# SUBDIVISION REGULATIONS

# TOWN OF OWLS HEAD

Adopted - October 13, 1983

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## Section I.

## **Definitions**

# 1. Subdivision:

For the purposes of this Regulation, a subdivision has the same definition as the MRSA Title 30, Section 4956.

## 2. <u>Subdivision, Major</u>:

A subdivision containing twenty (20) or more lots.

# 3. <u>Subdivision, Minor:</u>

A subdivision containing from three (3) up to, but not including, twenty (20) lots.

## 4. Local Street:

A street designed to primarily serve the residences of a residential area.

## 5. Collector Street:

A street connecting local streets with an arterial street or major roadway.

## 6. Arterial Street:

A major traffic route connecting major sections of the community or connecting with other communities.

# 7. Height of Building:

The vertical distance between the highest point of the roof and the average grade of the ground adjoining the building. Approval of structures on a roof, such as cupolas, ventilators, or solar collectors, which project above 34 feet may be given by the Planning Board if such structures do not obstruct the view of adjacent property owners.

# 8. Grade:

In relation to buildings, the average of the finished ground level of each wall of the building.

## 9. Lot:

A parcel of land in single ownership occupied or capable of being occupied by one building and the accessory buildings or uses customarily incidental to it, including such open spaces as are required by this regulation, and having frontage upon a street.

## Section II.

## Genera1

1. Any proposed subdivision shall be in conformity with the provisions of all pertinent state and local codes and ordinances.

- 2. If the proposed subdivision in any way falls within the jurisdiction of and is subject to review of the State of Maine Department of Environmental Protection, approval of DEP shall be submitted in writing to the Planning Board prior to submission of the Final Plot Plan.
- 3. Building height may not exceed 2 ½ stories or 34 feet.
- 4. Underground utilities, while not required, are encouraged as they present an improved visual perspective when compared to aerial utilities.
- 5. Plans for road construction, grading and ditching shall be reviewed by the Road Commissioner prior to Planning Board approval of the Final Plot Plan.
- 6. The Road Commissioner shall evaluate the potential impact of the subdivision's traffic on the town's existing road system and report his findings to the Planning Board.
- 7. Subdivision plans must be reviewed by the Selectmen to determine if the town's solid waste disposal system is adequate to handle the increased volume which might be caused by the subdivision.

# 8. <u>Sewage Waste Disposal</u>:

State and local regulations must be met.

a) Subsurface. If subsurface sewage disposal is to be used, each lot must be evaluated for subsurface disposal by a state-certified site evaluator.

The Preliminary and Final Plot Plans must show the location of all soils test pits and be accompanied by a written report of the site evaluator for each test pit.

The subsurface sewage disposal plans must be approved by the Local Plumbing Inspector.

b) If a public sewage system is to be used, the Sewer Authority must state in writing that it has sufficient capacity for the foreseeable needs of the subdivision.

Detailed design of the sewer system must be reviewed by the Sewer Authority.

# 9. Water Supply:

a) A report must be submitted to the Planning Board from a certified well driller or hydro-geologist giving his expert opinion as to the adequacy of a water supply for the needs of the subdivision.

Test wells may be required by the Planning Board if needed to properly evaluate the availability of a water supply for the subdivision. b) If a public water supply is to be used, the Water Authority must state in writing that it has sufficient capacity for the foreseeable needs of the subdivision.

The detailed design of the water system must be reviewed by the Water Authority.

# 10. Open Space and Protection of Natural Resources:

The Planning Board may require that a proposed subdivision design include a landscape plan that will show the preservation of existing trees (10" or more in diameter), the replacement of trees and vegetation, graded contours, streams, and the topography. Extensive grading and filling shall be avoided as much as possible.

## 11. Final Approval and Inspection Procedure:

All improvements within the subdivision shall be periodically reviewed by the Zoning Administrator utilizing inspection reports of the Road Commissioner, Local Plumbing Inspector, or other utility inspectors. Where improvements are not constructed in accordance with the Planning Board approved plans, the Zoning Administrator shall issue a "stop work" order until either the construction conforms to approved plans or an amended plan is approved by the Planning Board.

## 12. Monuments:

Permanent monuments shall be set at all corners and angle points of the subdivision's boundaries.

- 13. The Fire Chief shall review the Final Plot Plan to determine the adequacy of the streets for fire truck use and to determine the adequacy of the fire department to protect the residences of the subdivision.
- 14. No work within a subdivision may be started until the Final Plot Plan has been approved by the Planning Board.
- 15. The Planning Board may require a sub-divider to submit sufficient financial data to assure the Planning Board that the sub-divider has available sufficient finances to complete the subdivision as detailed in the Final Plot Plan.
- 16. The Planning Board may hire a consultant, such as an engineering or architectural firm, to review and reconfirm the adequacy of the design specifications of the various subdivision systems submitted by the sub-divider. The costs of such a consultant shall be borne by the sub-divider.

