

TOWN OF OAKLAND

Minimum Street Requirements

Adopted : August 22, 1977, Amended 06/20/1984, Amended 01/03/1990, Amended 07/07/1992, Amended 08/ 17 /1994, Amended 02/08/1995, Amended 05/09/07, Amended 08/22/07, Amended 05/21/08

STREET DESIGN AND CONSTRUCTION STANDARDS

1. General Requirements

- A. The Planning Board (Board) shall not approve any subdivision plan unless proposed streets are designed in accordance with any local ordinance or the specification contained in these regulations. Approval of the final plan by the Board shall not be deemed to constitute or be evidence of acceptance by the municipality of any street or easement.

- B. Subdividers shall submit to the Board, as part of the Final Plan, detailed construction drawing showing a plan view, profile, and cross-sections of the proposed streets at 50 foot intervals for all proposed street construction, and existing streets within 300 feet of any proposed intersections. The plan view scale shall be one-inch equals no more than fifty feet. The plans shall include the following information.
 - 1. Date, scale, and north point, indicating magnetic or true.
 - 2. Intersections of the proposed street with existing streets.
 - 3. Roadway right of way limits including edge of pavement, edge of shoulder, sidewalks, and curbs.
 - 4. 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 proposed drainage ways.
 - 5. Complete curve data shall be indicated for all horizontal and vertical curves.
 - 6. Turning radii at all intersections.
 - 7. Centerline gradients.
 - 8. Location of all developer installed signs such as speed, yield, caution and stop signs, and any others as determined by the Road Commissioner.

9. Size, type and locations of all existing and proposed overhead and underground utilities, to include but not be limited to water, sewer, electricity, telephone, lighting and cable television.

10. Engineers and or Professional Surveyors stamp on each drawing, combined with a statement that the plans have been designed in conformance with this ordinance, and standard engineering practices.

11. All lot lines shall be shown as common with the street lines.

- C. Upon receipt of plans for a proposed public street the Planning Board shall make them available to the Town Council, Road Commissioner, Town Engineer, Police Chief, Fire Chief and Public Works Director for review and comment. Plans for streets, which are not proposed to be accepted by the municipality, shall also be made available to the individuals listed above for review and comment.
- D. Where the sub-divider proposes improvements within existing public streets, the proposed design and construction details shall be approved in writing by the Road Commissioner.
- E. Where subdivision streets are to remain private roads, the following words shall appear on the recorded plan.

"All roads in this subdivision shall remain private roads to be maintained by the developer or the road association and shall not be accepted or maintained by the Town, until the road association or developer constructs the road or roads such that it/they meet the municipal street design and construction standards."

- F. Where existing streets are extended the same names will be retained unless a change is authorized by the proper Municipal Officials.
- G. At least ten (10) working days prior to the proposed start of construction the developer shall schedule, at the Town's convenience, a pre-construction meeting with the appropriate Municipal Officials. A review of the Road Construction Checklist shall be the agenda of this meeting. Date and signature lines shall be required for each phase of the project to be inspected.

It shall be the developer's responsibility to ensure adequate scheduling and inspections for compliance with the approved plans. Any work completed without the required approvals and signatures shall jeopardize final approval and acceptance of the road as a public way.

- H. During the review process by the Municipal Officials, if the Towns Road Commissioner determines that it would be in the best interest of the Town to have the developer's plans reviewed by a Professional Engineer then the developer shall be required to pay for this review. The developer shall make suitable plans for payment of the estimated amount. This estimated amount shall be deposited with the Town and maintained in a separate account. The Planning Board review process shall not continue until the funds have been deposited with the Town.

