ARTICLE 9 – SHORELAND MANAGEMENT AREA USES, DIMENSIONS, AND STANDARDS

9.1. ALLOWED USES

Key to Table 9A:
A=allowed without permit;
N=not allowed;
C=requires CEO permit, no Planning Board review;
P=requires CEO permit following Planning Board review;
L=requires plumbing permit; RS refers to the Residential Standards found in Article 8;
SS refers to Shoreland Standards found in this Article.)

TABLE 9A: USES AND ACTIVITIES IN THE SHORELAND MANAGEMENT AREA

LAND USE ACTIVITY	SHORELAND DISTRICTS	
	RESOURCE PROTECTION	LIMITED RESIDENTIAL
1. Agriculture	P	A
2. Aquaculture	P	P
3. Campgrounds	N	P[13]
4. Clearing or removal of vegetation for activities other than timber harvesting	C[1]	A
5. Conversions of seasonal residences to year-round residences	L	L
6. Emergency operations	A	A
7. Essential services		
A. Roadside distribution lines (34.5kV and lower)	C[6]	A[12]
B. Non-roadside or cross-country distribution lines involving ten poles or less in the shoreland zone	P[6]	C
C. Non-roadside or cross-country distribution lines involving eleven or more poles in the shoreland zone	P[6]	P
D. Other essential services	P[6]	P
8. Filling and earth moving of <10 cubic yards	C	A
9. Filling and earth moving of >10 cubic yards	P	C
10. Fire prevention activities	A	A
11. Forest management activities except for timber harvesting & land management roads	A	A
12. Home Occupations Level 1	N	P
13. Home Occupations Level 2	N	P
14. Individual, private campsites	C	C
15. Land management roads	P	A
16. Marinas	N	P
17. Mineral exploration	A[2]	A[2]

18. Mineral extraction including sand and gravel extraction	P[3]	P
19. Motorized vehicular traffic on existing roads and trails	A	A
20. Non-intensive recreational uses not requiring structures such as hunting, fishing and hiking	A	A
21. Parking facilities / areas	N	P
22. Piers, docks, wharfs, bridges and other structures and uses extending over or below the normal high-water line or within a wetland a. Temporary b. Permanent	C[11] P	C[11] P
23. Principal structures and uses A. One and two family residential, including driveways	P[9]	P
B. Multi-unit residential	N	P
C. Commercial	N	P[10]
D. Industrial	N	N
E. Governmental and institutional	N	P
F. Small non-residential facilities for educational, scientific, or nature interpretation purposes	P	C
24. Private sewage disposal systems for allowed uses	L	L
25. Public and private recreational areas involving minimal structural development	P	P
26. Road construction	N[8]	P
27. Service drops, as defined, to allowed uses	A	A
28. Signs	A	A
29. Soil and water conservation practices	A	A
30. Structures accessory to allowed uses	P[4]	C
31. Surveying and resource analysis	A	A
32. Timber harvesting	C	A
33. Wildlife management practices	A	A
34. Uses similar to uses allowed without a permit	A	A
35. Uses similar to uses requiring a CEO permit	C	C
36. Uses similar to uses requiring a PB permit	P	P

NOTES TO TABLE 9A:

[1]In RP not allowed within 75 feet horizontal distance, of the normal high-water line of great ponds, except to remove safety hazards.

[2]Requires permit from the Code Enforcement Officer if more than 100 square feet of surface area, in total, is disturbed. Mineral exploration is not allowed within 75 feet, horizontal distance, of the normal high-water line of a stream.

[3]In RP not allowed in areas so designated because of wildlife value. Not allowed within 75 feet, horizontal distance, of the normal high-water line of a stream.

[4]Provided that a variance from the setback requirement is obtained from the Board of Appeals.

[5] N/A

[6]See further restrictions in **SS 9.2.**

[7]N/A

[8]Except as provided in **SS 16.3.**

[9]Single family residential structures may be allowed by special exception only according to the provisions of **SS 20.0, Special Exceptions.** Two-family residential structures are prohibited.

[10]Only for commercial uses otherwise listed in this Table, such as marinas and campgrounds that are allowed in the respective district.

[11]Excluding bridges and other crossings not involving earthwork, in which case no permit is required.

[12]Permit not required but must file a written "notice of intent to construct" with CEO.

[13] As provided in **SS 4.0.**

NOTE: A person performing any of the following activities shall require a permit from the Department of Environmental Protection, pursuant to **38 MRSA § 480-C,** if the activity occurs in, on, over or adjacent to any freshwater wetland, great pond, river, stream or brook and operates in such a manner that material or soil may be washed into them:

A. Dredging, bulldozing, removing or displacing soil, sand, vegetation or other materials;
B. Draining or otherwise dewatering;
C. Filling, including adding sand or other material to a sand dune; or
D. Any construction or alteration of any permanent structure.

9.2. DIMENSIONAL REQUIREMENTS IN THE SHORELAND MANAGEMENT AREA

In addition to any dimensional requirements that apply to a parcel due to the underlying growth management area, lots in the Shoreland Management Area shall conform to the **Minimum Lot Standards** of **SS 12.0.**

Principal and accessory structures shall conform to the setback requirements and height requirements of **SS 15.0, Principal and Accessory Structures.**

Proposed uses and activities involving non-conforming lots, uses and structures shall conform with all applicable provisions of **Article 16, Non-conformity Provisions.**

Many of the land use activities in the Shoreland Management Area addressed by this Ordinance have shore setback restrictions and other dimensional requirements. Landowners in the Shoreland Management Area are advised to become familiar with the Shoreland Standards that follow.

In all cases where other provisions of this Ordinance apply to a land use in addition to the Shoreland Standards, the most restrictive requirement shall apply.

9.3. SHORELAND STANDARDS (SS)

All land use activities within two hundred fifty feet (250') of the normal high-water line of any great pond, within two hundred fifty feet (250') of the upland edge of a freshwater wetland, or within seventy-five feet (75') of the high-water line of a stream or tributary stream, and also any structure built on, over or abutting a dock, wharf or pier, or other structure extending or located below the normal high-water line of a water body or within a wetland, shall conform with the following provisions, if applicable. Descriptions of the Districts and Areas within the Shoreland Management Area are found in **Article 3** and the Official Shoreland Management Map of Clifton shows the designated boundaries of those

Shoreland Districts and Areas.

SS 1.0 GENERAL STANDARD OF CONFORMANCE

After the submission of a complete Shoreland Management Area application to the Planning Board, the Board shall approve an application or approve it with conditions if it makes a positive finding based on the information presented that the proposed use:

SS 1.1. Will maintain safe and healthful conditions;

SS 1.2. Will not result in water pollution, erosion, or sedimentation to surface waters;

SS 1.3. Will adequately provide for the disposal of all wastewater;

SS 1.4. Will not have an adverse impact on spawning grounds, fish, aquatic life, bird or other wildlife habitat;

SS 1.5. Will conserve shore cover and visual, as well as actual, points of access to inland waters;

SS 1.6. Will protect archaeological and historic resources as designated in the comprehensive plan;

SS 1.7. Will avoid problems associated with floodplain development and use; and

SS 1.8. Is in conformance with all applicable provisions of the following Shoreland Standards and all other applicable standards and requirements of this Ordinance.

SS 2.0 AGRICULTURE

SS 2.1. All spreading of manure shall be accomplished in conformance with the *Manure Utilization Guidelines* published by the Maine Department of Agriculture on November 1, 2001, and the Nutrient Management Act (**7 M.R.S.A. §4201-4209**).

SS 2.2. Manure shall not be stored or stockpiled within one hundred feet (100'), horizontal distance, of a great pond or within seventy-five feet (75') horizontal distance, of other water bodies, tributary streams, or wetlands. All manure storage areas within the Shoreland Management Area must be constructed or modified such that the facility produces no discharge of effluent or contaminated storm water.

