

## Town of Kennebunk

### Section 8 Street Design and Construction Standards Ordinance

- 8.1 TITLE AND AUTHORITY: This ordinance shall be entitled "Kennebunk Street Design and Construction Standards Ordinance" and is enacted pursuant to the provisions of 30-A M.R.S.A. Sections 3001 to 3003.
- 8.2 PURPOSE: The purpose of these provisions is to establish appropriate standards for the design and construction of all streets in the Town, and to establish a procedure for the petitioning of streets to the Town for acceptance as Town Ways.

These street standards are designed to promote the following objectives:

- to promote and conserve the health, safety, convenience, and welfare of the Town's inhabitants,
- to complement and enhance the goals and polices of the Town Comprehensive Plan,
- to provide safe and convenient pedestrian circulation,
- to provide safe and convenient vehicular access and circulation,
- to minimize long term street maintenance and repair costs, and
- to minimize the creation of impervious surface in order to limit the impact of runoff on the Town's water resources.

8.3 DEFINITIONS:

A.D.T: Average daily traffic (per latest edition of the I.T.E. Trip Generation Manual).

Driveway: A private entrance from a street or right-of-way to a building or buildings on abutting grounds. The driveway itself shall not constitute the means of legal access to a lot.

Street: The word "street" means and includes such public or private ways as alleys, avenues, highways, roads, streets and other rights-of-way which are used or intended to be used for passage or travel by motor vehicles. The term street shall not include driveways as defined above.

Town Way: A street which has been accepted by the Town and for which the Town becomes responsible for its maintenance, repair, plowing and other similar Town services.

8.4 PROCEDURES:

8.4.1 General: All streets which are laid out or proposed for Town acceptance shall be in accordance with Maine law and the provisions of this ordinance as follows:

- A. Subdivisions: The Planning Board shall not approve any subdivision plan unless proposed street(s) are designed and to be constructed in accordance with the standards of this ordinance. Final subdivision plan approval by the Planning Board shall not be deemed to constitute or be evidence of acceptance by the Town of any street, easement or other open space.
- B. Site Plans: The Site Plan Review Board shall not approve any site plan unless proposed street(s) are designed and to be constructed in accordance with the standards of this ordinance. Final site plan approval by the Site Plan Review Board shall not be deemed to constitute or be evidence of acceptance by the Town of any street, easement or other open space.
- C. Petition to Town Legislative Body for acceptance of a street as a Town Way: All petitions for the acceptance of a street(s) as a Town Way shall be made to the Board of Selectmen, prior to being brought before Town Meeting, and shall be in accordance with Maine law and the provisions of this Ordinance. "Unpaved Local Streets" are not eligible for petitioning or acceptance as Town Ways.

#### 8.4.2 Application Procedure For Street Acceptance:

- A. All petitions for street acceptance shall be accompanied by an application which includes the following information:
  - 1) Petitioner's name, address, phone, signature and date,
  - 2) Names of owner(s) of record of the land upon which the proposed Town Way is located, including any proposed easements which are proposed as part of the petition to the Town,
  - 3) A statement of any legal encumbrances on the land upon which the proposed Town Way is located,
  - 4) Legal description of proposed Town Way (and all associated easements) giving complete descriptive data by bearings and distances per a Maine licensed standard boundary survey, along with a copy of such survey, and verification that permanent monumentation has been set at all street intersections and points of curvature.
  - 5) A written certification by a professional engineer, registered in the State of Maine, certifying that the proposed Town Way meets or exceeds the design and construction standards set forth in this ordinance,
  - 6) One mylar and two sets of blue prints of as-built conditions of the proposed Town Way conforming to the plan requirements and standards of Section 8.6. where underground utilities have been installed, the as-built plans shall show the final, installed location of such lines,

- 7) Date that street construction was completed, including the dates that the base course and surface course of pavement were installed.
- B. Upon receipt of a petition and application for a proposed street acceptance, the Board of Selectmen shall forward one set of plans to the Planning Board, who shall confirm the street's classification per Section 8.5, and one set of plans to the Town's consulting engineer who shall review and provide written comment back to the Selectmen. The engineer's comment shall state either that the street meets the Town's street design and construction standards as specified in Section 8.6, or shall provide a list of the standards which have not been met. The Town engineer's review shall include a field inspection of the proposed Town Way, to determine if there are any performance problems or structural failures which have occurred since the completion of the street construction.
- C. When the Board of Selectmen determines that the proposed street meets or exceeds the design and construction requirements of this ordinance, they shall set and hold a public hearing on the petition. At or following the public hearing, the Board of Selectmen shall vote to place it on the next available Town Meeting Warrant.

#### 8.5 STREET CLASSIFICATION:

The classification of an existing or proposed street shall be made by the Planning Board per 8.4.1.A. or Site Plan Review Board per 8.4.1.B. as applicable, after its consideration of the existing and proposed land use. For an existing street and/or extension of an existing street, the classification shall be based on existing and estimated ADT. For a proposed new street, classification shall be based on estimated ADT. (one single family home = 10 ADT)

- A. Arterial Street: An arterial street shall be defined as a major thoroughfare which serves as a major traffic way through Town and between towns, and whose primary function is traffic movement. Traffic volumes range from 10,000 - 30,000 vehicles per day. The following roadways shall be considered arterials:
  - Maine Turnpike
  - Route One
- B. Collector Street: A street with average daily traffic of over 250 vehicles per day, or a street serving as a feeder to an arterial and as a collector of traffic from minor streets. Streets classified under this category shall be further classified as either "rural" or "growth", based upon the guidelines of the Town's Comprehensive Plan.
- C. Minor Street: A minor street shall be defined as a street which generally serves to carry the least amount of traffic at the lowest speeds. It is also intended to provide a safe environment for residential neighborhoods. No minor street (or street section if it has more than one street connection) shall have an ADT greater than 250. Streets classified under this

category shall be further classified as either "rural" or "growth", based upon the guidelines of the Town's Comprehensive Plan.