2. STREET DESIGN STANDARDS

- A. These design guidelines shall control the roadway, shoulders, curbs, sidewalks, drainage systems, culverts, signage, lighting, and other appurtenances associated with the street, and shall be complied with by all streets within a subdivision, unless the applicant can provide clear and convincing evidence that an alternate design will meet good engineering practice and will meet the performance standards.
- B. Reserve strips controlling access to streets shall be prohibited except where their control is definitely placed with the municipality.
- C. Adjacent to areas zoned and designed for commercial use, or where a change of zoning to a zone which permits commercial uses is contemplated by the municipality, the street right of way and/or pavement width shall be increased on each side by half of the amount necessary to bring the road into conformance with the standards for commercial streets in this Ordinance.
- D. Where a subdivision borders an existing narrow street (not meeting the width requirements of the standards for streets in these regulations), or when the plan indicates plans for realignment or widening of a road that would require use of some of the land in the subdivision, the plan shall indicate reserved areas for widening or realigning the road marked "Reserved for Road Realignment (widening) purposes." Land reserved for such purposes may not be included in computing lot area or setback requirements of the Subdivision Ordinance. When such widening or realignment is included in the Municipality's Capital Investment Plan, the reserve area shall not be included in any lot, but shall be reserved to be deeded to the municipality or State.
- E. Any subdivision expected to generate average daily traffic of 200 trips per day or more, may be required to have at least two street connections with existing public streets, streets shown on an Official Map, or streets on an approved subdivision plan for which performance guarantees have been filed and accepted.
- F. Iron pins at least ½" in diameter and three (3) feet in length must be set at all street corners, or breaks in the street lines, curves, and at boundary corners of subdivisions.

- G. All proposed streets shall be constructed to their full length unless the project has been approved to be constructed in scheduled phases.
- H. The following design standards apply according to street classification:
- I. Existing roads with right-of-way widths of less than 50' will be allowed to extend the street/road at the current width, provided that there is no other reasonable alternative as determined by the Road Commissioner and/or Engineer.
- J. Signs supplied shall conform in size and quality to current Manual on Uniform Traffic Control Devices (MUTCD) specifications and be installed according to M.D.O.T., specifications, section 645, most recent edition.
- K. Where a proposed street intersects with an existing street, The Road Commissioner may waive the minimum right-of-way radius if no other reasonable alternative is available. The turning radius standard in all proposed new streets shall be met.

<u>Description</u>	<u>Arterial</u>		<u>Collector</u>	<u>Minor</u>	<u>Pr.ROW</u>	<u>Industrial/Comm.</u>
Minimum ROW width	80'	50'	50'	50'	60'	
Minimum traveled way width	32'		24'	20'	20'	32'
Travel Way Width for Very Low Volume Roads	32'		24'	16'	16'	32'
Min. width of shoulders (each side)	5'(paved)		3'(paved)	3'	3'	5'(paved)
Sidewalk width	4'		4'	4'	4'	4'
Buffer strip from edge of pavement	5'					5'

<u>Description</u>	<u>Arterial</u>	<u>Collector</u>	<u>Minor</u>	<u>Pr.ROW</u>	<u>Industrial/Comm.</u>
Minimum Grade	.5%	.5%	.5%	.5%	.5%
Maximum Grade	5%	6%	8%	8%	5% *
Minimum Centerline Radius Without SE 500'		150'	150'	150'	400'
Note: SE= Super elevation					
Roadway Crown	1/4"/ft.	1/4"/ft.	1/4"/ft.	***	1/4"/ft. **
Min. angle of intersection	90	90	75	60	90 *****
Maximum Grade Within 75' of Intersection	3%	3%	3%	N/A	3%
Min. Curb Radii at Intersections	30'	25'	20'	N/A	30*****
Min. R/O/W Radii at Intersections	20'	10'	10'	10'	20'*****
Min. Traveled Way Radii on Cul-de-sac	n/a	n/a	n/a	n/a	n/a
Outside Rad.:	n/a	n/a	45'	45'	47'
Inside Rad.:	n/a	n/a	20'	20'	17'

Note : The outside and inside radii may include the width of shoulders, i.e. low volume roads will require wider shoulders.

- * Maximum grade may be exceeded for a length of 100 feet or less.
- ** Roadway crown is per foot of lane width, shoulder crown is 1/2" per foot of shoulder width.
- *** Gravel surfaces shall have a minimum crown of 3/4" per foot of lane width.
- **** Street intersection angles shall be as close to 90 as feasible but no less than the listed angle.
- ***** Should be based on turning radii of expected commercial vehicles, but no less than 30 feet.
- ***** In lieu of a cul-de-sac a developer may substitute a "T" type of turn around. The "T" turn around must be constructed to the same specifications required in section 3 street construction standards.

L. To the greatest extent possible, the centerline of the roadway shall be constructed at the centerline of the right of way.