SS 2.3. Agricultural activities involving tillage of soil greater than forty thousand (40,000) square feet in surface area within the Shoreland Management Area shall require a Conservation Plan to be filed with and approved by the Planning Board. Non-conformance with the provisions of said plan shall be considered to be a violation of this Ordinance.

SS 2.4. There shall be no new tilling of soil within one hundred feet (100'), horizontal distance, of the normal high-water line of a great pond; within seventy-five feet (75'), horizontal distance, from other water bodies; nor within twenty-five feet (25'), horizontal distance, of tributary streams, and freshwater wetlands. Operations in existence on the effective date of this Ordinance and not in conformance with this provision may be maintained.

SS 2.5. Newly established livestock grazing areas shall not be permitted within one hundred feet (100'), horizontal distance, of the normal high-water line of a great pond; within seventy-five feet (75), horizontal distance of other water bodies, nor; within twenty-five feet (25'), horizontal distance, of tributary streams, and freshwater wetlands. Livestock grazing associated with ongoing farm activities, and which are not in conformance with the above setback provisions may continue, provided that such grazing is conducted in accordance with a Conservation Plan.

SS 3.0 ARCHAEOLOGICAL SITES

Please refer to **GPS 2.0**. Compliance with **GPS 2.0** fulfills compliance with **this requirement**.

SS 4.0 CAMPGROUNDS

(Also see **Article 14.2**)

Campgrounds are allowed in the Limited Residential district and shall conform to the minimum requirements imposed under State licensing procedures and the following:

SS 4.1. Campgrounds shall contain a minimum of five thousand (5,000) square feet of land, not including roads and driveways, for each site. Land supporting wetland vegetation, and land below the normal high-water line of a water body shall not be included in calculating land area per site.

SS 4.2. The areas intended for placement of a recreational vehicle, tent or shelter, and utility and service buildings shall be set back a minimum of one hundred (100) feet, horizontal distance, from the normal high-water line of a great pond classified GPA, and seventy-five (75) feet, horizontal distance, from the normal high-water line of other water bodies, tributary streams, or the upland edge of a wetland.

SS 5.0 CLEARING OR REMOVAL OF VEGETATION FOR ACTIVITIES OTHER THAN TIMBER HARVESTING

SS 5.1. In the Great Pond Resource Protection Area, there shall be no cutting of vegetation within the strip of land extending 75 feet, horizontal distance, inland from the normal high-water line, except to remove safety hazards.

Elsewhere, in the Resource Protection District (in the Freshwater Wetland Resource Protection, Stream Resource Protection and other areas designated as in the Resource Protection District in **Article 3**), the cutting or removal of vegetation shall be limited to that which is necessary for uses expressly authorized in the Resource Protection District.

SS 5.2. In the Limited Residential District, except to allow for the development of permitted uses, within a strip of land extending one-hundred (100) feet, horizontal distance, inland from the normal high-water line of a great pond, and seventy-five (75) feet, horizontal distance, from any other water body, tributary stream, or the upland edge of a wetland, a buffer strip of vegetation shall be preserved as follows:

SS 5.2.1. There shall be no cleared opening greater than 250 square feet in the forest canopy (or other existing woody vegetation if a forested canopy is not present) as measured from the outer limits of the tree or shrub crown. However, a footpath not to exceed six (6) feet in width as measured between tree trunks and/or shrub stems is allowed provided that a cleared line of sight to the water through the buffer strip is not created.

SS 5.2.2. Selective cutting of trees within the buffer strip is allowed provided that a well-distributed stand of trees and other natural vegetation is maintained. For the purposes of this subsection 2, a "well-distributed stand of trees" adjacent to a great pond or a stream flowing to a great pond, shall be defined as maintaining a rating score of 24 or more in each 25-foot by 50-foot rectangular (1250 square feet) area as determined by the following rating system.

Diameter of Tree at 4-1/2 feet Above	Points

Ground Level (inches)

2 < 4 in.	1
4 <8 in.	2
8 < 12 in.	4
12 in. or greater	8

Adjacent to other water bodies, tributary streams, and wetlands, a "well-distributed stand of trees" is defined as maintaining a minimum rating score of 16 per 25-foot by 50-foot rectangular area.

The following shall govern in applying this point system:

SS 5.2.2.1. The 25-foot by 50-foot rectangular plots must be established where the landowner or lessee proposes clearing within the required buffer;

SS 5.2.2.2. Each successive plot must be adjacent to, but not overlap a previous plot;

SS 5.2.2.3. Any plot not containing the required points must have no vegetation removed except as otherwise allowed by this Ordinance;

SS 5.2.2.4. Any plot containing the required points may have vegetation removed down to the minimum points required or as otherwise allowed by is Ordinance;

SS 5.2.2.5. Where conditions permit, no more than 50% of the points on any 25-foot by 50-foot rectangular area may consist of trees greater than 12 inches in diameter.

For the purposes of this subsection 2, "other natural vegetation" is defined as retaining existing vegetation under three (3) feet in height and other ground cover and retaining at least five (5) saplings less than two (2) inches in diameter at four and one half (4 ½) feet above ground level for each 25-foot by 50-foot rectangle area. If five saplings do not exist, no woody stems less than two (2) inches in diameter can be removed until 5 saplings have been recruited into the plot.

Notwithstanding the above provisions, no more than 40% of the total volume of trees four (4) inches or more in diameter, measured at 4 1/2 feet above ground level may be removed in any ten (10) year period.

SS 5.2.3. In order to protect water quality and wildlife habitat, existing vegetation under three (3) feet in height and other ground cover, including leaf litter and the forest duff layer, shall not be cut, covered, or removed, except to provide for a footpath or other permitted uses as described in **SS 5.2** above.

SS 5.2.4. Pruning of tree branches, on the bottom 1/3 of the tree is allowed.

SS 5.2.5. In order to maintain a buffer strip of vegetation, when the removal of storm-damaged, diseased, unsafe, or dead trees results in the creation of cleared openings, these openings shall be replanted with native tree species unless existing new tree growth is present.

***NOTE: SS 5.2** does not apply to those portions of public recreational facilities adjacent to public swimming areas as long as cleared areas are limited to the minimum area necessary.*

SS 5.3. In the Shoreland Management Area, at distances greater than one hundred (100) feet, horizontal distance, from a great pond, and seventy-five (75) feet, horizontal distance, from the normal high-water line of any other water body, tributary stream, or the upland edge of a wetland, there shall be allowed on any lot, in any ten (10) year period, selective cutting of not more than forty (40) percent of the volume of trees four (4) inches or more in diameter, measured 4 1/2 feet above ground level. Tree removal in conjunction with the development of

permitted uses shall be included in the forty (40) percent calculation. For the purposes of these standards volume may be considered to be equivalent to basal area.

In no event shall cleared openings for any purpose, including but not limited to, principal and accessory structures, driveways, lawns and sewage disposal areas, exceed in the aggregate, 25% of the lot area within the Shoreland Management Area or ten thousand (10,000) square feet, whichever is greater, including land previously cleared.

SS 5.4. Legally existing nonconforming cleared openings may be maintained, but shall not be enlarged, except as allowed by this Ordinance.

SS 5.5. Fields and other cleared openings that have reverted to primarily shrubs, trees, or other woody vegetation shall be regulated under the provisions of this requirement**.**

SS 6.0 COMMERCIAL AND INDUSTRIAL USES

The following new commercial and industrial uses are prohibited within the Shoreland Management Area adjacent to great ponds classified GPA, and streams that flow to great ponds classified GPA:

SS 6.0.1. Auto washing facilities

SS 6.0.2. Auto or other vehicle service and/or repair operations, including body shops

SS 6.0.3. Chemical and bacteriological laboratories

SS 6.0.4. Storage of chemicals, including herbicides, pesticides or fertilizers, other than amounts normally associated with individual households or farms

SS 6.0.5. Commercial painting, wood preserving, and furniture stripping

SS 6.0.6. Dry cleaning establishments

SS 6.0.7. Electronic circuit assembly

SS 6.0.8. Laundromats, unless connected to a sanitary sewer

SS 6.0.9. Metal plating, finishing, or polishing

SS 6.0.10. Petroleum or petroleum product storage and/or sale except storage on same property as use occurs and except for storage and sales associated with marinas

SS 6.0.11. Photographic processing

SS 6.0.12. Printing

SS 7.0 CONVERSION OF SEASONAL DWELLINGS

Please refer to **Article 8.6.** Compliance with **Article 8.6** fulfills compliance with this requirement**.**

SS 8.0 EROSION AND SEDIMENTATION CONTROL

(Also see **GPS 7.0**).