## Section III.

# Storm Drainage Systems

#### General:

The Planning Board may require the installation of ditches, catch basins,

piping systems, and other appurtenances for the conveyance, control, or disposal of surface waters. Adequate drainage shall be provided so as to reduce the danger of flooding and erosion. If a storm drainage system is required, it shall be designed to meet the criteria of a ten year storm based on rainfall data of Knox County.

# 2. Design Standards:

- a) Existing downstream drainage facilities shall be studied to determine the effect of the proposed subdivision's drainage. The developer shall demonstrate to the satisfaction of the Planning Board that the storm drainage from the proposed subdivision will not, in any way, overload existing storm drainage systems downstream from the proposed subdivision.
- b) 300 feet shall be considered as the maximum length for carrying open storm water in a street gutter prior to intake at a catch basin. No storm water will be permitted to drain across a street or across an intersection. No additional water is to be drained onto abutting property.
- c) Design standards for drainage systems shall be approved by the Planning Board. Minimum pipe size for any storm drainage pipe shall be 12 inches.
- d) Where open ditches, channels, streams or natural drainage courses are used, either to collect or discharge storm water, adequately sized perpetual easements shall be provided. Minimum width shall be 30 feet.
- e) Where subsurface soils are of the nature requiring an under drainage system, under drains shall be installed and discharged in a positive manner.

## f) Culverts:

- When a subdivision local street connects with a collector or arterial street and a culvert is required, the culvert must be sized according to State or Maine specifications.
- 2) Where a driveway connects with a street, if a culvert is required, its minimum size must be 15 inches by 24 feet.

# 3. Storm Drain Construction Standards:

Any variation to the following must be approved by the Planning Board.

a) <u>Materials</u>: The following material shall be utilized for storm drain construction. See Maine Department of Transportation, Manual of Standard Specifications, Highways and Bridges, Revision of June 1981.

- Reinforced Concrete Pipe Reinforced Concrete Pipe shall meet the requirements of ASTM Designation C-76. Pipe classes shall be as required to meet soil and traffic loads with a factor of safety of 2.1 on the .01 inch crack strength with a class B bedding. Joints shall be of rubber gasket type meeting ASTM Designation C-443-70, or of an approved preformed plastic jointing material such as "Ramnek."
- 2) Asbestos Cement Pipe Asbestos Cement Pipe shall meet the requirements of ASTM C-428. Pipe classes shall be as required to meet soil and traffic loads with a factor of safety of 1.5 on the crushing strength. Joints may be of the rubber gasket type meeting the requirements of ASTM Designation 0-1869-63, or may be of the preformed plastic sleeve type.
- 3) Corrugated Metal Pipe Corrugated Metal Pipe shall be bituminous coated meeting the basic requirements of AASHTO Designation M-36. Pipe gauge shall be as required to meet soil and traffic loads with a deflection of not more than .5". Joints shall be by bolted bands with a minimum of 5 corrugations.
- 4) <u>PVC Pipe</u> Plastic PVC Pipe shall meet the requirement of the Maine Department of Transportation as to size and thickness. Joints shall be cemented with standard PVC cement.
- 5) <u>Under-drain Pipe</u> Under-drain Pipe may be of perforated bituminous coated corrugated metal or PVC meeting similar requirements to that of standard drain pipe.
- Manholes Manholes may be of precast concrete section construction, or precast concrete block construction. Precast sections shall meet the requirements of ASTM Designation C-478. Cones shall be truncated. Precast concrete manhole blocks shall meet the requirements of ASTM Designation C-139, radial type. Bases may be cast in place concrete, 3000 psi, 28 day strength, or may be precast concrete. Castings shall be of cast iron meeting Town standards for sewer construction. Brick inverts, shall be shaped to the crown of the pipe for sizes up to 18 inches, and to spring line for larger pipes.
- 7) Catch Basins Catch Basins may be of precast concrete construction or of precast concrete block construction, ASTM Designation C-139. Castings shall be square cast iron as required for the particular inlet condition with the gratings perpendicular to the curb line. All catch basins shall be provided with a Type 1 curb face inlet.

## Section IV.

## Minimum Design Standards for Street and Pedestrian Ways

## 1. Streets:

General

a) Streets must be designed to integrate with the topography and natural features, and provide adequate sight distances. The subdivided area shall have frontage on a public street of sufficient width to meet the road classification standards. If such an existing street has not been improved to the standards in these regulations, the Board may require the developer to make improvements on his frontage where necessary for drainage or traffic safety.