M. Dead End Streets.

In addition to the design standards above, dead end streets shall be constructed to provide a cul-de-sac or "T" type turn-around. "T" type turnarounds shall be constructed at the terminus of the road to the applicable roadway design specifications. Cul-de-sacs shall be constructed to the applicable roadway design standards and conform with the applicable minimum turning radius as outlined in design standards specified above. Where the cul-de-sac is in a wooded area prior to development, a stand of trees shall be maintained within the center of the cul-de-sac. The Board may require the reservation of a twenty-foot easement in line with the street to provide continuation of pedestrian traffic or utilities to the next street. The Board may also require the reservation of a fifty-foot (50') easement in line with the street to provide continuation of the road where future subdivision is possible.

N. 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 above.
2. All changes in grade shall be connected by vertical curves in order to provide the following minimum stopping sight distances based on the street design speed.

Design Speed (MPH)	25	30	35	40	45
Stopping Sight Distance	155	200	250	305	360

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

3. Where new street intersections or driveway curb-cuts are proposed, sight distances, as measured along the road onto which traffic will be turning, shall be based upon the posted speed limit and conform to the table below. Sight distances shall be measured from the driver's seat of a vehicle standing on that portion of the exit with the front of the vehicle a minimum of 10 feet behind the curb line or edge of shoulder, with the height of the eye 3.5 feet, to the top of an object 4.25 feet above the pavement.

Posted Speed Limit (mph)	25	30	35	40	45
Sight Distance (ft)	280	335	390	445	500

Where necessary, corner lots shall be cleared of all growth and sight obstructions, including ground excavation, to achieve the required visibility.

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 minimum distance of 125' shall be maintained between centerlines of minor streets and 200 feet between collectors or a collector and minor street.

O. Sidewalks.

Sidewalks shall be installed within all subdivisions within areas designated as growth areas in the comprehensive plan. Where sidewalks exist adjacent to a proposed subdivision outside of growth areas, sidewalks shall be installed connecting to existing sidewalks. Where installed, sidewalks shall meet these minimum requirements.

1. Location.

Sidewalks shall be located at the edge of the curb facing or edge of shoulder if the street is not curbed.

2. Bituminous Sidewalks.

- A. The "subbase" aggregate course shall be placed to a depth of not less than twelve inches after compaction.
- B. The hot bituminous pavement surface course shall be MDOT plant Mix Grade D placed in two lifts, each no less than one inch after compaction.

3. Portland Cement Concrete Sidewalks.

A. The subbase aggregate shall be no less than twelve inches after compaction.

B. The Portland Cement Concrete shall be reinforced with six-inch square, number 10 wire mesh and shall be placed to a depth of not less than four inches.

P. Curbs shall be installed within all subdivisions within areas designated as growth areas in the comprehensive plan. Granite curbing shall be installed on a thoroughly compacted gravel base of six inches minimum thickness or as determined and approved by the Towns Engineer. Bituminous curbing shall be installed on the base course of pavement. The specified traveled way width above shall be measured between the curbs.

3. STREET CONSTRUCTION STANDARDS

A. The minimum depth shall meet the specifications in the table below, after compaction:

Street Construction Materials	Minimum Requirements				
	<u>Arterial</u>	<u>Collector</u>	<u>Private</u> <u>Minor</u>	<u>R.O.W</u>	<u>Industrial</u> <u>Commercial</u>
Aggregate Subbase Course (maximum size stone 6")					
Sub-base gravel	20"	15"	15"	12"	20"
Aggregate Base Course, crushed (maximum size stone 1 1/2")					
	4"	3"	3"	3"	4"
Surface Gravel, crushed (maximum size stone 1 1/2")				3"	
Hot Bituminous Pavement					
Total depth	3"	3"	3"	N/A	4"
Surface course	1 1/4"	1 1/4"	1 1/4"	N/A	1 1/4"
Base course	1 3/4"	1 3/4"	1 3/4"	N/A	2 3/4"