SS 8.1. All activities which involve filling, grading, excavation or other similar activities which result in un-stabilized soil conditions and which require a permit under this Ordinance shall also require a written soil erosion and sedimentation control plan. The plan shall be submitted to the Code Enforcement Officer or Planning Board for approval, as required, and shall include, where applicable, provisions for:

SS 8.1.1. Mulching and re-vegetation of disturbed soil.

SS 8.1.2. Temporary runoff control features such as hay bales, silt fencing or diversion ditches.

SS 8.1.3. Permanent stabilization structures such as retaining walls or riprap.

SS 8.2. In order to create the least potential for erosion, development shall be designed to fit with the topography and soils of the site. Areas of steep slopes where high cuts and fills may be required shall be avoided wherever possible, and natural contours shall be followed as closely as possible.

SS 8.3. Erosion and sedimentation control measures shall apply to all aspects of the proposed project involving land disturbance, and shall be in operation during all stages of the activity. The amount of exposed soil at every phase of construction shall be minimized to reduce the potential for erosion.

SS 8.4. Any exposed ground area shall be temporarily or permanently stabilized within one (1) week from the time it was last actively worked, by use of riprap, sod, seed, and mulch, or other effective measures. In all cases permanent stabilization shall occur within nine (9) months of the initial date of exposure. In addition:

SS 8.4.1. Where mulch is used, it shall be applied at a rate of at least one (1) bale per five hundred (500) square feet and shall be maintained until a catch of vegetation is established.

SS 8.4.2. Anchoring the mulch with netting, peg, and twine or other suitable method may be required to maintain the mulch cover.

SS 8.4.3. Additional measures shall be taken where necessary in order to avoid siltation into the water. Such measures may include the use of staked hay bales and/or silt fences.

SS 8.5. Natural and man-made drainage ways and drainage outlets shall be protected from erosion from water flowing through them. Drainage ways shall be designed and constructed in order to carry water from a twenty-five (25) year storm or greater, and shall be stabilized with vegetation or lined with riprap.

SS 9.0 ESSENTIAL SERVICES

SS 9.1. Where feasible, the installation of essential services shall be limited to existing public ways and existing service corridors.

SS 9.2. The installation of essential services, other than road-side distribution lines, is not allowed in the Resource Protection District except to provide services to a permitted use within said district, or except where the applicant demonstrates that no reasonable alternative exists. Where allowed, such structures and facilities shall be located so as to minimize any adverse impacts on surrounding uses and resources, including visual impacts.

SS 9.3. Damaged or destroyed public utility transmission and distribution lines, towers and related equipment may be replaced or reconstructed without a permit.

SS 10.0 INDIVIDUAL PRIVATE CAMPSITES

See **GPS 9.0** as well. Individual private campsites, not associated with campgrounds, are allowed within the Shoreland Management Area provided the following conditions are met:

SS 10.1. One campsite per lot of record existing on the effective date of this Ordinance, or per forty-three thousand five hundred and sixty (43,560) square feet of lot area within the Shoreland Overlay Area, whichever is less dense, may be permitted.

SS 10.2. Campsite placement on any lot, including the area intended for a recreational vehicle or tent platform, shall be set back one hundred feet (100'), horizontal distance, from the normal high-water line of a great pond , and seventy-five feet (75), horizontal distance, from the normal high-water line of other water bodies, tributary streams, or the upland edge of a wetland.

SS 10.3. Only one recreational vehicle shall be allowed on a campsite. The recreational vehicle shall not be located on any type of permanent foundation except for a gravel pad, and no structure except a canopy shall be attached to the recreational vehicle.

SS 10.4. A written sewage disposal plan describing the proposed method and location of sewage disposal shall be required for each campsite and shall be approved by the Local Plumbing Inspector. Where disposal is off-site, written authorization from the receiving facility or landowner is required.

SS 10.5. The clearing of vegetation for the siting of the recreational vehicle, tent or similar shelter in the Resource Protection District shall be limited to one thousand (1000) square feet.

SS 10.6. When a recreational vehicle, tent or similar shelter is placed on-site for more than one hundred and twenty (120) days per year, all requirements for residential structures shall be met, including the installation of a subsurface sewage disposal system in compliance with the State of Maine Subsurface Wastewater Disposal Rules.

SS 11.0 MINERAL EXPLORATION AND EXTRACTION

Mineral exploration to determine the nature or extent of mineral resources shall be accomplished by hand sampling, test boring, or other methods which create minimal disturbance of less than one hundred (100) square feet of ground surface. A permit from the Code Enforcement Officer shall be required for mineral exploration, which exceeds the above limitation. All excavations, including test pits and holes shall be immediately capped, filled, or secured by other equally effective measures to restore disturbed areas and to protect the public health and safety.

Mineral extraction may be permitted under the following conditions and in addition must comply with all applicable provisions of **Article 14.3.0**:

SS 11.1. A reclamation plan shall be filed with, and approved by the Planning Board before a permit is granted. Such plan shall describe, in detail, procedures to be undertaken to fulfill the requirements of **SS 11.3** below.

SS 11.2. No part of any extraction operation, including drainage and runoff control features shall be permitted within one hundred feet (100'), horizontal distance, of the normal high-water line of a great pond, and within seventy-five feet (75'), horizontal distance, of the normal high-water line of any other water body, tributary stream, or the upland edge of a wetland. Extraction operations shall not be permitted within seventy-five feet (75') of any property line, without written permission of the owner of such adjacent property.

SS 11.3. Within twelve (12) months following the completion of extraction operations at any extraction site, which operations shall be deemed complete when less than one hundred (100) cubic yards of materials are removed in any consecutive twelve (12) month period, ground levels and grades shall be established in accordance with the following:

SS 11.3.1. All debris, stumps, and similar material shall be removed for disposal in an approved location, or shall be buried on-site. Only materials generated on-site may be

buried or covered on-site.

SS 11.3.2. The final graded slope shall be two to one (2:1) slope or flatter.

SS 11.3.3. Top soil or loam shall be retained to cover all disturbed land areas, which shall be reseeded and stabilized with vegetation native to the area. Additional topsoil or loam shall be obtained from off-site sources if necessary to complete the stabilization project.

SS 11.4. In keeping with the purposes of this Ordinance, the Planning Board may impose such conditions as are necessary to minimize the adverse impacts associated with mineral extraction operation on surrounding uses and resources, including but not limited to any reasonable form of performance guarantee such as a performance bond.

SS 12.0 MINIMUM LOT STANDARDS

In addition to all applicable lot standards and requirements found elsewhere in this Ordinance:

SS 12.1. All lots within the Shoreland Management Area shall have the minimum lot size of the underlying growth management area as set forth in this ordinance and have a minimum shore frontage of two hundred feet (200').

SS 12.2. Land below the normal high-water line of a water body or upland edge of a wetland and land beneath roads serving more than two (2) lots shall not be included toward calculating minimum lot area.

9.12.3. Lots located on opposite sides of a public or private road shall be considered each a separate tract or parcel of land unless such road was established by the owner of land on both sides thereof after **September 22, 1971**.

SS 12.4. The minimum width of any portion of any lot within one hundred feet (100'), horizontal distance, of the normal high-water line of a water body or upland edge of a wetland shall be equal to or greater than the shore frontage requirement for a lot with the proposed use.

