO ACCESS DOOR |
| ② SOCKET CLAMPS | TYPE J-2AL (2'-6" X 2'-6") H-20 LOADING |
| ③ SOCKET CLAMPS | ⑩ RESILIENT SEAT GATE VALVE (FL-FL) |
| ④ MJ TEE | ⑪ RESILIENT SEAT GATE VALVE (FL-FL) |
| ⑤ FLANGE ADAPTER | ⑫ BADGER RECORDALL COMPOUND METER |
| ⑥ PIPE SUPPORTS (4 REQ'D) | ⑬ RECORDER PLATE STRAINER |
| ⑦ LADDER | ⑭ MJ 90° BEND |
| ⑧ SUMP PUMP OR GRAVITY DISCHARGE TO GROUND SURFACE | ⑮ THRUST BLOCK PER APPENDIX BB |
| | ⑯ THRUST BLOCK PER APPENDIX BB |

TYPICAL WATER METER VAULT
 (N.T.S.)

TOWN OF AVON

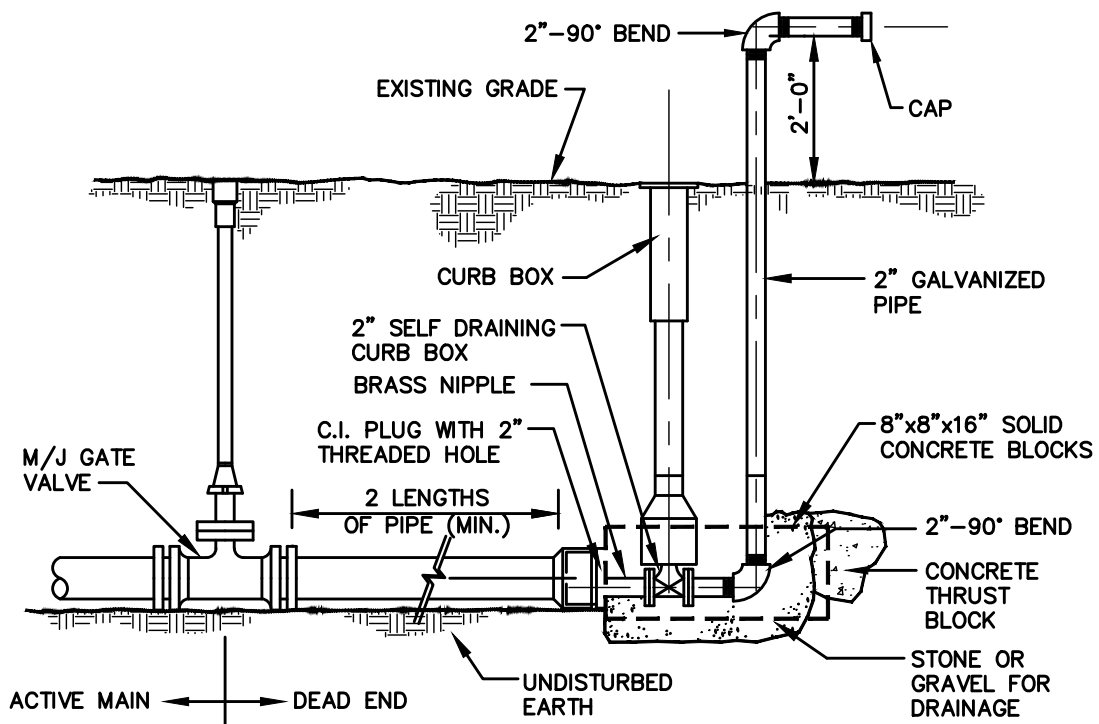


NOTES:

- 1.) COPPER SERVICES SHALL BE ENCASED ALL AROUND WITH SELECT EARTH. ALL SERVICES SHALL BE A MINIMUM OF 1" TYPE K COPPER (OR AS APPROVED BY WATER SUPERINTENDENT)

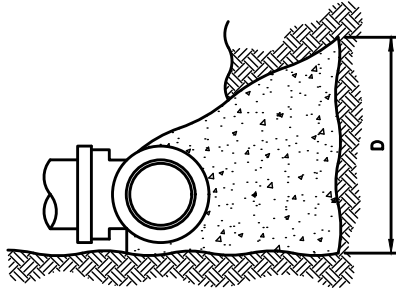
TYPICAL WATER SERVICE
 (N.T.S.)

TOWN OF AVON



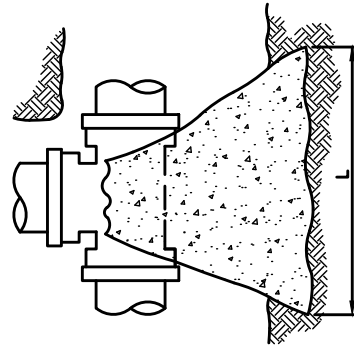
WATERMAIN BLOW-OFF DETAIL
(N.T.S.)

TOWN OF AVON

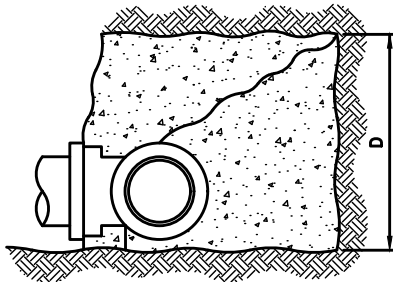


SECTION

TEE

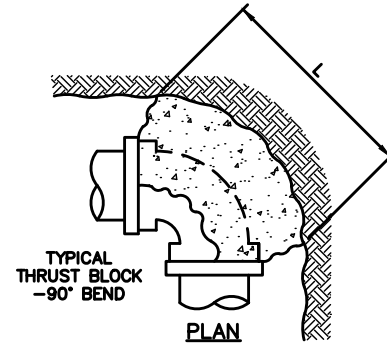


PLAN



SECTION

HORIZONTAL BEND



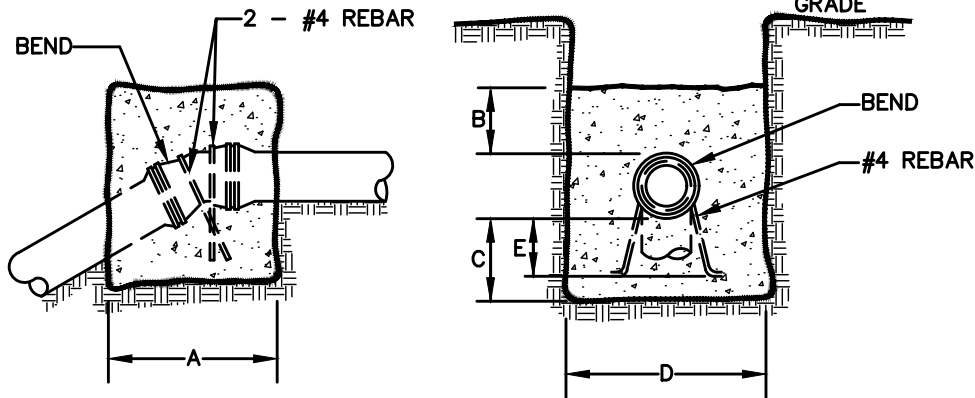
PLAN

PIPE SIZE (INCHES)	WORKING PRESSURE (PSIG)	TEE OF PLUG		90° BEND		45° BEND		22-1/2° BEND	
		L	D	L	D	L	D	L	D
4	150	2.00	1.25	2.75	1.25	2.00	1.00	1.25	.75
	250	2.75	1.50	3.00	2.00	2.50	1.25	1.50	1.00
6	150	2.75	2.00	4.00	2.00	2.75	1.50	2.25	1.00
	250	4.00	2.25	5.25	2.50	3.50	2.00	2.75	1.25
8	150	4.50	2.25	5.25	2.75	3.75	2.00	3.75	2.00
	250	5.50	3.00	6.75	3.50	5.25	2.50	3.75	1.75
10	150	5.25	3.00	6.75	3.25	4.75	2.50	3.50	1.75
	250	7.50	3.50	8.75	4.25	6.25	3.25	4.50	2.25
12	150	6.50	3.50	8.00	4.00	5.75	3.00	4.50	2.00
	250	8.75	4.25	10.25	5.25	7.75	3.75	5.25	2.75
14	150	7.75	4.00	9.00	4.75	6.75	3.50	5.00	2.40
	250	10.25	5.00	12.00	6.00	8.75	4.50	6.25	3.25
16	150	9.00	4.50	10.75	5.25	7.75	4.00	5.75	2.75
	250	11.50	5.75	14.00	6.75	10.25	5.00	7.00	3.75

HORIZONTAL THRUST BLOCK DETAIL

(N.T.S.)

TOWN OF AVON



VERTICAL BEND

BEND *	MINIMUM VOLUME OF CONCRETE	MINIMUM ALLOWABLE DIMENSIONS FOR VERTICAL THRUST BLOCKS (IN FEET)				
		DIMENSIONS	A	B	C	D
4" x 11-1/4"	0.06	1.00	1.00	1.00	0.67	0.50
4" x 22-1/2"	0.08	1.25	1.00	1.00	0.75	0.50
4" x 45"	0.17	2.00	1.00	1.00	1.00	0.50
6" x 11-1/4"	0.12	1.25	1.00	1.00	1.00	0.50
6" x 22-1/2"	0.20	1.75	1.00	1.00	1.25	0.50
6" x 45"	0.45	2.50	1.00	1.25	1.75	0.75
8" x 11-1/4"	0.22	1.50	1.00	1.25	1.00	1.00
8" x 22-1/2"	0.44	2.50	1.00	1.50	1.50	1.00
8" x 45"	1.3	4.00	1.50	2.25	2.00	1.75
10" x 11-1/4"	0.43	2.00	1.00	1.50	1.75	1.00
10" x 22-1/2"	0.85	3.00	1.25	1.75	2.00	1.25
10" x 45"	2.24	4.75	1.75	2.50	2.50	2.00
12" x 11-1/4"	0.58	2.25	1.00	1.50	2.00	1.00
12" x 22-1/2"	1.58	4.00	1.50	2.25	2.25	1.75
12" x 45"	3.83	5.75	2.00	3.00	3.00	2.50
14" x 11-1/4"	0.84	2.75	1.00	1.50	2.25	1.00
14" x 22-1/2"	2.38	4.75	1.75	2.50	2.50	2.00
14" x 45"	6.05	6.75	2.25	3.50	3.50	3.00
16" x 11-1/4"	1.17	3.00	1.00	1.50	2.75	1.00
16" x 22-1/2"	3.69	5.25	2.00	3.00	3.00	2.50
16" x 45"	8.43	7.50	2.50	3.75	4.00	3.25