B. Preparation.

1. Before any clearing has started on the right of way, the centerline and sidelines of the new road shall be staked or flagged at fifty-foot intervals.
2. Before grading is started, the entire area within the right-of-way necessary for traveled way, shoulders, sidewalks, drainage ways, and utilities shall be cleared of all stumps, roots, brush, and other objectionable material. All shallow ledge, large boulders and tree stumps shall be removed from the cleared area.
3. All organic materials or other deleterious material shall be removed to a depth of two feet below the sub-grade of the roadway. Rocks and boulders shall also be removed to a depth of two feet below the sub-grade of the roadway. On soils which have been identified by the Municipal Engineer as not suitable for roadways, either the subsoil shall be removed from the street to a depth of two feet below the sub-grade and replaced with material meeting the specifications for gravel aggregate sub-base below, or a MDOT approved stabilization geo-textile may be used.
4. Except in a ledge cut, side slopes shall be no steeper than a slope of three feet horizontal to one foot vertical, and shall be graded, loamed, limed, fertilized, and seeded according to the specifications of the erosion and sedimentation control plan. Where cut results in exposed ledge a side slope no steeper than four feet vertical to one foot horizontal is permitted.
5. All underground utilities shall be installed prior to paving to avoid cuts in the pavement. Building sewers and water service connections shall be installed to the edge of the right-of-way prior to paving.
6. All hauling equipment used on the road construction project shall meet the requirements of the most recent edition of MDOT Specifications, section 401.08. All Paving equipment used on the road construction project shall meet the requirements of the most recent edition of MDOT Specifications, section 401.09. All compaction equipment used on the road construction project shall meet the requirements of the most recent edition of MDOT Specifications, section 401.10. All batch and drum plants used to produce asphalt mix for the road construction project shall meet the requirements of the most recent edition of MDOT Specifications, section 401.07. The automation of batching shall meet the requirements of the most recent edition of MDOT Specifications, section 401.072. At automatic mixing plants, automatic tickets shall be printed that meet MDOT Specifications, section 401.073

C. Bases and Pavement.

1. Bases/Sub-base.

- a. The Aggregate Sub-base Course shall be sand or gravel of hard durable particles free from vegetative matter, lumps or balls of clay and other deleterious substances. Aggregate shall be placed in lifts not to exceed twelve inches, and shall be compacted by mechanical methods that meet the most recent edition of MDOT Specifications, section 304.04. Aggregate placed shall achieve 95% compaction (Proctor test) on 100% of the areas tested. Testing shall be accomplished by a Maine Certified Testing Laboratory and will require at least one test for every 100 feet of roadway length. The gradation of the part that passes a 3-inch square mesh sieve shall meet the following gradation requirements:

Percentage by Weight Passing	
<u>Sieve Designation</u>	<u>Square Mesh Sieves</u>
1/4 inch	25 - 70 %
No. 40	0 - 30 %
No. 200	0 - 7%

Aggregate for the sub-base shall contain no particles of rock exceeding six inches in any dimension.

- b. The Aggregate Base Course shall consist of a minimum of three inches (see section 3 (A) (2.) above) of aggregate placed on top of the sub-base course. The Aggregate Base Course shall be screened or crushed gravel of hard durable particles free from vegetative matter, lumps or balls of clay and other deleterious substances. Aggregate shall be placed in lifts not to exceed twelve inches, and shall be compacted by mechanical methods that meet the most recent edition of MDOT Specifications, section 304.04. Aggregate placed shall achieve 95% compaction (Proctor test) on 100% of the areas tested. Testing shall be accomplished by a Maine Certified Testing Laboratory and will require at least one test for every 100 feet of roadway length. The gradation of the part that passes a 3-inch square mesh sieve shall meet the following gradation requirements:

Percentage by Weight Passing
Sieve Designation Square Mesh Sieves

1/2 inch	45 - 70 %
1/4 inch	30 - 55 %
No. 40	0 - 20 %
No. 200	0 - 5 %

Aggregate for the base shall contain no particles of rock exceeding two inches in any dimension.

- c. It shall be the responsibility of the Contractor/Developer to prove to the satisfaction of the Town's Road Commissioner and/or Engineer that the gravel materials used comply with the specifications detailed in this ordinance. All expenses for testing to prove compliance shall be borne by the Contractor/Developer.

2. Pavement Joints

Where pavement joins an existing pavement and forms a neat, even, vertical joint.