SS 12.5. If more than one residential dwelling unit, principal governmental, institutional, commercial or industrial structure or use, or combination thereof, is constructed or established on a single parcel, all dimensional requirements shall be met for each additional dwelling unit, principal structure, or use.

SS 13.0 PARKING AREAS

SS 13.1. Parking areas shall meet the shoreline setback requirements established for structures in **SS 15.1.** under **PRINCIPAL AND ACCESSORY STRUCTURES** and the setback requirements for the growth management area in which such parking areas are located.

SS 13.2. Parking areas shall be adequately sized for the proposed use and shall be designed to prevent storm water runoff from flowing directly into a water body, tributary stream or wetland and, where feasible, to retain all runoff on-site.

SS 13.3. In determining the appropriate size of proposed parking facilities, the following shall apply:

SS 13.3.1. Typical parking space: Approximately ten feet (10') wide and twenty feet (20') long, except that parking spaces for a vehicle and boat trailer shall be forty feet (40') long.

SS 13.3.2. Internal travel aisles: Approximately twenty feet (20') wide.

SS 14.0 PIERS, DOCKS, WHARFS, BRIDGES AND OTHER STRUCTURES AND USES EXTENDING OVER OR BELOW THE NORMAL HIGH-WATER LINE OF A WATER BODY OR WITHIN A WETLAND

SS 14.1. Access to the shore shall be developed on soils appropriate for such use and constructed so as to control erosion.

SS 14.2. The location shall not interfere with existing developed or natural beach areas.

SS 14.3. The facility shall be located so as to minimize adverse effects on fisheries.

SS 14.4. The facility shall be no larger in dimension than necessary to carry on the activity and be consistent with the surrounding character and uses of the area. A temporary pier, dock or wharf shall not be wider than six feet.

SS 14.5. No new structure shall be built on, over or abutting a pier, wharf, dock, or other structure extending below the normal high-water line of a water body or within a wetland unless the structure requires direct access to the water body or wetland as an operational necessity.

SS 14.6. New permanent piers and docks shall not be permitted unless it is clearly demonstrated to the Planning Board that a temporary pier or dock is not feasible, and a permit has been obtained from the Department of Environmental Protection, pursuant to the Natural Resources Protection Act.

SS 14.7. No existing structures built on, over or abutting a pier, dock, wharf or other structure extending below the normal high-water line of a water body or within a wetland shall be converted to residential dwelling units in any Shoreland District.

SS 14.8. Structures built on, over or abutting a pier, wharf, dock or other structure extending beyond the normal high-water line of a water body or within a wetland shall not exceed twenty (20) feet in height above the pier, wharf, dock or other structure.

SS 15.0. PRINCIPAL AND ACCESSORY STRUCTURES

SS 15.1. In the Limited Residential District, all new principal and accessory structures shall be set back at least one hundred (100) feet, horizontal distance, from the normal high-water line of great ponds classified GPA, and one hundred (100) feet, horizontal distance, from the upland edge of a wetland, and seventy-five (75) feet, horizontal distance, from the normal high-water line of other water bodies and tributary streams. In the Resource Protection District, the setback requirement shall be two hundred fifty (250) feet, horizontal distance, from the normal high-water line of great ponds classified GPA, or the upland edge of a wetland, and seventy-five (75) feet, horizontal distance, from the normal high-water line of a stream, except for structures, roads, or other regulated objects specifically allowed in that district in which case the setback requirements specified above shall apply.

In addition:

SS 15.1.1. The water body, tributary stream, or wetland setback provision shall neither apply to structures that require direct access to the water body or wetland as an operational necessity, such as piers, docks and retaining walls, nor to other functionally water-dependent uses.

SS 15.1.2. On a non-conforming lot of record on which only a residential structure exists, and it is not possible to place an accessory structure meeting the required water body, tributary stream or wetland setbacks, the Code Enforcement Officer may issue a permit to place a single accessory structure, with no utilities, for the storage of yard tools and similar equipment. Such accessory structure shall not exceed eighty (80) square feet in area nor eight (8) feet in height, and shall be located as far from the shoreline or tributary stream as practical and shall meet all other applicable standards, including lot coverage and vegetation

clearing limitations. In no case shall the structure be located closer to the shoreline or tributary stream than the principal structure.

SS 15.1.3. The Planning Board may increase the required setback of a proposed structure, as a condition to permit approval, if necessary to accomplish the purposes of this ordinance. Instances where a greater setback may be appropriate include, but are not limited to: areas of steep slope; shallow or erodible soils; or where an adequate vegetative buffer does not exist.

SS 15.2. Principal or accessory structures and expansions of existing structures which are permitted in the Shoreland Management Area shall not exceed thirty-five (35) feet in height. This provision shall not apply to structures such as transmission towers, windmills, antennas, and similar structures having no floor area.

SS 15.3. The lowest floor elevation or openings of all buildings and structures, including basements, shall be elevated at least one foot above the elevation of the 100 year flood, the flood of record, or in the absence of these, the flood as defined by soil types identified as recent floodplain soils; except that, accessory structures may be placed in accordance with the Flood Hazard Management Area standards of this ordinance and need not meet the elevation requirements of this paragraph.

SS 15.4. The total footprint area of all structures, parking lots and other non-vegetated surfaces, within the Shoreland Management Area shall not exceed twenty (20) percent of the lot or a portion thereof, located within the Shoreland Management Area, including land area previously developed.

SS 15.5. Retaining walls that are not necessary for erosion control shall meet the structure setback requirement, except for low retaining walls and associated fill provided all of the following conditions are met:

SS 15.5.1. The site has been previously altered and an effective vegetated buffer does not exist;

SS 15.5.2. The wall(s) is(are) at least 25 feet, horizontal distance, from the normal high-water line of a water body, tributary stream, or upland edge of a wetland;

SS 15.5.3. The site where the retaining wall will be constructed is legally existing lawn or is a site eroding from lack of naturally occurring vegetation, and which cannot be stabilized with vegetative plantings;

SS 15.5.4. The total height of the wall(s), in the aggregate, is (are) no more than 24 inches;

SS 15.5.5. Retaining walls are located outside of the 100-year floodplain on rivers, streams, wetlands, and tributary streams, as designated on the Federal Emergency Management Agency's (FEMA) Flood Insurance Rate Maps or Flood Hazard Boundary Maps, or the flood of record, or in the absence of these, by soil types identified as recent floodplain soils.

SS 15.5.6. The area behind the wall is re-vegetated with grass, shrubs, trees, or a combination thereof, and no further structural development will occur within the setback area, including patios and decks; and

SS 15.5.7. A vegetated buffer area is established within 25 feet, horizontal distance, of the normal high-water line of a water body, tributary stream, or upland edge of a wetland when a natural buffer area does not exist. The buffer area must meet the following characteristics:

SS 15.5.7.1. The buffer must include shrubs and other woody and herbaceous vegetation. Where natural ground cover is lacking the area must be supplemented with leaf or bark mulch;

SS 15.5.7.2. Vegetation plantings must be in quantities sufficient to retard erosion and provide for effective infiltration of storm water runoff;

SS 15.5.7.3. Only native species may be used to establish the buffer area;

SS 15.5.7.4. A minimum buffer width of 15 feet, horizontal distance, is required, measured perpendicularly to the normal high-water line or upland edge of a wetland;

SS 15.5.7.5. A footpath not to exceed the standards in **SS 5.0** may traverse the buffer;

SS 15.6. Notwithstanding the requirements stated above, stairways or similar structures may be allowed with a permit from the Code Enforcement Officer, to provide shoreline access in areas of steep slopes or unstable soils provided: that the structure is limited to a maximum of four (4) feet in width; that the structure does not extend below or over the normal high-water line of a water body or upland edge of a wetland, (unless permitted by the Department of Environmental Protection pursuant to the **Natural Resources Protection Act, 38 MRSA. §480-C**); and that the applicant demonstrates that no reasonable access alternative exists on the property.