NOTES:

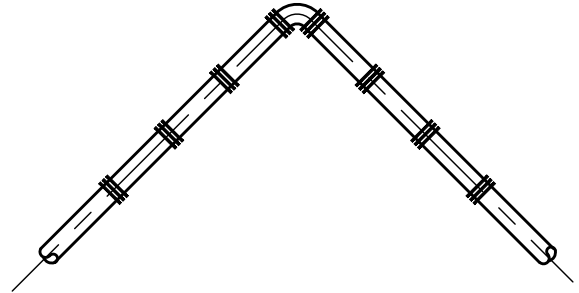
1. TIE RODS SHALL BE USED IN CONJUNCTION WITH CONCRETE THRUST BLOCKS FOR VERTICAL BENDS.
2. ALL DIMENSIONS ARE IN FEET AND VOLUMES ARE IN CUBIC YARDS.
3. BEARING AREAS ARE BASED ON ALLOWABLE SOIL BEARING PRESSURE OF 1500 PSF.
4. HEIGHT OF THRUST BLOCK SHOULD BE EQUAL TO OR LESS THAN 1/2 THE DEPTH FROM THE GROUND SURFACE TO THE BASE OF THE BLOCK.
5. ALL THRUST BLOCKS SHALL CURE A MINIMUM OF SEVEN (7) DAYS BEFORE ANY PRESSURE TESTS ARE CONDUCTED.
6. MINIMUM CONCRETE STRENGTH SHALL BE 3000 PSI.
7. THRUST BLOCKS FOR LARGER DIAMETER PIPES SHALL BE DESIGNED AND CERTIFIED BY THE DEVELOPERS ENGINEER.

VERTICAL THRUST BLOCK DETAIL

(N.T.S.)

TOWN OF AVON

NOM. PIPE SIZE(in.)	90° BEND	45° BEND	22.5° BEND	11.25° BEND	SIZE ON SIZE TEE	DEAD END
4	10	4	1	1	BR.	23
6	14	6	3	1	BR.	33
8	18	8	4	2	BR.	43
10	22	9	4	2	BR.	52
12	26	11	5	3	BR.	62
14	29	12	6	3	1	71
16	33	14	7	3	6	81
18	37	15	7	4	15	91
20	44	18	9	4	23	100
24	51	21	10	5	40	118



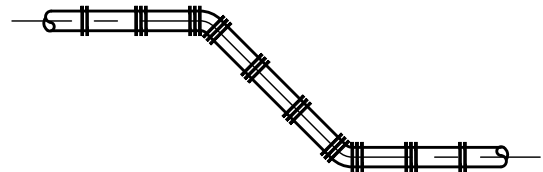
HORIZONTAL BEND

NOTES:

- **RECOMMENDED RESTRAINED LENGTHS FOR STRAIGHT TEES ASSUME A MINIMUM 20' LENGTH OF PIPE ATTACHED TO EACH SIDE OF THE RUN.
- **BR. ONLY INDICATES RESTRAINT AT TEE BRANCH ONLY.
- **ALL BENDS (DEGREE CHANGES) ARE CALCULATED AS HORIZONTAL.
- **DEAD-END SERVICE CONSTITUTES CAPS, PLUGS, VALVES AND HYDRANTS.

HORIZONTAL BEND RESTRAINT

NOM. PIPE SIZE(in.)	45° BEND	22.5° BEND	11.25° BEND
4	10/3	5/2	2/1
6	14/5	7/2	3/1
8	18/6	9/3	4/1
12	26/9	13/4	6/2
14	30/10	14/5	7/2
16	34/11	16/5	8/3
18	38/11	18/5	9/3
20	41/12	20/6	10/3
24	49/14	23/7	12/3



VERTICAL DOWN BEND AND OFFSET

NOTES:

- **ALL BENDS (DEGREE CHANGES) ARE CALCULATED AS VERTICAL. THE FIRST RESTRAINED LENGTH (FEET) IS FOR THE HIGH-SIDE BEND(S) AND THE SECOND RESTRAINED LENGTH (FEET) INDICATES THE LOW-SIDE BEND(S). THESE LENGTHS WERE CALCULATED USING A CONSISTANT 5 FOOT DEPTH OF COVER FOR THE WATERMAIN.
- **90° BENDS SHALL NOT BE USED FOR VERTICAL BENDS.

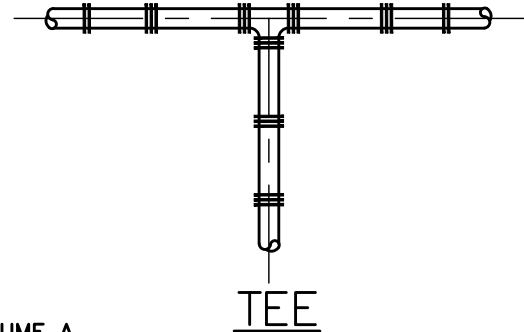
VERTICAL BEND RESTRAINT

MECHANICAL JOINT PIPE RESTRAINT TABLES

(N.T.S.)

TOWN OF AVON

NOM. PIPE SIZE(in.)	TEE (REDUC.)	STRAIGHT REDUCER
6 x 4	BR.	17
8 x 6	BR.	18
10 x 8	BR.	18
12 x 10	BR.	31
14 x 12	BR.	18
16 x 14	BR.	19
18 x 16	BR.	19
20 x 18	6	18
24 x 20	6	35



NOTES:

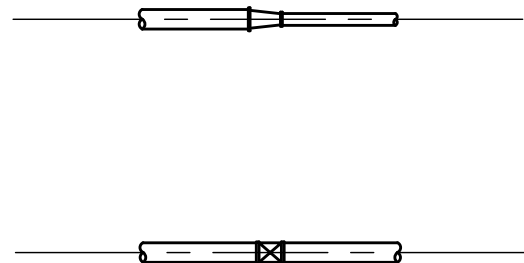
**RECOMMENDED RESTRAINED LENGTHS FOR STRAIGHT TEES ASSUME A MINIMUM 20' LENGTH OF PIPE ATTACHED TO EACH SIDE OF THE RUN.