3. Pavements.

- a. Pavements shall be hot mix asphalt and shall be composed of a mixture of aggregate and bituminous material. The Contractor/Developer shall submit, for the Road Commissioner and/or Engineer's approval, a current job mix formula (JMF). For a Superpave design, a current MDOT Superpave JMF shall be submitted. If an alternate design similar to the former MDOT designs for B, C and D mix pavement is desired, the contractor/developer shall submit a previously approved JMF conforming to the MDOT Specifications, revisions of April 1995. The pavement may be placed between April 15 and October 01 of each year, provided the air temperature is 45 degrees Fahrenheit, and rising and the surface to be paved is not frozen or wet. A minimum of 48 hours shall be required between placement of base and surface pavement courses. The exposed base course shall be thoroughly cleaned, dry and a tack coat at a minimum rate of 0.02 gallons/square yard shall be applied to the base pavement course.

b. Testing of Pavement. All materials and every detail of work will be subject to inspection by the Road Commissioner and/or Engineer. The Road Commissioner and/or Engineer shall have the right to inspect and test, at the Contractor/Developer's expense, by the following methods: (1.) Core samples for density testing in accordance to AASHTO standards every 1000 tons, (2.) samples of the hot mix asphalt may be taken in accordance with AASHTO standards every 1000 tons to check for asphalt content, gradation, and theoretical maximum density. All test results shall be required to comply with the most recent edition of Section 401 of the MDOT Specifications. Upon demand, the Contractor /Developer shall supply the Road Commissioner/Engineer with a ten (10) foot straightedge. The surface, when tested, shall comply with Section 401.2 of the most recent edition of the MDOT Specifications.

4. Surface Gravel.

A. Private Rights of Ways need not be paved and may have a gravel surface. Surface gravel shall be placed on top of the aggregate sub-base, in the same method as the aggregate sub-base, shall have no stones larger than 2 inches in size and meet the following gradation:

Percentage By Weight Passing

<u>Sieve Designation</u>	<u>Square Mesh Sieves</u>
2 inch	59 - 100%
1/2 inch	30 - 65%
No. 200	7 - 12%

4. Acceptance Procedure

A. All road(s) or street(s) being considered for acceptance, as a public way must be built according to the specifications in this ordinance. No road(s) or street(s) constructed to the Private Right-of-Way standard will be considered for acceptance as a public way until they have been upgraded or constructed to at least the Minor Residential Street standard. All costs associated with construction and inspection of construction under this section shall be at the road association or developer's expense.

- B. The Town 's Road Commissioner must be fully satisfied that all facets of this ordinance have been complied with. The Road Commissioner must submit a written letter of approval attesting to its compliance and suitability for acceptance as a public way.
- C. The Town Council shall not consider any road(s) or street(s) for acceptance as a public way after the first Regular Council Meeting in November. All such road(s) or streets(s) considered for acceptance shall be completed at least thirty (30) days prior to consideration by the Town Council.
- D. All road(s) or streets(s) constructed after the date of adoption of this ordinance shall be constructed in accordance with this ordinance.
- E. Streets and roads shall not be considered for acceptance until at least 51% of the lots assessed by the street or road have been developed and occupied for their principal use. The Council may waive this requirement if it finds that it is of benefit to the Town. Examples of benefits to the Town for the purposes waiving the 51% requirement include, but are not limited to: improvements in traffic flow, efficiencies in snowplowing and efficiencies in bus routing.
- F. Any road(s) or streets(s) currently under construction that are not substantially complete, as of the adoption date of this ordinance shall be built according to the specifications in this ordinance.
- G. All signage shall be installed in accordance with the final plan approved by the Planning board and in accordance with the most recent edition of the Manual on Uniform Traffic Control Devices (MUTCD) at least 30 days prior to acceptance.
- H. All utilities shall be installed in accordance with the final plan approved by the Planning Board. Written letters of acceptance from all public utilities (CMP, Verizon, Oakland Wastewater Treatment Plant, Aqua Maine) will be on file prior to acceptance.
- I. One set of as-built drawings showing the actual post construction condition of all roads that includes plan view, profile view and cross sections at 50-foot intervals. The as-built drawings shall be signed and stamped by a Professional Engineer or Professional Land Surveyor registered to practice in the State of Maine.
- J. A deed of dedication of the entire right-of-way to be accepted will be forwarded to the Road Commissioner not less than 10 working days prior to the Council considering the road for acceptance.