SS 16.0 ROADS AND DRIVEWAYS

The following standards shall apply to the construction of roads and/or driveways and drainage systems, culverts, and other related features.

SS 16.1. Roads and driveways shall be set back at least one-hundred (100) feet, horizontal distance, from the normal high-water line of a great pond classified GPA, at least one-hundred feet, horizontal distance from the upland edge of a wetland and seventy-five (75) feet, horizontal distance from the normal high-water line of other water bodies and tributary streams unless no reasonable alternative exists as determined by the Planning Board. If no other reasonable alternative exists, the road and/or driveway setback requirement shall be no less than fifty (50) feet, horizontal distance, upon clear showing by the applicant that appropriate techniques will be used to prevent sedimentation of the water body, tributary stream, or wetland. Such techniques may include, but are not limited to, the installation of settling basins, and/or the effective use of additional ditch relief culverts and turnouts placed so as to avoid sedimentation of the water body, tributary stream, or wetland.

On slopes of greater than twenty (20) percent the road and/or driveway setback shall be increased by ten (10) feet, horizontal distance, for each five (5) percent increase in slope above twenty (20) percent.

This section does not apply to approaches to water crossings or to roads or driveways that provide access to permitted structures and facilities located nearer to the shoreline or tributary stream due to an operational necessity, excluding temporary docks for recreational uses. Roads and driveways providing access to permitted structures within the setback area shall comply fully with the requirements of this section except for that portion of the road or driveway necessary for direct access to the structure.

SS 16.2. Existing public roads may be expanded within the legal road right of way regardless of their setback from a water body, tributary stream or wetland.

SS 16.3. New roads and driveways are prohibited in the Resource Protection District except that the Planning Board may grant a permit to construct a road or driveway to provide access to permitted uses within the District. A road or driveway may also be approved by the Planning Board in the Resource Protection District, upon a finding that no reasonable alternative route or location is available outside the District. When a road or driveway is permitted in the Resource Protection District the road and/or driveway shall be set back as far as practicable from the normal high-water line of a water body, tributary stream, or upland edge of a wetland.

SS 16.4. Road and driveway banks shall be no steeper than a slope of two (2) horizontal to one (1) vertical, and shall be graded and stabilized in accordance with the provisions for erosion and sedimentation control contained in **SS 8.0**.

SS 16.5. Road and driveway grades shall be no greater than ten (10) percent except for segments of less than two hundred (200) feet.

SS 16.6. In order to prevent road and driveway surface drainage from directly entering water bodies, tributary streams or wetlands, roads and driveways shall be designed, constructed, and maintained to empty onto an un-scarified buffer strip at least (50) feet plus two times the average slope, in width between the outflow point of the ditch or culvert and the normal high-water line of a water body, tributary stream, or upland edge of a wetland. Surface drainage directed to an un-scarified buffer strip shall be diffused or spread out to promote infiltration of the runoff and to minimize channelized flow of the drainage through the buffer strip.

SS 16.7. Ditch relief (cross drainage) culverts, drainage dips and water turnouts shall be installed in a manner effective in directing drainage onto un-scarified buffer strips before the flow gains sufficient volume or head to erode the road, driveway, or ditch. To accomplish this, the following shall apply:

SS 16.7.1. Ditch relief culverts, drainage dips and associated water turnouts shall be spaced along the road or driveway at intervals no greater than indicated in the following table:

Grade (Percent)	Spacing (Feet)
0-2	250
3-5	200-135
6-10	100-80
11-15	80-60
16-20	60-45
21 +	40

SS 16.7.2. Drainage dips may be used in place of ditch relief culverts only where the grade is ten (10) percent or less.

SS 16.7.3. On sections having slopes greater than ten (10) percent, ditch relief culverts shall be placed at approximately a thirty (30) degree angle down slope from a line perpendicular to the centerline of the road or driveway.

SS 16.7.4. Ditch relief culverts shall be sufficiently sized and properly installed in order to allow for effective functioning, and their inlet and outlet ends shall be stabilized with appropriate materials.

SS 16.7.5. Ditches, culverts, bridges, dips, water turnouts and other storm water runoff control installations associated with roads and driveways shall be maintained on a regular basis to assure effective functioning.

SS 16.7.6. Culverts shall be permitted and installed in compliance with **GPS 4.0.**

SS 17.0 SEPTIC WASTE DISPOSAL

All subsurface sewage disposal systems shall be installed in conformance with the State of Maine Subsurface Wastewater Disposal Rules and the following:

SS 17.1. Clearing or removal of woody vegetation necessary to site a new system and any associated fill extensions, shall not extend closer than seventy-five (75) feet, horizontal distance, from the normal high-water line of a water body or the upland edge of a wetland; and

SS 17.2. A holding tank is not allowed for a first-time residential use in the Shoreland Management Area.

SS 18.0 SIGNS

All signs in the Shoreland Management Area shall conform to the provisions of **GPS 27.7**:

SS 19.0 SOILS

All land uses shall be located on soils in or upon which the proposed uses or structures can be established or maintained without causing adverse environmental impacts, including severe erosion, mass soil movement, and water pollution, whether during or after construction. Proposed uses requiring subsurface waste disposal, and commercial or industrial development and other similar intensive land uses, shall require a soils report based on an on-site investigation and be prepared by state-certified professionals. Certified persons may include Maine Certified Soil Scientists, Maine Registered Professional Engineers, Maine State Certified Geologists and other persons who have training and experience in the recognition and evaluation of soil properties. The report shall be based upon the analysis of the characteristics of the soil and surrounding land and water areas, maximum ground water elevation, presence of ledge, drainage conditions, and other pertinent data which the evaluator deems appropriate. The soils report shall include recommendations for a proposed use to counteract soil limitations where they exist.

SS 20.0 SPECIAL EXCEPTIONS

In addition to meeting all other criteria specified in this Ordinance, excepting structure setback requirements, the Planning Board may approve a permit for a single family residential structure in the Resource Protection District provided that the applicant demonstrates that all of the following conditions are met:

SS 20.1. There is no location on the property, other than a location within the Resource Protection District, where the structure can be built.

SS 20.2. The lot on which the structure is proposed is undeveloped and was established and recorded in the registry of deeds of the county in which the lot is located before the adoption of the Resource Protection District.

SS 20.3. All proposed buildings, sewage disposal systems and other improvements are:

SS 20.3.1. Located on natural ground slopes of less than 20%; and

SS 20.3.2. Located outside the floodway of the 100-year floodplain along rivers and artificially formed great ponds along rivers, based on detailed flood insurance studies and as delineated on the Federal Emergency Management Agency's Flood Boundary and Floodway Maps and Flood Insurance Rate Maps; all buildings, including basements, are elevated at least one foot above the 100-year floodplain elevation; and the development is otherwise in compliance with any applicable provisions of the Flood Plain Management provisions of this Ordinance.

If the floodway is not shown on the Federal Emergency Management Agency Maps, it is deemed to be 1/2 the width of the 100-year floodplain.

SS 20.4. The total ground-floor area, including cantilevered or similar overhanging extensions, of all principal and accessory structures is limited to a maximum of 1,500 square feet. This limitation shall not be altered by variance.

SS 20.5. All structures, except functionally water-dependent structures, are set back from the normal high-water line of a water body, tributary stream or upland edge of a wetland to the greatest practical extent, but not less than 75 feet, horizontal distance. In determining the greatest practical extent, the Planning Board shall consider the depth of the lot, the slope of the land, the potential for soil erosion, the type and amount of vegetation to be removed, the proposed building site's elevation in regard to the flood-plain, and its proximity to moderate-value and high-value wetlands.

SS 21.0 STORM WATER RUNOFF

SS 21.1. All new construction and development shall be designed to minimize storm water runoff from the site in excess of the natural predevelopment conditions. Where possible, existing natural runoff control features, such as berms, swales, terraces, and wooded areas shall be retained in order to reduce runoff and encourage infiltration of storm waters.

SS 21.2. Storm water runoff control systems shall be maintained as necessary to ensure proper functioning.

SS 22.0. TIMBER HARVESTING

Timber harvesting in the Shoreland Management Area shall be governed by the following:

SS 22.1. Within the Great Pond Resource Protection Area, timber harvesting shall be limited to the following:

SS 22.1.1. Within the strip of land extending 75 feet, horizontal distance, inland from the normal high-water line, there shall be no timber harvesting except to remove safety hazards.

SS 22.1.2. Beyond the 75 foot strip referred to above, timber harvesting is permitted in except that in no case shall the average residual basal area of trees over 4 and ½ feet above ground level be reduced to less than 30 square feet per acre.

SS 22.2. Except in areas as described in **SS 22.1,** timber harvesting shall conform with the following provisions:

SS 22.2.1. Selective cutting of no more than forty percent (40%) of the total volume of trees four (4) inches or more in diameter measured at four and one-half feet (4 1/2') above ground level on any lot in any ten (10) year period is permitted. In addition:

SS 22.2.1.1. Within one-hundred (100) feet, horizontal distance, of the normal high-water line of a great pond classified GPA, and within seventy-five (75) feet, horizontal distance, of the normal high-water line of other water bodies, tributary streams, or the upland edge of a wetland, there shall be no clear cut openings and a well-distributed stand of trees and other vegetation, including existing ground cover, shall be maintained.

SS 22.2.1.2. At distances greater than one-hundred (100) feet, horizontal distance, of a great pond, and greater than seventy-five (75) feet, horizontal distance, of the normal high-water line of other water bodies or the upland edge of a wetland, harvesting operations shall not create single clear cut openings greater than ten-thousand (10,000) square feet in the forest canopy. Where such openings exceed five-thousand (5000) square feet they shall be at least one hundred (100) feet, horizontal distance, apart. Such clear-cut openings shall be included in the calculation of total volume removal. Volume may be considered to be equivalent to basal area.

SS 22.3. Timber harvesting exceeding the 40% limitation in **SS 22.1,** may be allowed by the Planning Board upon a clear showing, including a forest management plan signed by a Maine licensed professional forester, that such exception is necessary for good forest management and will be carried out in accordance with the purposes of this Ordinance. The Planning Board shall notify the Commissioner of the Department of Environmental Protection of each exception allowed, within fourteen (14) days of the Planning Board's decision.

SS 22.4. No accumulation of slash shall be left within fifty feet (50'), horizontal distance, of the normal high-water line of a water body. In all other areas slash shall either be removed or disposed of in such a manner that it lies on the ground and no part thereof extends more than four feet (4') above the ground. Any debris that falls below the normal high-water line of a water body or tributary stream shall be removed.

SS 22.5. Timber harvesting equipment shall not use stream channels as travel routes except when:

SS 22.5.1. Surface waters are frozen; and

SS 22.5.2. The activity will not result in any ground disturbance.

SS 22.6. All crossings of flowing water shall require a bridge or culvert, except in areas with low banks and channel beds which are composed of gravel, rock, or similar hard surface which would not be eroded or otherwise damaged.

SS 22.7. Skid trail approaches to water crossings shall be located and designed so as to prevent water runoff from directly entering the water body or tributary stream. Upon completion of timber harvesting, temporary bridges and culverts shall be removed and areas of exposed soil re-vegetated.

SS 22.8. Except for water crossings, skid trails, and other sites, where the operation of machinery used in timber harvesting results in the exposure of mineral soil, the operation shall be located such that an un-scarified strip of vegetation of at least seventy-five feet (75'), horizontal distance, in width for slopes up to ten percent (10%) shall be retained between the exposed mineral soil and the normal high-water line of a water body or upland edge of a wetland. For each ten percent (10%) increase in slope, the un-scarified strip shall be increased by twenty feet (20'), horizontal distance. The provisions of this paragraph apply only to a face sloping toward the water body or wetland, provided, however, that no portion of such exposed mineral soil on a back face shall be closer than twenty-five feet (25'), horizontal distance, from the normal high-water line of a water body or upland edge of a wetland.

SS 23.0 TIMBER HARVESTING – STATEWIDE STANDARDS [Effective on effective date established in Article 1, Section 9]

SS 23.1. Shoreline integrity and sedimentation. Persons conducting timber harvesting and related activities must take reasonable measures to avoid the disruption of shoreline integrity, the occurrence of sedimentation of water, and the disturbance of water body and tributary stream banks, water body and tributary stream channels, shorelines, and soil lying within water bodies, tributary streams and wetlands. If, despite such precautions, the disruption of shoreline integrity, sedimentation of water, or the disturbance of water body and tributary stream banks, water body and tributary stream channels, shorelines, and soil lying within water bodies, tributary streams and wetlands occurs, such conditions must be corrected.

SS 23.2. Slash treatment. Timber harvesting and related activities shall be conducted such that slash or debris is not left below the normal high-water line of any water body or tributary stream, or the upland edge of a wetland. This requirement does not apply to minor, incidental amounts of slash that result from timber harvesting and related activities otherwise conducted in compliance with this section.

SS 23.2.1. Slash actively used to protect soil from disturbance by equipment or to stabilize exposed soil, may be left in place, provided that no part thereof extends more than 4 feet above the ground.

SS 23.2.2. Adjacent to great ponds, rivers and wetlands:

SS 23.2.2.1. No accumulation of slash shall be left within 50 feet, horizontal distance, of the normal high-water line or upland edge of a wetland; and

SS 23.2.2.2. Between 50 feet and 250 feet, horizontal distance, of the normal high-water line or upland edge of a wetland, all slash larger than 3 inches in diameter must be disposed of in such a manner that no part thereof extends more than 4 feet above the ground.

SS 23.3. Timber harvesting and related activities must leave adequate tree cover and shall be conducted so that a well-distributed stand of trees is retained. This requirement may be satisfied by following one of the following three options:

SS 23.3.1. Option 1 (40% volume removal), as follows:

SS 23.3.1.1. Harvesting of no more than 40 percent of the total volume on each acre of trees 4.5 inches DBH or greater in any 10 year period is allowed. Volume may be considered to be equivalent to basal area;

SS 23.3.1.2. A well-distributed stand of trees which is wind firm, and other vegetation including existing ground cover, must be maintained; and,

SS 23.3.1.3. Within 75 feet, horizontal distance, of the normal high-water line of rivers, streams, and great ponds, and within 75 feet, horizontal distance, of the upland edge of a wetland, there must be no cleared openings. At distances greater than 75 feet, horizontal distance, of the normal high-water line of a river or great pond or upland edge of a wetland, timber harvesting and related activities must not create single cleared openings greater than 14,000 square feet in the forest canopy. Where such openings exceed 10,000 square feet, they must be at least 100 feet, horizontal distance, apart. Such cleared openings will be included in the calculation of total volume removal. Volume may be considered equivalent to basal area.

SS 23.3.2. Option 2 (60 square foot basal area retention), as follows:

SS 23.3.2.1. The residual stand must contain an average basal area of at least 60 square feet per acre of woody vegetation greater than or equal to 1.0 inch DBH, of which 40 square feet per acre must be greater than or equal to 4.5 inches DBH;

SS 23.3.2.2. A well-distributed stand of trees which is wind firm, and other vegetation including existing ground cover, must be maintained; and,

SS 23.3.2.3. Within 75 feet, horizontal distance, of the normal high-water line of water bodies and within 75 feet, horizontal distance, of the upland edge of wetlands, there must be no cleared openings. At distances greater than 75 feet, horizontal distance, of the normal high-water line of a river or great pond, or upland edge of a wetland, timber harvesting and related activities must not create single cleared openings greater than 14,000 square feet in the forest canopy. Where such openings exceed 10,000 square feet, they must be at least 100 feet, horizontal distance, apart. Such cleared openings will be included in the calculation of the average basal area. Volume may be considered equivalent to basal area.

SS 23.3.3. Option 3 (Outcome based), which requires: An alternative method proposed in an application, signed by a Licensed Forester or certified wildlife professional, submitted by the landowner or designated agent to the State of Maine Department of Conservation's Bureau of Forestry (Bureau) for review and approval, which provides equal or better protection of the Shoreland Overlay Area than this rule.

Landowners must designate on the Forest Operations Notification form required by **12 MRSA chapter 805, subchapter 5** which option they choose to use. If landowners choose Option 1 or Option 2, compliance will be determined solely on the criteria for the option chosen. If landowners choose Option 3, timber harvesting and related activities may not begin until the Bureau has approved the alternative method.

The Bureau may verify that adequate tree cover and a well-distributed stand of trees is retained through a field procedure that uses sample plots that are located randomly or systematically to provide a fair representation of the harvest area.

SS 23.4. Skid trails, yards, and equipment operation. This requirement applies to the construction, maintenance, and use of skid trails and yards in the Shoreland Overlay Area.

SS 23.4.1. Equipment used in timber harvesting and related activities shall not use river, stream or tributary stream channels as travel routes except when surface waters are frozen and snow covered, and the activity will not result in any ground disturbance.

SS 23.4.2. Skid trails and yards must be designed and constructed to prevent sediment and concentrated water runoff from entering a water body, tributary stream, or wetland. Upon termination of their use, skid trails and yards must be stabilized.

SS 23.4.3. Setbacks:

SS 23.4.3.1. Equipment must be operated to avoid the exposure of mineral soil within 25 feet, horizontal distance, of any water body, tributary stream, or wetland. On slopes of 10 percent or greater, the setback for equipment operation must be increased by 20 feet, horizontal distance, plus an additional 10 feet, horizontal distance, for each 5 percent increase in slope above 10 percent. Where slopes fall away from the resource, no increase in the 25-foot setback is required.

SS 23.4.3.2. Where such setbacks are impracticable, appropriate techniques shall be used to avoid sedimentation of the water body, tributary stream or wetland. Such techniques may include the installation of sump holes or settling basins, and/or the effective use of additional ditch relief culverts and ditch water turnouts placed to avoid sedimentation of the water body, tributary stream, or wetland. If, despite such precautions, sedimentation or the disruption of shoreline integrity occurs, such conditions must be corrected.

SS 23.5. Land Management Roads. Land management roads, including approaches to crossings of water bodies, tributary stream channels, and wetlands, ditches and other related structures, must be designed, constructed, and maintained to prevent sediment and concentrated water runoff from directly entering the water body, tributary stream or wetland. Surface water on or adjacent to water crossing approaches must be diverted through vegetative filter strips to avoid sedimentation of the watercourse or wetland. Because roadside ditches may not extend to the resource being crossed, vegetative filter strips must be established in accordance with the setback requirements in **SS 23.7 Slope Table**.

SS 23.5.1. Land management roads and associated ditches, excavation, and fill must be set back at least:

SS 23.5.1.1. 100 feet, horizontal distance, from the normal high-water line of a great pond, river or wetland;

SS 23.5.1.2. 50 feet, horizontal distance, from the normal high-water line of streams; and

SS 23.5.1.3. 25 feet, horizontal distance, from the normal high-water line of tributary streams.

SS 23.5.2. The minimum 100 foot setback specified in **SS 23.5.1.1** above may be reduced to no less than 50 feet, horizontal distance, and the 50 foot setback specified in **SS 23.5.1.2** above may be reduced to no less than 25 feet, horizontal distance, if, prior to construction, the landowner or the landowner's designated agent demonstrates to the Planning Board's satisfaction that no reasonable alternative exists and that appropriate techniques will be used to prevent sedimentation of the water body, tributary stream, or wetland. Such techniques may include, but are not limited to, the installation of settling basins, and/or the effective use of additional ditch relief culverts and turnouts placed to avoid sedimentation of the water body, tributary stream or wetland. If, despite such precautions, sedimentation or the disruption of shoreline integrity occurs, such conditions must be corrected.

SS 23.5.3. On slopes of 10 percent or greater, the land management road setback must be increased by at least 20 feet, horizontal distance, plus an additional 10 feet, horizontal distance, for each 5 percent increase in slope above 10 percent.

SS 23.5.4. New land management roads are not allowed within the shoreland area along Significant River Segments as identified in **38 MRSA §437**, nor in a Resource Protection District, unless, prior to construction, the landowner or the landowner's designated agent makes a clear demonstration to the Planning Board's satisfaction that no reasonable alternative route exists outside the shoreland zone, and that the new road must be set back as far as practicable from the normal high-water line and screened from the river by existing vegetation.

SS 23.5.5. Ditches, culverts, bridges, dips, water turnouts and other water control installations associated with roads must be maintained on a regular basis to assure effective functioning. Drainage structures shall deliver a dispersed flow of water into an un-scarified filter strip no less than the width indicated in the setback requirements in **SS 23.7 Slope Table**. Where such a filter strip is impracticable, appropriate techniques shall be used to avoid sedimentation of the water body, tributary stream, or wetland. Such techniques may include the installation of sump holes or settling basins, and/or the effective use of additional ditch relief culverts and ditch water turnouts placed to avoid sedimentation of the water body, tributary stream, or wetland. If, despite such precautions, sedimentation or the disruption of shoreline integrity occurs, such conditions must be corrected.

SS 23.5.6. Road closeout and discontinuance. Maintenance of the water control installations required in **SS 23.5.5** must continue until use of the road is discontinued and the road is put to bed by effective installation of water bars or other adequate road drainage structures at appropriate intervals, constructed to avoid surface water flowing over or under the water bar, and extending a sufficient distance beyond the traveled way so that water does not reenter the road surface.

SS 23.5.7. Upgrading existing roads. Extension or enlargement of presently existing roads must conform to the provisions of **SS 23.0.** Any nonconforming existing road may continue to exist and to be maintained, as long as the nonconforming conditions are not made more nonconforming.

SS 23.5.8. Exception. Extension or enlargement of presently existing roads need not conform to the setback requirements of **SS 23.5.1** if, prior to extension or enlargement, the landowner or the landowner's designated agent demonstrates to the Planning Board's satisfaction that no reasonable alternative exists and that appropriate techniques will be used to prevent sedimentation of the water body, tributary stream, or wetland. Such techniques may include, but are not limited to, the installation of settling basins, and/or the effective use of additional ditch relief culverts and turnouts placed to avoid sedimentation of the water body, tributary stream, or wetland. If, despite such precautions, sedimentation or the disruption of shoreline integrity occurs, such conditions must be corrected.

Additional measures. In addition to the foregoing minimum requirements, persons undertaking construction and maintenance of roads and river, stream and tributary stream crossings must take reasonable measures to avoid sedimentation of surface waters.

SS 23.6. Crossings of water bodies. Crossings of rivers, streams, and tributary streams must allow for fish passage at all times of the year, must not impound water, and must allow for the maintenance of normal flows.

SS 23.6.1. Determination of flow. Provided they are properly applied and used for the circumstances for which they are designed, methods including but not limited to the following are acceptable as a means of calculating the 10 year and 25 year frequency water flows and thereby determining water crossing sizes as required in **SS 23.0:** The United States Geological Survey (USGS) Methods; specifically: Hodgkins, G. 1999; Estimating the

Magnitude of Peak Flows for Streams in Maine for Selected Recurrence Intervals. U.S. Geological Survey. Water Resources Investigations Report 99-4008. 45 pp.

SS 23.6.2. Upgrading existing water crossings. Extension or enlargement of presently existing water crossings must conform to the provisions of **SS 23.0.** Any nonconforming existing water crossing may continue to exist and be maintained, as long as the nonconforming conditions are not made more nonconforming; however, any maintenance or repair work done below the normal high-water line must conform to the provisions of **SS 23.0.**

SS 23.6.3. Other Agency Permits. Any timber harvesting and related activities involving the design, construction, and maintenance of crossings on water bodies other than a river, stream or tributary stream may require a permit from the Land Use Regulation Commission, the Department of Environmental Protection, or the US Army Corps of Engineers.

SS 23.6.4. Any timber harvesting and related activities involving the design, construction, and maintenance of crossings of wetlands identified by the Department of Inland Fisheries and Wildlife as essential wildlife habitat require prior consultation with the Department of Inland Fisheries and Wildlife.

SS 23.6.5. Notice to Bureau of Forestry. Written notice of all water crossing construction maintenance, alteration and replacement activities in shoreland areas must be given to the Bureau prior to the commencement of such activities. Such notice must contain all information required by the Bureau, including:

SS 23.6.5.1. a map showing the location of all proposed permanent crossings;

SS 23.6.5.2. the GPS location of all proposed permanent crossings;

SS 23.6.5.3. for any temporary or permanent crossing that requires a permit from state or federal agencies, a copy of the approved permit or permits; and

SS 23.6.5.4. a statement signed by the responsible party that all temporary and permanent crossings will be constructed, maintained, and closed out in accordance with the requirements of this Section.

SS 23.6.6. Water crossing standards. All crossings of rivers require a bridge or culvert sized according to the requirements of **SS 23.6.7** below. Streams and tributary streams may be crossed using temporary structures that are not bridges or culverts provided:

SS 23.6.6.1. concentrated water runoff does not enter the stream or tributary stream;

SS 23.6.6.2. sedimentation of surface waters is reasonably avoided;

SS 23.6.6.3. there is no substantial disturbance of the bank, or stream or tributary stream channel;

SS 23.6.6.4. fish passage is not impeded; and,

SS 23.6.6.5. water flow is not unreasonably impeded.

Subject to **SS 23.6.6.4** above, skid trail crossings of streams and tributary streams when channels of such streams and tributary streams are frozen and snow-covered or are composed of a hard surface which will not be eroded or otherwise damaged are not required to use permanent or temporary structures.

SS 23.6.7. Bridge and Culvert Sizing. For crossings of river, stream and tributary stream channels with a bridge or culvert, the following requirements apply:

SS 23.6.7.1. Bridges and culverts must be installed and maintained to provide an opening sufficient in size and structure to accommodate 10 year frequency water flows or with a cross-sectional area at least equal to 2 1/2 times the cross-sectional area of the river, stream, or tributary stream channel.

SS 23.6.7.2. Temporary bridge and culvert sizes may be smaller than provided in **SS 23.7.1** if techniques are effectively employed such that in the event of culvert or bridge failure, the natural course of water flow is maintained and sedimentation of the water body or tributary stream is avoided. Such crossing structures must be at least as wide as the channel and placed above the normal high-water line. Techniques may include, but are not limited to, the effective use of any, a combination of, or all of the following:

SS 23.6.7.2.1. use of temporary skidder bridges;

SS 23.6.7.2.2. removing culverts prior to the onset of frozen ground conditions;

SS 23.6.7.2.3. using water bars in conjunction with culverts;

SS 23.6.7.2.4. using road dips in conjunction with culverts.

SS 23.6.7.3. Culverts utilized in river, stream and tributary stream crossings must:

SS 23.6.7.3.1. be installed at or below river, stream or tributary stream bed elevation;

SS 23.6.7.3.2. be seated on firm ground;

SS 23.6.7.3.3. have soil compacted at least halfway up the side of the culvert;

SS 23.6.7.3.4. be covered by soil to a minimum depth of 1 foot or according to the culvert manufacturer's specifications, whichever is greater; and

SS 23.6.7.3.5. have a headwall at the inlet end which is adequately stabilized by riprap or other suitable means to reasonably avoid erosion of material around the culvert.

SS 23.6.7.4. River, stream and tributary stream crossings allowed under **SS 23.0,** but located in flood hazard areas (i.e. A zones) as identified on a community's Flood Insurance Rate Maps (FIRM) or Flood Hazard Boundary Maps (FHBM), must be designed and constructed under the stricter standards contained in that community's National Flood Insurance Program (NFIP). For example, a water crossing may be required to pass a 100-year flood event.

SS 23.6.7.5. Exception. Skid trail crossings of tributary streams within shoreland areas and wetlands adjacent to such streams may be undertaken in a manner not in conformity with the requirements of the foregoing subsections provided persons conducting such activities take reasonable measures to avoid the disruption of shoreline integrity, the occurrence of sedimentation of water, and the disturbance of stream banks, stream channels, shorelines, and soil lying within ponds and wetlands. If, despite such precautions, the disruption of shoreline integrity, sedimentation of water, or the disturbance of stream banks, stream channels, shorelines, and soil lying within ponds and wetlands occurs, such conditions must be corrected.

SS 23.6.8. Skid trail closeout. Upon completion of timber harvesting and related activities, or upon the expiration of a Forest Operations Notification, whichever is earlier, the following requirements apply:

SS 23.6.8.1. Bridges and culverts installed for river, stream and tributary stream crossings by skid trails must either be removed and areas of exposed soil stabilized, or upgraded to comply with the closeout standards for land management roads in **SS 23.6.9** below.

SS 23.6.8.2. Water crossing structures that are not bridges or culverts must either be removed immediately following timber harvesting and related activities, or, if frozen into the river, stream or tributary stream bed or bank, as soon as practical after snowmelt.

SS 23.6.8.3. River, stream and tributary stream channels, banks and approaches to crossings of water bodies and tributary streams must be immediately stabilized on completion of harvest, or if the ground is frozen and/or snow-covered, as soon as practical after snowmelt. If, despite such precautions, sedimentation or the disruption of shoreline integrity occurs, such conditions must be corrected.

SS 23.6.9. Land management road closeout. Maintenance of the water control features must continue until use of the road is discontinued and the road is put to bed by taking the following actions:

SS 23.6.9.1. Effective installation of water bars or other adequate road drainage structures at appropriate intervals, constructed to reasonably avoid surface water flowing over or under the water bar, and extending sufficient distance beyond the traveled way so that water does not reenter the road surface.

SS 23.6.9.2. Water crossing structures must be appropriately sized or dismantled and removed in a manner that reasonably avoids sedimentation of the water body or tributary stream.

SS 23.6.9.3. Any bridge or water crossing culvert in roads to be discontinued shall satisfy one of the following requirements:

SS 23.6.9.3.1. it shall be designed to provide an opening sufficient in size and structure to accommodate 25 year frequency water flows;

SS 23.6.9.3.2. it shall be designed to provide an opening with a cross-sectional area at least 3 1/2 times the cross-sectional area of the river, stream or tributary stream channel; or

SS 23.6.9.3.3. it shall be dismantled and removed in a fashion to reasonably avoid sedimentation of the river, stream or tributary stream.

If, despite such precautions, sedimentation or the disruption of shoreline integrity occurs, such conditions must be corrected.

SS 23.7. Slope Table

Filter strips, skid trail setbacks, and land management road setbacks must be maintained as specified in **SS 23.0,** but in no case shall be less than shown in the following table.

Average slope of land between exposed mineral soil and the shoreline (percent)	Width of strip between exposed mineral soil and shoreline (feet along surface of the ground)
0	25
10	45
20	65
30	85
40	105
50	125
60	145
70	165

SS 24.0. UTILITIES – INSTALLATION OF PUBLIC UTILITY SERVICE

No public utility, water district, sanitary district or any utility company of any kind may install services to any new structure located in the Shoreland Management Area unless written authorization attesting to the validity and currency of all local permits required under this or any previous Ordinance, has been issued by the appropriate municipal officials. Following installation of service, the company or district shall forward the written authorization to the municipal officials, indicating that installation has been completed.

SS 25.0. WATER QUALITY

No activity shall deposit on or into the ground or discharge to the waters of the State, any pollutant that, by itself or in combination with other activities or substances will impair designated uses or the water classification of the water body, tributary stream or wetland.