D. Local Street: A minor residential street servicing no more than five residential lots/dwelling units. An unpaved local street shall not be eligible for Town services or for acceptance as a Town Way.

E. Commercial/Industrial Street: A street servicing commercial and/or industrial land uses.

8.6 STREET DESIGN AND CONSTRUCTION STANDARDS: All proposed streets, street extensions, sidewalks and storm drainage systems shall be designed and constructed to meet the design standards of this section and of the relevant Appendix A details, unless otherwise varied per Section 8.8 of this Ordinance.

8.6.1 Plans: The plans and details which are submitted as part of an application shall be prepared and stamped by a professional engineer and shall include detailed construction drawings, drawn at a scale of no more than 50 feet to the inch, shall show a plan view, profile and typical cross-section of the proposed street(s), and shall include the following information:

- a) Date, scale and magnetic or true north arrow,
- b) Intersections of the proposed street with existing streets,
- c) All natural waterways and watercourses in or on land contiguous to the proposed street(s),
- d) Kind, size, location, material, profile and cross-section of all existing and proposed drainage structures and their location with respect to the existing natural waterways and/or watercourses,
- e) Complete curve data, including radii and tangent points, shall be indicated for all horizontal and vertical curves,
- f) Turning radii at all intersections,
- g) All centerline gradients
- h) The dimensions of lots, easements and building lines along the proposed street, and showing the names of the owners of such abutting property,
- i) The limits and location of street pavement and street rights-of-way, shoulders, sidewalks and curbs,
- j) The limits and location of existing and proposed sidewalks and curbing, and
- k) The location and size of existing and proposed overhead and underground utilities including the following:
  - 1) water
  - 2) sewer
  - 3) electric
  - 4) telephone, cable
  - 5) street lighting
  - 6) fire suppression system and hydrants

- I) The name(s) of proposed street(s) which names shall not closely duplicate the names of any existing street names in the Town.

8.6.2 Design Standards: All proposed streets shall be designed and constructed to the following standards:

- A. Proposed streets shall conform to the Town's Comprehensive Plan.
- B. All streets shall be designed to provide safe pedestrian and vehicular travel.
- C. The arrangement, character, extent, width, grade, and location of all streets shall be considered in relation to existing or planned streets, topographical conditions, public convenience and safety, and the proposed use of the land to be served by the street. Grades of streets shall conform as closely as possible to the original topography.
- D. The Board may require the reservation of a 50 foot wide easement (or a width appropriate to meet the street as classified per Section 8.5) connecting the new street with an external boundary to provide a logical continuation of the street to an abutting site. This future connection will allow for safe and efficient traffic circulation.  
  
All easements proposed under this regulation must be deeded to the Town.
- E. In the event that a residential development is proposed in an area also zoned for commercial use, the Board may require an increased right-of-way (per the standards of commercial streets) to accommodate potential development in the area.
- F. Developments containing over 25 dwelling units or which generate average daily traffic (ADT) of over 250 trips per day, shall have at least two street connections either with existing public streets, or with streets shown on an approved subdivision plan or site plan for which a performance guarantee has been filed and accepted.
- G. The design standards shown on Table A apply according to the street classification of Section 8.5.
- H. The centerline of the roadway shall be the centerline of the right-of-way.
- I. Dead End Streets - Except for streets classified as private rights-of-way, dead end streets shall be constructed so as to provide a cul-de-sac turn-around meeting the minimum requirements of Table A:

Where the cul-de-sac is located in a wooded area prior to development, a stand of trees shall be maintained within the center of the turnaround, unless otherwise waived by the reviewing board.

J. Grades, Intersections and Sight Distances.

- 1) Grades of all streets shall conform in general to the terrain, so that cut and fill are minimized while maintaining the grade standards noted in Table A.
- 2) All changes in grade shall be connected by vertical curves of such length and radius as meet with the approval of the Reviewing Board so that clear visibility is provided for distances specified below.

<u>Street Class.:</u>	<u>Collector</u>	<u>Minor</u>	<u>Local</u>	<u>Comm./Indust.</u>
<u>Stop. Sight Dist.:</u>	200'	150'	150'	250'

Stopping sight distance shall be calculated with a height of eye at 3 1/2 feet and the height of object at 1/2 foot.

- 3) Where new street intersections or commercial/industrial curb cuts are proposed, sight distances, as measured along the road onto which traffic will be turning, shall conform to the table below. Sight distance shall be measured from an eye point located 15 feet behind the edge of traveled way at an elevation of 3.5 feet above the finished grade surface to a height of object of 4.25 feet above the pavement in the centerline of the travel lane approaching the intersection. Where unavoidable obstructions are encountered at the 15 foot setback, the point of eye may be moved to a point no closer than 10 feet from the traveled way. If the special conditions of the site or of the use so warrant, the Board may require such additional sight distance as will enhance safety.

Posted Speed Limit (mph)	25	30	35	40	45	50	55
Sight Distance (ft)	300	350	400	450	500	550	600

- 4) Cross (four-cornered) street intersections shall be avoided insofar as possible, except as shown on the Comprehensive Plan or at other important traffic intersections. A distance of at least two hundred (200) feet shall be maintained between center lines of offset intersecting streets.

K. Sidewalks and Curbing

Sidewalk and curbing shall be required within and along the public road frontage of all developments located in designated growth areas as specified by the Kennebunk Comprehensive Plan and for all development for which any part is located within 1,000' of any school or any commercial zone. Where sidewalks exist adjacent to a proposed development, the new sidewalk shall be installed in a manner which connects to the existing sidewalk. Where installed, sidewalks and curbing shall meet the following minimum standards:

- 1) Sidewalks shall be located a minimum of four feet from the curb facing or edge of shoulder if the street is not curbed.
- 2) Bituminous sidewalks: The gravel aggregate sub-base course shall not be less than ten inches in thickness. The crushed aggregate base course shall be not less than two inches in thickness. The hot bituminous pavement surface course shall be put down in two lifts and shall be not less than two inches in thickness, after compaction.
- 3) Portland cement concrete sidewalks: The aggregate base shall be not less than six inches in thickness. The Portland cement concrete shall be reinforced with six inch square number ten wire mesh and shall be not less than four inches in thickness.
- 4) Type 1, 5" granite curbing shall be installed on a thoroughly compacted gravel base of six inches minimum thickness. Bituminous curbing shall be installed on the base course of the pavement. The specified pavement width shall be measured between the curbs. All curbs shall be vertical except when Type 5 sloped curbs are specifically requested or allowed by the Board. Granite curbing shall be used for traffic islands and intersections. Granite transition pieces shall be used between:
  - Granite inlet headstones and bituminous curb, and
  - Type 1 vertical curb and type 5 granite curb.

8.6.3. Construction Standards:

A. Minimum thickness of materials after compaction:

CONSTRUCTION MATERIALS

MINIMUM REQUIREMENTS

	<u>Arterial</u>	<u>Collector</u>	<u>Minor/Local</u>	<u>Ind/Comm</u>	<u>Sidewalk</u>
Aggregate Sub-base Course (Max. sized stone = 4")	21"	21"	18"	21"	10"
Crushed Aggregate Base Course	3"	3"	3"	3"	2"
Hot Bituminous Pavement (After Compaction):					
Total Thickness	4"	3"	3"	4"	2"
Surface Course	1 1/2"	1 1/4"	1 1/4"	1 1/2"	(Placed Base
Course	2 1/2"	1 3/4"	1 3/4"	2 1/2"	in 2 lifts)

B. Preparation:

- 1) Before any clearing has started on the right-of-way, the center line of the new street shall be staked and sidestaked at 50 foot intervals. Limits of clearing shall be marked by stakes or flagging.
- 2) Before grading is started, the right-of-way area directly dedicated to the construction of the roadway and shoulders, sidewalks and utilities shall be cleared of all stumps, roots, brush, and other objectionable material. All ledge, large boulders, and tree stumps shall be removed from this area.
- 3) Tree stumps and other organic materials shall be removed to a depth of 2 feet below the subgrade of the roadway. Rocks and boulders and ledge shall also be removed to a depth of 2 feet below the subgrade of the roadway. On soils which are not suitable for roadways, the subsoil shall be removed from the street site to a depth of two feet below the subgrade and replaced with gravel borrow meeting the State of Maine Department of Transportation's Specifications for Highways and Bridges, currently located in Section 700, Paragraph 703.20.
- 4) Side slopes shall not be steeper than a slope of 3 feet horizontal to 1 foot vertical, and shall be graded, fertilized, seeded and mulched according to the erosion control standards of the Maine Erosion and Sediment Control Handbook for Construction - Best Management Practices, 1991, or latest revisions thereof.

C. Base and pavement material requirements:

- 1) Aggregate Sub-base Course - MDOT 703.06(b) - Type D.
- 2) Crushed Aggregate Base Course - MDOT 703.06(a) - Type A.
- 3) Hot Bituminous Pavement:
  - a) Base Course: MDOT 703.09 - Grading B.
  - b) Surface Course: MDOT 703.09 - Grading C.
  - c) Sidewalks: MDOT 703.09 - Grading D.
- 4) Portland Cement Concrete for Sidewalks (when used) -MDOT 502.05 - Class AA.

8.6.4 Storm Drainage Design Standards:

- A. Adequate provision shall be made for disposal of all storm water collected in streets and areas tributary to the street system. A storm water management plan shall be prepared by a registered professional engineer in accordance with Urban Hydrology for Small Watersheds, T.R. 20 or T.R. 55, 1986 edition, published by the U.S. Soil Conservation Service, or latest revisions thereof.

- 1) All storm water systems shall be designed to meet the criteria of a 25 year storm based on rainfall data from weather bureau records for Portland.
- 2) Appropriate conveyances for outlets to drainage systems must be provided.
- 3) In any case, the minimum pipe size for any storm drainage pipe shall be 12 inches. Catch basins of an appropriate size and type shall be installed where necessary, and shall be located generally at the curb line. Catch basins shall be placed away from the line of traffic flow, however, shall be adequate in design and strength to accommodate vehicle traffic. Catch basins shall be specifically constructed to accept a granite inlet headstone.
  - a) Materials:
    - 1) Storm drainage pipes shall be one of the following:
      - aluminized Type 11 culvert,
      - PVC-SDR 35,
      - reinforced concrete,
      - aluminum pipe.
    - 2) Where the storm drainage pipe is to be covered by ten feet or more of fill material, pipe material shall be PVC SDR 35 or concrete.
    - 3) Where storm drainage pipe may come into contact with salt water, concrete pipes shall be used.
  - b) Pipe Gauges: Metallic storm drainage pipe shall meet the following thickness requirements depending on pipe diameter:

<u>Material</u>	
<u>Inside Diameter</u>	<u>Aluminum/Zinc Coated CMP Corrugated Aluminum Alloy</u>
15" to 24"	14 ga.
30" to 36"	12 ga.
42" to 54"	10 ga.
60" to 72"	8 ga.

- B. Existing or future downstream drainage requirements shall be studied to determine the effect on proposed drainage. The applicant shall demonstrate to the satisfaction of the Board that the storm drainage will not, in any way, overload existing or future storm drainage systems downstream from the proposed street. The drainage requirement for a two, ten and 25 year storm shall be evaluated to determine drainage system needs.