5. Optional Paving Procedures

- A. If in the opinion of the Town Manager it would be advantageous for the Town to have the surface course of pavement installed at a later time, not to exceed 1 (one) year, then the following procedures will be followed.
1. The developer/contractor shall place into an escrow account with the Town of Oakland a sum of money equal to the quoted amount supplied by the paving contractor. The Town will establish this escrow account for this specific purpose.
 2. The contractor/developer shall be reimbursed any money left in this account after the paving is completed. Reimbursement shall be within 60 (sixty) days of pavement completion.
 3. Deficiencies in any of the foregoing work shall be corrected and must remain complete without further defect for a period of 30 days after April 15 and before September 28 of any year before proceeding to placement of the surface course of pavement.
- B. Any road(s) or street(s) that have not been accepted as a public way that are built in accordance with the requirements of this ordinance with the exception of the paving may ask to have the pavement included with the Town's paving projects. To qualify for the potential savings the following requirements must be met.
1. Roadway construction must have been approved by the appropriate Municipal Officials (Road Commissioner, Municipal Engineer etc.) in the year in which the road(s) are to be paved.
 2. Deposit the estimated cost of paving plus 10% into an escrow account established for this purpose with the Town of Oakland. The Town's paving contractor shall establish this estimated amount.
 3. Agree to pay any additional cost of paving to the Town within 30 (thirty) days.

NOTE - The Towns only responsibility to the developer/contractor will be to see that the monies paid to the Town for the road paving project is spent on the designated project at the Towns' paving rate.

6. Amendments

This ordinance may be amended by a majority vote of the Town Council. Amendments may be initiated by the Town Council, a majority vote of the Planning Board, or written petition by a number of voters equal to at least 10% of the number of votes cast in the Municipality in the last gubernatorial election.

7. Authority

These standards have been prepared in accordance with the provisions of Title 30-A M.R.S.A. Section 4403.

8. Validity and Severability

- A. Should any section of provision of this Ordinance be declared by the courts to be invalid, such decision shall not invalidate any other section or provision of this Ordinance.
- B. This ordinance shall not repeal, annul, or remove the necessity of compliance with any other rule, regulation, bylaw, permit, or provision of law.

9. Interpretation

The Appeals Board shall be the final arbiter pertaining to matters of interpretation and compliance with this ordinance.

DEFINITIONS

Applicant - The person applying for approval under these regulations.

Average Daily Traffic (ADT) - The average number of vehicles per day that enter and exit the premises or travel over a specific section of road.

Buffer Area - A part of a property or an entire property, which is not built upon and is specifically intended to separate and thus minimize the effects of a land use activity (e.g. noise, dust, visibility, glare, etc.) on adjacent properties or on sensitive natural resources.

Capital Improvements Program (CIP) - The municipality's proposed schedule of future projects listed in order of construction priority together with cost estimates and the anticipated means of financing each project.

Capital Investment Plan - The identification of the projects which need to be considered for inclusion within the capital improvements program, together with an estimate of the order of magnitude for the cost of each project.

Complete Substantial Construction - The completion of not less than thirty (30) percent of the cost of the proposed improvements within a subdivision. If the subdivision is to consist of individual lots to be sold or leased by the sub-divider, the cost of construction of buildings on those lots shall not be included. If the subdivision is a multifamily development, or if the applicant proposes to construct the buildings within the subdivision, the cost of building construction shall be included in the total costs of proposed improvements.

Comprehensive Plan - A document or interrelated documents adopted by the Legislative Body, containing an inventory and analysis of existing conditions, a compilation of goals for the development of the community, an expression of policies for achieving these goals, and a strategy for implementation of the policies.

Conservation Easement - A non-possessory interest in real property imposing limitations of affirmative obligations, the purposes of which include retaining or protecting natural, scenic or open space values of real property; assuring its availability for agricultural, forest, recreational or open space; protecting natural resources; or maintaining air or water quality.

Developed Area - Any area on which a site improvement or change is made, including buildings, landscaping, parking areas, and streets.

Engineer - A professional engineer, registered in the State of Maine.

Municipal Engineer - Any professional engineer registered in the State of Maine, hired or retained by the municipality, either as staff or on a consulting basis.

Person - Includes a firm, association, organization, partnership, trust, company, or corporation, as well as an individual.

Planning Board - The Planning Board of the Town of Oakland.

Road Association – An association of owners with frontage along a private way that are organized in accordance with Title 23, M.R.S.A., section 3101 –3105.

Sight Distance - The length of an unobstructed view from a particular access point to the farthest visible point of reference on a roadway. Used in this ordinance as a reference for unobstructed road visibility.