**BR. ONLY INDICATES RESTRAINT AT TEE BRANCH ONLY.

**STRAIGHT REDUCER UNOBSERVED RESTRAINED LENGTHS INDICATE THE RECOMMENDED DISTANCES ON THE LARGE-END SIDE

RESTRAINED LENGTHS FOR REDUCING FITTINGS

NOM. PIPE SIZE(in.)	VALVE LR
4	24
6	33
8	44
10	53
12	63
14	72
16	82
18	91
20	100
24	118

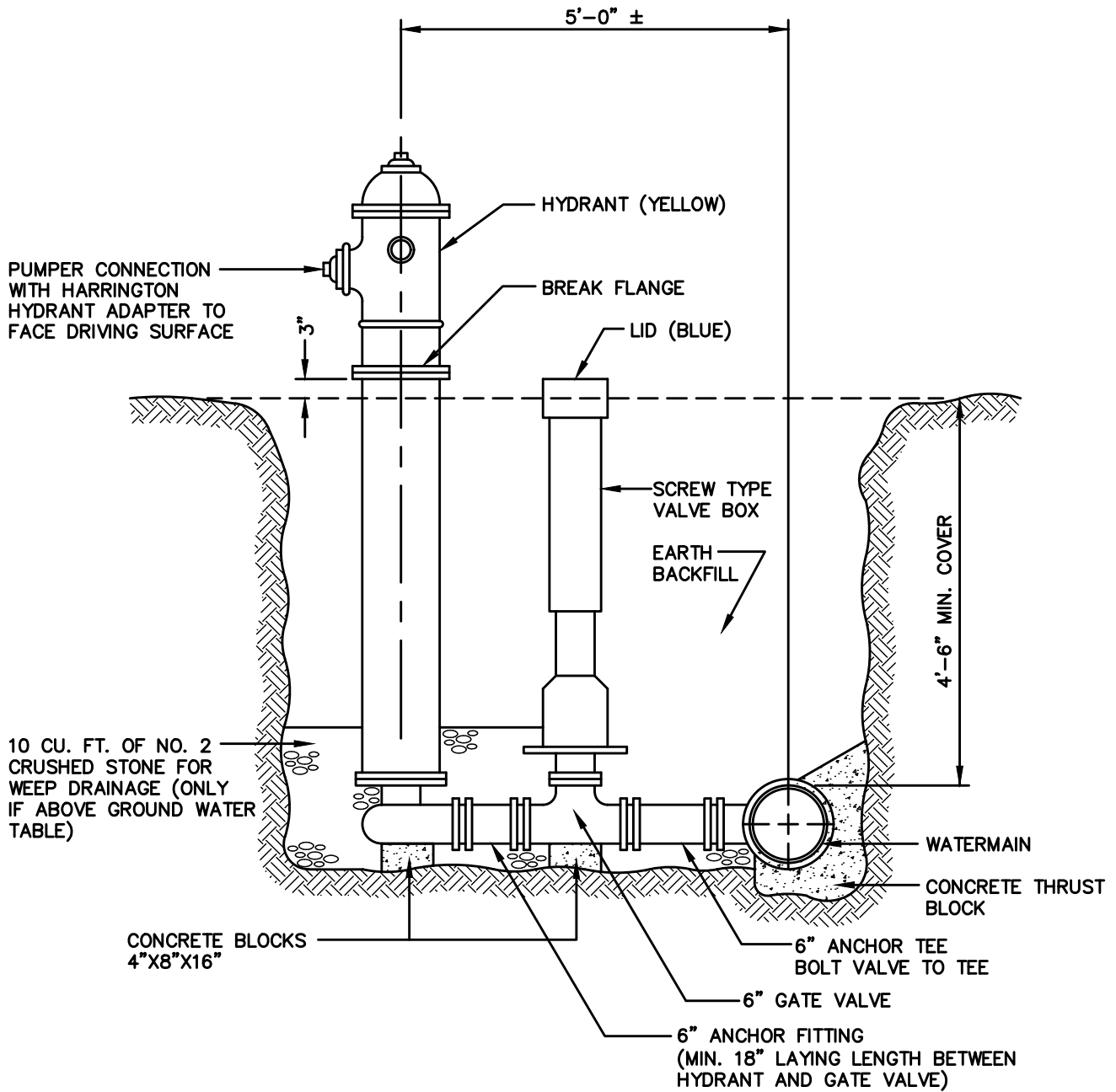


RESTRAINED LENGTHS FOR VALVES

MECHANICAL JOINT PIPE RESTRAINT TABLES

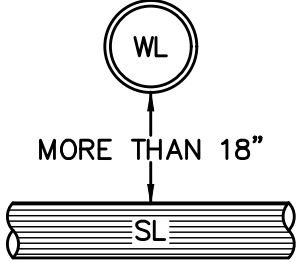
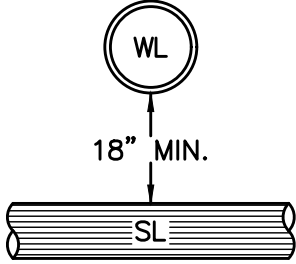
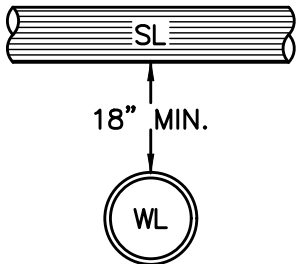
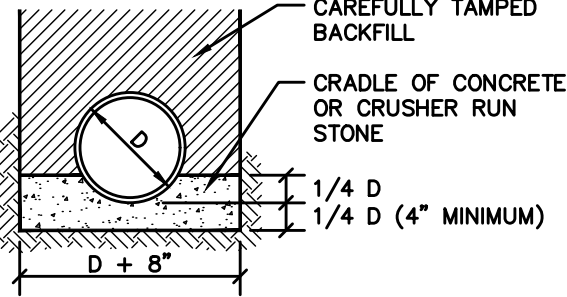
(N.T.S.)

TOWN OF AVON



HYDRANT UNIT
(N.T.S.)

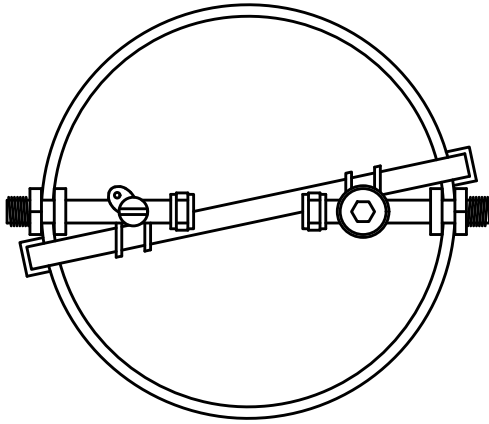
TOWN OF AVON

CONDITION	SCHEMATIC	REQUIREMENTS
<p>I WATER LINE ABOVE SEWER LINE</p>		<p>A) WATER LINE AND SEWER LINE PIPE LENGTHS TO BE CENTERED AT CROSSING. EACH LENGTH OF PIPE TO BE 10 FT. MINIMUM. B) BACKFILL WITH COMPACTED CRUSHER RUN STONE.</p>
<p>II WATER LINE ABOVE SEWER LINE</p>		<p>A) WATER LINE AND SEWER LINE PIPE LENGTHS TO BE CENTERED AT CROSSING. EACH LENGTH OF PIPE TO BE 10 FT. MINIMUM. B) WHEN BOTH WATER LINE AND SEWER LINE ARE NEW, SLEEVE SEWER LINE WITH STEEL CASING FOR 10 FT. EACH SIDE OF CROSSING. WHEN ONE LINE IS EXISTING, SLEEVE PIPE BEING INSTALLED WITH STEEL CASING FOR 10 FT. EACH SIDE OF CROSSING. C) BACKFILL WITH COMPACTED CRUSHER RUN STONE.</p>
<p>III SEWER LINE ABOVE WATER LINE</p>		<p>A) WATER LINE AND SEWER LINE PIPE LENGTHS TO BE CENTERED AT CROSSING. EACH LENGTH OF PIPE TO BE 10 FT. MINIMUM. B) SLEEVE SEWER LINE WITH STEEL CASING FOR 10 FT. EACH SIDE OF CROSSING. C) PROVIDE CRADLE OF CONCRETE OR CRUSHER RUN STONE (SEE TRENCH DETAIL BELOW) FOR WATER LINE AND SEWER LINE FOR 10 FT. EACH SIDE OF CROSSING.</p>
<p style="text-align: center;">NOTES</p> <p>WL (WATER LINE) SL (SEWER LINE) D (OUTSIDE DIAMETER OF PIPE)</p> <p>IN NO CASE SHALL PIPES BE CLOSER THAN 18" APART. DISTANCES ARE MEASURED BETWEEN OUTSIDES OF PIPE.</p>		

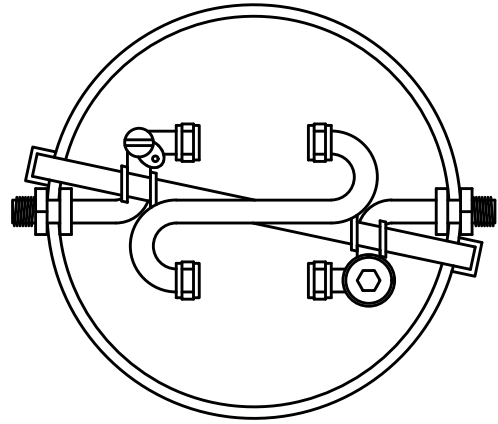
WATERMAIN/SEWER CROSSING DETAIL

(N.T.S.)

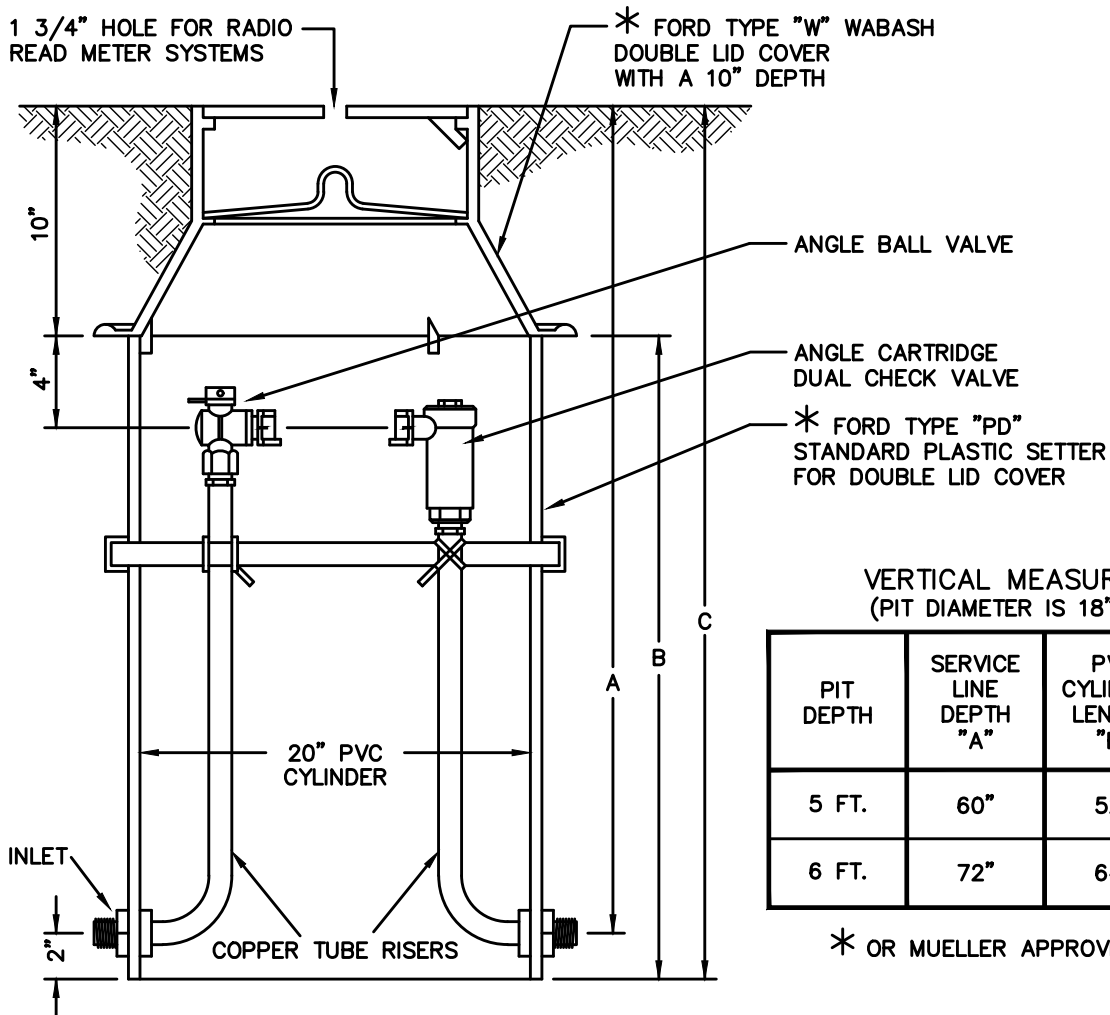
TOWN OF AVON



SINGLE METER SETTING



TANDEM SETTING



VERTICAL MEASUREMENTS
 (PIT DIAMETER IS 18" OR 20")

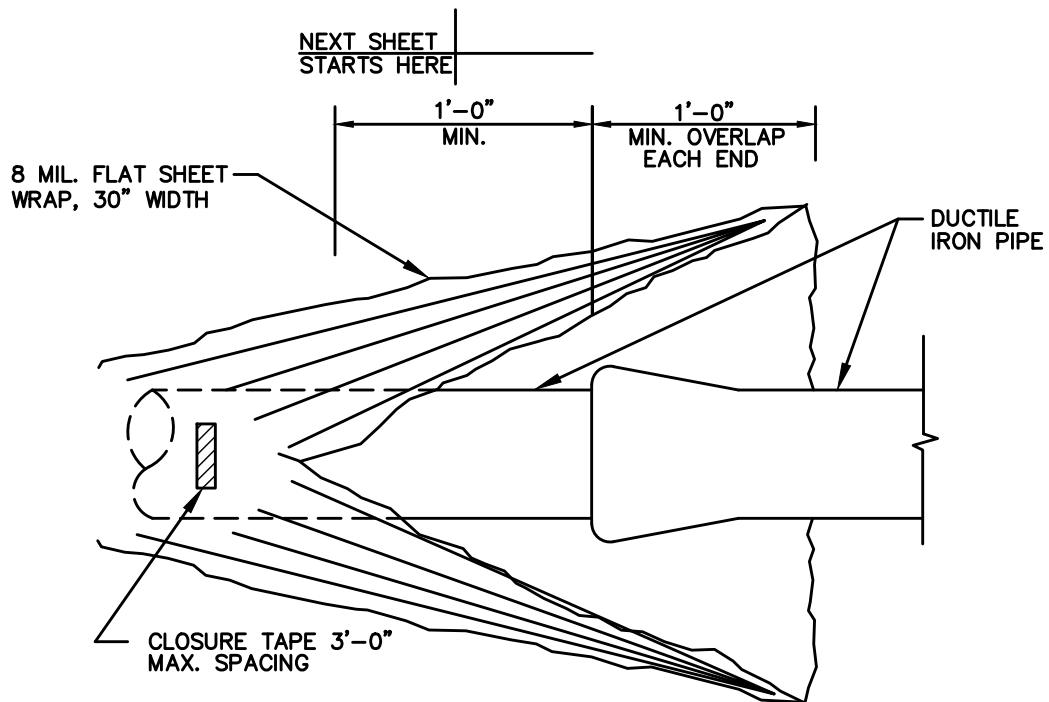
PIT DEPTH	SERVICE LINE DEPTH "A"	PVC CYLINDER LENGTH "B"	TOTAL PIT DEPTH "C"
5 FT.	60"	52"	62"
6 FT.	72"	64"	74"

* OR MUELLER APPROVED EQUAL

METER PIT DETAIL

(N.T.S.)

TOWN OF AVON



NOTE: ALL NEW PIPES AND FITTINGS SHALL BE ENCASED.

POLYETHYLENE ENCASEMENT DETAIL

(N.T.S.)

APPENDIX: BB
DATE: MAY 2016

MRB | *group*

ENGINEERING/ARCHITECTURE/SURVEYING, P.C.
145 Culver Road, Suite 160, Rochester, N.Y. 14620

TOWN OF AVON

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IN ACCORDANCE WITH DIG SAFELY. NEW YORK
(www.digsafelynewyork.com) CONTRACTORS MUST NOTIFY ALL
UTILITIES IN THE AREA TWO (2) WORKING DAYS BEFORE
EXCAVATION.

IN ADDITION, THE CONTRACTOR SHALL NOTIFY THE MUNICIPAL SEWER
AND WATER DEPARTMENTS WITHIN THE PROJECT AREA.

UTILITY NOTIFICATIONS

PIPE BEDDING DETAILS FOR WATER, SANITARY AND STORM MAINS

TYPE OF UTILITY: **Water Main**

PIPE MATERIAL: **Ductile Iron Pipe**

APPLICABLE PIPE SIZE: 4" I.D. 24"

TRENCH WIDTH (2): Min. O.D. +12"
 Max.O.D. +24"

TRENCH CONDITIONS: **Select Earth**

BEDDING SPECIFICATION: The trench bottom shall be true, even and free from stones, large dirt clods and any frozen materials with any dimension greater than 1-1/2". Loose material left by the excavator on the trench bottom or soft material shoveled down from the sidewalls will be adequate for bedding the pipe barrel so that it is fully supported. Depressions shall be provided in the trench bottom for pipe bells at each joint end to allow for withdrawal of pipe slings to assure that the pipe barrels lie flat on the trench bottom.

BACKFILL SPECIFICATION: All backfill material shall be free from cinders, ashes, refuse, vegetable or organic material, boulders, rocks or stones, frozen soil or other material that in the opinion of the Town is unsuitable. From the top of the bedding material to 12" above the top of the pipe, the backfill shall meet the standards of gradation for select granular fill (NYSDOT Spec. 203-2.02C) and be firmly tamped. Excavated material may be used for backfill provided that such material consists of loam, clay, sand, gravel or other materials that, in the opinion of the Town, are suitable for backfilling.

If there is a deficiency of backfill material due to a rejection of a portion of the excavated material, the required amount of approved select material shall be provided.

PIPE BEDDING DETAILS FOR WATER AND STORM MAINS

TYPE OF UTILITY: **Water Main**

PIPE MATERIAL: **Ductile Iron Pipe**

APPLICABLE PIPE SIZE: 4" I.D. 24"

TRENCH WIDTH (2): Min. O.D. +12"
Max.O.D. +24"

TRENCH CONDITIONS: **Rock or Hard Pan**

BEDDING SPECIFICATION: When excavation of rock or hard pan is encountered, all rock or hard pan material shall be removed to provide a minimum clearance of 6 inches below and on each side of all pipe, valves and fittings. In its place approved NYSDOT crushed stone screenings (NYSDOT gradation Table 703-4) or coarse sand shall be installed (minimum 6 inches) and tamped. From this point follow backfill instructions for Bedding in Select Earth.

BACKFILL SPECIFICATION: See instructions for Backfill in Select Earth.

TRENCH CONDITIONS: **Wet Earth (3)**

BEDDING SPECIFICATION: When the subgrade is found to be wet or unstable, such material shall be removed to a minimum of 8" or to the depth ordered by the owner and replaced with 6" of crushed stone, #2 and #3 mixed equally as per gradation in NYSDOT Table 703-4 and 2" of crushed stone screenings (NYSDOT Gradation Table 703-4) or approved coarse sand. From this point, follow instructions for Bedding in Select Earth.

BACKFILL SPECIFICATION: See instructions for Backfill in Select Earth.

PIPE BEDDING DETAILS FOR WATER AND STORM MAINS

TYPE OF UTILITY: **Water Main**

PIPE MATERIAL: **PVC Pressure Pipe**

APPLICABLE PIPE SIZE: 4" I.D. 12"

TRENCH WIDTH (2): Min. O.D. +12"
 Max.O.D. +24"

TRENCH CONDITIONS: **Select Earth**

BEDDING SPECIFICATION: The trench bottom shall be true, even and free from stones, large dirt clods or any frozen material with any dimension greater than 1/2" for PVC and 1-1/2" for RTRP. Generally, loose material left by the excavator on the trench bottom or soft material shoveled down from the sidewalls will be adequate for bedding the pipe barrel so that it is fully supported. Depressions shall be provided in the trench bottom for pipe bells at each joint and to allow for withdrawal of pipe slings. This is to assure that the pipe barrel lies flat on the trench bottom.

BACKFILL SPECIFICATION: initial backfill material shall be select earth fill free from rocks, dirt clods or frozen material with any dimension greater than 1/2" for PVC and 1-1/2" for RTRP. It shall extend twelve inches above the top of the pipe be properly tamped.

If such material is not available on site then approved crushed stone screenings (NYSDOT Gradation Table 703-4) or coarse sand shall be provided.

The balance of the backfill need not be as carefully selected as the initial material. It should, however, be free of large stones which could damage the pipe. It shall be placed in uniform layers in such a manner as to provide a uniformly dense backfill load on the pipe and avoid unfilled spaces in the backfill. Rolling equipment shall not be used until a minimum of 30" for RTRP and 18" for PVC of backfill material cover the top of the pipe.

PIPE BEDDING DETAILS FOR WATER AND STORM MAINS

TYPE OF UTILITY: **Water Main**

PIPE MATERIAL: **PVC Pressure Pipe**

APPLICABLE PIPE SIZE: 4" I.D. 12"

TRENCH WIDTH (2): Min. O.D. +12"
Max.O.D. +24"

TRENCH CONDITIONS: **Rock or Hard Pan**

BEDDING SPECIFICATION: See Instructions for Ductile Iron Pipe, Bedding in Rock or Hard Pan.

BACKFILL SPECIFICATION: See Instructions for Ductile Iron Pipe, Backfill in Rock or Hard Pan.

TRENCH CONDITIONS: **Wet Earth (3)**

BEDDING SPECIFICATION: See Instructions for Ductile Iron Pipe, Bedding in Wet Earth.

BACKFILL SPECIFICATION: See Instructions for Ductile Iron Pipe, Backfill in Wet Earth.

PIPE BEDDING DETAILS FOR WATER AND STORM MAINS

TYPE OF UTILITY: **Storm Sewer**

PIPE MATERIAL: **PVC**

APPLICABLE PIPE SIZE: 4" I.D. 15"

TRENCH WIDTH (2): Min. O.D. +18"
 Max.O.D. +24"

TRENCH CONDITIONS: **Select Earth (3)**

BEDDING SPECIFICATION: The trench bottom shall be true, even and free of large stones, large dirt clods and any other frozen material as approved by the Engineer. A minimum of three inches of No. 1 and No. 1A crushed stone mixed equally (NYSDOT Gradation Table 703-4) shall be installed and tamped to provide a satisfactory bedding for the pipe which is firm and gives continuous support of the pipe barrel. Depressions shall be hollowed in the trench bottom for pipe bells at all joints in this granular lift.

BACKFILL SPECIFICATION: Initial backfill from the top of the pipe bedding material to the spring line of the pipe shall consist of No.1 and No. 1A crushed stone (NYSDOT Gradation Table 703-4), mixed equally.

From the spring line of the pipe to twelve inches above the top of the pipe, approved select backfill material free of large stones, dirt clods or frozen material with any dimension greater than 1-1/2" shall be installed.

The remainder of the backfill material need not be as carefully selected as the initial backfill. Large stones shall be avoided that could damage the installed pipe when dropped or when forced through the soil cushion of the initial backfill.

The consolidation of the final backfill above the initial material has no effect, except for weight, on flexible pipe performance. Therefore, its placement and compaction requirements shall be as dictated with consideration of the proposed surface use.

PIPE BEDDING DETAILS FOR WATER AND STORM MAINS

TYPE OF UTILITY: **Storm Sewer**

PIPE MATERIAL: **PVC**

APPLICABLE PIPE SIZE: 4" I.D. 15"

TRENCH WIDTH (2): Min. O.D. +18"
 Max.O.D. +24"

TRENCH CONDITIONS: **Rock or Hard Pan**

BEDDING SPECIFICATION: A minimum cushion of six inches of No. 1 and No. 1A crushed stone (NYSDOT Gradation Table 703-4) shall be used when excavating through rock or hard pan. The remainder of the bedding instructions shall be as those for Bedding in Select Earth.

BACKFILL SPECIFICATION: See instructions for PVC Sewer Pipe, Backfill in Select Earth.

TRENCH CONDITIONS: **Wet Earth (3)**

BEDDING SPECIFICATION: in addition to the bedding required for PVC Sewer Pipe in Select Earth, an additional six inches of No. 2 and No.3 crushed stone (NYSDOT Gradation Table 703-4) mixed equally shall be installed to support the specified bedding material, 3" of No. 1 and No. 1A crushed stone.

BACKFILL SPECIFICATION: See instructions for PVC Sewer Pipe, Backfill in Select Earth.

PIPE BEDDING DETAILS FOR WATER AND STORM MAINS

TYPE OF UTILITY: **Storm Sewer**

PIPE MATERIAL: **Reinforced Concrete Pipe (RCP) and Corrugated Steel Pipe (CSP), Corrugated PVC**

APPLICABLE PIPE SIZE: 12" I.D. 27" for RCP
 12" I.D. 24" for CSP
 12" I.D. 24" for C. PVC

TRENCH WIDTH (2): Max. O.D. +24"

TRENCH CONDITIONS: **Select Earth**

BEDDING SPECIFICATION: See instructions for PVC Sewer Pipe, Bedding in Select Earth and substitute No. 1 and No. 2 crushed stone, mixed equally, for No. 1 and No. 1A crushed stone.

BACKFILL SPECIFICATION: See instructions for PVC Sewer Pipe, Backfill in Select Earth and substitute No. 1 and No. 2 crushed stone, mixed equally, for No. 1 and No. 1A crushed stone.

TRENCH CONDITIONS: **Rock or Hard Pan**

BEDDING SPECIFICATION: See instructions for PVC, Sewer Pipe, Bedding in Rock or Hard Pan and substitute No. 1 and No. 2 crushed stone, mixed equally, for No. 1 and No. 1A crushed stone.

BACKFILL SPECIFICATION: See instructions for PVC Sewer Pipe, Backfill in Select Earth and substitute No. 1 and No. 2 crushed stone, mixed equally, for No. 1 and No. 1A crushed stone.

TRENCH CONDITIONS: **Wet Earth (3)**

BEDDING SPECIFICATION: See instructions for PVC, Sewer Pipe, Bedding in Wet Earth and substitute No. 1 and No. 2 crushed stone for No. 1 and No. 1A crushed stone.

BACKFILL SPECIFICATION: See instructions for PVC Sewer Pipe, Backfill in Select Earth and substitute No. 1 and No. 2 crushed stone for No. 1 and No. 1A crushed stone.

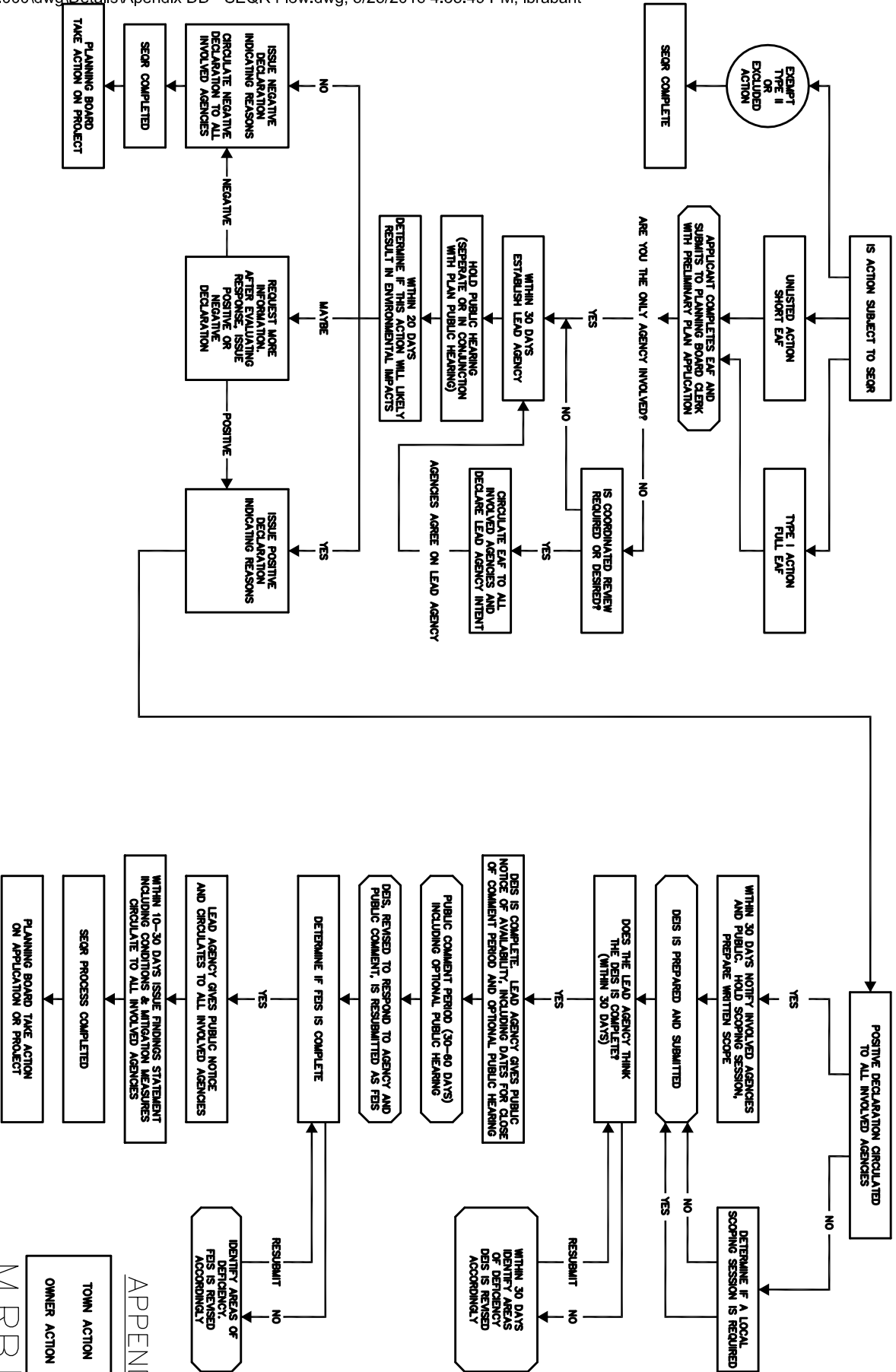
PIPE BEDDING DETAILS FOR WATER AND STORM MAINS

GENERAL NOTES:

- (1) These details are to be used by developers as minimum standards of design. Individual projects, local soil conditions and intended use are the design parameters that should be considered by the developer's Engineer when he/she designs the bedding requirements for a proposed development.
- (2) Trenches shall be of such extra width, when required, to permit placement of timber supports, sheeting, bracing and appurtenances.
- (3) When wet earth or other unstable sub-grade conditions are encountered, the pipe diameter and height of fill will be the controlling factors for additional stone bedding requirements.

SEQR BASIC FLOW CHART

TOWN OF FARMINGTON



APPENDIX: DD

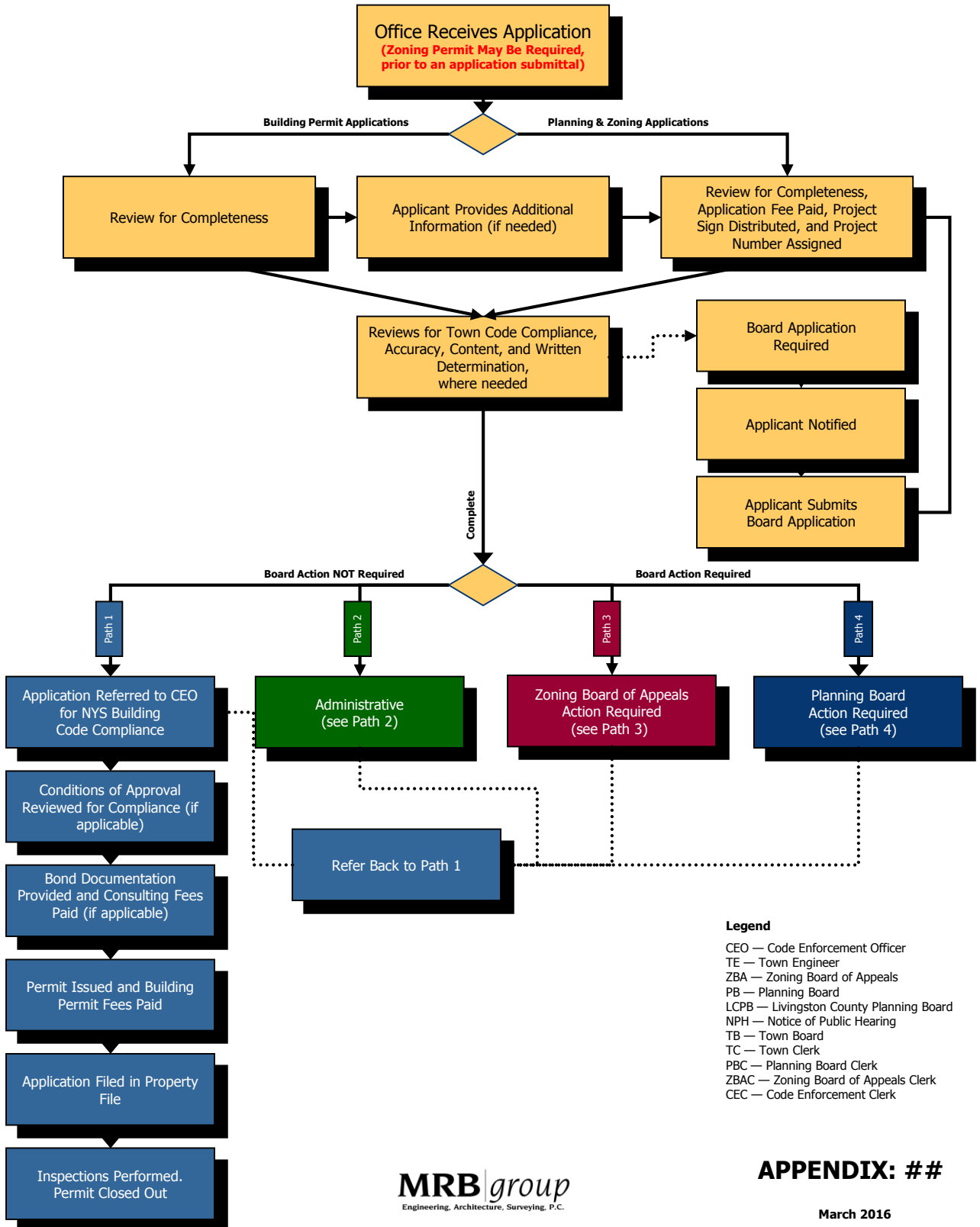
TOWN ACTION

OWNER ACTION

MRB | group

Building and Zoning Department: Action Chart

Application Process

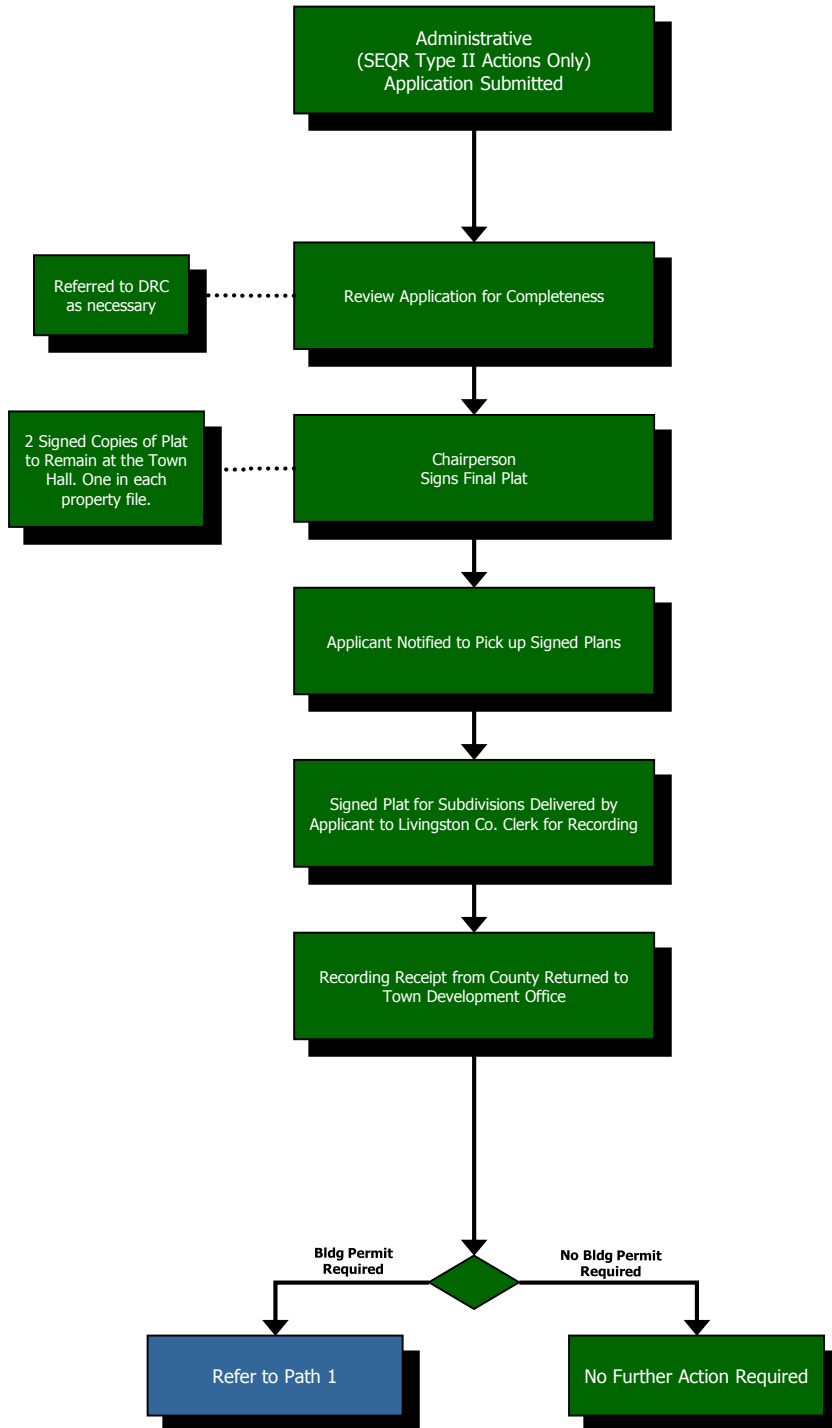


Legend

- CEO — Code Enforcement Officer
- TE — Town Engineer
- ZBA — Zoning Board of Appeals
- PB — Planning Board
- LCPB — Livingston County Planning Board
- NPH — Notice of Public Hearing
- TB — Town Board
- TC — Town Clerk
- PBC — Planning Board Clerk
- ZBAC — Zoning Board of Appeals Clerk
- CEC — Code Enforcement Clerk

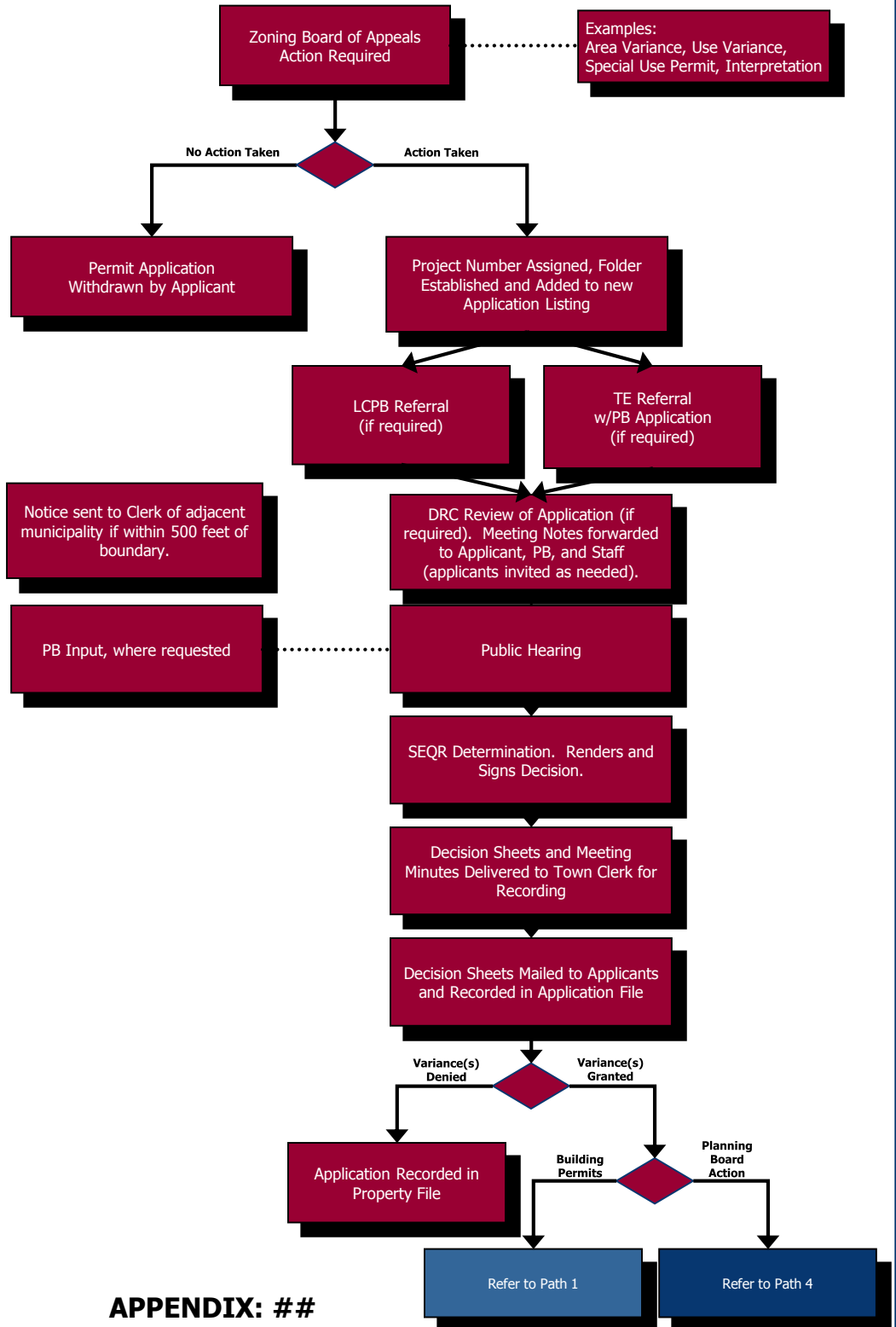
Building and Zoning Department: Action Chart

Administrative (Path 2)



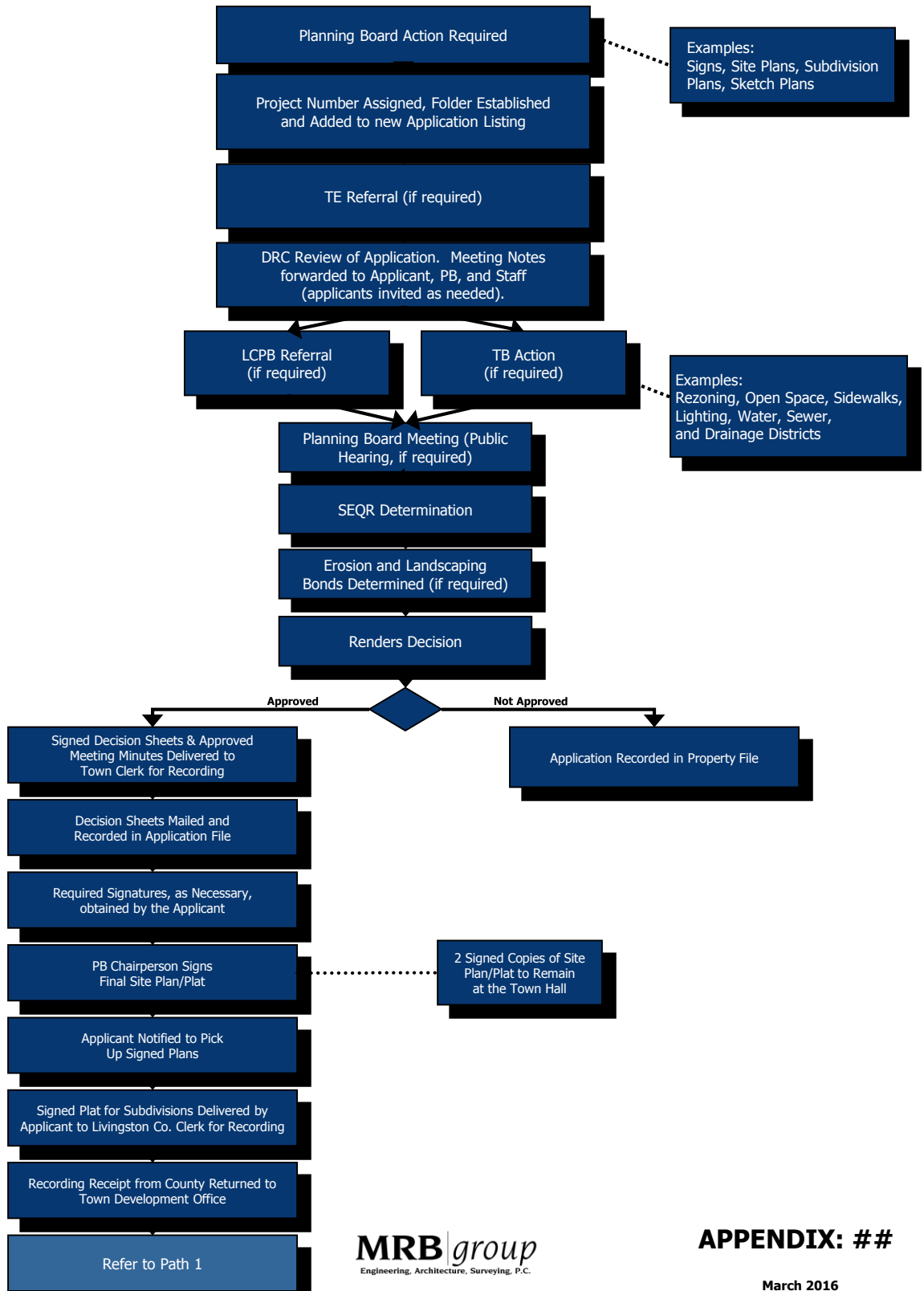
Building and Zoning Department: Action Chart

Zoning Board of Appeals (Path 3)



Building and Zoning Department: Action Chart

Planning Board (Path 4)



TOWN OF AVON
BUILDING AND ZONING DEPARTMENT
OPERA BLOCK BUILDING
23 GENESEE STREET
AVON, NEW YORK 14414
 PHONE: (585) 226-2425 • FAX: (585) 226-9299
http://www.avon-ny.org/index_town.html

SWPPP & Construction Process Checklist

Contact Information:

Project Name/Number: _____ Date: _____

Property Owner/Developer: _____ Foreman: _____

Phone: _____ Email: _____ Fax: _____

Project Information:

Property Address: _____

Tax Account #: _____ Zoning District: _____

Project Description: _____

SWPPP Info:

<input type="checkbox"/> Greater than 1 Acre of Disturbance		<input type="checkbox"/> Greater than 5 Acres of Disturbance	
Item	Provided	Date Completed	
Signed Notice of Intent (NOI)			
Acknowledgement letter from NYSDEC			
Signed Owner & Contractors Certification Forms			
5 Acre Waiver Request & Approval			
Grading/ Erosion Control Phasing Plan			
SPDES General Permit			
SWPPP Inspection Form			

Final Subdivision and Site Plans Submittals	Date Signed
<input type="checkbox"/> Final Plans (Subdivision/Site Plan): Signed	____/____/____
<input type="checkbox"/> Filed with Livingston County	____/____/____
<input type="checkbox"/> Filed with Town Clerk	____/____/____

General

A Stormwater Pollution Prevention Plan (SWPPP) and permit coverage under the NYDEC - "SPDES General Permit for Stormwater Discharges from Construction Activities" are required for construction projects which will involve land disturbances of 43,560 square feet (one acre) or more. The requirements for stormwater pollution

prevention and erosion and sediment control are contained within the Site Design Criteria and Land Development Regulations of the Town of Avon Code and in the New York State Department of Environmental Conservation "SPDES General Permit for Stormwater Discharges from Construction Activities".

PRIOR TO CONSTRUCTION			
ITEM	REQ'D (Y/N)	DATE COMPLETE	COMMENTS
EASEMENTS & AGREEMENTS & SURETIES			
Easement Maps and Descriptions			
Stormwater Maintenance Agreement			
Surety/ LOC Provided			
Review by Town Engineer			
Review by Stormwater Manager			
Approved by Town Attorney			
Approved by Town Board			
Signed by Town Supervisor			
Filed with County Clerk			
Copy of Receipt of Recording Fee from County Clerk provided to Town Clerk			
PRECONSTRUCTION MEETING			
Preconstruction Meeting Date			
Final Meeting Minutes Received by Town			
CONTRACTORS & SUBCONTRACTORS IDENTIFIED <i>(General Permit Part III.A.6)</i>			
Trained Contractors Identified & Certification Statements Signed			
Certificates of Erosion & Sediment Control Training Provided <i>(General 1 Permit Appendix A – Definitions & Part III.A.6)</i>			
Qualified Inspector Identified <i>(General Permit Appendix A – Definitions & Part IV.C)</i>			
DURING CONSTRUCTION			
ITEM	REQ'D (Y/N)	DATE COMPLETE	COMMENTS
INSPECTIONS BY TOWN <i>(24 hour notice required)</i>			
SWPPP Onsite			
Temporary Control Measures Installed			
Site Clearing Completed			
Rough Grading Completed			
Site Temporary Stabilized			
INSPECTIONS BY TOWN <i>(Continued)</i>			
Site Final Grading Completed			
Site Permanently Stabilized			
Closeout of Construction			

Final Landscaping Installed			
SWPPP INSPECTIONS BY QUALIFIED INSPECTOR (electronic inspection reports w/ photos to be submitted to Stormwater Manager)			
Greater than 1-Acres of Disturbance Inspections Once every 7 days			
Greater than 5-Acres of Disturbance Inspection Twice every 7 days			
SWPPP Inspection Reports submitted to the Stormwater Manager weekly			
SWPPP Inspection Reports kept onsite within the project SWPPP			
CONSTRUCTION COMPLETED			
ITEM	REQ'D (Y/N)	DATE COMPLETE	COMMENTS
Proprietary & Non-Standard Control Measures Identified & Manuals Received			
Final Inspection Completed			
Maintenance Bond Accepted			
Dedication Process Completed			
Release of Surety/LOC approved by the Town Board			
NOTICE OF TERMINATION			
Site is Fully Stabilized			
Certification by Owner/ Operator			
Approved by Town Engineer			
CEO Approval			
POST CONSTRUCTION INSPECTIONS & MAINTENANCE			
Inspections & maintenance of stormwater facilities shall be performed in accordance with Chapter 48 – Site Design Criteria and Land Development Regulations of the Town of Avon Code, Appendix G of 2015 NYS Stormwater Management Design Manual, and as required in manuals for any proprietary and non-standard control measures.			

Town of Avon, NY
Wednesday, May 25, 2016

Chapter 113. Subdivision of Land

Article VI. Specifications for Preliminary Plats and Final Plats

§ 113-17. Preliminary plat.

Preliminary plats for major and minor subdivisions submitted to the Planning Board shall be drawn to a scale of not more than one inch equals 100 feet and shall show the following information, except as noted in § 113-18:

- A. The location of the property with respect to surrounding property and streets. There shall also be included a key map at a scale of one inch equals 500 feet, showing all streets, streams and property within 1,500 feet of the applicant's property. All property held by the applicant in the area should be identified.
- B. The location and appropriate dimensions of all existing property lines (include entire area proposed to be subdivided and remainder of the tract owned by the subdividing owner).
- C. All pertinent features such as existing structures, wells, septic systems, streets, railroads, water bodies, streams, large trees, wetlands, wooded areas, floodplains and ditches that may influence the design of the subdivision and topography at a vertical contour interval of not more than five feet, unless waived by the Planning Board. Such features shall be shown on and within 200 feet of the subdivision.
- D. The location, width and approximate grade of all proposed streets. Approximate elevations shall be shown at the beginning and end of each street, at street intersections and at all points where there is a decided change in the slope or direction.
- E. The approximate location, dimensions and area of all proposed or existing lots.
- F. The approximate location and dimensions of all property proposed to be set aside for playground or park use.
- G. The names of all property owners of record or the names of developments within 500 feet.
- H. The name and address of the owner or owners of land to be subdivided, the name and address of the subdivider, if other than the owner, and the name of the land surveyor and land planner or engineer.
- I. The date, North point and scale.
- J. Acreage of tract to be subdivided, to nearest tenth of an acre.
- K.

Proposed provision of water supply, fire protection, disposal of sanitary waste, stormwater drainage, street trees, streetlighting fixtures, street signs and sidewalks, data on which must be available for consideration at this stage.

- L. Each block shall be numbered, and the lots within each block shall be numbered consecutively in accordance with the procedure established by the Town. The total number of residential lots shall be noted on the plat.
- M. The ground elevations of and distances to any buildings, wells and leach fields located within 100 feet of the proposed subdivision.
- N. Arrows or lines indicating the proposed method of conveyance and direction of surface drainage and storm drains. This shall include an indication of where the water will go once it leaves the site.
- O. All proposed development, including:
 - (1) Approximate location of the proposed structure and sewage disposal system, if appropriate.
 - (2) Finished grade of entire parcel (five-foot contour intervals), finished floor elevation.
 - (3) Trees, grass areas and other landscaping.
 - (4) Zoning setback line and actual setback dimensions.
 - (5) Driveways from highway, including turnaround and parking areas.
 - (6) Utility service locations.
 - (7) If the subdivision is not served by a public sanitary sewer, septic system details, including dimensions and elevations.
- P. Soil test data, to include the following:
 - (1) Deep hole test data to include:
 - (a) The date of the test.
 - (b) The location of test hole(s).
 - (c) The type of soil and thickness of each layer.
 - (d) The level of mineral deposits.
 - (e) The level of groundwater.
 - (f) The level of solid rock. If no solid rock is encountered, state "none."
 - (2) If not serviced by a public sewer system, percolation test data to include:
 - (a) The date of the test.
 - (b) The percolation rate.
 - (c) The location of test holes.
 - (d) The name of the person who conducted the test.
- Q. If the subdivision is not to be served by public water, a well detail shall be shown. A note shall be added to the plan stating, "The Town of Avon is not responsible for the quantity or quality of the water."

- R. A block for indicating changes to the plan.
- S. All other data as may be required by the Planning Board.
- T. The plan shall be clearly marked "preliminary plan."
- U. Remaining lands. If the application covers only a part of the subdivider's entire holding, a map of the entire tract, drawn to scale of not more than 400 feet to the inch, showing an outline of the planned area with its proposed streets and indication of the probable future street system with its grades and drainage in the remaining portion of the tract and the probable future drainage layout of the entire tract, shall be submitted. The part of the subdivider's holdings submitted for approval shall be considered in light of the entire holdings.

Town of Avon, NY
Wednesday, May 25, 2016

Chapter 113. Subdivision of Land

Article VI. Specifications for Preliminary Plats and Final Plats

§ 113-18. Minor subdivision preliminary plat waivers.

In the case of minor subdivisions only, the following informational requirements may be left off the preliminary plat, unless the Planning Board specifically requests inclusion.

- A. A permit to construct a sewage disposal system obtained from the Livingston County Health Department may be substituted for septic system details.
- B. If the application only covers a part of the subdivider's entire holdings, a plan showing an outline of the entire tract and possible future development areas may be substituted for § 113-17U.
- C. In the case of a minor subdivision, preliminary and final approval may be granted simultaneously. The plat shall include the information required for both submittals except where waived by the Planning Board.

Town of Avon, NY
Wednesday, May 25, 2016

Chapter 113. Subdivision of Land

Article VI. Specifications for Preliminary Plats and Final Plats

§ 113-19. Minor subdivision final plat.

In the case of minor subdivisions, the final subdivision plat application shall only include the following information:

- A. Items in Subsections **B, G, H, I, J, L, Q** and **R** from § 113-17.
- B. A copy of such covenants or deed restrictions as are intended to cover all or parts of the tract.
- C. An actual field survey of the boundary lines of the tract, giving complete descriptive data by bearings and distances, made and certified to by a licensed land surveyor. The corners of the tract shall also be located on the ground and marked by monuments, as approved by the Town Engineer, and shall be referenced and shown on the plat.
- D. All on-site sanitation and water supply facilities shall be designed to meet the minimum specifications of the State Department of Health, and a note to this effect shall be stated on the plat and signed by a licensed engineer.
- E. Proposed subdivision name; name of the Town and county.
- F. The plat to be filed with the County Clerk shall be on uniform-size sheets in accordance with New York State law.
- G. The locations, names and widths of existing streets, highways and easements, building lines, parks and other public properties.
- H. Lot areas in square feet.

Town of Avon, NY
Wednesday, May 25, 2016

Chapter 113. Subdivision of Land

Article VI. Specifications for Preliminary Plats and Final Plats

§ 113-20. Major subdivision final plat.

Major subdivision final plats shall be accompanied by separate construction detail sheets (including a subdivision grading and drainage plan and a subdivision utility and street plan), which shall be submitted to the Planning Board for approval as follows:

- A. Drawing, scale and size of plat and construction detail sheets. The subdivision plat and construction detail sheets shall be clearly and legibly drawn on a stable transparent base (Mylar, Cronaflex, etc.). In areas zoned for lots of minimum size of 20,000 square feet or more, maps and profiles shall be at a scale of one inch equals 50 feet. Maps shall be on uniform-size sheets in accordance with New York State law. Whenever any project is of such size that more than one sheet is required, then an index map on the same size sheet shall accompany these sheets. The construction detail sheets shall show all items included in Subsection C of this section and as actually constructed.
- B. Information to be shown on final plat. The plat shall show the following information:
 - (1) The proposed subdivision name or identifying title which shall not duplicate or too closely approximate that of any other development in the Town.
 - (2) The title of the sheet, including name and address of the subdivider, owner and developer, and all required signatures. (Where developer or owner is a corporation, a statement of corporate ownership and officers shall be submitted to the Planning Board at the preliminary stage.)
 - (3) North point, graphic scale and date.
 - (4) The acreage of tract to be subdivided, to nearest tenth of an acre.
 - (5) The boundaries of the subdivision and information to show the location of the subdivision in relation to surrounding property and streets, including names of owners of adjacent land or names of adjacent subdivision. In whatever manner that is practical, the subdivision boundary shall be referenced from two directions to establish United States Coast and Geodetic Survey (USCGS) monuments or New York State Plane Coordinate monuments. In the event that such monuments have been obliterated, the subdivision boundary shall be referenced to the nearest highway intersections or at least two previously established monuments of subdivisions of public lands. Any combination of types of reference ties may be accepted which would fulfill the requirement of exact measurements from the subdivision boundary to reference points previously established.

- (6) The lines of existing and proposed streets within the subdivision and the lines of existing or approved streets on adjoining properties.
 - (7) The names of existing and proposed streets.
 - (8) The lines and dimensions of proposed lots, which shall be numbered and shall have their area in square feet indicated.
 - (9) The lines and purposes of existing and proposed easements immediately adjoining and within the subdivision.
 - (10) The lines and dimensions of all property which is offered or to be offered for dedication for public use, with the purpose indicated thereon, and of all property that is proposed to be reserved by deed covenant for the common use of the property owners of the subdivision.
 - (11) The location, material and approximate size of all monuments to be placed within the subdivision.
 - (12) The locations of any municipal and zoning boundary lines within the subdivision.
 - (13) Statements as to:
 - (a) The zoning of the property within the subdivision.
 - (b) Compliance of the proposed lots with zoning requirements. If any lots do not comply but are covered by zoning variances, the statement should include reference to such variance.
 - (14) Certification by a licensed professional engineer and a licensed land surveyor as evidence of professional responsibility for the preparation of the plat, and a place for the liber and page where filed.
 - (15) A signature block shall be provided for all required approvals, certifications and endorsements, including the Planning Board Chairperson, Town Engineer and Public Health Officer, as well as other approvals required by local, county or state law or as required by the Planning Board.
 - (16) Items in Subsections **K, M, O, P, Q, R** and **S** of § 113-17.
 - (17) Radii of all curves and lengths of arcs.
 - (18) Each block shall be numbered, and the lots within such block shall be numbered consecutively in accordance with the procedure established by the Town. The total number of residential lots shall be noted on the plat.
- C. In addition to the subdivision plat as described above, the following shall also be presented to the Planning Board:
- (1) A certificate that there are no tax liens on the property being subdivided.
 - (2) A performance bond or letter of credit in such amount as is necessary to complete the site improvements.
 - (3) A copy of such covenants or deed restrictions as are intended to cover all or parts of the tract.
 - (4) All on-site sanitation and water supply facilities shall be designed to meet the minimum specifications of the State Department of Health, and a note to this effect shall be stated on the plat and signed by a licensed engineer.

- D. Construction detail sheets. (Subdivision Grading and Drainage Plan and Subdivision Utility and Street Plan.) Construction detail sheets shall show the following information, except that, where requirements have been waived, applicable specifications may be omitted. All plans shall conform to the Town Design Criteria and Construction Specifications^[1] and shall be subject to the approval of the Town Engineer.
- (1) Subdivision Utility and Street Plan.
 - (a) Complete plans and profiles of all proposed sanitary and storm sewers, including:
 - [1] Inverts, grades, original and finished ground profiles above these sewers and top of manhole grades.
 - [2] Elevations of stormwater inlets.
 - [3] Type, material and class of pipe.
 - (b) Location and details of all other facilities, including water mains, gas mains, telephone and electric.
 - (c) Location of all existing utilities in and adjacent to the site to be developed.
 - (d) A statement as to:
 - [1] The pressure and flow available in existing water mains.
 - [2] The proposed number of units and anticipated sanitary sewage flow.
 - [3] The available stormwater facilities downstream of this project.
 - (e) Details of erosion and slope stabilization measures, where applicable.
 - (f) Any other details pertinent to site construction.
 - (g) Profiles showing existing and proposed elevations along the center lines of all streets. Where a proposed street intersects an existing street or streets, the elevation along the center line of the existing street or streets within 100 feet of the intersection in both directions shall be shown. All elevations must be referred to established United States government or approved local bench marks, where they exist within 1/2 mile of the boundary of the subdivision.
 - (h) The Planning Board may require, where steep slopes exist, that present elevations of all proposed streets shall be shown every 100 feet at five points on a line at right angles to the center line of the street, and said elevation points shall be at the center line of the street, each property line and points 30 feet inside each property line.
 - (i) Plans and profiles showing the location and typical section of street pavements, including curbs and gutters, sidewalks, manholes and catch basins; the locations of street trees, streetlighting standards and street signs; the location, size and invert elevations of existing and proposed sanitary sewers, stormwater drains and fire hydrants; and the exact location and size of all water, gas, electric or other underground utilities or structures.
 - (2) Subdivision Grading and Drainage Plan.
 - (a) Contours of existing grade at intervals of not more than five feet. Intervals less than five feet may be required depending on the character of the topography and lot sizes. Contours are to extend a minimum of 300 feet beyond property limits.

- (b) The location of all buildings proposed.
 - (c) The number of each lot.
 - (d) Final grades and/or contours at intervals of not more than two feet. Less intervals may be required depending on topography.
 - [1] The location of all swales, creeks, ponds, drainage outfalls, etc.
 - [2] All grades shall be established from USCGS datum.
 - (e) The location and means of controlling erosion within the project limits.
 - (f) Slope stabilization details.
 - (g) Flood hazard prevention.
 - (h) Stormwater retention basins and ground recharge facilities.
 - (i) Certification by a licensed professional land surveyor of the finished grades after completion of grading.
- [1] *Editor's Note: See Ch. 48, Design and Construction Standards.*