C. For both upstream and downstream drainage, in determining the rate and volume of surface run-off, the following factors must be considered:

- 1) intensity of rainfall: 25 year design storm;
- 2) timing of rainfall (e.g. falling on snow or during the spring snow melt);
- 3) amount of precipitation occurring in the five days preceding the storm in question;
- 4) hydrologic soil group (i.e. the soil's rate of water infiltration and transmission. The rates for soils are described in the Best Management Practices Handbook, 1991, or latest revision thereof);
- 5) hydrologic conditions (soil's moisture content humus/organic content, temperature, and whether or not it is frozen);
- 6) vegetative cover (vegetation helps soil dry out after a rainfall, intercepts some precipitation during the rainfall, and slows down the flow of water over the land);
- 7) area of land covered by impervious surfaces (roads, sidewalks, roofs, driveways, patios, etc.);
- 8) topography (slopes affect the rate of run-off; marshland reduces peak discharge rate by slowing down the rate of run-off);
- 9) size and shape of watershed (peak discharge rates are slower in long, narrow watersheds, and vice versa).

D. An underdrainage system shall be designed and installed to properly drain all springs or areas where the ground water level is within one foot of the bottom of road sub-base and would cause a hazard to the stability of the roadway base. Evidence that water level exceeds the one foot standard ( test hole data) shall be submitted as part of any application which does not include such an underdrainage system.

The underdrain shall be a minimum of 6" diameter perforated PVC SDR 35 pipe encapsulated with ¾" crushed stone inside a geotextile fabric. Holes shall be placed down.

E. No storm water shall be permitted to drain across the surface of a street or an intersection.

#### 8.6.5 Storm Drainage Construction Standards:

A. All storm drain construction shall be in conformity with State of Maine Specifications for Highways and Bridges, revision 1990, or latest revisions thereof.

B. General Construction Requirements:

- 1) Trenching shall be accomplished in accordance with all appropriate state and federal safety requirements.
- 2) Drain alignment shall be straight in both horizontal and vertical alignment, unless specific approval of a curvilinear drain is obtained in writing from the Board.

- 3) Manholes shall be provided at all changes in vertical or horizontal alignment, and at all junctions. In straight runs, manholes shall be placed at a maximum of 300 feet intervals. Catch basins shall be connected to manholes on the main storm drain line. The maximum distance between catch basins and manholes shall be 250 feet.
- 4) Where necessary, outlets shall be terminated in an endwall of concrete construction, or shall be rip-rapped to prevent erosion, or other appropriate measures taken. Facilities for energy dissipation shall be provided where necessary.

#### 8.6.6 Additional Improvements and Requirements:

- A. Erosion Control: An erosion control plan shall be prepared by a professional engineer, licensed in the State of Maine, and designed in accordance with the standards of the Maine Erosion and Sediment Control Handbook for Construction: Best Management Practices, March 1991. Procedures shall be undertaken, both during preparatory, construction, and cleanup stages, to prevent soil erosion and water pollution.
- B. Cleanup: Following street construction, the developer or contractor shall conduct a thorough cleanup of stumps and other debris from the entire road or street right-of-way. Each catch basin or manhole shall be cleaned of all accumulation of silt and debris and kept clean.
- C. Street Name, Street Signs, Street Lights: Streets which join and are in alignment with streets of abutting or neighboring properties shall bear the same name. Names of new streets shall not duplicate, nor bear phonetic resemblance to the names of existing streets within the Town, and shall be subject to the approval of the applicable review board. Street name signs and directional signs shall be shown on plans and shall be furnished by the developer. The type, size and location shall be subject to the approval by the Reviewing Board. Street lighting shall be installed as required by the Planning Board or Site Plan Review Board per the applicable plan review and shall be consistent with the Town's street lighting standards.
- D. Utilities, where available, shall be installed prior to the street construction phase so as to avoid re-excavation of the finished street.

#### 8.7 PERFORMANCE GUARANTEE

- A. Purpose - Performance guarantees shall be provided to ensure the proper installation of required street, utility, storm drainage and other improvements.
- B. Submission of Performance Guarantee - Prior to plan approval per the applicable reviewing Board under Section 8.4.1 the applicant shall submit a performance guarantee for an amount adequate to cover the total construction costs of all required improvements. The guarantee shall contain a construction schedule, cost estimates for each phase of construction, provisions for inspections of the construction, provisions for method of release of part or all

of the performance guarantee to the developer, and a date after which the developer will be in default and the Town shall have access to the funds to finish construction.

The performance guarantee which is submitted for the Board's approval shall first be reviewed and accepted by the Town Manager. The following types of guarantee are acceptable methods:

- 1) Certified Check payable to the Town or a savings account naming the Town as owner, for the establishment of an escrow account.
  - 2) Performance Bond payable to the Town issued by a surety company.
  - 3) An irrevocable letter of credit from a financial institution which establishes funding for the construction of the required improvements, and from which the Town may draw upon if the construction is not completed in conformance with the approved plan.
  - 4) Conditional (one year) plan approval stipulating that there shall be no conveyance of lots or issuance of building permits until a performance guarantee covering the total cost of all required improvements, and conforming to the format of 8.7.B.1, 2, or 3 above, is submitted to the Reviewing Board and approved. A note shall be placed on the final plans listing this condition.
- C. Phasing of Development - The Planning Board or Site Plan Review Board may approve plans to develop a major development in separate and distinct phases. This may be accomplished by limiting final approval to those lots, commercial or industrial buildings, abutting that section of the proposed road which is covered by a performance guarantee. When development is phased, road construction shall commence from the public way. Final approval of subsequent phases shall be given only after determining that there has been substantial completion of requirements pertaining to the first and/or previous phase(s) of development.
- D. Inspection of Required Improvements - No street construction shall be initiated until the required inspection fee has been submitted to the Town to cover the costs of having each construction stage inspected by the Town's inspection agent (engineer) per the Town's inspection schedule.
- E. Release of Guarantee - Prior to the release of any part of the performance guarantee, the applicable Reviewing Board shall determine to its satisfaction, in part upon the inspection report of the Town's Engineer, that the site improvements meet or exceed the design and construction requirements for that portion of the improvements for which the release is requested.
- F. Default - If, upon inspection, the Town's Engineer finds that any of the required improvements have not been constructed in accordance with the plans and specifications

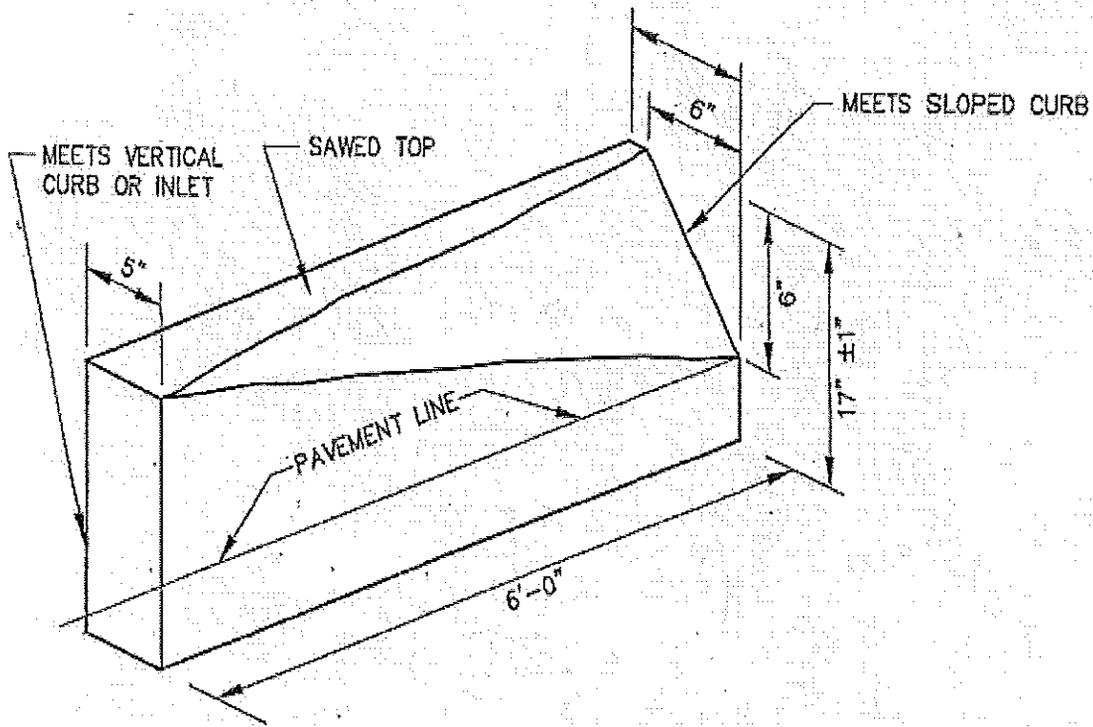
filed as part of the application, he shall so report in writing to the Code Enforcement Officer, the Municipal Officers, the Reviewing Board and the developer or builder. The Municipal Officers shall take any steps necessary to preserve the Town's rights.

- G. Assignment or Transfer - No assignment or transfer of rights to construct the project is valid without prior approval, by the applicable Reviewing Board, of a new performance guarantee to ensure that any assignee or transferee has the financial and technical capacity to complete the project. Should a previously approved performance guarantee become invalid for any reason, the plan approval shall be nullified until such time as a new performance guarantee is approved in the same manner as was originally approved.

## 8.8 VARIANCES AND WAIVERS:

1. The Planning Board or Site Plan Review Board may, as part of their review and approval of a plan, vary/waive certain street design and construction standards in conformance with the variance/waiver provisions of Article 13 of the Subdivision Review Regulations or Article 11, Section 9 of the Zoning Ordinance, as applicable. Such variances/waivers shall not assure eligibility for the petitioning or acceptance of such street as a Town Way.
2. Any variance/waiver of the provisions of this ordinance which is part of a petition for acceptance of street as a Town Way shall be decided by the Board of Selectmen and shall conform to the standards of Section 8.8.2.A and 2.B below.
  - A. Where extraordinary and unnecessary hardships would result, or due to the special circumstances of the site, certain requirements of this ordinance may be varied or waived by the Board of Selectmen based upon the following criteria:
    - 1) The requested variance/waiver shall have been previously reviewed and approved by the Planning Board (if the street is part of a subdivision plan review) or by the Site Plan Review Board (if the street is part of a site plan review). Such approval shall specifically address the impact of the requested variance/waiver upon: the safe functioning of the street, the long term costs of maintaining the street, and the Town's ability to provide public services along the street.
    - 2) The required thickness of pavement shall not be reduced, and
    - 3) A report from the Town's Highway Superintendent and Town's Consulting Engineer concerning the expected performance of the street (per the criteria listed in subsection A.1. above) if the variance/waiver is granted.
  - B. In granting such variances/waivers, the Board of Selectmen shall require such conditions, as will, in its judgement secure the objectives of Section 8.2 of these standards and of the requirement(s) so varied or waived.

- 8.9 APPEAL: Any person aggrieved by a decision or failure to act of the Board of Selectmen, Planning Board or Site Plan Review Board, pursuant to this ordinance, may appeal to York County Superior Court within 30 days of such decision or refusal to issue a decision.
- 8.10 SEVERABILITY: The invalidity of any section or provision of this ordinance shall not be held to invalidate any other section or provision of this ordinance.
- 8.11 REPEAL: All provisions of the Street Design and Construction Standards Ordinance, 1977, as amended 1988, and of the street standards of the Planning Board Standards for Reviewing Land Subdivisions, 1977, as amended, and of other prior ordinances of the Town that are inconsistent with this ordinance are hereby repealed.
- 8.12 EFFECTIVE DATE: This ordinance shall take effect immediately upon adoption of the same by a Town Meeting

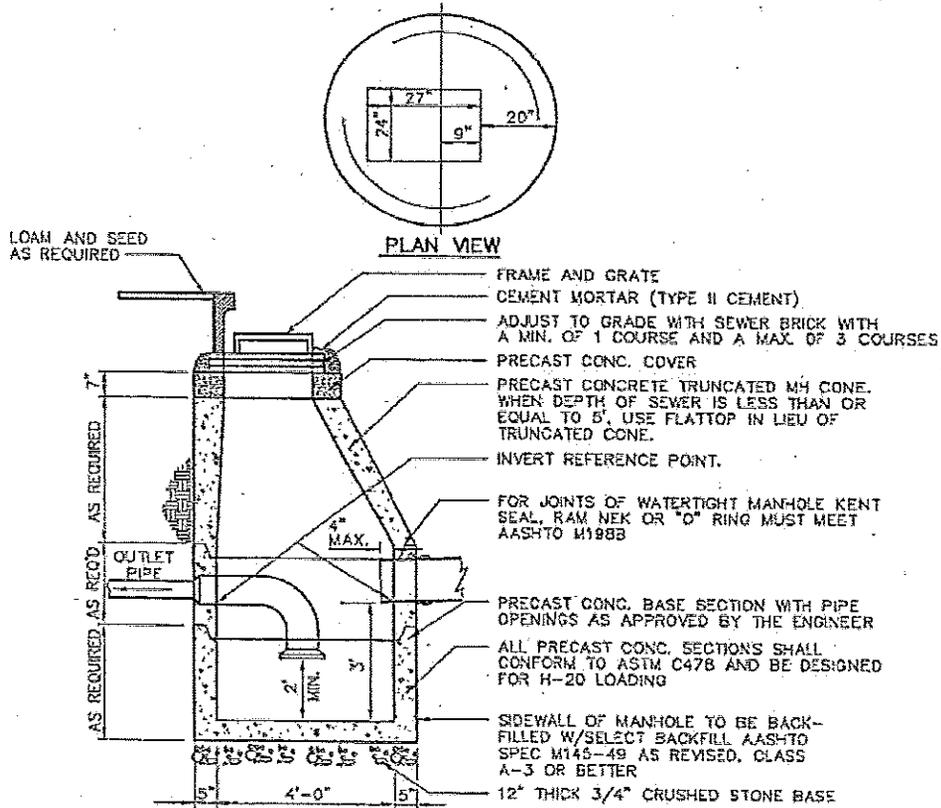


TRANSITION SECTION - VERTICAL TO SLOPED CURB  
VERTICAL TO SLOPED CURB TRANSITION STONES

N.T.S.

DET887.DWG

A-1



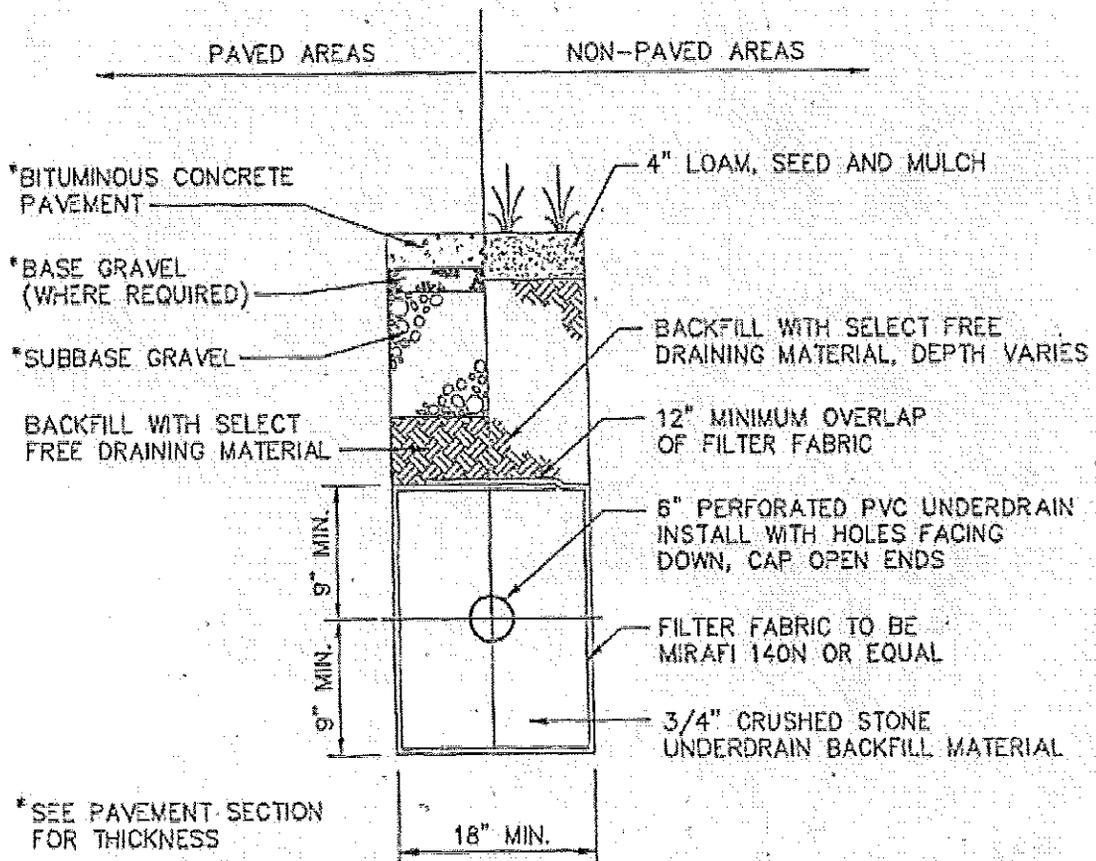
**4'-0" PRECAST CATCH BASIN  
WITH CURB INLET**

N.T.S.

DET507.DWG

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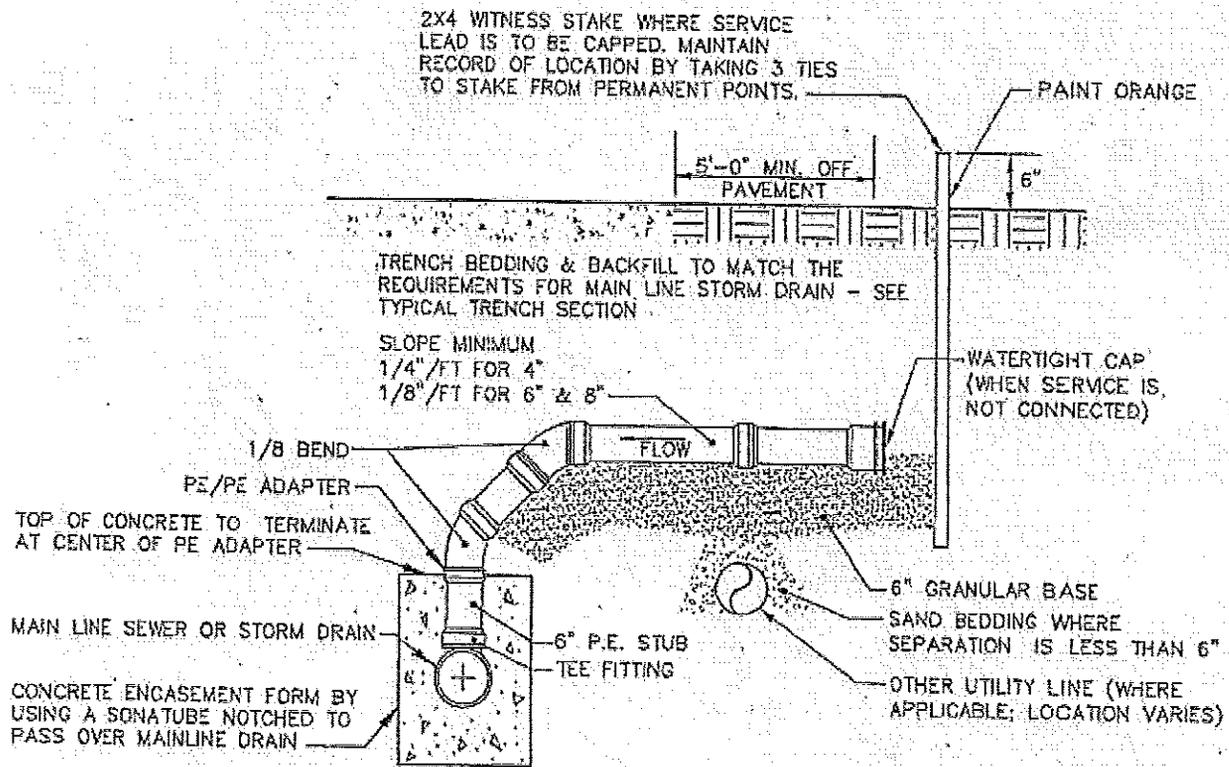




**TYPICAL UNDERDRAIN TRENCH SECTION**

N.T.S.

DET543.DWG



NOTE:  
ALL SERVICE LEADS TO BE TYPE 1 OR 2 UNLESS OTHERWISE DIRECTED BY THE ENGINEER IN THE FIELD.

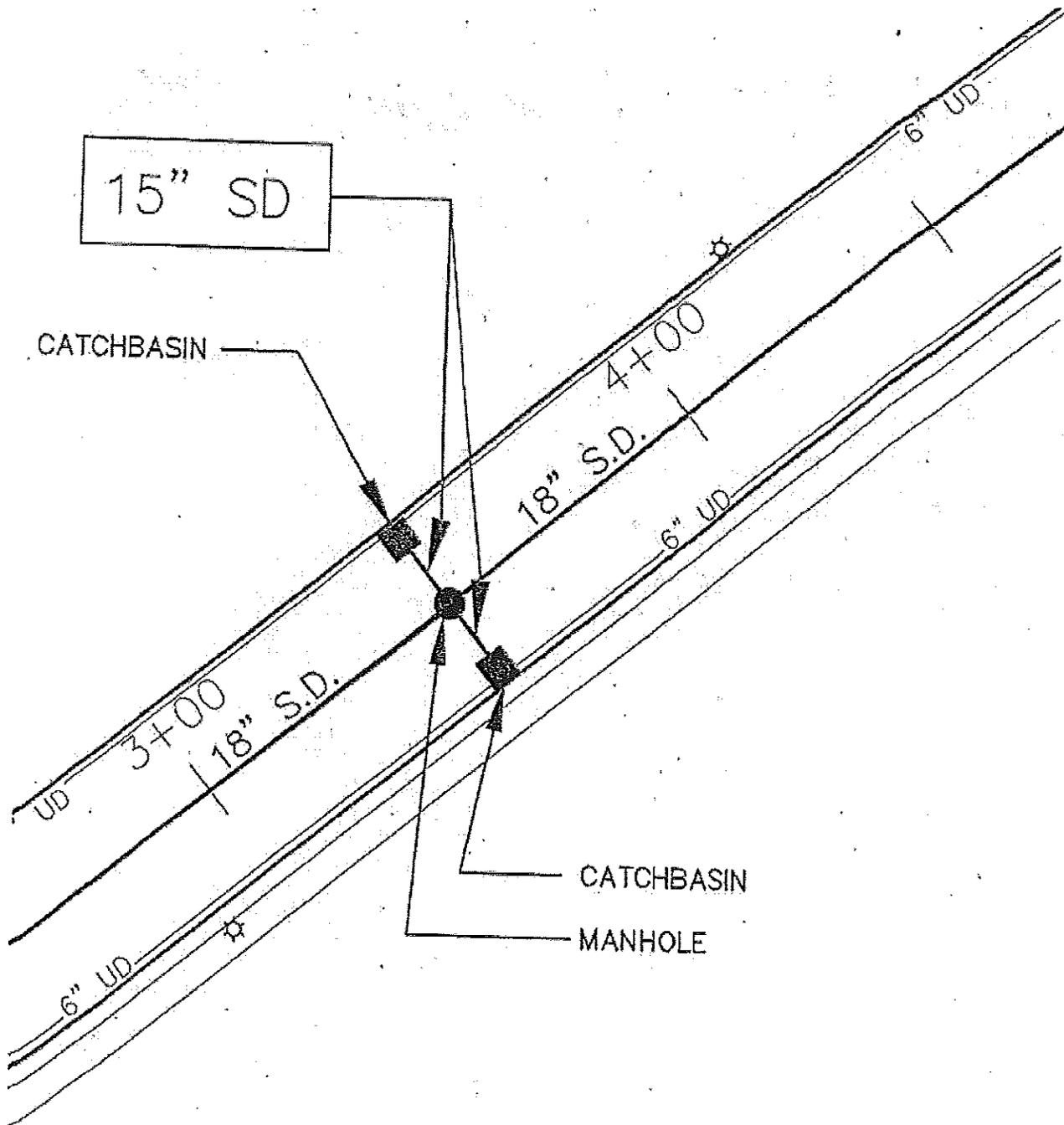
### TYPE 3 SERVICE LEAD (WITH CHIMNEY)

N.T.S.

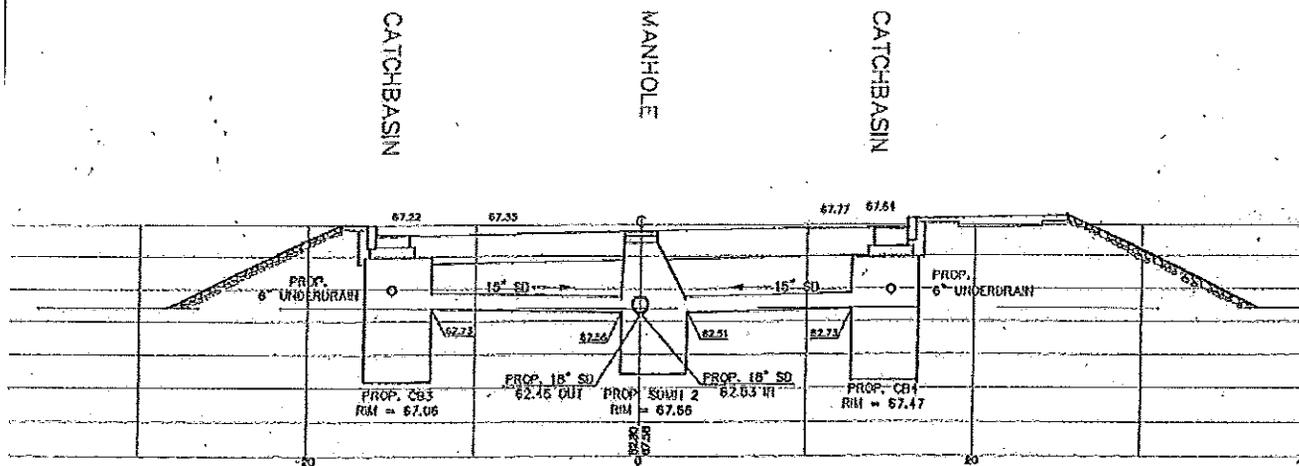
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**DESIGN STANDARDS  
TABLE A**

Minimum Widths	Collector		Minor		Local		Arterial, Commercial, Industrial
	Rural	Growth	Rural	Growth	Paved	Unpaved	
R.O.W. <sup>1</sup>	50'	50'	50'	60'	50'	50'	60'
Travel Way (pavement width)	22'	24' (28' curbed 1 side) (32' curbed 2 sides)	20'	22' (24' curbed)	18'	18' unpaved	24' (28' curbed 1 side) (32' curbed 2 sides)
Shoulder (each side)	4'	4'	3'	3'	2'	2'	4'
Sidewalk (paved)	5'	5'	5'	5'			5'
Green Strip	4'	4'	4'	4'			4'
Min. Grade	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%
Max. Grade <sup>2</sup>	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%
Minimum Centerline Radius	230'	230'	150'	160'	150'	150'	230'
Min. tangent traverse curves	200'	200'	100'	100'	100'	100'	200'
Roadway Crown	1/4" /ft.	1/4" /ft.	1/4" /ft.	1/4" /ft.	1/4" /ft.		1/4" /ft.
Shoulder Slope	1/2" /ft.	1/2" /ft.	1/2" /ft.	1/2" /ft.	1/2" /ft.		1/2" /ft.
<b>Street Intersection:</b>							
Min. Angle <sup>3</sup>	90°	90°	90°	90°	90°	90°	90°
Max. Grade w/75'	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%
Min. Curb Radi <sup>4</sup>	20'	20'	20'	20'	20'	n/a	25'
<b>Dead-Ends/Out-de-sac:</b>							
Max. Length	2500'	2500'	2500'	2500'	1500'	n/a	T-Turn Allowed
<b>Turnaround Radii:</b>							
Prop. Line	60'	60'	60'	60'	60'	n/a	
Outer Pavement	50'	50'	50'	50'	50'	n/a	
Inner Pavement	30'	30'	30'	30'	30'	n/a	
Fire Suppression: <sup>5</sup>	Hydrants shall be located with a spacing of no more than 500 feet						Hydrants every 250'

1. A sixty (60) foot right-of-way shall be provided when six (6) or more feet of cut and fill is otherwise required to meet these standards.
2. Maximum grade may be exceeded by two (2) percent for a length of one hundred (100) feet or less.
3. Upon determination by the reviewing board, some variance is allowed; however, in no case less than seventy five (75°).
4. May be reduced by the reviewing board upon a finding that both vehicular and pedestrian safety will be maintained.
5. Except as may be varied through plan review and approval by the applicable Reviewing Board.