# **Design Characteristics**

- a) The proposed street system shall be integrated within the existing street network.
- b) The pattern of circulation should be obvious to the motorist, with local streets subordinate to collector streets. Pavement width, street alignment, frequency and degree of curves, setback of homes, landscaping, or other means should heighten the distinction between local and collector streets. Local streets should discourage through traffic by the use of curves, cul-de-sacs, or other means to slow traffic speeds.
- c) Street layout shall reflect the natural terrain and special features. Rights of way shall not be stripped of trees or vegetation except where grading is absolutely necessary for drainage or safety requirements. Areas of cut and fill shall be minimized to inhibit erosion. Drainage shall utilize natural systems, where possible, with adequate protection against erosion and folding. Cul-de-sacs, P-loops, loop streets and T-heads may be utilized provided adequate radius and access is planned for emergency vehicles and snow plowing.
- d) Reserved streets for future street connections to adjoining undeveloped property may be required by the Board to be dedicated to the Town in order to insure proper access by fire equipment, snow plows, or for convenience of school buses. The developer of the adjoining property can be required by the Board to connect to and build over the reserved strips. Reserved strips not to be used shall be dispensed with according to MRSA Title 23, Section 3027.
- e) Street design shall conform to the following standards:
  Intersections should be at angles of 90 degrees, a 15 degree deviation may be considered. Intersections of streets should be a minimum of 250 feet apart. Where intersection's approach is off a hill, leveling area of at least 60 feet and not more than 2% slope shall be required. Street names shall not duplicate or approximate existing streets.

A street shall be graded to its full width between exterior lines, and cleared to its full width except for trees intended for preservation. That portion of a street to be paved shall be excavated to a depth of 18 inches (local Streets) or 27 inches (collector and arterial streets) below final approved finished grade. Pockets of unstable soil shall be excavated deeper than these minimum requirements as directed by the Road Commissioner.

The base course shall be constructed of gravel to finished grade. Sub-grade, grade course and surface course material must be approved by the Road Commissioner.

For major subdivisions, the street surface shall consist of bituminous concrete mix Type B placed in conformance to the latest Maine Department of Transportation Specifications for Highways and Bridges. The pavement shall be laid to a minimum thickness of 1 ½ inches. The Road Commissioner may recommend to the Board alternative pavement of equal or higher standards.

## DESIGN STANDARDS FOR STREETS

Minimum Right of Way 50 ft. 50 ft. 60 ft.	<u>I</u>	Local St.	Collector St.	Arterial St.
Payament Width 20 ft 22 26 ft 24 44 ft	Minimum Right of Way	50 ft.	50 ft.	60 ft.
Favement width 20 ft. 22-30 ft. 24-44 ft.	Pavement Width	20 ft.	22-36 ft.	24-44 ft.
Maximum Grade 10% 8% 6%	Maximum Grade	10%	8%	6%
Minimum Grade 1% 1% 1%	Minimum Grade	1%	1%	1%
Minimum Radius of Curve 100 ft. 100 ft. 300 ft.	Minimum Radius of Curve	100 ft.	100 ft.	300 ft.
Minimum Sight Distance 200 ft. 200-240 ft. 275 ft.	Minimum Sight Distance	200 ft.	200-240 ft.	275 ft.
(75 ft. at Intersections				(75 ft. at Intersections)
Design Speed 25 mph 30 mph 40-55 mph	Design Speed	25 mph	30 mph	40-55 mph
Minimum Turnaround Row Diameter 120 ft.	Minimum Turnaround Row Diameter	120 ft.		
Minimum Turnaround Pavement 24 ft.	Minimum Turnaround Pavement	24 ft.		
Center Island Diameter 40 ft.	Center Island Diameter	40 ft.		

## 2. Sidewalks:

For pedestrian safety and convenience, the Planning Board may require sidewalks. The Board shall consider the following factors when determining if a sidewalk is required.

- a) The probable present and future type, volume and speed of vehicular traffic on the particular way.
- b) The probable present and future type and quantity of pedestrian traffic on the particular way.

If sidewalks are required, they must be a least 5 feet wide.

## 3. Minimum Standards for Construction:

This section sets the minimum standards for street, sidewalk, and utilities construction.

## Clearing:

The provisions of this subsection apply to the clearing for streets.

- a) The entire area of the proposed traveled portion of each street, way, including shoulders and sidewalk, must be cleared of all stumps, brush, roots, boulders, like material, and all trees not intended for preservation.
- b) Beneath these ways all loam or soft spongy or otherwise under desirable material such as peat, roots, mulch or quicksand, must be removed to whatever depth it occurs, except if covered by 5 feet or more of fill if deemed necessary by the Road Commissioner.
- c) Clearing must be inspected and approved by the Road Commissioner before continuing the project.

# Rough Grading for Streets and Sidewalks:

The provisions of this subsection apply to both major and minor subdivisions.

- a) The entire length and width of the vehicular way must be brought to a firm sub-grade at least eighteen (18) inches below the finished grade shown on the profile.
- b) If required, the entire length and width of the sidewalk must be brought to a firm sub-grade at least eight (8) inches below the finished grade desired.
- c) All fill and ordinary borrow must consist of any firm bearing material, except loam or organic matter meeting the approval of the Road Commissioner.

Rough grading must be inspected and approved by the Road Commissioner before continuing the project.

# Finish Grading and Paving Curbs:

The provisions of this subsection apply to both major and minor subdivisions.

- a) All sub-grades of vehicular ways of local roads must be covered with at least fifteen (15) inches of well-compacted gravel to a grade of 2 ½ inches below finish grade shown on the profile, with a transverse pitch from centerline to edge of pavement of one-quarter (1/4) inch per foot. Sub-grades of connector roads covered with 24" to a grade of 2 ½"
  - Gravel specifications: Minimum amount of gravel 15" deep. Bottom 13" as per Maine Department of Transportation Specification No. 703.20, Gravel Borrow. No rocks over 6".

Passing 3" screen 70-100%
Passing 1/4" mesh sieve 10-70%
Passing 200 mesh sieve 0-10%
Top 2" as per Maine Department of Transportation Specification
No. 703.06 (b) Aggregate Sub-base
Passing 1 1/2" screen 100%
Passing 1/4" sieve 25-70%
Passing No. 40 sieve 5-30%
Passing No. 200 sieve 0-7%

# **Final Paving:**

The provisions of this subsection apply only to major subdivisions

- a) Gravel must be allowed to settle over one winter season prior to paving unless the gravel is compacted by a roller.
- b) All vehicular ways of a major subdivision must be paved with at least 1 ½" of compacted bituminous concrete binder course and 1" finish course.
- c) If sidewalks are required by the Board, all sub-grades of sidewalks must be covered with at least six (6) inches of well-compacted gravel to a grade two (2) inches below the desired finish grade and pitched one-quarter (1/4) inch per foot. A one and one-half (1 1/2) inch course of compacted bituminous concrete must be applied.
- d) Where planting strips are installed, at least four (4) inches of well compacted loam must be installed and pitched at least one-quarter (1/4) inch per foot and not more than four (4) inches per foot.
- e) All completed gravel courses must be inspected and approved by the Road Commissioner prior to application of the finished paving.

Permanent monuments meeting Maine Department of Transportation standards must be installed at all street intersections, at all points of change in direction, or curvature of streets.

Before a street is submitted to the Town for acceptance as a town street, the street must have gone through one full winter with the final paving.

## Section V.

## Performance Guarantee:

1. The Planning Board may require that the sub-divider file with the Board at the time of submission of the Final Plot Plan a performance guarantee in an amount sufficient to defray all expenses of the proposed public improvements. This may be tendered in the form of a certified check payable to the Treasurer of the Town, or a performance bond running to the Town and issued by a surety company acceptable to the Town, or an

irrevocable letter of credit from a bank, or an escrow account shall be determined by the Planning Board with the advice of the Town Selectmen. The amount shall be at least equal to the total cost of furnishing, installing, connecting and completing all of the street grading, paving, storm drainage and utilities or other improvements specified on the Final Plot Plan within two years of the date of the certified check, performance bond, letter of credit or escrow account.

- 2. The Planning Board may recommend a maximum extension of 12 months to the guaranteed performance period when the sub-divider can demonstrate, to the satisfaction of the Board and the Selectmen, good cause for such extension. Such recommendation shall be referred to the Selectmen for official action.
- 3. Before a subdivider may be released from any obligation requiring his guarantee of performance, the Planning Board will require certification from the Zoning Administrator and Selectmen to the effect that all improvements have been satisfactorily completed in accordance with all applicable standards (State, Federal, and local codes, ordinances, laws, and regulations).
- 4. Except for major subdivisions, the Planning Board may, at its discretion, waive the requirement of a performance guarantee and recommend a properly executed conditional agreement with the Town. Such agreement, if executed with the Town, shall be endorsed in writing on the Final Plot Plan and shall provide that the Planning Board may approve the Final Plot Plan or any part thereof, on the condition that no lot in the subdivision may be sold and no permit shall be issued for construction of any building on any lot on any street in the subdivision until it shall have been certified in the manner set forth in paragraph 3 above that all improvements have been made within 2 years of the date of executing such conditional agreement.

## Section VI.

## Amendments:

These regulations may be amended by the Planning Board after a Public Meeting.