Street - Public and private ways such as alleys, avenues, highways, roads, and other rights-of-way, as well as areas on subdivision plans designated as rights-of-way for vehicular access other than driveways.

Surveyor - A professional land surveyor, registered in the State of Maine.

Street Classification

Arterial Street - A major thoroughfare, which serves as a major traffic way for travel between and through the municipality.

Collector Street - A street or streets, which serve as feeders to arterial streets, and collectors of traffic from minor streets.

Dead End Street - A street with only one ingress/egress and a terminus designed for the reversal of traffic movement. The reversal of traffic movement shall be a cul-de-sac, “hammerhead” or “T turnaround” and shall be designed to allow expected traffic flow to move freely into and out of the street.

Industrial or Commercial Street - Streets servicing industrial or commercial uses.

Minor Residential Street - A street servicing only residential properties.

Private Right of Way - A minor residential street which is not intended to be dedicated as a public way.

Very Low Volume Street – Any street classified above, except Arterial Streets or Industrial/Commercial Streets, that is a local road and has a design average daily traffic volume of 400 vehicles per day or less. These streets may be approved with reduced travel way widths.

TOWN OF OAKLAND - ROAD CONSTRUCTION CHECKLIST FOR ROADS TO BE ACCEPTED AS TOWN WAYS

DEVELOPER
DATE/SIGNATURE

TOWN
DATE/SIGNATURE

SECTION I

MATERIALS REVIEW

- | | | |
|--|-------------------------------------------------------------------------|--|
| | A. Gravel source identified and accepted. | |
| | B. Pavement mix design submitted and accepted. | |
| | C. Culvert source identified and accepted. | |
| | D. Other materials identified and accepted. | |
| | Developer has been provided a copy of the Ordinance and this checklist. | |

SECTION II

ROAD BED PREPARATION

- | | | |
|--|-----------------------------------------------------------------------------------------------------------------|--|
| | A. Road bed cleared and grubbed to top of back slope of ditch. | |
| | 1. No organic material. | |
| | 2. Sub-grade sloped to ditches. | |
| | 3. Elevations checked at 100 foot stations. | |
| | B. Sub-based gravel placed | |
| | 1. 12" or less lifts | |
| | 2. Each lift compacted individually, to 95% compaction (Proctor). | |
| | 3. Stones larger than surface gravel lift removed. | |
| | 4. 1/4" foot crown maintained, 1/2" foot shoulder crown. | |
| | 5. Correct depth for design standard. | |
| | 6. Sufficient width to meet design standard. | |
| | C. Base Gravel Placed | |
| | 1. Correct depth to meet design standard. | |
| | 2. Sufficient width to meet design standard. | |
| | 3. Lift compacted individually. | |
| | 4. Stones larger than pavement thickness removed. | |
| | 5. 1/4" foot crown maintained, 1/2" foot shoulder crown. | |
| | D. Pavement placed | |
| | 1. Width/thickness sufficient to meet design standard. | |
| | 2. Base and surface placed and compacted individually, at least 48 hours between courses, tack coat applied. | |
| | 3. Placed in proper weather conditions (e.g. no heavy rain, no snow, ice on road bed, 45 degrees F and rising). | |
| | 4. All cold joints completely sealed. | |
| | 5. No drag marks in the surface course. | |
| | 6. 1/4" foot crown maintained, 1/2" foot shoulder crown. | |
| | E. Ditches | |
| | 1. Slopes to meet design standard. | |
| | 2. Sufficient depth to carry volume of water. | |
| | 3. Grass catch is evident. | |
| | 4. Rock check dams sufficient to meet standards. | |
| | 5. Drainage structures of sufficient size to meet design standards. | |

SECTION III

OTHER

**DEVELOPER
DATE/SIGNATURE**

**TOWN
DATE/SIGNATURE**

- A. Signage installed per plan
- B. Street Lights installed per plan.
- C. Utilities installed, ltrs from CMP, WWTP, Maine Water
- D. Other planning board conditions met.
- E. Deed of dedication prepared.
- F. Letter to Town Manager from developer asking for acceptance at least 30 days before consideration by Council and not later than 10/15, road way complete to standards.
- G. Monuments in- place (perimeter, property corners, PC & PT).
- H. As-built drawings forwarded to Town.
- I. Council motion to approve.

Town Manager/Road Commissioner

Public Works Director

A True Copy

Attest: