# **Town of Belgrade Planning Board**

Nov. 18, 2021 / 6 p.m.

Belgrade Town Office 990 Augusta Road Belgrade, ME 04917

This meeting will be conducted in person.

The public may also view the meeting and participate online at <a href="https://us02web.zoom.us/j/83033101494">https://us02web.zoom.us/j/83033101494</a>

### AGENDA

#### Call to order

#### 1. OLD BUSINESS

- **A.** Discussion and consideration of public input to the **proposed subdivision** ordinance rewrite.
- **B.** Discussion and consideration of **Commercial Development Review Ordinance amendments** addressing:
  - 1. Phosphorous export standards.
  - 2. Commercial solar and wind facilities, and telecommunications towers.
- C. Discussion of Dec. 2, 2021, agenda.
- **D.** Consideration of Oct. 21, 2021, and Nov. 4, 2021, Planning Board **minutes**.

#### 2. ADJOURN

## Memo

To: Planning Board

From: Anthony Wilson, Town Manager

Date: Nov. 18, 2021

Re: Subdivision ordinance timeline

At the Planning Board's Nov. 4 meeting, you collected public input on the proposed subdivision ordinance rewrite. As a reminder, here's the timeframe for completing this project in time for a Town Meeting vote:

- Nov. 18 consider incorporating input from the informational meeting in the proposed ordinance. The Nov. 4 meeting participants will be sent a notice of this meeting.
- **Dec. 2** consider final approval of the ordinance. If approved, the document would be recommended to the Selectboard.
- **Dec. 7** Selectboard consideration of the proposed ordinance. If approved, the document would be provided to the Town's attorney for a legal review.
- **Jan. 1** the proposed ordinance would be provided to the Town's attorney. He has assured he can complete the review in the timeframe necessary.
- **Jan. 18** Selectboard consideration of any changes recommended by the Town's attorney.
- **Jan. 19** deadline for referendum items for the March 19 town meeting.

A public hearing on the proposed ordinance, along with all other secret-ballot items, would be conducted no later than Feb. 17. Absentee ballots would be available beginning Feb. 18.

Dear Chairman and Board Members,

Again, thanks for all your hard work making the Belgrade Subdivision Regulations up to date.

I just wanted to try to further explain my comment / question that I raised at the November 4th informational meeting as I could only attend virtually.

Concerning the definition of a Minor Subdivision, defined on page 8, I think that a maximum area of the 3 new lots **less than or equal to 7 acres** instead of the proposed 6 acres would better protect the surface water, ground water and therefore the drinking water of the Town by allowing the subdivider the ability to create lots with a maximum density of 1 dwelling unit per 100,000 sf.

The current 6 acre maximum does not allow that density to be achieved.

This has nothing to do with the Towns minimum lot size and does not try to circumvent the subdivision process/regulations because the current proposed regulations require the following [page 45]

" 2. The subdivision of tracts into parcels with more than twice the required minimum lot size shall be laid out in such a manner as either to provide for or preclude future division. Deed restrictions and notes on the plan shall either prohibit future divisions of the lots or specify that any future division shall constitute a revision to the plan and shall require approval from the Board, subject to the criteria of the subdivision statute, the standards of these regulations and conditions placed on the original approval. "

Your time and attention to this matter are appreciated and thanks for your public service to the great Town of Belgrade.

Sincerely,

W. Minot Wood, PE

Maine # 7535 [Retired] - Massachusetts # 35505 176 Lincoln Street - Hudson, MA 01749

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#### ARTICLE I: PURPOSES AND REVIEW CRITERIA

#### 1. Purposes.

The purposes of this ordinance are:

- a. To assure the comfort, convenience, safety, health, and welfare of the people in the Town of Belgrade
- b. To protect the environment and conserve the natural and cultural resources identified in the Town of Belgrade Comprehensive Plan;
- c. To promote the development of an economically sound and stable community; and
- d. To assure that a minimal level of services and facilities are available to the residents of new subdivisions and that lots in the subdivisions can support the proposed uses and structures.

#### 2. Statutory Review Criteria.

In approving Subdivisions within the Town of Belgrade, Maine, the Planning Board shall consider the following criteria and before granting approval, shall make findings of fact that the provisions of this ordinance have been met and that the proposed subdivision will meet the guidelines of Title 30, M.R.S.A. \$4404,. The proposed project:

- a. Will not result in undue water or air pollution. In making this determination, the Planning Board shall at least consider:
  - 1. The elevation of the land above sea level and its relation to the floodplains;
  - 2. The nature of soils and sub soils and their ability to adequately support waste disposal;
  - 3. The slope of the land and its effect on effluents;
  - 4. The availability of streams for disposal of effluents; and
- 5. The applicable State and local health and water resources rules and regulations;
- b. Has sufficient water available for the reasonably foreseeable needs of the Subdivision;
- c. Will not cause an unreasonable burden on an existing water supply, if one is to be utilized;
- d. Will not cause unreasonable soil erosion or reduction in the capacity of the land to hold water so that a dangerous or unhealthy condition results;
- e. Will not cause unreasonable highway/or public road congestion or unsafe conditions with respect to use of the highways or public roads existing or proposed and, if the proposed subdivision requires driveways or entrances onto a state or state aid highway, the

- Department of Transportation indicating that the driveways or entrances conform to Title 23, section 704, and any rules adopted under that section;
- f. Will provide for adequate sewage waste disposal and will not cause an unreasonable burden on municipal services if they are utilized;
- g. Will not cause an unreasonable burden on the municipality's ability to dispose of solid waste if municipal services are to be utilized;
- h. Will not have an undue adverse effect on the scenic or natural beauty of the area, aesthetics, historic sites, significant wildlife habitat identified by the Department of Inland Fisheries and Wildlife or the municipality, or rare and irreplaceable natural areas or any public rights for physical or visual access to the shoreline;
- i. Is in conformance with a duly adopted subdivision ordinance, comprehensive plan, development plan, or land use plan if any. In making this determination, the Planning Board may interpret these ordinances and plans;
- j. Has adequate financial and technical capacity to meet the standards of this section;
- k. Will not, whenever situated entirely or partially within the watershed of any pond or lake or within 250 feet of any wetland, great pond, or river as defined in Title 38, sections 435 through 490, or within 250 feet of tidal waters, adversely or unreasonably affect the shoreline of such body of water; and
- 1. Will not, alone or in conjunction with existing activities, adversely affect the quality or quantity of ground water.
- m. Based on the Federal Emergency Management Agency's Flood Boundary and Floodway Maps and Flood Insurance Rate Maps, and information presented by the applicant whether the subdivision is in a flood-prone area. If the subdivision, or any part of it, is in such an area, the applicant shall determine the 100-year flood elevation and flood hazard boundaries within the subdivision. The proposed subdivision or project plan must include a condition of plan approval requiring that principal structures in the subdivision will be constructed with their lowest floor, including the basement, at least one foot above the 100-year flood elevation.
- n. All freshwater wetlands within the proposed subdivision have been identified on any maps submitted as part of the application, regardless of the size of these wetlands. Any mapping of freshwater wetlands may be done with the help of the local soil and water conservation district.

- o. Any river, stream or brook within or abutting the proposed subdivision has been identified on any maps submitted as part of the application.
- p. The proposed subdivision will provide for adequate storm water management.
- q. If any lots in the proposed subdivision have shore frontage on a river, stream, brook, great pond or coastal wetland, none of the lots created within the subdivision have a lot depth to shore frontage ratio greater than 5 to 1.
- r. The long-term cumulative effects of the proposed subdivision will not unreasonably increase a great pond's phosphorus concentration during the construction phase and life of the proposed subdivision
- s. For any proposed subdivision that crosses municipal boundaries, the proposed subdivision will not cause unreasonable traffic congestion or unsafe conditions with respect to the use of existing public ways in an adjoining municipality in which part of the subdivision is located.
- t. Lands subject to liquidation harvesting. Timber on the parcel being subdivided has not been harvested in violation of rules adopted pursuant to Title 12, M.R.S.A section 8869, subsection 14. If a violation of rules adopted by the Maine Forest Service to substantially eliminate liquidation harvesting has occurred, the Planning Board must determine prior to granting approval for the subdivision that 5 years have elapsed from the date the landowner under whose ownership the harvest occurred acquired the parcel. The Planning Board may request technical assistance from the Department of Conservation, Bureau of Forestry to determine whether a rule violation has occurred, or the Board may accept a determination certified by a forester licensed pursuant to Title 32, chapter 76. If the Bureau agrees to provide assistance, it shall make a finding and determination as to whether a rule violation has occurred. If the Bureau notifies the Planning Board that it will not provide assistance, the Board may require a subdivision applicant to provide a determination certified by a licensed forester. For the purposes of this subsection, "liquidation harvesting" has the same meaning as in Title 12, M.R.S.A section 8868, subsection 6 and "parcel" means a contiguous area within one municipality, township or plantation owned by one person or a group of persons in common or joint ownership.

#### ARTICLE II: Authority, Administration, and Amendments

#### 1. Authority.

- a. This ordinance has been prepared in accordance with the provisions of Title 30 M.R.S.A., §4403.
- b. This ordinance shall be known and may be cited as "Subdivision Ordinance of the Town of Belgrade, Maine".

#### 2. Administration.

- a. The Planning Board of the Town of Belgrade, hereinafter called the Board, shall administer this ordinance.
- b. The provisions of this ordinance shall pertain to all land proposed for subdivision as defined in Title 30, M.R.S.A., §4403 within the boundaries of the Town of Belgrade.

#### 3. Amendments.

- a. This ordinance may only be amended by the Belgrade Town Meeting.
- b. A public hearing shall be held prior to the adoption of any amendment. Notice of the hearing shall be provided at least seven days in advance of the hearing.

#### ARTICLE III DEFINITIONS

#### 1. State Definitions.

As used in this ordinance, unless the context otherwise indicates, the terms and respective definitions listed in M.S.R.A. 30-A §4401 shall have the same meaning.

#### 2. Additional Definitions.

As used in this ordinance, unless the context otherwise indicates, the following terms have the following meanings:

Impervious Surfaces. "Impervious Surfaces" means the total area of a parcel covered with a low-permeability material that is highly resistant to infiltration by water, such as asphalt, concrete, or rooftop, and areas such as gravel roads and unpaved parking areas that will be compacted through design or use to reduce their permeability. Common impervious areas include, but are not limited to, rooftops, walkways, patios, driveways, parking lots or storage areas, concrete or asphalt paving, gravel roads, packed earthen materials, and macadam or other surfaces which similarly impede the natural infiltration of stormwater. Pervious pavement, pervious pavers, pervious concrete and underdrained artificial turf fields are all considered impervious.

River, Stream, or Brook. "River, Stream, or brook" as used in this ordinance, shall have the same meaning as M.S.R.A. 38 §480-B 9. River, stream or brook.

Substantial Construction. "Substantial Construction" means that a continuous on-site physical construction program has progressed to a point where 25% or more of the total project is completed or where 25% or more of the total cost of the project has been expended for materials which are at the site.

#### ARTICLE IV: ADMINISTRATIVE PROCEDURE

In order to establish an orderly, equitable, and expeditious procedure for reviewing subdivisions and to avoid unnecessary delays in processing applications for subdivision review, the Planning Board shall prepare an agenda for each regularly scheduled meeting, Applicants shall request to be placed on the Planning Board's agenda no less than two weeks in advance of a regularly scheduled meeting by contacting the Code Enforcement Officer. Applicants who attend a meeting but who are not on the Planning Board's agenda may be heard but only after all agenda items have been completed, and then only if a majority of the Planning Board so votes. However, the Board shall take no action on any application not appearing on the Planning Board's written agenda.

#### ARTICLE V: SKETCH PLAN MEETING AND ON-SITE INSPECTION

#### 1. Purpose.

The purpose of the sketch plan meeting and on-site inspection is for the applicant to present general information regarding the proposed subdivision to the Planning Board and receive the Planning Board's comments prior to the expenditure of substantial sums of money on surveying, soils identification, and engineering by the applicant.

#### 2. Sketch Plan Meeting Procedure.

- a. Application presentation and submission of sketch plans.
- b. Questions and answer period. Planning Board makes specific suggestions to be incorporated by the applicant into subsequent submissions.
- c. Scheduling of on-site inspection.
- d. Designation of Minor or Major Subdivision

#### 3. Minor Subdivisions and Major Subdivisions.

The Planning Board or designee of the Planning Board will designate each subdivision at the Sketch Plan Meeting as either a minor or major subdivision.

Minor Subdivisions will be limited to:

- 1. Residential subdivisions only.
- 2. No more than three additional lots or dwelling units (leading to a total of 4 lots).
- 3. No new roads.
- 4. Total area of subdivided lots no larger than six (6) acres, excluding the acreage remaining from the original parcel from which the subdivision is being created.

If the proposed subdivision does not meet the above requirements, it will be considered a Major Subdivision.

#### 4. Submission.

The preapplication Sketch Plan shall show, in simple sketch form, the proposed layout of street, lots, and other features in relation to existing conditions of the site and the proposed development.

#### 5. On-Site Inspection.

Within thirty (30) days of application filing with the Town, the Board shall old an on-site inspection of the property. The thirty

(30) days may be adjusted to account for snow cover and other weather conditions.

#### 6. Rights not Vested.

The sketch plan meeting, the submittal, review of the sketch plan, or the on-site inspection shall not be considered the initiation of the review process for the purposes of bringing the plan under the protection of Title I M.R.S.A., §302.

#### 7. Establishment of File.

Following the sketch plan meeting the Planning Board shall establish a file for the proposed subdivision. All correspondence and submissions shall be maintained in the file.

#### ARTICLE VI: MINOR SUBDIVISION PRELIMINARY PLAN

#### 1. Procedure.

- a. Within six months after the on-site inspection by the Planning Board, the applicant shall submit an application for approval of a Minor Subdivision Preliminary Plan at least 14 days prior to a scheduled meeting of the Planning Board. Applications shall be submitted by mail or by hand to the municipal offices. Failure to submit an application within six months shall require resubmission of the Sketch Plan to the Planning Board. The Minor Subdivision Preliminary Plan shall approximate the layout shown on the Sketch Plan, plus any recommendations made by the Planning Board.
- b. All applications for Minor Subdivision Preliminary Plan shall be accompanied by a nonrefundable application fee of \$300, plus \$50 per lot or dwelling unit, payable by check to the municipality.
- c. The Board shall not review any Minor Subdivision Preliminary Plan application unless the applicant or applicant's representative attends the meeting. Should the applicant or applicant's representative fail to attend, the Board shall reschedule review of the application at its next regular meeting.
- d. Within three days of the receipt of the Minor Subdivision Preliminary Plan, the Board, or its designee, shall:
  - 1. Issue a dated receipt to the applicant.
  - 2. Notify in writing by First Class Mail all owners of abutting property that an application for subdivision approval has been submitted, specifying the location of the proposed subdivision including a general description of the project.
  - 3. Notify the clerk and the review authority of the neighboring municipalities if any portion of the subdivision abuts or crosses the municipal border.
- e. Within thirty days of receipt of a Minor Subdivision Preliminary Plan form and fee, the Board shall notify the applicant in writing whether or not the application is complete, and what, if any, additional submissions are required for a complete application.
- f. Upon determination that a complete Minor Subdivision Preliminary Plan has been submitted for review, the Board shall also notify the Road Commissioner, Fire Chief and Superintendent of Schools of the proposed subdivision. The Board shall request that these officials comment upon the

- adequacy of their department's existing capital facilities to service the proposed subdivision. The Board shall determine whether to hold a public hearing on the Minor Subdivision Preliminary Plan application.
- g. The Planning board shall hold a public hearing on the Minor Subdivision Preliminary Plan application within thirty (30) days of receipt of a complete application, and shall publish notice of the date, time, and place of the hearing in a newspaper of general circulation in the municipality at least two times, the date of the first publication to be at least seven days prior to the hearing. A copy of the notice shall be sent by First Class mail to abutting landowners and municipalities as well as the applicant at least ten days prior the hearing.
- h. The Planning Board may schedule additional on-site visits as it deems necessary in order to evaluate the Preliminary Subdivision Plan application and information presented to the Planning Board during a public hearing.
- i. Within thirty (30) days from the public hearing or within sixty days of determining a complete application has been received, if no hearing is held, or within another time limit as may be otherwise mutually agreed to by the Planning Board and the applicant, the Planning Board shall make findings of fact on the application, and approve, approve with conditions, or deny the Minor Subdivision Preliminary Plan application. The Planning Board shall specify in writing its findings of facts and reasons for any conditions or denial.
- j. When granting approval to a Minor Subdivision Preliminary Plan, the Planning Board shall state the conditions of such approval, if any, with respect to:
  - 1. The specific changes which it will require in the Minor Subdivision Final Plan;
  - 2. The character and extent of additional submissions required which the Planning Board deems critical to support the public health, safety, and general welfare; and
  - 3. The construction items for which cost estimates and performance guarantees will be required as prerequisite to the approval of the final plan.

#### 2. Mandatory Submissions for Minor Subdivision Preliminary Plan.

The following items shall be submitted as part of the Minor

Subdivision Preliminary Plan application. Twelve (12) physical copies and one (1) electronic copy of all materials shall be delivered to the Town Office, at least 14 days prior to a regularly scheduled Planning Board meeting, in order for the application to be placed on the Planning Board's agenda. The Planning Board may require additional information to be submitted, as necessary, in order to determine whether the criteria of Title 30-A M.R.S.A., §4404 are met.

#### a. Application Form.

15 copies of the application form and any accompanying information.

#### b. Location Map.

The Minor Subdivision Preliminary Plan shall be accompanied by a Location Map adequate to show the relationship of the proposed Minor Subdivision to the adjacent properties, and to allow the Board to locate the Minor Subdivision within the municipality. The Location Map shall show:

- 1. Existing Subdivisions in the proximity of the proposed subdivision;
- 2. Locations and names of existing and proposed streets;
- 3. Boundaries and designations of zoning districts; and
- 4. An outline of the proposed Minor Subdivision and any remaining portion of the owner's property if the Preliminary Subdivision Plan submitted cover only a portion of the owner's entire contiguous holding.

#### C. Minor Subdivision Preliminary Plan.

The Minor Subdivision Preliminary Plan may be printed or reproduced on paper, with all dimensions shown in feet or decimals of a foot. The preliminary subdivision plan shall be drawn to a scale of not more than one-hundred (100) feet to the inch. Plans for subdivisions containing more than one hundred acres may be drawn at a scale of not more than two hundred (200) feet of the inch, provided all necessary detail can easily be read. In addition, one copy of the accompanying information shall be mailed to each Planning Board member no less than seven days prior to the meeting. The application materials for preliminary plan approval shall include the following information:

1. Proposed name of the subdivision and the name of

- the municipality in which it is located, plus the Assessor's Map and Lot numbers;
- 2. Verification of right, title, or interest in the property by deed, purchase and sales agreement, option to purchase, or some other proof of interest:
- 3. A standard boundary survey of the parcel, giving complete descriptive data by bearings and distances, made and certified by a professional land surveyor. The corners of the tract shall be located on the ground and marked by monuments. The entire parcel or tract shall be shown, including all contiguous land in common ownership within the last five years, as required by Title 30-A M.S.R.A., §4401;
- 4. A copy of the deed from which the survey was based. A copy of all covenants or deed restrictions, easements, rights-of-ways, or other encumbrances currently affecting the property;
- 5. A copy of any covenants or deed restrictions intended to cover all or part of the lots or dwellings in the Subdivision;
- 6. Ten (10) foot interval contour lines showing elevations in relation to Mean Sea Level.
- 7. The number of acres within the proposed Subdivision, location of property lines, existing buildings, watercourses, vegetative cover type, and other essential existing physical features.
- 8. An indication of the type of sewage disposal to be used in the Subdivision;
  - i. When sewage disposal is to be accomplished by connection to the public sewer, a letter from the Sewer District indicating there is adequate capacity within the District's system to transport and treat the sewage shall be submitted.
  - ii. When sewage disposal is to be accomplished by subsurface wastewater disposal systems, test pit analysis, prepared by a Licensed Site Evaluator or Certified Soil Scientist shall be provided. A map showing the location of all test pits dug on the site shall be submitted.
- 9. Indication of the type of water supply system(s) to be used in the Subdivision.

- 10. The date the plan was prepared, north point, and graphic map scale;
- 11. The names and addresses of the record owner, applicant, and individual or company who prepared the plan, and adjoining property owners;
- 12. The zoning district in which the proposed subdivision is located and the location of any zoning boundaries affecting the subdivision;
- 13. The location and size of existing and proposed sewers, water mains, culverts, and drainage ways on or adjacent to the property to be subdivided;
- 14. The locations, names, and present widths of existing streets, highways, easements, building lines, parks, and other open spaces on or adjacent to the Subdivision;
- 15. The width and location of any streets or public improvements shown upon the Official Map and the Comprehensive Plan, if any, within the Subdivision.
- 16. The proposed lot lines with approximate dimensions and lot areas; and
- 17. The location and width of driveways with direct access to a public road.

## d. Additional Submissions for Minor Subdivision Preliminary Plan that may be required.

The following items shall be submitted as part of the Minor Subdivision Preliminary Plan if requested by the Board. Twelve (12) physical copies and one (1) electronic copy of all materials shall be delivered to the Town Office, at least 14 days prior to a regularly scheduled Planning Board meeting, in order for the application to be placed on the Board's agenda. The Board may require additional information to be submitted, as necessary, in order to determine whether the criteria of Title 30-A M.R.S.A., §4404 are met:

- 1. A phosphorous control plan shall be submitted which will limit phosphorous runoff after development in accordance with the phosphorous control standards in Article XIII.
- 2. A Hydrogeologic assessment prepared by a certified geologist or registered professional engineer, experienced in hydrogeology, when the subdivision is not served by public sewer and:
  - i. Any part of the subdivision is located over a

sand and gravel aquifer, as shown on a map entitled "Hydrogeologic Data for Significant Sand and Gravel Aquifers," by the Maine geological Survey, 1998, File No. 98-138, 144, and 147; or

- ii. The Subdivision has an average density of more than one dwelling unit per 100,000 square feet; or
- iii. There is reasonable presumption of no potable water sources on the property as a result of contaminations including petroleum, hazardous substances, salt, or any other potential contaminant. To determine if a reasonable presumption of a lack of potable drinking water, the presence of potential sources of future drinking water contamination associated with human activities, the following mapping of possible ground water contamination sources shall be submitted covering the subdivision property and abutting properties: the Maine Department of Environmental Protection's Environmental Geographic Analysis Database (EGAD), Google Earth satellite imagery, and Maine Department of Transportation mapping of salt contaminated wells in or near the area of Belgrade bounded by Route 27, Cemetery Road, and Routes 8 and 11.

The Board may require a hydrogeologic assessment in other cases where site considerations or development design indicate greater potential of adverse impacts on groundwater quality. These cases include extensive areas of shallow to bedrock soils; or cluster developments in which the average density is less than one dwelling unit per 100,000 square feet but the density of the developed portion is in excess of one dwelling unit per 80,000 square feet; and proposed use of shared or common subsurface wastewater disposal systems. The hydrogeologic assessment shall be conducted in accordance with the provisions of section 11.9 below.

- 3. A soil erosion and sedimentation control plan;
- 4. A plan for the disposal of surface drainage waters, prepared by a Maine Registered Professional Engineer;
- 5. A copy of that portion of the county soil survey covering the Subdivision. When the medium

- intensity soil survey shows soils which are generally unsuitable for the uses proposed, the Planning Board may require the submittal of a report by a Registered Soil Scientist indicating the suitability of soil conditions for those uses;
- 6. If any portion of the Subdivision is in a flood prone area, the boundaries of any flood hazard areas and the one hundred (100) year flood elevation shall be delineated on the plan;
- 7. Areas within or adjacent to the proposed subdivision which have been identified by the Maine Department of Inland Fisheries and Wildlife Beginning with Habitat Project or within the comprehensive plan. If any portion of the subdivision is located within an area designated as a unique natural area by the comprehensive plan or the Maine Natural Areas Program or Maine Department of Inland Fisheries & Wildlife Beginning With Habitat Project the plan shall indicate appropriate measures for the preservation of the values which qualify the site for such designation; and
- 8. All areas within or adjacent to the proposed subdivision which are either listed on or eligible to be listed on the National Register of Historic Places, or have been identified in the comprehensive plan or by the Maine Historic Preservation Commission as sensitive or likely to contain such sites.
- e. The Planning Board may require any additional information not listed above, when it is determined necessary by the Board to determine whether the statutory review criteria of Title 30-A M.R.S.A. §4404 have been met.

#### ARTICLE VII: MINOR SUBDIVISION FINAL PLAN

#### 1. Procedure.

a. Within six months after the approval of the Minor Subdivision Preliminary Plan, the applicant shall submit Twelve (12) physical copies and one (1) electronic copy of an application for approval of the Minor Subdivision Final Plan Application with all supporting materials, at least 14 days prior to a scheduled meeting of the Board. Applications shall be submitted by mail to the Board in care of the municipal offices or delivered by hand to the municipal offices. An electronic copy shall be submitted to the Board's designated staff person in the Town office. If the application for the Minor Subdivision Final Plan Application is not submitted within six months after Minor Subdivision Preliminary Plan approval, the Board shall require resubmission of the Minor Subdivision Preliminary Plan, except as stipulated below. The Minor Subdivision Final Plan Application shall approximate the layout shown on the Minor Subdivision Preliminary Plan, plus any changes required by the Board

If an applicant cannot submit the Minor Subdivision Final Plan application within six months, due to delays caused by other regulatory bodies, or other reasons, the applicant may request an extension. Such a request for an extension to the filing deadline shall be filed, in writing, with the Board prior to the expiration of the filing period. In considering the request for an extension the Board shall make findings that the applicant has made due progress in preparation of the Minor Subdivision Final Plan application and in pursuing approval of the plans before other agencies, and that municipal ordinances or regulations which may impact on the proposed development have not been amended

- b. All applications for Minor Subdivision Final Plan application shall be accompanied by an application fee of \$20.00 per lot or dwelling unit payable by check to the municipality. If a public hearing is deemed necessary by the Planning Board, an additional fee shall be required to cover the costs of advertising and postal notification.
- c. Prior to submittal of the Minor Subdivision Final Plan application, the following approvals shall be obtained in writing, where applicable:
  - Maine Department of Environmental Protection, under the Natural Resources Protection Act or Stormwater Law, or if an MEPDES wastewater discharge license is needed;

- 2. Maine Department of Human Services, if the applicant proposes to provide a public water system;
- 3. Maine Department of Human Services, if an engineered subsurface wastewater disposal system(s) is to be utilized;
- 4. U.S. Army Corps of Engineers, if a permit under Section 404 of the Clean Water Act is required; and
- 5. Maine Department of Transportation Traffic Movement Permit, and/or Highway Entrance/Driveway Access Management Permit

If the Board is unsure whether a permit or license from a state or federal agency is necessary, the applicant may be required to obtain a written opinion from the appropriate agency as to the applicability of their regulations.

- d. If the Minor Subdivision Preliminary Plan identified any areas listed on or eligible to be listed on the National Register of Historic Places, in accordance with Section 6.2.C.23, the applicant shall submit a copy of the plan and a copy of any proposed mitigation measures to the Maine Historic Preservation commission prior to submitting the final plan application.
- e. The Board shall not review any Minor Subdivision Final Plan application unless the applicant or applicant's representative attends the meeting. Should the applicant or applicant's representative fail to attend, the Board shall reschedule review of the application at its next regular meeting.
- f. Within three days of the receipt of the Minor Subdivision Final Plan application the Board, or its designee, shall issue a dated receipt to the applicant.
- g. Upon determination that a complete application has been submitted for review, the Planning Board shall issue a dated receipt to the applicant. The Planning Board shall hold a public hearing on the Minor Subdivision Final Plan application.
- h. Within thirty days of determining if the Planning Board has received a complete application, the Planning Board shall publish a notice of the date, time, and place of the hearing in a newspaper of local circulation at least two times, the date of the first publication to be at least seven days prior to the hearing. In addition, the notice of the hearing shall be posted in at least three prominent places within the municipality at least seven days prior to the hearing. A copy of the notice shall be sent by First Class mail to abutting landowners, abutting

- municipalities (if necessary), and to the applicant, at least ten days prior to the hearing.
- i. The Planning Board shall notify the Road Commissioner, School Superintendent, and Fire Chief of the proposed Subdivision, the number of dwelling units proposed and the size and construction characteristics of any multifamily, commercial, or industrial buildings. The Planning Board shall request that these official comment upon the adequacy of their department's existing capital facilities to service the proposed Minor Subdivision.
- j. Before the Board grants approval of the Minor Subdivision Final Plan application, the applicant shall meet the performance guarantee requirements contained in Article 12 PERFORMANCE GUARANTEES.
- k. Within thirty days from the public hearing or within sixty days of receiving a complete application, if no hearing is held, or within another time limit as may be otherwise mutually agreed to by the Board and the applicant, the Board shall make findings of fact, and conclusions relative to the criteria for approval contained in Title 30-A M.R.S.A., §4404 and the standards of these regulations. If the Board finds that all the criteria of the statute and the standards of these regulations have been met, they shall approve the Minor Subdivision Final Plan application. If the Board finds that any of the criteria of the statute or the standards of these regulations have not been met, the Board shall either deny the application or approve the application with conditions to ensure all of the standards will be met by the subdivision. The reasons for any conditions shall be stated in the records of the Board.

#### 2. Mandatory Submissions.

The Minor Subdivision Final Plan application shall consist of one or more maps or drawings drawn to a scale of not more than one hundred feet to the inch. Plans for subdivisions containing more than one hundred acres may be drawn at a scale of not more than two hundred feet to the inch provided all necessary detail can easily be read. Plans shall be no larger than 24 by 36 inches in size and shall have a margin of two inches outside of the border line on the left side for binding and a one-inch margin outside the border along the remaining sides. Space shall be reserved on the plan for endorsement by the Board. One reproducible, stable-based transparency of the recording plan to be recorded at the Registry of Deeds, and Twelve (12) physical copies and one (1) electronic copy of all the final plan sheets and any supporting documents shall be submitted to the Town Office.

The Final Subdivision Plan shall include or be accompanied by the

following mandatory submissions of information:

- a. Completed Minor Subdivision Final Plan Application Form and Submissions Checklist;
- b. Proposed name of the subdivision and the name of the municipality in which it is located, plus the assessor's map and lot numbers;
- c. An actual field survey of the boundary lines of the tract, giving complete descriptive data by bearings and distances, made and certified by a licensed land surveyor. The corners of the tract shall be located on the ground and marked by monuments. The plan shall indicate the type of monument set or found at each lot corner;
- d. The number of acres within the proposed subdivision, location of property lines, existing buildings, watercourses, and other essential existing physical features;
- e. An indication of the type of sewage disposal to be used in the subdivision. When sewage disposal is to be accomplished by connection to public sewer, a written statement from the sewer district indicating the district has review and approved the sewerage design shall be submitted;
- f. An indication of the type of water supply system(s) to be used in the subdivision;
  - When water is to be supplied by an existing public water supply, a written statement from the servicing water district shall be submitted indicating the district has reviewed and approved the water system design.
  - 2. A written statement shall be submitted from the fire chief approving all hydrant locations or other fire protection measures deemed necessary.
  - 3. When water is to be supplied by private wells and there is reasonable presumption of no potable water, evidence of adequate ground water supply and quality shall be submitted by a well driller or a hydrogeologist familiar with the area.
- g. The date the plan was prepared, north point, graphic map scale;
- h. The names and addresses of the record owner, applicant, and individual or company who prepared the plan;
- i. If different than those submitted with the Minor Subdivision Preliminary Plan Application, a copy of any

- proposed deed restrictions intended to cover all or part of the lots or dwellings in the subdivision;
- j. The location of any zoning boundaries affecting the subdivision;
- k. The location and size of existing and proposed sewers, water mains, culverts, and drainage ways on or adjacent to the property to be subdivided;
- 1. The location, names, and present widths of existing and proposed streets, highways, easements, buildings, parks and other open spaces on or adjacent to the subdivision. The plan shall contain sufficient data to allow the location, bearing and length of every street line, lot line, and boundary line to be readily determined and be reproduced upon the ground. These lines shall be tied to reference points previously established. The location, bearing and length of street lines, lot lines and parcel boundary lines shall be certified by a professional land surveyor. The original reproducible plan shall be embossed with the seal of the professional land surveyor and be signed by that individual;
- m. The location and width of driveways accessing a public road;
- n. The boundaries of any flood hazard areas and the 100-year flood elevation as depicted on the municipality's Flood Insurance Rate Map, shall be delineated on the plan; and
- o. The location and method of disposal for land clearing and construction debris.
- p. If applicable... Covenants for mandatory membership in the lot owners' association setting forth the owners' rights, interests, and privileges in the association and the common property and facilities, to be included in the deed for each lot or dwelling and also:
  - 1.Draft articles of incorporation of proposed lot owners' association as a not-for-profit corporation; and
  - 2. Draft by-laws of the proposed lot owners' association specifying the responsibilities and authority of the association, the operating procedures of the association and providing for proper capitalization of the association to cover the costs of major repairs, maintenance and replacement of common facilities.

### 3. Required Submissions for Minor Subdivisions in the Shoreland Zone

- a. An erosion and sedimentation control plan prepared in accordance with the Maine Erosion and Sediment Control, Best Management Practices: Manual for Designers and Engineers, published by the Maine Department of Environmental Protection, October 2016. The Board may waive submission of the erosion and sedimentation control plan only if the subdivision is not in the watershed of a great pond, and upon a finding that the proposed subdivision will not involve road construction or grading which changes drainage patterns and if the addition of impervious surfaces such as roofs and driveways is less than 5% of the area of the subdivision.
- b. A stormwater management plan, prepared by a Maine registered professional engineer in accordance with the most recent edition of Maine Stormwater Management Design Manual, Volumes I and III published by the Maine Department of Environmental Protection, 2016. Another methodology may be used if the applicant can demonstrate it is equally applicable to the site. The Board may waive submission of the stormwater management plan only if the subdivision is not in the watershed of a great pond, and upon a finding that the proposed subdivision will not involve road construction or grading which changes drainage patterns and if the addition of impervious surfaces such as roofs and driveways is less than 5% of the area of the subdivision.
- c. If any portion of the proposed subdivision is in the direct watershed of a great pond, and meets the criteria of section 11.12.D, the following shall be submitted or indicated on the plan:
  - 1. A phosphorus impact analysis and control plan conducted using the procedures set forth in DEP Phosphorus Design Manual, Volume II of the Maine Stormwater Best Management Practices Manual, 2016. The analysis and control plan shall include all worksheets, engineering calculations, and construction specifications and diagrams for control measures, as required by the Technical Guide;
  - 2. A long-term maintenance plan for all phosphorus
     control measures;
  - 3. The contour lines shown on the plan shall be at an interval of no less than five feet; and
  - 4. Areas with sustained slopes greater than 25% covering more than one acre shall be delineated.

#### ARTICLE VI: MAJOR SUBDIVISION PRELIMINARY PLAN

#### 3. Procedure.

- a. Within six months after the on-site inspection by the Planning Board, the applicant shall submit an application for approval of a Major Subdivision Preliminary Plan Application at least 14 days prior to a scheduled meeting of the Planning Board. Applications shall be submitted by mail or by hand to the municipal offices. Failure to submit an application within six months shall require resubmission of the Sketch Plan to the Planning Board. The Major Subdivision Preliminary Plan Application shall approximate the layout shown on the Sketch Plan, plus any recommendations made by the Planning Board.
- b. All applications for Major Subdivision Preliminary Plan Application shall be accompanied by a nonrefundable application fee of \$300, plus \$50 per lot or dwelling unit, payable by check to the municipality. In addition, the applicant shall pay an escrow fee of \$250 per lot or dwelling unit, to be deposited in a special escrow account designated for that subdivision application, to be used by the Board for hiring independent consulting services to review engineering and other technical submissions associated with the application, and to ensure compliance with the Zoning Ordinance and Subdivision Regulations. If the balance in this special account is drawn down by 75%, the Board shall notify the applicant, and require that the balance be brought back up to the original deposit amount. The Board shall continue to notify the applicant and require a deposit as necessary whenever the balance of the escrow account is drawn down by 75% of the original deposit. Any balance in the escrow account remaining after a decision on the final plan application by the Board shall be returned to the applicant.
- c. The Board shall not review any Major Subdivision Preliminary Plan Application unless the applicant or applicant's representative attends the meeting. Should the applicant or applicant's representative fail to attend, the Board shall reschedule review of the application at its next regular meeting.
- d. Within three days of the receipt of the Major Subdivision Preliminary Plan Application, the Board, or its designee, shall:
  - 1. Issue a dated receipt to the applicant.
  - 2. Notify in writing by First Class Mail all owners of property within 500 feet of the proposed subdivision that an application for subdivision

- approval has been submitted, specifying the location of the proposed subdivision and including a general description of the project.
- 3. Notify the clerk and the review authority of the neighboring municipalities if any portion of the subdivision abuts or crosses the municipal border.
- e. Within thirty days of receipt of Major Subdivision Preliminary Plan Application form and fee, the Board shall notify the applicant in writing whether or not the application is complete, and what, if any, additional submissions are required for a complete application.
- f. Upon determination that a complete application has been submitted for review, the Board shall notify the applicant in writing. The Board shall also notify the Road Commissioner, Fire Chief and Superintendent of Schools of the proposed subdivision, the number of dwelling units proposed, the length of roadways, and the size and construction characteristics of any multifamily, commercial, or industrial buildings. The Board shall request that these officials comment upon the adequacy of their department's existing capital facilities to service the proposed subdivision. The Board shall determine whether to hold a public hearing on the preliminary plan application.
- g. The Planning board shall hold a public hearing on the Major Subdivision Preliminary Plan Application within thirty (30) days of receipt of a complete application, and shall publish notice of the date, time, and place of the hearing in a newspaper of general circulation in the municipality at least two times, the date of the first publication to be at least seven days prior to the hearing. A copy of the notice shall be sent by First Class mail to abutting landowners and municipalities as well as the applicant at least ten days prior the hearing.
- h. The Planning Board may schedule additional on-site visits as it deems necessary in order to evaluate the Major Subdivision Preliminary Plan Application and information presented to the Planning Board during a public hearing.
- i. Within thirty (30) days from the public hearing or within sixty days of determining a complete application has been received, if no hearing is held, or within another time limit as may be otherwise mutually agreed to by the Planning Board and the applicant, the Planning Board shall make findings of fact on the application, and approve, approve with conditions, or deny the Major Subdivision Preliminary Plan

Application. The Planning Board shall specify in writing its findings of facts and reasons for any conditions or denial.

- j. When granting approval to a Major Subdivision Preliminary Plan, the Planning Board shall state the conditions of such approval, if any, with respect to:
  - 1. The specific changes which it will require in the final plan;
  - 2. The character and extent of the required improvements for which waivers may have been requested and which in the Planning Board's opinion may be waived without jeopardy to the public health, safety, and general welfare; and
  - 3. The construction items for which cost estimates and performance guarantees will be required as prerequisite to the approval of the final plan.

#### 4. Mandatory Submissions for Major Subdivision Preliminary Plan.

The following items shall be submitted as part of the Major Subdivision Preliminary Plan Application, unless the applicant submits a written waiver request, and is granted a waiver from the submission required by the Planning Board, pursuant to Article 12. Twelve (12) physical copies and one (1) electronic copy of all materials shall be delivered to the Town Office, at least 14 days prior to a regularly scheduled Planning Board meeting, in order for the application to be placed on the Planning Board's agenda. The Planning Board may require additional information to be submitted, as necessary, in order to determine whether the criteria of Title 30-A M.R.S.A., §4404 are met.

#### a. Application Form.

Twelve (12) physical copies and one (1) electronic copy the application form and any accompanying information.

#### b. Location Map.

The Major Subdivision Preliminary Plan shall be accompanied by a Location Map adequate to show the relationship of the proposed Subdivision to the adjacent properties, and to allow the Board to locate the Subdivision within the municipality. The Location Map shall show:

- 1. Existing Subdivisions in the proximity of the proposed subdivision;
- 2. Locations and names of existing and proposed streets;

- 3. Boundaries and designations of zoning districts; and
- 4. An outline of the proposed Subdivision and any remaining portion of the owner's property if the Preliminary Subdivision Plan submitted cover only a portion of the owner's entire contiguous holding.

#### c. Major Subdivision Preliminary Plan.

The Major Subdivision Preliminary Plan may be printed or reproduced on paper, with all dimensions shown in feet or decimals of a foot. The preliminary subdivision plan shall be drawn to a scale of not more than one-hundred (100) feet to the inch. Plans for subdivisions containing more than one hundred acres may be drawn at a scale of not more than two hundred (200) feet of the inch, provided all necessary detail can easily be read. In addition, one copy of the accompanying information shall be mailed to each Planning Board member no less than seven days prior to the meeting. The application materials for preliminary plan approval shall include the following information:

- 1. Proposed name of the subdivision and the name of the municipality in which it is located, plus the Assessor's Map and Lot numbers;
- 2. Verification of right, title, or interest in the property by deed, purchase and sales agreement, option to purchase, or some other proof of interest;
- 3. A standard boundary survey of the parcel, giving complete descriptive data by bearings and distances, made and certified by a professional land surveyor. The corners of the tract shall be located on the ground and marked by monuments. The entire parcel or tract shall be shown, including all contiguous land in common ownership within the last five years, as required by Title 30-A M.S.R.A., §4401;
- 4. A copy of the deed from which the survey was based. A copy of all covenants or deed restrictions, easements, rights-of-ways, or other encumbrances currently affecting the property;
- 5. A copy of any covenants or deed restrictions intended to cover all or part of the lots or dwellings in the Subdivision;
- 6. Ten (10) foot interval contour lines showing

- elevations in relation to Mean Sea Level.
- 7. The number of acres within the proposed Subdivision, location of property lines, existing buildings, watercourses, vegetative cover type, and other essential existing physical features.
- 8. An indication of the type of sewage disposal to be used in the Subdivision;
  - i. When sewage disposal is to be accomplished by connection to the public sewer, a letter from the Sewer District indicating there is adequate capacity within the District's system to transport and treat the sewage shall be submitted.
  - ii. When sewage disposal is to be accomplished by subsurface wastewater disposal systems, test pit analysis, prepared by a Licensed Site Evaluator or Certified Soil Scientist shall be provided. A map showing the location of all test pits dug on the site shall be submitted.
- 9. Indication of the type of water supply system(s) to be used in the Subdivision. When water is to be supplied by an existing public water supply, a written statement from the servicing water utility shall be submitted indicating the utility has reviewed and approved the water system design.
- 10. The date the plan was prepared, north point, and graphic map scale;
- 11. The names and addresses of the record owner, applicant, and individual or company who prepared the plan, and adjoining property owners;
- 12. The zoning district in which the proposed subdivision is located and the location of any zoning boundaries affecting the subdivision;
- 13. The location and size of existing and proposed sewers, water mains, culverts, and drainage ways on or adjacent to the property to be subdivided;
- 14. The locations, names, and present widths of existing streets, highways, easements, building lines, parks, and other open spaces on or adjacent to the Subdivision;
- 15. The width and location of any streets or public improvements shown upon the Official Map and the Comprehensive Plan, if any, within the

Subdivision.

- 16. The proposed lot lines with approximate dimensions and lot areas;
- 17. All parcels of land proposed to be dedicated to public use and the conditions of such dedication;
- 18. The location of any open space to be preserved or common area to be created, and a general description of proposed ownership, improvement, and management;
- 19.A soil erosion and sedimentation control plan;
- 20.A plan for the disposal of surface drainage
   waters, prepared by a Maine Registered
   Professional Engineer;
- 21. A copy of that portion of the county soil survey covering the Subdivision. When the medium intensity soil survey shows soils which are generally unsuitable for the uses proposed, the Planning Board may require the submittal of a report by a Registered Soil Scientist indicating the suitability of soil conditions for those uses;
- 22. If any portion of the Subdivision is in a flood prone area, the boundaries of any flood hazard areas and the one hundred (100) year flood elevation shall be delineated on the plan;
- 23. Areas within or adjacent to the proposed subdivision which have been identified by the Maine Department of Agriculture, Conservation and Forestry's Natural Areas Program, or the Maine Department of Inland Fisheries and Wildlife Beginning with Habitat mapping, or within the comprehensive plan; the applicant shall request each agency to review their preliminary plan and submit written review comments to the Planning Board with any recommended resource mitigation measures. If any portion of the subdivision is located within an area designated as a unique natural area by the comprehensive plan or the Maine Natural Areas Program or significant wildlife habitat by the Maine Department of Inland Fisheries & Wildlife Beginning With Habitat mapping the plan shall indicate appropriate measures for the preservation of the values which qualify the site for such designation; and
- 24. All areas within or adjacent to the proposed subdivision which are either listed on or eligible to be listed on the National Register of Historic Places

or have been identified in the comprehensive plan or by the Maine Historic Preservation Commission as sensitive or likely to contain such sites. Written documentation from the Maine Historic Preservation Commission of their subdivision review findings.

25.A phosphorous control plan shall be submitted which will limit phosphorous runoff after development in accordance with the phosphorous control standards in Article XIII.

#### d. Required Submissions for which a Waiver May be Granted.

The following items shall be submitted as part of the Major Subdivision Preliminary Plan, unless the applicant submits a written waiver request, and is granted a waiver from the submission requirement by the Planning Board, pursuant to Article 12, Waivers. Twelve (12) physical copies and one (1) electronic copy of all materials shall be delivered to the Town Office, at least 14 days prior to a regularly scheduled Planning Board meeting, in order for the application to be placed on the Board's agenda. The Board may require additional information to be submitted, as necessary, in order to determine whether the criteria of Title 30-A M.R.S.A., §4404 are met:

- 1. A stormwater management plan, prepared by a registered professional engineer in accordance with the most recent edition of Maine Stormwater Management Design Manual, Volumes I and III, published by the Maine Department of Environmental Protection, 2016. Another methodology may be used if the applicant can demonstrate it is equally applicable to the site. The Board may waive submission of the stormwater management plan only if the subdivision is not in the watershed of a great pond, and upon a finding that the proposed subdivision will not involve road construction or grading which changes drainage patterns and if the addition of impervious surfaces such as roofs and driveways is less than 5% of the area of the subdivision.
- 2. A high-intensity soil survey by a registered soil scientist;
- 3. Contour lines at the interval specified by the Planning Board, showing elevations in relation to mean sea level;
- 4. A Hydrogeologic assessment prepared by a Maine certified geologist or registered professional engineer, experienced in hydrogeology, when the subdivision is not served by public sewer and

#### water and:

- i. Any part of the subdivision is located over a sand and gravel aquifer, as shown on a map entitled "Hydrogeologic Data for Significant Sand and Gravel Aquifers," by the Maine geological Survey, 1998, File No. 98-138, 144, and 147; or
- ii. The Subdivision has an average density of more than one dwelling unit per 100,000 square feet; or
- iii. There is reasonable presumption of no potable water sources on the property as a result of contaminations including petroleum, hazardous substances, salt, or any other potential contaminant. To determine if a reasonable presumption of a lack of potable drinking water, the presence of potential sources of future drinking water contamination associated with human activities, the following mapping of possible ground water contamination sources shall be submitted covering the subdivision property and abutting properties: the Maine Department of Environmental Protection's Environmental Geographic Analysis Database (EGAD), Google Earth satellite imagery, and Maine Department of Transportation mapping of salt contaminated wells in or near the area of Belgrade bounded by Route 27, Cemetery Road, and Routes 8 and 11.

The Board may require a hydrogeologic assessment in other cases where site considerations or development design indicate greater potential of adverse impacts on groundwater quality. These cases include extensive areas of shallow to bedrock soils; or cluster developments in which the average density is less than one dwelling unit per 100,000 square feet but the density of the developed portion is in excess of one dwelling unit per 80,000 square feet; and proposed use of shared or common subsurface wastewater disposal systems. The hydrogeologic assessment shall be conducted in accordance with the provisions of section 11.9 below.

5. An estimate of the amount and type of vehicular traffic to be generated on a daily basis and at peak hours. Trip generation rates used shall be taken from the most recent available edition of the Trip Generation Manual published by the

Institute of Transportation Engineers. Trip generation rates from other sources may be used if the applicant demonstrates that these sources better reflect local conditions.

6. Traffic Impact Analysis.

For subdivisions involving 28 or more parking spaces or projected to generate more than 140 vehicle trips per day, a traffic impact analysis, prepared by a Registered Professional Engineer with experience in traffic engineering, shall be submitted. The analysis shall indicate the expected average daily vehicular trips, peak-hour volumes, access conditions at the site, distribution of traffic, types of vehicles expected, effect upon the level of service of the street giving access to the site and neighboring streets which may be affected, and recommended improvements to maintain the desired level of service on the affected streets.

e. The Planning Board may require any additional information not listed above when it is determined necessary by the Board to determine whether the statutory review criteria of Title 30-A M.R.S.A. §4404 have been met.

#### ARTICLE VII: MAJOR SUBDIVISION FINAL PLAN

#### 4. Procedure.

a. Within six months after the approval of the Major Subdivision Preliminary Plan, the applicant shall submit Twelve (12) physical copies and one (1) electronic copy for approval of the Major Subdivision Final Plan with all supporting materials, at least 14 days prior to a scheduled meeting of the Board. Applications shall be submitted by mail to the Board in care of the municipal offices or delivered by hand to the municipal offices. If the application for the final plan is not submitted within six months after preliminary plan approval, the Board shall require resubmission of the preliminary plan, except as stipulated below. Major Subdivision Final Plan shall approximate the layout shown on the Major Subdivision Preliminary Plan, plus any changes required by the Board

If an applicant cannot submit the Major Subdivision Final Plan within six months, due to delays caused by other regulatory bodies, or other reasons, the applicant may request an extension. Such a request for an extension to the filing deadline shall be filed, in writing, with the Board prior to the expiration of the filing period. In considering the request for an extension the Board shall make findings that the applicant has made due progress in preparation of the final plan and in pursuing approval of the plans before other agencies, and that municipal ordinances or regulations which may impact on the proposed development have not been amended

- b. All applications for Major Subdivision Final Plan shall be accompanied by an application fee of \$20.00 per lot or dwelling unit payable by check to the municipality. If a public hearing is deemed necessary by the Planning Board, an additional fee shall be required to cover the costs of advertising and postal notification.
- c. Prior to submittal of the Major Subdivision Final Plan application, the following approvals shall be obtained in writing, where applicable:
  - 1. Maine Department of Environmental Protection, under the Site Location of Development Act;
  - 2. Maine Department of Environmental Protection, under the Natural Resources Protection Act or Stormwater Law, or if an MEPDES wastewater discharge license is needed;
  - 3. Maine Department of Human Services, if the applicant proposes to provide a public water system;

- 4. Maine Department of Human Services, if an engineered subsurface wastewater disposal system(s) is to be utilized;
- 5. U.S. Army Corps of Engineers, if a permit under Section 404 of the Clean Water Act is required; and
- 6. Maine Department of Transportation Traffic Movement Permit, and/or Highway Entrance/Driveway Access Management Permit

If the Board is unsure whether a permit or license from a state or federal agency is necessary, the applicant may be required to obtain a written opinion from the appropriate agency as to the applicability of their regulations.

- d. If the Major Subdivision Preliminary Plan identified any areas listed on or eligible to be listed on the National Register of Historic Places, in accordance with Section 6.2.C.23, the applicant shall submit a copy of the plan and a copy of any proposed mitigation measures to the Maine Historic Preservation commission prior to submitting the final plan application.
- e. Written approval of any proposed street names from the Town of Belgrade E911 Addressing Officer.
- f. The Board shall not review any final plan application unless the applicant or applicant's representative attends the meeting. Should the applicant or applicant's representative fail to attend, the Board shall reschedule review of the application at its next regular meeting.
- g. Within three days of the receipt of the Final Plan application, the Board, or its designee, shall issue a dated receipt to the applicant.
- h. Upon determination that a complete application has been submitted for review, the Planning Board shall issue a dated receipt to the applicant. The Planning Board shall hold a public hearing on the Final Subdivision Plan application.
- i. Within thirty days of determining if the Planning Board has received a complete application, the Planning Board shall publish a notice of the date, time, and place of the hearing in a newspaper of local circulation at least two times, the date of the first publication to be at least seven days prior to the hearing. In addition, the notice of the hearing shall be posted in at least three prominent places within the municipality at least seven days prior to the hearing. A copy of the notice shall be sent by First Class mail to abutting landowners and to the applicant, at least ten days prior to the hearing.

- j. The Planning Board shall notify the Road Commissioner, School Superintendent, and Fire Chief of the proposed Subdivision, the number of dwelling units proposed, the length of roadways, and the size and construction characteristics of any multi-family, commercial, or industrial buildings. The Planning Board shall request that these official comment upon the adequacy of their department's existing capital facilities to service the proposed Subdivision.
- k. Before the Board grants approval of the Major Subdivision Final Plan, the applicant shall meet the performance guarantee requirements contained in Article 12 PERFORMANCE GUARANTEES.
- 1. Within thirty days from the public hearing or within sixty days of receiving a complete application, if no hearing is held, or within another time limit as may be otherwise mutually agreed to by the Board and the applicant, the Board shall make findings of fact, and conclusions relative to the criteria for approval contained in Title 30-A M.R.S.A., §4404 and the standards of these regulations. If the Board finds that all the criteria of the statute and the standards of these regulations have been met, they shall approve the Major Subdivision Final Plan. If the Board finds that any of the criteria of the statute or the standards of these regulations have not been met, the Board shall either deny the application or approve the application with conditions to ensure all of the standards will be met by the subdivision. The reasons for any conditions shall be stated in the records of the Board.

# 5. Mandatory Submissions.

The Major Subdivision Final Plan shall consist of one or more maps or drawings drawn to a scale of not more than one hundred feet to the inch. Plans for subdivisions containing more than one hundred acres may be drawn at a scale of not more than two hundred feet to the inch provided all necessary detail can easily be read. Plans shall be no larger than 24 by 36 inches in size and shall have a margin of two inches outside of the border line on the left side for binding and a one-inch margin outside the border along the remaining sides. Space shall be reserved on the plan for endorsement by the Board. One reproducible, stable-based transparency of the recording plan to be recorded at the Registry of Deeds, and Twelve (12) physical copies and one (1) electronic copy of all the final plan sheets and any supporting documents shall be submitted.

The Final Subdivision Plan shall include or be accompanied by the following mandatory submissions of information:

- a. Completed Final Plan Application Form and Final Plan Application Submissions Checklist;
- b. Proposed name of the subdivision and the name of the municipality in which it is located, plus the assessor's map and lot numbers;
- c. An actual field survey of the boundary lines of the tract, giving complete descriptive data by bearings and distances, made and certified by a licensed land surveyor. The corners of the tract shall be located on the ground and marked by monuments. The plan shall indicate the type of monument set or found at each lot corner;
- d. The number of acres within the proposed subdivision, location of property lines, existing buildings, watercourses, and other essential existing physical features;
- e. An indication of the type of sewage disposal to be used in the subdivision. When sewage disposal is to be accomplished by connection to public sewer, a written statement from the sewer district indicating the district has review and approved the sewerage design shall be submitted;
- f. An indication of the type of water supply system(s) to be used in the subdivision;
  - 1. When water is to be supplied by an existing public water supply, a written statement from the servicing water district shall be submitted indicating the district has reviewed and approved the water system design
  - 2. A written statement shall be submitted from the fire chief approving all hydrant locations or other fire protection measures deemed necessary.
  - 3. When water is to be supplied by private wells, evidence of adequate ground water supply shall be submitted by a well driller or a hydrogeologist familiar with the area.
- g. The date the plan was prepared, north point, graphic map scale;
- h. The names and addresses of the record owner, applicant, and individual or company who prepared the plan;
- i. If different than those submitted with the preliminary plan, a copy of any proposed deed restrictions intended to cover all or part of the lots or dwellings in the subdivision;

- j. The location of any zoning boundaries affecting the subdivision:
- k. The location and size of existing and proposed sewers, water mains, culverts, and drainage ways on or adjacent to the property to be subdivided;
- 1. The location, names, and present widths of existing and proposed streets, highways, easements, buildings, parks and other open spaces on or adjacent to the subdivision. The plan shall contain sufficient data to allow the location, bearing and length of every street line, lot line, and boundary line to be readily determined and be reproduced upon the ground. These lines shall be tied to reference points previously established. The location, bearing and length of street lines, lot lines and parcel boundary lines shall be certified by a professional land surveyor. The original reproducible plan shall be embossed with the seal of the professional land surveyor and be signed by that individual;
- m. Street plans, meeting the requirements of Section 11.15;
- n. All parcels of land proposed to be dedicated to public use and the conditions of such dedication. Written offers to convey title to the municipality of all public ways and open spaces shown on the Plan, and copies of agreements or other documents showing the manner in which open spaces to be retained by the developer or lot owners are to be managed and maintained shall be submitted. These may include homeowners' association by laws and condominium declarations. If proposed streets and/or open spaces or other land is to be offered to the municipality, written evidence that the Municipal Officers are satisfied with the legal sufficiency of the written offer to convey title shall be included;
- o. The boundaries of any flood hazard areas and the 100-year flood elevation as depicted on the municipality's Flood Insurance Rate Map, shall be delineated on the plan; and
- p. The location and method of disposal for land clearing and construction debris.
- q. The common land or open space shall be shown on the final plan with appropriate notations on the plan to indicate:
  - 1.It shall not be used for future building lots; and
  - 2. Which portions of the open space, if any, may be dedicated for acceptance by the municipality or a local land trust.

- r. Covenants for mandatory membership in the lot owners' association setting forth the owners' rights, interests, and privileges in the association and the common property and facilities, to be included in the deed for each lot or dwelling and also:
  - Draft articles of incorporation of proposed lot owners' association as a not-for-profit corporation; and
  - 2. Draft by-laws of the proposed lot owners' association specifying the responsibilities and authority of the association, the operating procedures of the association and providing for proper capitalization of the association to cover the costs of major repairs, maintenance and replacement of common facilities.

## 6. Required Submissions for which a Waiver May be Granted.

- a. The name and certification number of the Maine Department of Environmental Protection certified contractor to oversee all soil disturbance.
- b. An erosion and sedimentation control plan prepared in accordance with the Maine Erosion and Sediment Control Best Management Practices: Manual for Designers and Engineers, published by the Maine Department of Environmental Protection, October 2016. The Board may waive submission of the erosion and sedimentation control plan only if the subdivision is not in the watershed of a great pond, and upon a finding that the proposed subdivision will not involve road construction or grading which changes drainage patterns and if the addition of impervious surfaces such as roads, roofs, walkways, and driveways is less than 5% of the area of the subdivision.
- c. A stormwater management plan, prepared by a Maine registered professional engineer in accordance with the most recent edition of Maine Stormwater Management Design Manual, Vols. I and III, published by the Maine Department of Environmental Protection, 2016. Another methodology may be used if the applicant can demonstrate it is equally applicable to the site. The Board may waive submission of the stormwater management plan only if the subdivision is not in the watershed of a great pond, and upon a finding that the proposed subdivision will not involve road construction or grading which changes drainage patterns and if the addition of impervious surfaces such as roads, roofs, walkways, and driveways is less than 5% of the area of the subdivision.
- d. If any portion of the proposed subdivision is in the direct watershed of a great pond, and meets the criteria

of section 11.12.D, the following shall be submitted or indicated on the plan:

- 1. A phosphorus impact analysis and control plan conducted using the procedures set forth in Maine DEP Phosphorus Control in Lake Watersheds, Volume II of the Maine Stormwater Management Design Manual, 2016. The analysis and control plan shall be based on the per acre phosphorous allocations in Appendix C. When a subdivision is in the direct watershed of more than one great pond, the lowest phosphorous allocation shall be used. The analysis and control plan shall include all worksheets, engineering calculations, and construction specifications and diagrams for control measures, as required by the Technical Guide;
- 2. A long-term inspection and maintenance plan for all phosphorus control measures;
- 3. The contour lines shown on the plan shall be at an interval of no less than five feet; and
- 4. Areas with sustained slopes greater than 25% covering more than one acre shall be delineated.
- 5. The Board may waive submission of the above phosphorous analysis and control requirements only if the subdivision is not in the watershed of a great pond, and upon a finding that the proposed subdivision will not involve road construction or grading which changes drainage patterns and if the addition of impervious surfaces such as roads, roofs, walkways, and driveways is less than 5% of the area of the subdivision.

# ARTICLE VIII: FINAL APPROVAL AND FILING FOR MINOR AND MAJOR SUBDIVISIONS

- 1. No Minor or Major Subdivision Final Plan shall be approved by the Board as long as the applicant is in violation of the provisions of a previously approved Plan within the municipality.
- 2. All subdivisions shall be approved with the following standard conditions of approval. These conditions and any special conditions of approval shall be listed on the Final plan.
  - a. The Board approval of this subdivision is limited to that described in the application and depicted in the final plan and other application submissions. Except to the extent that the Board has expressly indicated in the finding of facts and conclusions of law that certain depictions may be revised by the applicant without further review and approval by the Board, any changes to the application, final plan, or other supporting application submissions must receive prior approval from the Board, including but not limited to, changes in the location of structures, roads, parking, vehicle road entrance and exit, drinking water wells, waste water disposal, storm water management, and phosphorous analysis and control plans.
  - b. Unless a waiver from a specific ordinance standard has been requested by the applicant in writing and approved by the Board, the subdivision is required to meet all applicable ordinance requirements.
- 3. Upon findings of fact and determination that all standards in Title 30-A M.R.S.A., §4404, and these regulations have been met, and upon voting to approve the subdivision, the Board shall sign the Minor or Major Subdivision Final Plan. The Board shall specify in writing its findings of facts and reasons for any conditions or denial. One copy of the signed plan shall be retained by the Board as part of its permanent records. One copy of the signed plan shall be forwarded to the tax assessor. One copy of the signed plan shall be forwarded to the code enforcement officer. Any subdivision not recorded in the Registry of Deeds within ninety days of the date upon which the plan is approved and signed by the Board shall become null and void.
- 4. At the time the Board grants Minor or Major Subdivision Final Plan approval, it may permit the Plan to be divided into two or more sections subject to any conditions the Board deems necessary in order to ensure the orderly development of the Plan. If any municipal or quasi-municipal department head notified of the proposed subdivision informs the Board that

their department or district does not have adequate capital facilities to service the subdivision, the Board shall require the plan to be divided into two or more sections subject to any conditions the Board deems necessary in order to allow the orderly planning, financing and provision of public services to the subdivision. If the expansion, addition or purchase of the needed facilities is included in the municipality's capital improvements program, the time period of the phasing shall be no longer than the time period contained in the capital improvements program for the expansion, addition or purchase.

- 5. No changes, erasures, modifications, or revisions shall be made in any Minor or Major Subdivision Final Plan after approval has been given by the Board and endorsed in writing on the plan, unless a revised final plan is first submitted and the Board approves any modifications, in accordance with Article 9. The Board shall make findings that the revised plan meets the criteria of Title 30-A M.R.S.A., §4404, and the standards of these regulations. In the event that a Plan is recorded without complying with this requirement, it shall be considered null and void, and the Board shall institute proceedings to have the plan stricken from the records of the Registry of Deeds.
- 6. The approval by the Board of a Minor or Major Subdivision Final Plan shall not be deemed to constitute or be evidence of any acceptance by the municipality of any street, easement, or other open space shown on such plan. When a park, playground, or other recreation area shall have been shown on the plan to be dedicated to the municipality, approval of the plan shall not constitute an acceptance by the municipality of such areas. The Board shall require the plan to contain appropriate notes to this effect. The Board may also require the filing of a written agreement between the applicant and the municipal officers covering future deed and title dedication, and provision for the cost of grading, development, equipment, and maintenance of any such dedicated area.
- 7. Failure to commence substantial construction of the Subdivision within two years of the date of approval and signing of the plan shall render the plan null and void. Upon determining that a Subdivision's approval has expired under this paragraph, the Board shall have a notice placed in the Registry of Deeds to that effect.
- 8. Except in the case of a phased development plan, failure to complete substantial construction of the subdivision within five years of the date of approval and signing of the plan shall render the plan null and void. Upon determining that a subdivision's approval has expired under this paragraph, the Board shall have a notice placed in the Registry of Deeds to that effect.

## ARTICLE IX: REVISIONS TO APPROVED PLANS

### 1. Procedure.

An applicant for a revision to a previously approved plan shall, at least 7 days prior to a scheduled meeting of the Board, request to be placed on the Board's agenda. If the revision involves the creation of additional lots or dwelling units, the procedures for preliminary plan approval shall be followed. If the revision involves only modifications of the approved plan, without the creation of additional lots or dwelling units, the procedures for final plan approval shall be followed.

### 2. Submissions.

The applicant shall submit a copy of the approved plan as well as \_\_\_\_\_\_copies of the proposed revisions. The application shall also include enough supporting information to allow the Board to make a determination that the proposed revisions meet the standards of these regulations and the criteria of the statute. The revised plan shall indicate that it is the revision of a previously approved and recorded plan and shall show the title of the subdivision and the book and page or cabinet and sheet on which the original plan is recorded at the Registry of Deeds.

# 3. Scope of Review.

The Board's scope of review shall be limited to those portions of the plan which are proposed to be changed.

## ARTICLE X: INSPECTIONS AND ENFORCEMENT

## 1. Inspection and Required Improvements.

- a. At least five days prior to commencing construction of required improvements, the Applicant or builder shall:
  - 1. Notify the code enforcement officer in writing of the time when they propose to commence construction of such improvements, so that the municipal officers can arrange for inspections to assure that all municipal specifications, requirements, and conditions of approval are met during the construction of required improvements, and to assure the satisfactory completion of improvements and utilities required by the Board.
  - 2. Deposit with the municipal officers a check for the amount of 2% of the estimated costs of the required improvements to pay for the costs of inspection. If upon satisfactory completion of construction and cleanup there are funds remaining, the surplus shall be refunded to the applicant or builder as appropriate. If the inspection account shall be drawn down by 90%, the applicant or builder shall deposit an additional 1% of the estimated costs of the required improvements.
- b. If the inspecting official finds upon inspection of the improvements that any of the required improvements have not been constructed in accordance with the plans and specifications filed by the subdivider, the inspecting official shall so report in writing to the municipal officers, Board, and the subdivider and builder. The municipal officers shall take any steps necessary to assure compliance with the approved plans.
- c. If at any time it appears necessary or desirable to modify the required improvements before or during the construction of the required improvements, the inspecting official is authorized to approve minor modifications due to unforeseen circumstances such as encountering hidden outcrops of bedrock, natural springs, etc. The inspecting official shall issue any approval under this section in writing and shall transmit a copy of the approval to the Board. Revised plans shall be filed with the Board. For major modifications, such as relocation of right of ways, property boundaries, changes of grade by more than 1%, etc., the subdivider shall obtain permission from the Board to modify the plans in accordance with Article 9.
- d. At the close of each summer construction season the Town shall, at the expense of the subdivider, have the site inspected by a qualified individual. By October 1 of each

year during which construction was done on the site, the inspector shall submit a report to the Board based on that inspection, addressing whether storm water and erosion control measures (both temporary and permanent) are in place, are properly installed, and appear adequate. The report shall also include a discussion and recommendations on any problems which were encountered.

- e. Prior to the sale of any lot, the subdivider shall provide the Board with a letter from a professional land surveyor, stating that all monumentation shown on the plan has been installed.
- f. Upon completion of street construction and prior to a vote by the municipal officers to submit a proposed public way to a town meeting, a written certification signed by a professional engineer shall be submitted to the municipal officers at the expense of the applicant, certifying that the proposed public way meets or exceeds the design and construction requirements of these regulations. If there are any underground utilities, the servicing utility shall certify in writing that they have been installed in a manner acceptable to the utility. "As built" plans shall be submitted to the municipal officers.
- g. The subdivider shall be required to maintain all improvements and provide for snow removal on streets and sidewalks until acceptance of the improvements by the municipality or control is placed with a lot owners' association.

### 2. Violations and Enforcement.

- a. No plan of a division of land within the municipality which would constitute a subdivision shall be recorded in the Registry of Deeds until a final plan has been approved by the Board in accordance with these regulations.
- b. A person shall not convey, offer or agree to convey any land in a subdivision which has not been approved by the Board and recorded in the Registry of Deeds.
- c. A person shall not sell, lease or otherwise convey any land in an approved subdivision which is not shown on the plan as a separate lot.
- d. No public utility, water district, sanitary district or any utility company of any kind shall serve any lot in a subdivision for which a final plan has not been approved by the Board.
- e. Development of a subdivision without Board approval shall be a violation of law. Development includes grading or

- construction of roads, grading of land or lots, or construction of buildings which require a plan approved as provided in these regulations and recorded in the Registry of Deeds.
- f. No lot in a subdivision may be sold, leased, or otherwise conveyed before the street upon which the lot fronts is completed in accordance with these regulations up to and including the entire frontage of the lot. No unit in a multi-family development shall be occupied before the street upon which the unit is accessed is completed in accordance with these regulations.
- g. A person who conveys any land in a Subdivision which has not been approved as required by these regulations shall be punished by a fine of not less than \$100.00, and not more than \$2,500.00 for each conveyance. The Municipality may institute proceedings to enjoin the violation of this Section and may collect attorney's fees and court costs if it is the prevailing party.

## ARTICLE XI: PERFORMANCE AND DESIGN STANDARDS

## 1. Basic Subdivision Layout.

a. Blocks.

Where street lengths exceed 1,000 feet between intersections with other streets, the Board may require a utility/pedestrian easement, at least 20 feet in width, to provide for underground utility crossings and/or a pedestrian pathway of at least five feet in width constructed in accordance with design standards for sidewalks below. Maintenance obligations of the easement shall be included in the written description of the easement.

#### b. Lots.

- 1. Wherever possible, side lot lines shall be perpendicular to the street.
- 2. The subdivision of tracts into parcels with more than twice the required minimum lot size shall be laid out in such a manner as either to provide for or preclude future division. Deed restrictions and notes on the plan shall either prohibit future divisions of the lots or specify that any future division shall constitute a revision to the plan and shall require approval from the Board, subject to the criteria of the subdivision statute, the standards of these regulations and conditions placed on the original approval.
- 3. If a lot on one side of a stream, tidal water, or road fails to meet the minimum requirements for lot size, it may not be combined with a lot on the other side of the stream, tidal water, or road to meet the minimum lot size.
- 4. The ratio of lot length to width, outside of the shoreland zone, shall not be more than three to one. Flag lots and other odd-shaped lots in which narrow strips are joined to other parcels in order to meet minimum lot size requirements are prohibited. If any lots in the proposed subdivision have shore frontage on a river, stream, brook, great pond or coastal wetland as, none of the lots created within the subdivision have a lot depth to shore frontage ratio greater than 5 to 1.
- 5. In areas served by a postal carrier, lots shall be numbered in such a manner as to facilitate mail delivery. Even numbers shall be assigned to lots

on one side of the street, and odd numbers on the opposite side. Where the proposed subdivision contains the extension of an existing street or street approved by the Board, but not yet constructed, the lot numbers shall correspond with the existing lot numbers. The lot numbering shall be reviewed by the E-911 Addressing Officer and the comments shall be considered by the Board.

#### c. Utilities.

Utilities serving subdivisions in areas designated by the comprehensive plan as growth areas shall be installed underground. Utilities serving lots with a street frontage of 125 feet or less shall be installed underground. The Board may approve overhead utilities when the applicant proposes reserved affordable housing and provides evidence that the increased costs of underground utilities will raise the costs of the housing beyond the targets for affordable housing in the comprehensive plan.

### d. Monuments.

- 1. Survey monuments shall be located and constructed in accordance with the requirements of the Maine Board of Licensure for Professional Land Surveyors regulations, Chapter 90: Standards of Practice.
- 2. Monuments shall be installed prior to offering any lots for sale or lease.

#### 2. Sufficient Water.

- a. Water Supply.
  - 1. Any subdivision within the area designated in the comprehensive plan for future public water supply service shall make provisions for connection to the public system. A proposed subdivision shall not generate a demand on the source, treatment facilities or distribution system of the servicing water company or district beyond the capacity of those system components, considering improvements that are planned to be in place prior to occupancy of the subdivision. The applicant shall be responsible for paying the costs of system improvements to the district's or company's system as necessary in order to facilitate connection. When public water supply service will not be available at the time of construction of the subdivision, a "capped system" shall be installed within the subdivision to allow future connection when service becomes available without excavation

- within the right-of-way of any street within the subdivision.
- 2. When a subdivision is to be served by a public water system, the complete supply system within the subdivision including fire hydrants, shall be installed at the expense of the applicant. The size and location of mains, gate valves, hydrants, and service connections shall be reviewed and approved in writing by the servicing water company or district and the fire chief. Fire hydrants connected to a public water supply system shall be located no further than 500 feet from any building.
- 3. When a proposed subdivision is not within the area designated for public water supply service in the comprehensive plan, water supply shall be from individual wells or a private community water system.
  - i. Individual wells shall be sited and constructed to prevent infiltration of surface water, and contamination from subsurface wastewater disposal systems and other sources of potential contamination.
    - a. Due to the increased chance of contamination from surface water, dug wells shall be prohibited on lots of smaller than one acre. On lots of one acre or smaller, the applicant shall prohibit dug wells by deed restrictions and a note on the plan.
    - b. Wells shall not be constructed within 100 feet of the traveled way of any street, if located downhill from the street, or within 50 feet of the traveled way of any street, if located uphill of the street. This restriction shall be included as a note on the plan and deed restriction to the effected lots.
  - ii. Lot design shall permit placement of wells, subsurface wastewater disposal areas, and reserve sites for subsurface waste water disposal areas in compliance with the Maine Subsurface Wastewater Disposal Rules and the Well Drillers and Pump Installers Rules.
  - iii. If a central water supply system is provided by the applicant, the location and

protection of the source, the design, construction, and operation of the system shall conform to the standards of the Maine Rules Relating to Drinking Water (10-144A C.M.R. 231).

## b. Water Quality.

- 1. Water supplies shall meet the drinking water standards contained in the Maine Center for Disease Control and Prevention's Maximum Exposure Guidelines for Drinking Water, and in the case of salt, the Maine Department of Transportation action level of 200 mg/L. If existing water quality contains contaminants in excess of the secondary drinking water standards in the Maine Rules Relating to Drinking Water, that fact shall be disclosed in a note on the plan to be recorded in the Registry of Deeds.
- 2. There may be no significant risk of contamination above the Maine Center for Disease Control and Prevention 's Maximum Exposure Guidelines (MEGs) for Drinking Water to ground water to serve as the proposed subdivision drinking water supply from historical or current likely ground water contamination sources of oil, solid waste, salt and hazardous substances or wastes caused by human activities. Whether a significant risk of contamination to the proposed subdivision drinking water source exists shall be assessed as follows. Existing mapping and surrounding land uses will be reviewed to identify potential ground water contamination sources on the subdivision property or on abutting lots using the Maine Department of Environmental Protection's Environmental Geographic Analysis Database (EGAD; Maine Department of Transportation mapping of existing salt contaminated wells in the area of Town generally bounded by and abutting Routes 27, Cemetery Road and Routes 8 and 11; and Google Earth satellite imagery to locate vehicle junkyards, salvage or recycling facilities, the presence of commercial autobody shops, and commercial vehicle or boat repair facilities. If any of the above are present on the subdivision property or abutting lots, a hydrogeological assessment, and if required by the Planning Board, a hydrogeological investigation by a Maine Certified Geologist to demonstrate that water supply wells to serve the proposed subdivision will likely meet the Maine MEGs and will not pose

a significant risk of future contamination from identified potential groundwater pollution sources.

## 3. Erosion and Sedimentation and Impact on Water Bodies.

- a. The proposed subdivision shall prevent soil erosion and sedimentation from entering waterbodies, wetlands, and adjacent properties.
- b. The procedures outlined in the erosion and sedimentation control plan shall be implemented during the site preparation, construction, and clean-up stages.
- c. Cutting or removal of vegetation along waterbodies shall not increase water temperature or result in shoreline erosion or sedimentation. Within the Shoreland Zone, the vegetation cutting standards of Belgrade's Shoreland Zoning ordinance shall be adhered to. Natural vegetated buffer strips shall be maintained along perennial and intermittent streams, the width of which is determined by the slope of the land and as determined below. All cutting of vegetation is prohibited with a buffer strip.

Land Slope (%)	Minimum Width of Buffer Strip (ft.)
0	
1-10	45
11-20	65
31-30	85
31-40	105
41-50	145
>50	Addition 20' for every 10% of slope

d. Topsoil shall be considered part of the subdivision and shall not be removed from the site except for surplus topsoil from roads, parking areas, and building excavations.

# 4. Sewage Disposal

- a. Public System.
  - Any subdivision within the area designated in the comprehensive plan for future public sewage disposal service shall be connected to the public system.

- 2. When a subdivision is proposed to be served by the public sewage system, the complete collection system within the subdivision, including manholes and pump stations, shall be installed at the expense of the applicant.
- 3. The sewer district shall certify that providing service to the proposed subdivision is within the capacity of the system's existing collection and treatment system or improvements planned to be complete prior to the construction of the subdivision.
- 4. The sewer district shall review and approve the construction drawings for the sewerage system. The size and location of laterals, collectors, manholes, and pump stations shall be reviewed and approved in writing by the servicing sewer district or department.

## b. Private Systems.

- 1. When a proposed subdivision is not within the area designated for public sewage disposal service in the comprehensive plan, connection to the public system shall not be permitted. Sewage disposal shall be private subsurface wastewater disposal systems or a private treatment facility with surface discharge, licensed by the Department of Environmental Protection.
- 2. The applicant shall submit evidence of site suitability for subsurface sewage disposal prepared by a Maine Licensed Site Evaluator in full compliance with the requirements of the State of Maine Subsurface Wastewater Disposal Rules.
  - i. The site evaluator shall certify in writing that all test pits which meet the requirements for a new system represent an area large enough to a disposal area on soils which meet the Disposal Rules.
  - ii. On lots in which the limiting factor has been identified as being within 24 inches of the surface, a second site with suitable soils shall be shown as a reserve area for future replacement of the disposal area. The reserve area shall be shown on the plan and restricted in the deed so as not to be built upon.
  - iii. In no instance shall a disposal area be on a site which requires a New System Variance

from the Subsurface Wastewater Disposal Rules.

### 5. Solid Waste.

If the additional solid waste from the proposed subdivision exceeds the capacity of the municipal solid waste facility, causes the municipal facility to no longer be in compliance with its license from the Department of Environmental Protection, or causes the municipality to exceed its contract with a non-municipal facility, the applicant shall make alternate arrangements for the disposal of solid waste. The alternate arrangements shall be at a disposal facility which is in compliance with its license. The Board may not require the alternate arrangement to exceed a period of five years.

- 6. Impact on Natural Beauty, Aesthetics, Historic Sites, Wildlife Habitat, Rare Natural Areas, Or Public Access to Shoreline.
  - a. Preservation of Natural Beauty and Aesthetics.
    - 1. The plan shall, by notes on the final plan and deed restrictions, limit the clearing of trees to those areas designated on the plan.
    - 2. Except in areas of the municipality designated by the comprehensive plan as Village Districts, General Development Districts, and Residential/Mixed Use Districts, the subdivision shall be designed to minimize the visibility of buildings from existing public roads. Outside of these designated areas, a subdivision in which the land cover type at the time of application is forested, shall maintain a wooded buffer strip no less than fifty feet in width along all existing public roads. The buffer may be broken only for driveways and streets.
    - 3. The Board may require the application to include a landscape plan that will show the preservation of any existing large specimen trees, the replacement of trees and vegetation, and graded contours.
    - 4. Unless located in areas designated as Village Districts, General Development Districts, and Residential/Mixed Use Districts, in the comprehensive plan, building location shall be restricted from open fields, and shall be located within forested portions of the subdivision. When the subdivision contains no forest or insufficient forested portions to include all buildings, the subdivision shall be designed to minimize the appearance of buildings when viewed from existing public streets. When a proposed subdivision street

traverses open fields, the plan shall include the planting of street trees. Street trees shall include a mix of tall shade trees and medium height flowering species. Trees shall be planted no more than fifty feet apart.

- b. Retention of Open Spaces and Natural or Historic Features.
  - 1. If any portion of the subdivision is located within an area designated by the comprehensive plan as a Critical Resource Conservation District, that portion shall be reserved for preservation.
  - 2. If any portion of the subdivision is located within an area designated as a unique natural area by the comprehensive plan or the Maine Natural Areas Program the plan shall include a project review by the Department of Agriculture, Forestry, and Conservation and indicate appropriate measures for the preservation of the values which qualify the site for such designation.
  - 3. If any portion of the subdivision is designated a site of historic or prehistoric importance by the comprehensive plan, National Register of Historic Places, or the Maine Historic Preservation Commission, appropriate measures for the protection of the historic or prehistoric resources shall be included in the plan. When the historic features to be protected include buildings, the placement and the architectural design of new structures in the subdivision shall be similar to the historic structures. The Board shall seek the advice of the Maine Historic Preservation Commission in reviewing such plans.
  - 4. The subdivision shall reserve sufficient undeveloped land to provide for the passive recreational needs of the occupants and to provide residual wildlife habitat. For subdivisions larger than 10 acres, the percentage of open space to be reserved shall constitute no less than 10% of the area of the subdivision. In determining the need for recreational open space, the Board shall also consider the proximity of the subdivision to neighboring dedicated open space or recreation facilities, and the type of development. Sites selected primarily for scenic or passive recreation purposes shall have such access as the Board may deem suitable and no less than 25 feet of road frontage.

- 5. Land reserved for open space purposes shall be of a character, configuration, and location suitable for the particular use intended.
- 6. Reserved open space land may be dedicated to the municipality or to land trusts.
- 7. Where land within the subdivision is not suitable or is insufficient in amount, a payment in lieu of dedication may be substituted for the reservation of some or part of the open space requirement. Payments in lieu of dedication shall be calculated based on the percentage of reserved open space that otherwise would be required and that percentage of the projected market value of the developed land at the time of the subdivision, as determined by the municipal tax assessor. The payment in lieu of dedication shall be deposited into a municipal land open space or outdoor recreation facility acquisition or improvement fund.
- c. Protection of High Value Plant and Animal.
  - 1. 250 feet of the following areas identified and mapped by the Department of Inland Fisheries and Wildlife Beginning with Habitat mapping <del>Project</del> or the comprehensive plan as:
    - i. Habitat for species appearing on the official state or federal lists of endangered, or threatened species, or Significant Vernal Pools;
    - ii. High and moderate value waterfowl and wading bird habitats, including nesting and feeding areas;
    - iii. Shorebird nesting, feeding and staging areas
       and seabird nesting islands;
      - iv. Critical spawning and nursery areas for Atlantic sea run salmon as defined by the Atlantic Sea Run Salmon Commission; or
  - 2.1,320 feet of an area identified and mapped by the Department of Inland Fisheries and Wildlife as a high or moderate value deer wintering area, defined as a forested area used by deer when snow depth in the open/hardwoods exceeds 12 inches, or travel corridor;
  - 3. Or other important habitat areas identified in the comprehensive plan or in the Department of Inland Fisheries and Wildlife Beginning with Habitat

Project; the applicant shall demonstrate that there shall be no adverse impacts on the habitat and species it supports. There shall be no cutting of vegetation within such areas, or within the strip of land extending at least 75 feet from the edge or normal high-water mark of such habitat areas. The applicant must consult with the Maine Department of Inland Fisheries and Wildlife and provide their written comments and recommendations for mitigation measures, if any, to the Board. The Board may require a report to be submitted, prepared by a wildlife biologist, selected or approved by the Board, with demonstrated experience with the wildlife resource being impacted. This report shall assess the potential impact of the subdivision on the significant habitat and adjacent areas that are important to the maintenance of the affected species and shall describe any additional appropriate mitigation measures to ensure that the subdivision will have no adverse impacts on the habitat and the species it supports.

- d. Protection of Important Shoreland Areas.
  - 1. Any existing public rights of access to the shoreline of a water body shall be maintained by means of easements or rights-of-way or should be included in the open space with provisions made for continued public access.
  - 2. Within areas subject to the state mandated shoreland zone, within a strip of land extending 100 feet inland from the normal high-water line of a great pond or any tributary to a great pond, and 75 feet from any other water body or the upland edge of a wetland, a buffer strip of vegetation shall be preserved. The plan notes, and deeds to any lots which include any such land, shall contain the following deed restrictions:
    - i. Tree removal shall be limited to no more than 40% of the volume of trees 4 inches or more in diameter measured at 4 1/2 feet above the ground level on any lot in any ten-year period.
    - ii. There shall be no cleared opening greater than 250 square feet in the forest canopy as measured from the outer limits of the tree crown.
    - iii. However, a footpath not to exceed ten feet in

width as measured between tree trunks is permitted provided that a cleared line of sight to the water through the buffer strip is not created. Adjacent to a great pond, or a tributary to a great pond, the width of the foot path shall be limited to six feet.

- iv. In order to protect water quality and wildlife habitat adjacent to great ponds, and tributaries to great ponds, existing vegetation under three feet in height and other ground cover shall not be removed, except to provide for a footpath or other permitted uses as described above.
- v. Pruning of tree branches, on the bottom third of the tree is permitted.
- 3. Within areas subject to the state mandated shoreland zone, beyond the buffer strip designated above, and out to 250 feet from the normal highwater line of a water body or upland edge of a wetland, cleared openings for development, including but not limited to, principal and accessory structures, driveways and sewage disposal areas, shall not exceed in the aggregate, 25% of the lot area or 10,000 square feet, whichever is greater, including land previously developed.
- e. Reservation or Dedication and Maintenance of Open Space and Common Land, Facilities, and Services.
  - 1. All open space common land, facilities and property shall be owned by:
    - i. The owners of the lots or dwelling units by means of a lot owners' association;
    - ii. An association which has as its principal purpose the conservation or preservation of land in essentially its natural condition; or
    - iii. The municipality or land trust.
  - 2. Further subdivision of the common land or open space and its use for other than non-commercial recreation, agriculture, or conservation purposes, except for easements for underground utilities, shall be prohibited. Structures and buildings accessory to non-commercial recreational or conservation uses may be erected on the common land. When open space is to be owned by an entity other than the municipality, there shall be a

conservation easement deeded to the municipality prohibiting future development.

- 3. In combination, the documents referenced in paragraph D above shall provide for the following.
  - i. The homeowners' association shall have the responsibility of maintaining the common property or facilities.
  - ii. The association shall levy annual charges against all owners of lots or dwelling units to defray the expenses connected with the maintenance, repair, and replacement of common property and facilities and tax assessments.
  - iii. The association shall have the power to place a lien on the property of members who fail to pay dues or assessments.
    - iv. The developer or subdivider shall maintain control of the common property, and be responsible for its maintenance until development sufficient to support the association has taken place. Such determination shall be made by the Board upon request of the lot owners' association or the developer.

# 7. Conformance with Zoning Ordinance and Other Land Use Ordinances.

All lots, other than those found within cluster developments approved pursuant to section 11. 13, shall meet the minimum dimensional requirements of the zoning ordinance for the zoning district in which they are located. The proposed subdivision shall meet all applicable performance standards or design criteria from the zoning ordinance and other land use ordinances including the Belgrade Minimum Lot Size Ordinance.

## 8. Financial and Technical Capacity.

a. Financial Capacity.

The applicant shall have adequate financial resources to construct the proposed improvements and meet the criteria of the statute and the standards of these regulations. When the applicant proposes to construct the buildings as well as the subdivision improvements, the applicant shall have adequate financial resources to construct the total development. In making the above determinations the Board shall consider the proposed time frame for construction and the effects of inflation.

- b. Technical Capacity.
  - The applicant shall retain qualified contractors and consultants with the appropriate state certifications to supervise, construct and inspect the required improvements in the proposed subdivision.
  - 2. In determining the applicant's technical ability, the Board shall consider the applicant's previous experience, the experience and training of the applicant's consultants and contractors, and the existence of violations of previous approvals granted to the applicant.

## 9. Impact on Ground Water Quality or Quantity.

- a. Ground Water Quality.
  - 1. When a hydrogeologic assessment is submitted, the assessment shall contain at least the following information:
    - i. A map showing the basic soils types.
    - ii. The depth to the water table at representative points throughout the subdivision.
    - iii. Drainage conditions throughout the subdivision.
      - iv. Data on the existing ground water quality, either from test wells in the subdivision or from existing wells on neighboring properties.
        - v. An analysis and evaluation of the effect of the subdivision on ground water resources. In the case of residential developments, the evaluation shall, at a minimum, include a projection of post development nitratenitrogen concentrations at any wells within the subdivision, or at the subdivision boundaries; or at a distance of 1,000 feet from potential contamination sources, whichever is a shortest distance.
      - vi. A map showing the location of any subsurface wastewater disposal systems and drinking water wells within the subdivision and within 200 feet of the subdivision boundaries.
  - 2. Projections of ground water quality shall be based on the assumption of drought conditions (assuming 60% of annual average precipitation).

- 3. No subdivision shall increase any contaminant concentration in the ground water to more than one half of the Primary Drinking Water Standards. No subdivision shall increase any contaminant concentration in the ground water to more than the Secondary Drinking Water Standards.
- 4. If ground water contains contaminants in excess of the primary standards, and the subdivision is to be served by onsite ground water supplies, the applicant shall demonstrate how water quality will be improved or treated.
- 5. If ground water contains contaminants in excess of the secondary standards, the subdivision shall not cause the concentration of the parameters in question to exceed 150% of the ambient concentration.
- 6. Subsurface wastewater disposal systems and drinking water wells shall be constructed as shown on the map submitted with the assessment. If construction standards for drinking water wells or other measures to reduce ground water contamination and protect drinking water supplies are recommended in the assessment, those standards shall be included as a note on the final plan, and as restrictions in the deeds to the affected lots.

## b. Ground Water Quantity.

- 1. Ground water withdrawals by a proposed subdivision shall not lower the water table beyond the boundaries of the subdivision.
- 2. A proposed subdivision shall not result in a lowering of the water table at the subdivision boundary by increasing runoff with a corresponding decrease in infiltration of precipitation.

### 10. Floodplain Management.

When any part of a subdivision is located in a special flood hazard area as identified by the Federal Emergency Management Agency:

- a. All public utilities and facilities, such as sewer, gas, electrical and water systems shall be located and constructed to minimize or eliminate flood damages.
- b. Adequate drainage shall be provided so as to reduce exposure to flood hazards.
- c. The plan shall include a statement that structures in the subdivision shall be constructed with their lowest

floor, including the basement, at least one foot above the 100-year flood elevation. Such a restriction shall be included in any deed, lease, purchase and sale agreement, or document transferring or expressing an intent to transfer any interest in real estate or structure, including but not limited to a time-share interest. The statement shall clearly articulate that the municipality may enforce any violation of the construction requirement and that fact shall also be included in the deed or any other document previously described. The construction requirement shall also be clearly stated on the plan.

# 11. Identification of Freshwater Wetlands, Rivers, Streams, or Brooks.

Freshwater wetlands within the proposed subdivision shall be identified in accordance with the US Fish and Wildlife Service's National Wetlands Inventory. Any rivers, streams, or brooks within or abutting the proposed subdivision shall be identified.

### 12. Stormwater Management.

- a. For subdivisions that require a DEP review under the Site Location of Development Act (SLDA), a stormwater management plan shall be submitted which complies with the SLDA permit and the requirements of DEP Chapter 500 Stormwater Regulations.
- b. For subdivisions that do not require a SLDA permit, but require a DEP permit under the Stormwater Law, a stormwater management plan shall be submitted which complies with the requirements of DEP Chapter 500 Stormwater Regulations.
- c. For subdivisions within the watershed of a Great Pond, a stormwater management plan shall be submitted if there is 30,000 sq. ft. of disturbed area or 350 linear feet of road or driveway according to the Town's Shoreland Zoning and Commercial Development ordinances. The watershed management plan shall be submitted with the methodology described the DEP Best Management Practices Manual, 2016 Phosphorous Control in Lake Watersheds.
- d. The Planning Board may require a hydrologic analysis for any site in areas with a history of flooding or in areas with a potential for future flooding, associated with cumulative impacts of development. This hydrologic analysis would be in the form of a "Downstream Analysis" under conditions of the 10-year, 24-hour storm and the 25-year, 24-hour storm, and the 100-year, 24-hour storm, as described below:

# Downstream Analysis Methodology

The criteria used for the downstream analysis is referred to as the "10% rule." Under the 10% rule, a hydrologic and hydraulic analysis for the 10-year, 24-hour storm and the 25-year, 24-hour storm, and the 100-year, 24-hour storm is extended downstream to the point where the site represents 10% of the total drainage area. For example, a 10-acre site would be analyzed to the point downstream with a drainage area of 100 acres. This analysis should compute flow rates and velocities downstream to the location of the 10% rule for present conditions and proposed conditions. If the flow rates and velocities increase by more than 5% and/or if any existing downstream structures are impacted, the designer should redesign and incorporate detention facilities.

# 13. Cluster Development

## a. Purpose, Mandate for Clustering.

- 1. The purpose of these provisions is to allow for flexibility in the design of housing developments to allow for the creation of open space which provides recreational opportunities or protects important natural features from the adverse impacts of development, provided that the net residential density shall be no greater than is permitted in the district in which the development is proposed. Notwithstanding provisions of the zoning ordinance relating to dimensional requirements, the Board, in reviewing and approving proposed residential subdivisions, may modify the provisions related to dimensional requirements to permit flexibility in approaches to housing and environmental design in accordance with the following guidelines. This shall not be construed as granting variances to relieve hardship, and action of the Zoning Board of Appeals shall not be required.
- 2. All subdivisions where \_\_\_ lots or units or more are created within any five-year period, and the project is located in the \_\_\_ or \_\_ zoning districts, shall be designed as a cluster development, according to the following standards. Subdivisions created in other districts or containing \_\_\_ lots or units or less, may be designed either utilizing the cluster development approach, or by the traditional subdivision method with little or no common open space.

# b. Basic Standards for Cluster Developments.

- 1. Cluster developments shall meet all requirements of these regulations.
- 2. Each building shall be an element of an overall plan for site development. Only developments having a total site plan for structures will be considered. The application shall illustrate the placement of buildings and the treatment of spaces, paths, roads, service, and parking and in so doing shall take into consideration all requirements of this section and of other relevant sections of these regulations.
- 3. The Planning Board shall allow lots within cluster developments to be reduced in lot area, street frontage and lot width below the minimum normally required by this ordinance in return for provision of common open space, as long as the maximum number of dwelling units is not exceeded, according to the calculations in section below.
- 4. In order to determine the maximum number of dwelling units permitted on a tract of land, the net residential acreage as determined in section 5 shall be divided by the minimum lot size in the district, as required by the zoning ordinance. No building in the cluster development shall be sited on slopes steeper than 25%, within 100 feet of any water body or wetland, or on soil classified as being very poorly drained.
- 5. The net residential acreage shall be calculated by taking the total area of the lot and subtracting, in order, the following:
  - i. 15% of the area of the lot to account for roads and parking.
  - ii. Portions of the lot shown to be in a floodway or a coastal high hazard zone as designated in the Flood Boundary and Floodway Map prepared by the Federal Insurance Administration.
- iii. Portions of the lot which are unsuitable for development in their natural state due to topographical, drainage or subsoil conditions such as, but not limited to:
  - a. slopes greater than 20%.
  - b. wetland soils.

- c. Portions of the lot subject to right of ways.
- d. Portions of the lot located in the resource protection zone.
- e. Portions of the lot covered by surface waters.
- f. Portions of the lot utilized for storm water management facilities.
- 6. Unless a community sewage collection and treatment system are provided, no lot or area of occupation, in the case of a condominium, shall be smaller in area than 20,000 square feet.
- 7. The total area of reserved open space within the development shall equal or exceed the sum of the areas by which any building lots are reduced below the minimum lot area normally required by the zoning ordinance. However, at least fifty percent (50%) of the area of the entire parcel or tract shall be included as common open space. Common open space shall not include road right of ways, streets, drives, or parking. No more than fifty percent (50%) of the common open space shall consist of forested or open wetlands of any size.
- 8. Every building lot that is reduced in area below the amount normally required shall be within 1,000 feet of the common land.
- 9. The distance between buildings shall not be less than 20 feet.
- 10. No individual lot or dwelling unit shall have direct vehicular access onto a public road existing at the time of development.
- 11. Shore frontage for each lot or area of occupation, in the case of a condominium, shall not be reduced below the minimum normally required by the zoning ordinance.
- 12. Where a cluster development abuts a body of water, a usable portion of the shoreline, as well as reasonable access to it, shall be a part of the common land.
- 13. The common open space shall be owned and managed according to the standards of 11.6.E.
- 14. The subdivider shall be responsible for the maintenance of the common open space and the other common facilities, until development sufficient to

support the neighborhood association has taken place. or, alternatively, the objectives of clustering have been met. The transfer of responsibility shall occur only after review and approval by the Planning Board, upon request by the neighborhood association or the developer or subdivider.

## 14. Compliance with Timber Harvesting Rules.

The Board shall ascertain that any timber harvested on the parcel being subdivided, has been harvested in compliance with rules adopted pursuant to Title 12, M.R.S.A section 8869, subsection 14. If a violation of rules adopted by the Maine Forest Service to substantially eliminate liquidation harvesting has occurred, the Planning Board must determine prior to granting approval for the subdivision that 5 years have elapsed from the date the landowner under whose ownership the harvest occurred acquired the parcel. The Planning Board may request technical assistance from the Department of Conservation, Bureau of Forestry to determine whether a rule violation has occurred, or the Board may accept a determination certified by a forester licensed pursuant to Title 32, chapter 76. If the Bureau agrees to provide assistance, it shall make a finding and determination as to whether a rule violation has occurred. If the Bureau notifies the Planning Board that it will not provide assistance, the Board may require a subdivision applicant to provide a determination certified by a licensed forester. For the purposes of this subsection, "liquidation harvesting" has the same meaning as in Title 12, M.R.S.A section 8868, subsection 6 and "parcel" means a contiguous area within one municipality, township or plantation owned by one person or a group of persons in common or joint ownership.

## 15. Traffic Conditions and Streets.

# a. General Standards.

The proposed subdivision shall meet the following general transportation performance standards:

- The subdivision transportation system shall provide safeguards against hazards to vehicles, bicyclists and pedestrians in interior subdivision streets and access connections to external streets;
- 2. The subdivision transportation system shall have design standards that avoid traffic congestion on any street;
- 3. The subdivision transportation system shall provide safe and convenient circulation for

vehicles, bicyclists and pedestrians on interior subdivision streets and access connections to external streets;

- 4. The subdivision transportation system shall have design standards that are compatible with the estimated Average Annual Daily Traffic of the street, the land uses accommodated by the street, and the lot density of the street; and
- 5. The subdivision transportation system shall have a positive relationship to the natural setting of the proposed subdivision site.

### b. General Access Standards.

All subdivision accesses connecting with external streets shall meet the following standards:

- 1. Accesses connecting to any state or state-aid highway shall meet the minimum access permitting requirements of the Maine Department of Transportation "Highway Driveway and Entrance Rules";
- 2. Accesses that are expected to carry more than 100 passenger vehicle equivalent trips in the peak hour shall meet the minimum access permitting requirements of the Maine Department of Transportation "Rules and Regulations Pertaining to Traffic Movement Permits".
- 3. The street giving access to the subdivision and neighboring streets and intersections which can be expected to carry traffic generated by the subdivision shall have the capacity or be suitably improved to accommodate that traffic and avoid unreasonable congestion. No subdivision shall reduce the Level of Service (LOS) of streets or intersections neighboring the subdivision to a LOS of "E" or below, unless:
  - i. the comprehensive plan has indicated that Levels of Service "E" or "F" are acceptable for that street or intersection; or
  - ii. the level of service of the road or intersection will be raised to D or above through transportation demand management techniques; or
  - iii. the applicant provides evidence that it is not possible to raise the level of service of the road or intersection to D or above by road or intersection improvements or by

transportation demand management techniques, but improvements will be made or transportation demand management techniques will be used such that the proposed development will not increase delay at a signalized or unsignalized intersection, or otherwise worsen the operational condition of the road or intersection in the horizon year; or

- iv. improvements cannot reasonably be made because the road or intersection is located in a central business district or because implementation of the improvements will adversely affect a historic site as defined in 0 6 0 9 6 C M R 3 7 5 ( 1 1 ) (Preservation of Historic Sites) and transportation demand management techniques will be implemented to the fullest extent practical; or
  - v. The development is located in a designated growth area, in which case the applicant shall be entitled to an exception from the level of service mitigation requirements set forth under the General Standards in this Section. This exception applies even if part or all of the traffic impacts of the proposed development will occur outside the boundaries of the designated growth area. This exception does not exempt the development from meeting safety standards, and greater mitigation measures may be required than otherwise provided in this subsection if needed to address safety issues; or
- vi. In the case of unsignalized intersections, if traffic with the development in place would not meet the warrant criteria for signalization or turning lanes, as set forth in the Federal Highway Administration's "Manual on Uniform Traffic Control Devices," (1988), then the municipal reviewing authority may reduce the mitigation requirement for those measures so long as the resulting traffic conditions provide for safe traffic movement.
- 4. Accesses to non-residential subdivisions or to multifamily developments shall be designed to avoid queuing of entering vehicles on any street. Left lane storage capacity shall be provided to meet anticipated demand. A study or analysis to

determine the need for a left-turn storage lane shall be done.

## c. General Internal Subdivision Street Standards.

All internal subdivision streets shall meet the following minimum standards. In cases where the internal subdivision street standards conflict with the street ordinance of the municipality, the more stringent rule shall apply.

- 1. The street or street system of the proposed subdivision shall be designed to coordinate with existing, proposed, and planned streets. Wherever a proposed development abuts unplatted land or a future development phase of the same development, street stubs shall be provided as deemed necessary by the municipality to provide access to abutting properties or to logically extend the street system. All street stubs shall be provided with temporary turn around or cul-de-sacs unless specifically exempted by the Public Works Director, and the restoration and expansion of the street shall be the responsibility of any future developer of the abutting land. Minor collector and local streets shall connect with surrounding streets to permit convenient movement of traffic between residential neighborhoods or facilitate emergency access and evacuation, but such connections shall not be permitted where the effect would be to encourage the use of such streets by substantial through traffic.
- 2. Where necessary to safeguard against hazards to vehicle drivers, bicyclists, and pedestrians and/or to avoid traffic congestion, provision shall be made for turning lanes, traffic directional islands, frontage roads, sidewalks, bicycle ways, transportation demand management techniques, and traffic controls within existing public streets.
- 3. Street Names, Signs and Lighting. Streets which join and are in alignment with streets of abutting or neighboring properties shall bear the same name. Names of new streets shall not duplicate, nor bear phonetic resemblance to the names of existing streets within the municipality and shall be subject to the approval of the Board. No street name shall be the common given name of a person. The developer shall either install street name, traffic safety and control signs meeting municipal specifications or reimburse the municipality for

- the costs of their installation. Street lighting shall be installed as approved by the Board.
- 4. During street construction, the entire right of way shall not be cleared unless clearing is necessary for utilities, drainage, or other infrastructure necessities beyond the clear zone. Following street construction, the developer or contractor shall conduct a thorough clean-up of stumps and other debris from the entire right of way created during the street construction process. If on-site disposal of the stumps and debris is proposed, the site shall be indicated on the plan, and be suitably covered with fill and topsoil, limed, fertilized, and seeded.

# 16. Specific Access and Street Design Standards.

### a. Access Control.

- 1. To the maximum extent practical, all subdivision accesses shall be constructed perpendicular to the external street providing access to the subdivision. No subdivision accesses shall intersect the external street at an angle of less than 60 degrees.
- 2. Where a subdivision abuts or contains an existing or proposed arterial street, no lot may have vehicular access directly to the arterial street. This requirement shall be noted on the plan and in the deed of any lot with frontage on the arterial street.
- 3. Where a lot has frontage on two or more streets, the access to the lot shall be provided to the lot across the frontage and to the street where there is lesser potential for traffic congestion and for hazards to traffic and pedestrians. This restriction shall appear as a note on the plan and as a deed restriction to the affected lots. In cases where creating an access to a lesser traveled way is problematical, the Board may allow an access on the higher volume street if the access does not significantly detract from public safety. For accesses on higher volume streets, the Board shall consider the functional classification of the external street, the length of frontage on the external street, the intensity of traffic generated by the proposed subdivision, the geography along the frontage of the public way with lesser potential for traffic, and the distance to the public way with lesser potential

for traffic. In cases where the double frontage lot has frontage on two Maine Department of Transportation designated noncompact arterials, the access shall meet the permitting standards of the Maine Department of Transportation "Highway Driveway and Entrance Rules".

- 4. Lots in subdivisions with frontage on a state or state aid highway shall have shared access points to and from the highway. Normally a maximum of two accesses shall be allowed regardless of the number of lots or businesses served.
- 5. The subdivision access including all radii must be paved from the edge of pavement of the external street to the street right of way or the length of the design vehicle using the subdivision, whichever is greater, unless:
  - i. the external street is not paved; or
  - ii. the internal subdivision street is an unpaved private street that is expected to carry an Average Daily Traffic capacity of 50 trips or less.
- 6. Minimum Sight Distance Standards Minimum sight distance requirements for all subdivision accesses connecting to external streets shall be contingent on the posted speed of the external street connecting to the subdivision access. For accesses that are expected to carry primarily passenger vehicles, the standards in the second column in Table 11.15-1 shall apply. For accesses that are estimated to carry more than 30% of their traffic in vehicles larger than standard passenger vehicles, the standards in the third column of Table 11.15-1 shall apply. On roads that are designated by the Maine Department of Transportation as Mobility or Retrograde Arterials, the third column in Table 11.15-1 shall apply.
- 7. Access design shall be based on the traffic volume estimates anticipated to be carried by the internal subdivision street. Traffic volume estimates shall be defined by the latest edition of the Trip Generation Manual published by the Institute of Transportation Engineers. The following traffic volume standards shall apply to the design of subdivision accesses connecting to external streets:
  - i. Low Volume Access: An access with 50 or less

- passenger car equivalent trips per day.
- ii. Medium Volume Access: Any access with more than 50 passenger car equivalent trips per day but less than 100 passenger car equivalent trips during the peak hour.
- iii. High Volume Access: Any access with 100 or more passenger car equivalent trips during the peak hour.
- 8. Basic Access Design Standards for Low and Medium Volume Accesses The following minimum access design standards shall apply to all low and medium volume accesses connecting to external streets:
- 9. Additional Access Requirements for Medium Volume Accesses In addition to the basic access standards outlined in 11.15-2., medium volume accesses on state or state-aid highways designated as Major Collectors or Arterials shall also comply with the following standards:
  - i. The minimum curb radius on the edge of the access shall exceed the minimum curb radius standard in 11.15-2. if a larger design radius is needed to accommodate a larger design vehicle.
  - ii. A throat shall be constructed around the access in order to store vehicles waiting to exit the access. The throat shall be of sufficient length to prevent incoming vehicles from queuing back into the highway. Access from the throat to parking or other areas shall be prohibited.
  - iii. A separator strip or strip of land that separates the roadway from the throat or parking area shall be constructed. The access separator strips shall be installed between the parking area and the roadway and along the throat. The Board shall determine if the separator strip shall include curbing, walkways, ditching, and/or vegetation. The separator strip shall extend away from the highway at a minimum of 9 feet from the traveled way of the external road.
    - iv. The Board shall determine if one two-way or two one-way access (es) will be required for the proposed subdivision. If a one-way system is required and the predominant traffic volume is truck traffic, the entrance will be

configured on the minimum angle that permits the truck to enter or leave the highway safely and conveniently. Otherwise, all one-way accesses will be configured perpendicular to the highway for at least the length of the design vehicle. For one-way access systems, the Board shall determine if a physical separation of curbing, ditching, grass, or other landscaping must be used between the two one-way accesses. Both portions of a one-way access must be separated from another one-way access by at least 12 feet.

10. All high-volume accesses shall meet the requirements of the Maine Department of Transportation's "Rules and Regulations Pertaining to Traffic Movement Permits." A copy of the Maine Department of Transportation's required traffic study shall be submitted to the Board. The Board shall develop design standards for the proposed subdivision access based on the findings of the traffic study submitted to the Maine Department of Transportation. The design standards shall be compatible with the performance standards cited in Section 11.15.B of the Subdivision Regulations.

## b. Street Design and Construction Standards.

## 1. General Requirements.

- i. The Board shall not approve any subdivision plan unless proposed streets are designed in accordance with any local ordinance or the specifications contained in these regulations. Approval of the final plan by the Board shall not be deemed to constitute or be evidence of acceptance by the municipality of any street or easement.
- ii. Applicants shall submit to the Board, as part of the final plan, detailed construction drawings showing a plan view, profile, and typical cross-section of the proposed streets and existing streets within 300 feet of any proposed intersections. The plan view shall be at a scale of one inch equals no more than fifty feet. The vertical scale of the profile shall be one inch equals no more than five feet. The plans shall include the following information:
  - a. Date, scale, and north point, indicating magnetic or true.

- b. Intersections of the proposed street with existing streets.
- c. Roadway and right-of-way limits including edge of pavement or aggregate base, edge of shoulder, clear zone, sidewalks, and curbs.
- d. Kind, size, location, material, profile and cross-section of all existing and proposed drainage structures and their location with respect to the existing natural waterways and proposed drainage ways.
- e. Complete curve data shall be indicated for all horizontal and vertical curves.
- f. Turning radii at all intersections.
- g. Centerline gradients.
- h. Size, type, vertical clearance, and locations of all existing and proposed overhead and underground utilities, to include but not be limited to water, sewer, electricity, telephone, lighting, and cable television.
- iii. Upon receipt of plans for a proposed public street the Board shall forward one copy to the municipal officers, the road commissioner, and the municipal engineer for review and comment. Plans for streets which are not proposed to be accepted by the municipality shall be sent to the municipal engineer for review and comment.
  - iv. Where the applicant proposes improvements within existing public streets, the proposed design and construction details shall be approved in writing by the road commissioner or the Maine Department of Transportation, as appropriate.
    - v. Private Roads. The following standards shall apply to all proposed private roads:
      - a. All private roads shall be designated as such and will be required to have adequate signage indicating the road is a private road and not publicly maintained.
      - b. Except for sidewalk, bicycle provisions

- and minimum grade requirements stipulated in this Section, all private roads shall adhere to the road design standards of this Section.
- c. The Board may approve a reduction of the right of way easement for private roads to a minimum of 30 feet in land use density areas designated as "Rural" in Section 11.15.1.B.2.f.
- d. All properties served by the private road shall provide adequate access for emergency vehicles and shall conform to the approved local street numbering system.
- e. All private roads shall have adequate provisions for drainage and stormwater runoff as provided in Section 11.12.
- f. Where the subdivision streets are to remain private roads, the following words shall appear on the recorded plan: "All roads in this subdivision shall remain private roads to be maintained by the developer or the lot owners and shall not be accepted or maintained by the Town, until they meet all municipal street design and construction standards."
- g. A road maintenance agreement, prepared by the Town Attorney shall be recorded with the deed of each property to be served by a common private road. The agreement shall provide for a method to initiate and finance a private road and maintain that road in condition, and a method of apportioning maintenance costs to current and future users.

## 2. Street Design Standards.

i. These design guidelines shall control the roadway, shoulders, clear zones, curbs, sidewalks, drainage systems, culverts, and other appurtenances associated with the street, and shall be met by all streets within a subdivision, unless the applicant can provide clear and convincing evidence that an alternate design will meet good engineering practice and will meet the performance standards of this Article.

- ii. Reserve strips controlling access to streets shall be prohibited except where their control is definitely placed with the municipality.
- iii. Adjacent to areas zoned and designed for commercial use, or where a change of zoning to a zone which permits commercial uses is contemplated by the municipality, the street right-of-way and/or pavement width shall be increased on each side by half of the amount necessary to bring the road into conformance with the standards for commercial streets in these regulations.
  - iv. Where a subdivision borders an existing narrow street (not meeting the width requirements of the standards for streets in these regulations), or when the comprehensive plan indicates plans for realignment or widening of a road that would require use of some of the land in the subdivision, the plan shall indicate reserved areas for widening or realigning the road marked "Reserved for Road Realignment (Widening) Purposes." Land reserved for such purposes may not be included in computing lot area or setback requirements of the zoning ordinance. When such widening or realignment is included in the municipality's capital investment plan, the reserve area shall not be included in any lot but shall be reserved to be deeded to the municipality or State.
  - v. Any subdivision expected to generate average daily traffic of 200 trips per day or more shall have at least two street connections with existing public streets, streets shown on an Official Map, or streets on an approved subdivision plan for which performance guarantees have been filed and accepted. Any street with an average daily traffic of 200 trips per day or more shall have at least two street connections leading to existing public streets, streets shown on an Official Map, or streets on an approved subdivision plan for which performance guarantees have been filed and accepted.
  - vi. The design standards of Table 11.15-3 shall be compatible with the traffic volume access thresholds referenced in Section 11.16.A.7. In addition, the street design standards

shall be compatible with the estimated Average Daily Traffic expected to occur on the internal subdivision street, and the land use type and lot density allowed in the land use zone. The following land use density pattern requirements shall be required for the following land use zones.

- vii. The Board shall have authority to increase the minimum standards in Table 11.15-3, if the Board approves a road design that will accommodate travel speeds greater than 30 mph.
- viii. On Street Parking. The Board shall have authority to require a paved cross section of 26 feet for residential subdivisions with average lot widths between 100 feet and 40 feet wide for on-street spillover parking.

#### ix. Curbs.

- a. Curbs shall be installed for stormwater purposes and/or to protect the pavement edge from unraveling along parking lanes or in very intensive developments where heavy use may erode the planted area at the edge of the pavement. Curbs for stormwater management shall be contingent on the stormwater design standards specified in Section 11.13. If curbs are not necessary for stormwater management purposes, they are not required for subdivisions in which the average lot width is 100 feet or greater. If the Board requires a vertical curb and no parking lane is present, a minimum shoulder of 2 feet is recommended from the traveled way to the curb. For sloped curbs where no parking lane is present, a minimum 1-foot shoulder is required from the traveled way to the curb.
- b. Granite curbing shall be installed on a thoroughly compacted gravel base of six inches minimum thickness. Bituminous curbing shall be installed on the base course of the pavement.
- x. The Board may require additional shoulder lengths in any situation where the proximity of the proposed subdivision to future or

existing neighborhood businesses, schools, community facilities, or other bicycle traffic generators suggest that additional shoulder lengths will be needed for bicycle traffic. In situations where additional shoulder lengths are required for bicyclists, the minimum width of a paved shoulder shall be 1 foot on either side of the traveled way for all low and medium volume streets in Rural (R) designated zones defined in Section 11.15.1.B.2..f. Paved shoulder widths for low and medium volume streets in Village/Urban (V/U) designated zones shall be a minimum of 2 feet on either side of the traveled way.

- xi. The centerline of the roadway shall be the centerline of the right-of-way.
- xii. Dead End Streets. In addition to the design standards in Table 11.15-3, dead-end streets shall be constructed to provide a cul-de-sac turn-around with a travel lane and width equal to the minimum width required for the internal subdivision street. For all residential cul-de-sacs, the minimum radius shall be 38 feet. For commercial/industrial cul-de-sacs the minimum radius shall be 50 feet. Where the cul-de-sac is in a wooded area prior to development, a stand of trees shall be maintained within the center of the cul-de-sac. The Board shall require the reservation of a twenty-foot easement in line with the street to provide continuation of pedestrian traffic or utilities to the next street. The Board may also require the reservation of a right-of-way easement equal to the right of way width of the internal subdivision street in line with the street to provide continuation of the road where future subdivision is possible. A T-turn around is permissible for residential subdivisions carrying an ADT of 100 or less. The turnaround area shall have a width equal to the street width, a 5-foot turning radius, and a total length of 50 feet centered above the street.
- xiii. Sidewalks. The Board may require sidewalks in any situation where the proximity of the proposed subdivision to future or existing neighborhood businesses, schools, community facilities, or other pedestrian traffic

generators suggest sidewalks will be needed. The Board shall determine if sidewalks will be installed on one side or both sides of the street, and if the sidewalk shall be a bituminous or Portland cement concrete sidewalk.

- a. Location. Sidewalks may be located adjacent to the curb or shoulder, but it is recommended to locate sidewalks a minimum of 2 1/2 feet from the curb facing or edge of shoulder if the street is not curbed. If no shoulder is required, the sidewalk shall be located a minimum of 4 feet from the edge of the traveled way.
- b. Bituminous Sidewalks.
  - i. The "subbase" aggregate course shall be no less than twelve inches thick after compaction.
  - ii. The hot bituminous pavement surface course shall be MDOT plant Mix Grade D constructed in two lifts, each no less than one inch after compaction.
  - c. Portland Cement Concrete Sidewalks.
    - i. The "subbase" aggregate shall be no less than twelve inches thick after compaction.
    - ii. The Portland Cement concrete shall be reinforced with six-inch square, number 10 wire mesh and shall be no less than four inches thick.

## 3. Street Construction Standards.

- i. The minimum thickness of material after compaction shall meet the specifications in Table 11.15-4.
- ii. Preparation.
  - a. Before any clearing has started on the right-of-way, the center line and side lines of the new road shall be staked or flagged at fifty-foot intervals.
  - b. Before grading is started, the entire area within the right-of-way necessary

for traveled way, shoulders, clear zones, sidewalks, drainage-ways, and utilities shall be cleared of all stumps, roots, brush, and other objectionable material. All shallow ledge, large boulders and tree stumps shall be removed from the cleared area.

- c. All organic materials or other deleterious material shall be removed to a depth of two feet below the subgrade of the roadway. Rocks and boulders shall also be removed to a depth of two feet below the subgrade of the roadway. On soils which have been identified by the municipal engineer as not suitable for roadways, either the subsoil shall be removed from the street site to a depth of two feet below the subgrade and replaced with material meeting the specifications for gravel aggregate subbase below, or a Maine Department of Transportation approved stabilization geotextile may be used.
- d. Except in a ledge cut, side slopes shall be no steeper than a slope of three feet horizontal to one foot vertical, and shall be graded, loamed, limed, fertilized, and seeded according to the specifications of the erosion and sedimentation control plan. Where a cut results in exposed ledge a side slope no steeper than one foot horizontal to four feet vertical is permitted.
- e. All underground utilities shall be installed prior to paving to avoid cuts in the pavement. Building sewers and water service connections shall be installed to the edge of the right-ofway prior to paving.

### iii. Bases and Pavement.

- a. Bases/Subbase.
  - i. The Aggregate subbase course shall be sand or gravel of hard durable particles free from vegetative matter, lumps or balls of clay and other deleterious substances. The gradation of the part that passes a

- three-inch square mesh sieve shall meet the grading requirements of Table 11.15-5. Aggregate for the subbase shall contain no particles of rock exceeding six inches in any dimension.
- ii. If the Aggregate Subbase Course is found to be not fine-gradable because of larger stones, then a minimum of three inches of Aggregate Base Course shall be placed on top of the subbase course. The Aggregate Base Course shall be screened or crushed gravel of hard durable particles free from vegetative matter, lumps or balls of clay and other deleterious substances. The gradation of the part that passes a three-inch square mesh sieve shall meet the grading requirements of Table 11.15-6. Aggregate for the base shall contain no particles of rock exceeding two inches in any dimension.
- iv. Pavement Joints. Where pavement joins an existing pavement, the existing pavement shall be cut along a smooth line and form a neat, even, vertical joint.

#### v. Pavements.

- a. Minimum standards for the base layer of pavement shall be the Maine Department of Transportation specifications for plant mix grade B with an aggregate size no more than 1 inch maximum and a liquid asphalt content between 4.8% and 6.0% by weight depending on aggregate characteristics. The pavement may be placed between April 15 and November 15, provided the air temperature in the shade at the paving location is 35°F or higher and the surface to be paved is not frozen or unreasonably wet.
- b. Minimum standards for the surface layer of pavement shall be the Maine Department of Transportation specifications for plant mix grade C or D with an aggregate size no more than

- 3/4 inch maximum and a liquid asphalt content between 5.8% and 7.0% by weight depending on aggregate characteristics. The pavement may be placed between April 15 and October 15, provided the air temperature in the shade at the paving location is 50°F or higher.
- c. Surface Gravel. The Board may approve an aggregate road base for any internal subdivision public street in which zoning requires a minimum of one dwelling unit per 7 acres, or any private way with a maximum estimated Average Daily Traffic of 50 ADT or less. The surface gravel shall meet the gravel grading requirements of Table 11.15-7.

Table 11.15-1 Minimum Sight Distance Standards for Subdivision Accesses

Posted	Sight Distance Standard Vehi-	Sight Distance Larger Vehi-	Mobility			
Speed	cles	cles	Sight Distance			
(MPH)	(Feet)	(Feet)	(Feet)			
20	155	230	Not applicable			
25	200	300	Not applicable			
30	250	375	Not applicable			
35	305	455	Not applicable			
40	360	540	580			
45	425	635	710			
50	495	740	840			
55	570	855	990			
60	645	965	1,150			

Table 11.15-2 Access Design Standards for Low and Medium Volume Accesses

Basic Standards		Low Volume	Medium Volume
		(feet)	(feet)
Minimum Access Width:*			
	Majority Passenger Vehicles	14	22
	>30% Larger Vehicles	30	30
Minimum Curb Radius:			
	Majority Passenger Vehicles	10	15
	>30% Larger Vehicles	15	15
Minimum Corner Clearance to:**	-		
	Unsignalized Intersection	75	100
	Signalized Intersection	125	125
Minimum Access Spacing***:	MBH (5 ( 1 B1		
	MPH of External Road	No Decides	
	05	No Require-	No Dominosont
	35 or less:	ment	No Requirement
	40	175	175
	45	265	265
	50	350	350
	55 or more	525	525

<sup>\*</sup>Minimum widths for low or medium volume accesses shall be either the minimum cross section width of the internal subdivision street or the minimum access width in Table 11.15.-2, whichever width is greater.

<sup>\*\*</sup>Minimum corner clearance shall be the distance measured from the edge of an internal subdivision access excluding radii to the edge of an external street excluding radii.

<sup>\*\*\*</sup>Minimum access spacing shall be the distance measured from the edge of an internal subdivision access excluding radii to the edge of a neighboring access excluding radii.

Table 11.15-3 Street Design Guidelines

Access Category	Lo	w Volum	е						Medium	Volume						Hig	h Volum	е
Traffic Volume Level	1-50 ADT		50-100 ADT		100-400 ADT		400-1500		1500+			100 PCE+						
Density Pattern	R	V/U	I/C	R	V/U	I/C	R	V/U	I/C	R	V/U	I/C	R	V/U	I/C	R	V/U	I/C
Minimum Right of Way	40'	40'	40'	40'	40'	50	50	50	50	50	50	60	60	60	60	60	60	60
Minimum Traveled Way Width	14'	16'	16'	18'	18'	24'	18'	20'	28'	18'	20'	30'	20'	22'	30'	22'	24'	30'
Minimum Shoulder Width (each side)*	0'	0'	4'	0'	1'	2'	2'	1'	2'	2'	2'	4'	3'	4'	5'	3'	4'	5'
Clear Zone Width (each side)	7'	7'	7'	7'	7'	7'	7'	7'	7'	8'	8'	8'	8'	8'	8'	8'	8'	8'
Minimum Vertical Clearance**	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'
Minimum Grade	0.50%	0.50%	0.50%	0.50%	0.50%	0.50%	0.50%	0.50%	0.50%	0.50%	0.50%	0.50%	0.50%	0.50%	0.50%	0.50%	0.50%	0.5
Maximum Grade***	8%	8%	5%	8%	8%	5%	8%	8%	5%	6%	6%	5%	6%	6%	5%	5%	5%	5%
Minimum Centerline Radius****	100'	100'	350'	100'	100'	350'	100'	100'	350'	140'	140'	350'	140'	140'	350'	350'	350'	350'
Roadway Crown Asphalt Surface	.25"/ft	.25"/ft	.25"/ft	. <b>2</b> 5"/ft	.25"/ft	.25"/ft	.25"/ft	.25"/ft	.25"/ft	.25"/ft	.25"/ft	.25"/ft	.25"/ft	.25"/ft	.25"/ft	.25"/ft	.25"/ft	.25"
Roadway Crown Aggregate Surface	.5"/ft	N/A	N/A	.5"/ft	N/A	N/A	.5"/ft	N/A	N/A	.5"/ft	N/A	N/A	.5"/ft	N/A	N/A	.5"/ft	N/A	N/A
Minimum Internal Sight Distance	155'	155'	230'	155'	155'	230'	155'	155'	230'	155'	155'	230'	155'	155'	230'	155'	155'	230'
Minimum Internal Spacing Standards*****	25'	25'	40'	25'	25'	40'	25'	25'	40'	25'	25'	40'	25'	25'	40'	25'	25'	40'
Minimum Internal Access to Street Corner																		
Clearance******	30'	30'	75'	30'	30'	75'	30'	30'	75'	30'	30'	75'	30'	30'	75'	30'	30'	75'

<sup>\*</sup>The Board may require an increase in shoulder width for stormwater management purposes or road stabilization.

<sup>\*\*</sup>The minimum vertical clearance is the vertical clearance over the entire roadway width, including any shoulders.

<sup>\*\*\*</sup>Maximum grade may be exceeded for a length of

<sup>\*\*\*\*</sup>Superelevation is not recommended for any subdivision street, unless recommended by Town Engineer or Town-Hired Consultant.

<sup>\*\*\*\*\*</sup>Internal spacing distances are measured from the edge of one internal subdivision access to another, excluding curb radii.

<sup>\*\*\*\*\*</sup>Internal access to street corner clearances are measured from the edge of an internal subdivision access to an intersecting public road, excluding curb radii.

Table 11.15-4 Minimum Pavement Materials Thickness

Street Materials	Thickness Standards
Aggregate Subbase Course	
(Max. sized stone 6")	
Without base gravel	18"
With base gravel	15"
Crushed Aggregate Base Course	
(if necessary)	3"
Hot Bituminous Pavement	
Total Thickness	3"
Surface Course	1 1/4"
Base Course	1 3/4"
Surface Gravel	
(if permissible)	3"

Table 11.15-5 Aggregate Subbase Grading Requirements

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

Table 11.15-6 Base Course Grading Requirements

Percentage by Weight
Passing
Sieve Designation
1/2 inch
1/4 inch
No. 40
No. 200

Percentage by Weight
Passing
Square Mesh Sieves
45-70%
0-20%
0-20%
0-5%

Table 11.15-7 Surface Gravel Grading Requirements

	Percentage by Weight Passing
Sieve Designation	Square Mesh Sieves
2 inch	95-100%
1/2 inch	30-65%
No. 200	7-12%

## ARTICLE XII: STREET AND STORM DRAINAGE DESIGN AND CONSTRUCTION STANDARDS

#### 1. General Requirements.

- a. The Board shall not approve any Subdivision Plan unless proposed streets and storm water management systems are designed in accordance with the specifications contained in these regulations. Approval of the Final Plan by the Board shall not be deemed to constitute or be evidence of acceptance by the municipality of any street or easement.
- b. Sub dividers shall submit to the Board, as part of the Final Plan, detailed construction drawings showing a plan view, profile, and typical cross-section of the proposed streets. The plans shall include the following information:
  - 1. Date, scale, and magnetic or true north point.
  - 2. Intersections of the proposed street with existing streets.
  - 3. Roadway and right of ways limits including edge of pavement, edge of shoulder, sidewalks, and curbs.
  - 4. Kind, size, location, material; profile, and cross section of all existing and proposed drainage structures and their location with respect to the existing natural waterways and proposed drainage ways.
  - 5. Complete curve data shall be indicated for all horizontal and vertical curves.
  - 6. Turning radial at all intersections.
  - 7. Center line gradients.
  - 8. Locations of all existing and proposed overhead and underground utilities, to include but not be limited to water, sewer, electricity, telephone, lighting, and cable television.
- c. Upon receipt of plans for a proposed public street the Board shall forward one copy to the to the Municipal Officers and the Road Commissioner for review and comment.

#### 2. Street Design Standards.

a. Where a subdivision borders an existing narrow streets (not meeting the width requirements of the standards for streets in these regulation), or when the

Comprehensive Plan indicates plans for realignment or widening of a road that would require use of some of the land in the Subdivision, the plan shall indicate reserved areas for widening or realigning the road marked "Reserved for Road realignment (Widening)

Purpose s." Land reserved for such purposes may not be included in computing lot area or setback requirements of the Zoning Ordinance. When such widening or realignment is indicated on the Official Map, the reserve area shall not be included in any lot but shall be reserved to be deeded to the Municipality or State.

- b. Where Major Subdivision abuts or contains an existing or proposed arterial street; no residential lot may have vehicular access directly on to the arterial street. This requirement shall be noted on the plan and in the deeds of any lot with frontage on the arterial street.
  - SEE: Town of Belgrade Municipal Street and Road Ordinance for specification if subdivision road is to be built with intent to be a municipal road.

    NOTE: Private roads within a subdivision must have a minimum right-of-way of 60' unless the Planning Board, due to individual circumstances determines the necessary right-of-way to be less than or greater than 60'.
- c. All Subdivisions must have an adequate turn-around as determined by the Planning Board.
- d. Where private roads intersect with public roads, grades as sight distance must be maintained in a safe manner as determined by the Planning Board.

## 3. Storm Water Management Design Standards.

- a. Adequate provision shall be made for disposal of all storm water generated within the subdivision, and any drained ground water through a management system of swales, culverts, under drain, and storm drains. The storm water management system shall be designed to conduct storm water flows to existing watercourses or storm drains.
  - All components of the storm water management system shall be designed to meet the criteria of a twenty-five-year storm based on rainfall data for Portland, Maine.
  - 2. The minimum pipe size for any storm drainage pipe shall be twelve inches. Maximum trench width at the pipe crown shall be the outside diameter of the pipe plus two feet. Pipe shall be bedded in a

fine granular material, containing no stones larger than 3 inches, lumps of clay, or organic matter, reaching a minimum of six inches below the bottom of the pipe extending to six inches above the top of the pipe.

- 3. Catch basins shall be installed where necessary and located at the curb line.
- 4. Outlets shall be stabilized against soil erosion by stone riprap or other suitable materials to reduce storm water velocity'.
- b. The storm water management system shall be designed to accommodate upstream drainage, taking into account existing conditions and approved or planned developments not yet built and shall include a surplus design capacity factor of 25% for potential increases in upstream runoff.
- c. Downstream drainage requirements shall be studied to determine the effect of the proposed subdivision. The storm drainage shall not overload existing or future planned storm drainage systems downstream from the subdivision. The sub divider shall be responsible for financing any improvements to existing drainage systems required to handle the increased storm flows.
- d. Wherever the storm drainage system is not within the right-of-way of a public street, perpetual easements shall be provided to the town or Subdivision Association if they are responsible, allowing maintenance and improvements of the system.
- e. Where soils require a subsurface drainage system, the drains shall be installed and maintained separately from the storm water drainage system.

## 4. Additional Improvements and Requirements.

## a. Erosion Control.

The procedures outlined in the erosion and sedimentation control plan shall be implemented during the site preparation, construction, and clean-up stages.

## ARTICLE XIII: PERFORMANCE GUARANTEES

#### 1. Types of Guarantees.

With submittal of the application for final plan approval, the applicant shall provide one of the following performance guarantees for an amount adequate to cover the total construction costs of all required improvements, taking into account the timespan of the construction schedule and the inflation rate for construction costs:

- a. Either a certified check payable to the municipality or a savings account or certificate of deposit naming the municipality as owner, for the establishment of an escrow account;
- b. A performance bond payable to the municipality issued by a surety company, approved by the municipal officers, or town manager; or
- c. An irrevocable letter of credit (see Appendix B for a sample) from a financial institution establishing funding for the construction of the subdivision, from which the Municipality may draw if construction is inadequate, approved by the municipal officers, or town manager.

The conditions and amount of the performance guarantee shall be determined by the Board with the advice of the municipal engineer, road commissioner, municipal officers, and/or municipal attorney.

## 2. Contents of Guarantee.

The performance guarantee shall contain a construction schedule, cost estimates for each major phase of construction taking into account inflation, provisions for inspections of each phase of construction, provisions for the release of part or all of the performance guarantee to the developer, and a date after which the applicant will be in default and the municipality shall have access to the funds to finish construction.

#### 3. Escrow Account.

A cash contribution to the establishment of an escrow account shall be made by either a certified check made out to the municipality, the direct deposit into a savings account, or the purchase of a certificate of deposit. For any account opened by the applicant, the municipality shall be named as owner or coowner, and the consent of the municipality shall be required for a withdrawal. Any interest earned on the escrow account shall be returned to the applicant unless the municipality has found it necessary to draw on the account, in which case the interest earned shall be proportionately divided between the amount returned to the applicant and the amount withdrawn to complete the required improvements.

#### 4. Performance Bond.

A performance bond shall detail the conditions of the bond, the method for release of the bond or portions of the bond to the applicant, and the procedures for collection by the municipality. The bond documents shall specifically reference the subdivision for which approval is sought.

#### 5. Letter of Credit.

An irrevocable letter of credit from a bank or other lending institution with offices in the region, shall indicate that funds have been set aside for the construction of the subdivision for the duration of the project and may not be used for any other project or loan.

#### 6. Phasing of Development.

The Board may approve plans to develop a major subdivision in separate and distinct phases. This may be accomplished by limiting final approval to those lots abutting that section of the proposed subdivision street which is covered by a performance guarantee. When development is phased, road construction shall commence from an existing public way. Final approval of lots in subsequent phases shall be given only upon satisfactory completion of all requirements pertaining to previous phases.

#### 7. Release of Guarantee.

Prior to the release of any part of the performance guarantee, the Board shall determine to its satisfaction, in part upon the report of the municipal engineer or other qualified individual retained by the municipality and any other agencies and departments who may be involved, that the proposed improvements meet or exceed the design and construction requirements for that portion or phase of the subdivision for which the release is requested.

#### 8. Default.

If upon inspection, the municipal engineer or other qualified individual retained by the municipality finds that any of the required improvements have not been constructed in accordance with the plans and specifications filed as part of the application, he or she shall so report in writing to the code enforcement officer, the municipal officers, the Board, and the applicant or builder. The municipal officers shall take any steps necessary to preserve the municipality's rights.

## 9. Improvements Guaranteed

Performance guarantees shall be tendered for all improvements required to meet the standards of these regulations and for the construction of the streets, storm water management facilities, public sewage collection or disposal facilities, public water systems, and erosion and sedimentation control measures.

## ARTICLE XIV: PHOSPHORUS CONTROL STANDARDS

1. All subdivisions shall adhere to the Phosphorous Control Standards according to the Maine Department of Environmental Protection's March 2016 Maine Stormwater Management Design Manual, Volume II Phosphorous Control Manual, including the phosphorous allocations for specific great ponds in Appendix C. To the maximum extent feasible, phosphorous control measures shall include reliance on natural vegetation buffer areas. Engineered phosphorous control systems shall be routinely inspected and maintained in accordance with the subdivision's inspection and maintenance plan to ensure long-term effectiveness and proper operation.

## ARTICLE XV: WAIVERS

- 1. Where the Board makes written finding of fact that there are special circumstances of a particular lot proposed to be subdivided, it may waive portions of the submission requirements or the standards, unless otherwise indicated in the regulations, to permit a more practical and economic development, provided the waivers do not have the effect of nullifying the intent and purpose of the Belgrade Comprehensive Plan, the Shore land Zoning Ordinance, or these regulations.
- 2. Where the Board makes written findings of fact that due to special circumstances of a particular lot proposed to be subdivided, the provision of certain required improvements is not requisite to provide for the public health, safety or welfare, or are inappropriate because of inadequate or lacking connecting facilities adjacent to or in proximity of the proposed subdivision, it may waive the requirements for such improvements, subject to appropriate conditions.
- 3. In granting waivers to any of these regulations in accordance with Section 13.1 and 13.2 the Board shall require such conditions as will assure the objectives of these regulations are met.
- 4. Waivers to be shown on final plan. When the Board grants a waiver to any of the improvements required by these regulations, the Final Plan, to be recorded at the Registry of Deeds, shall indicate the waivers granted and the date on which they were granted.

## ARTICLE XVI: APPEALS

## 1. Board of Appeals.

The Board of Appeals is authorized to hear administrative appeals and variance appeals arising from this Ordinance only upon receipt of a written appeal by an aggrieved party.

- a. Administrative Appeals: To hear and decide administrative appeals on a de novo basis, where it is alleged by an aggrieved party that there is an error in any administrative decision, order, requirement, or determination made by, or failure to act by the Code Enforcement Officer or Planning Board in the administration of this ordinance. A de novo review looks at the factual and legal issues afresh, undertakes its own credibility determinations, evaluates the evidence presented, and draws its own conclusions. If an ordinance establishes an appellate review process for the Board of Appeals, instead of de novo, then the Board of Appeals shall limit its review on appeal and to the arguments of the parties. The Board of Appeals may not accept new evidence as part of an appellate review.
- b. Variance Appeals: Except as provided in Disability and Setback Variances below, the Board of Appeals may grant a variance only where strict application of this ordinance, or a provision therof, to the petitioner and their property would cause undue hardship. The words "undue hardship" as used in this subsection mean:
  - 1. The land in question cannot yield a reasonable return unless a variance is granted;
  - 2. The need for a variance is due to the unique circumstances of the property and not the general conditions in the neighborhood;
  - 3. The granting of a variance will not alter the essential character of the locality; and
  - 4. The hardship is not the result of action taken by the applicant or the prior owner.

The Board of Appeals shall limit any variances granted as strictly as possible to ensure conformance with the purposes and provisions of this ordinance to the greatest extent possible, and in doing so may impose such conditions to a variance it deems necessary. The party receiving the variance shall comply with any conditions imposed.

#### 2. Permissible Variances.

a. Variances may be granted only from dimensional

- requirements including but not limited to lot width, structure height, lot coverage and setback requirements.
- b. Variances shall not be granted for establishment of any uses otherwise prohibited by this Ordinance.
- c. Variances shall not be granted under this Ordinance for any dimensional standards required under any other ordinance, including but not limited to the Town of Belgrade Minimum Lot Size Ordinance or Shoreland Zoning Ordinance.
- d. Disability Variance: The board may grant a variance to an owner of a residential dwelling for the purpose of making that dwelling accessible to a person with a disability who resides in or regularly uses the dwelling. The Board shall restrict any variance granted under this subsection solely to the installation of equipment or the construction of structures necessary for access to or egress from the dwelling by the person with the disability. The Board may impose conditions on the variance, including limiting the variance to the duration of the disability or to the time that the person with the disability lives in the dwelling. For the purposes of this subsection, a disability has the same meaning as a physical or mental handicap under 5 M.R.S.A. § 4553. The term "structures necessary for access to or egress from the dwelling" shall include railing, wall, or roof systems necessary for the safety or effectiveness of the structure.
- e. Setback Variance: The Board may grant a setback variance to a property owner of a single family dwelling where the Board finds that strict application of any applicable town ordinance, or a provision thereof, to the petitioner and his/her property would cause undue hardship as defined in M.R.S.A. 30-A § 4553(4-B):
  - 1. The need for a variance is due to the unique circumstances of the property and not to the general conditions in the neighborhood;
  - 2. The granting of a variance will not alter the essential character of the locality;
  - 3. The hardship is not the result of action taken by the applicant or prior owner;
  - 4. The granting of the variance will not substantially reduce or impair the use of the abutting property;
  - 5. The granting of the variance is based upon demonstrated need, not convenience, and no other

feasible alternative is available.

- f. Additional limitations upon this variance request are:
  - 1. The dwelling for which the variance is sought must be the primary year-round residence of the applicant.
  - 2. The variance may not exceed 20% of the required setback.
  - 3. The variance shall not allow a reduction in the shoreline setback.
  - 4. The variance may not cause the area of the dwelling to exceed the maximum permissible lot coverage.

## 3. Appeal Procedure.

- a. Any person aggrieved by an action which comes under the jurisdiction of the Board of Appeals pursuant to this Ordinance must file such application for appeal in writing within thirty (30) days of the granting or denial of a permit. The applicant shall file this appeal at the Town Office to the attention of the Chairperson, Belgrade Board of Appeals, setting for the ground for their appeal. Upon receiving the application for appeal, the Town Office shall promptly notify the Board of Appeals Chairperson.
- b. All costs of appeal, including publication and other notices, and any and all recording fees shall be borne by the petitioner.
- 4. Board of Appeals Hearings.
  - a. All Board of Appeals hearings related to this Ordinance shall adhere to the standards and procedures set forth in the Town of Belgrade Board of Appeals Ordinance.
- 5. Decision.
  - a. All Board of Appeals decisions related to this Ordinance shall adhere to the standards and procedures set forth in the Town of Belgrade Board of Appeals Ordinance.
- 6. Reconsideration.
  - a. The Board of Appeals may reconsider any decision. The Board of Appeals must decide to reconsider any decision, notify all interested parties, and make any change in its original decision within forty-five (45) days of its prior decision. A request to the Board of Appeals to reconsider a decision must be filed within ten (10) days of the decision that is being reconsidered. A meeting to decide whether to reconsider shall be called by the

Chairperson of the Board of Appeals in accordance with Section VI of the Town of Belgrade Board of Appeals Ordinance. The Board of Appeals may conduct additional hearings and receive additional evidence and testimony. A reconsideration vote must receive a majority of those Board of Appeals members who voted on the original appeal decision.

- b. Reconsideration should be for one of the following reasons:
  - 1. The record contains significant factual errors due to fraud or mistake, regarding facts upon which the decision was based; or
  - 2. The Board of Appeals misinterpreted the ordinance, followed improper procedures, or acted beyond its jurisdiction, or the Board votes to accept new information for the hearing record that may have had a bearing on the outcome of the original decision.
- 7. Appeal to Superior Court.
  - a. The decision of the Board of Appeals may be taken, within forty-five (45) days after the decision is rendered, by the party to the decision to Superior Court in accordance with the 9 Maine Rules of Civil Procedure, Rule 80B. This time period may be extended by the court upon motion for good cause shown.

# Memo

To: Planning Board

From: Anthony Wilson, Town Manager

Date: Nov. 18, 2021

Re: CDRO amendments

The Board seems poised to approve the phosphorous export standards as proposed by George Seel. See attached.

As a reminder, the Selectboard has called a special town meeting for 6:30 p.m. Nov. 16, 2021, to have voters approve anew and extend the moratorium ordinance for another 180 days on applications for subdivisions and for solar, wind and telecommunications developments. Assuming the moratorium passes, this will give the Planning Board time to finish its work on the subdivision ordinance for voter approval in March, and to develop a comprehensive set of regulations for solar farms.

Because you have begun discussing decommissioning, I might suggest you continue that discussion at this meeting to further your work on that portion of the proposed CDRO amendment, which would also address wind and solar. Attached is a document that includes the changes you discussed Nov. 4. From there, you may want to segue into a discussion on the issues you will address in the solar amendments, the template you will work from, the process and a timeline for finishing your work prior to May 5, 2022, when the moratorium would expire. Among the guestions you raised on Nov. 4:

- How would a commercial solar development be defined? The Board expressed some comfort with the definition in the Kennebec Valley Council of Governments template. (See attached.)
- How large must a development be for the ordinance to apply? Would that be based on acreage? Wattage? Square feet?
- How would escrows be protected from bankruptcy claims? Would the ordinance limit financial assurances to bonds?

Fortunately, at least for the time being, there are no pending applications, which will allow you to focus on ordinance work.

# DISCUSSION DOCUMENT: UPDATE/CORRECTION OF PHOPHOROUS EXPORT STANDARDS TO THE BELGRADE LAKES IN COMMERCIAL DEVELOPMENT REVIEW ORDINANCE (pp. 35-38)

#### A. Impact on Lake Water Quality

Any new or expanded development within the scope of this ordinance shall be designed to limit the post development phosphorus export consistent with the following standards and practices.

- Unless otherwise noted, methods and standards for review under this section will
  be the DEP manual Phosphorus Control in Lake Watersheds: A Technical
  Guide for Evaluating New Development, September 1992, Maine Stormwater
  Management Design Manual, Volume II Phosphorus Control Manual, March
  2016 or as revised. (hereinafter referred to as "Phosphorus Control Method").
- 2. Applicability: This section applies to
  - non-residential development resulting in more than 15,000 square feet in footprint area of disturbed area or 7,500 square feet in footprint area of impervious surface when completed.
  - the creation of new roads/driveways in excess of 250 feet.
  - a. Projects which have received approval of a Stormwater Management Permit under the state Maine Stormwater Management Law (38 MRSA  $\delta$  420-D) shall be considered to comply with the phosphorus control portion of this ordinance.

Unless receiving approval under subsection (a), above, all development shall demonstrate that phosphorous export in stormwater runoff will be limited to the figures listed in the Table below\_phosphorous export standards for specific great ponds in Appendix C of the Maine Department of Environmental Protection's March 2016 Maine Stormwater Management Design Manual, Volume II Phosphorous Control Manual, or as revised.

TABLE: Water Quality Categories and Phosphorus Export Established for Belgrade Lakes

FAKE	Water Quality Category (Maine DEP)	Permitted Phosphorus Export/Acre in pounds*
Long Pond North	Moderate-stable	0.055
Long Pond South	good	0.067
Salmon Lake	Moderate-sensitive	0.08
McGrath-Pond	Moderate sensitive	0.049
<del>Messalonskee Lake</del>	Moderate sensitive	0.068
Great Pond	Moderate-sensitive	0.088
Hamilton-Pond*	Moderate sensitive	0.055
Stuart Pond*	Moderate-sensitive	0.055

### DISCUSSION DOCUMENT: UPDATE/CORRECTION OF PHOPHOROUS EXPORT STANDARDS TO THE BELGRADE LAKES IN COMMERCIAL DEVELOPMENT REVIEW ORDINANCE (pp. 35-38)

Chamberlain-Pond*	Moderate-sensitive	0.024
Penney Pond*	Moderate-sensitive	0.071
Joe Pond*	Moderate-sensitive	0.033
Wellman Pond*	Moderate-sensitive	0.049

\* Within the starred watersheds, if a proposed development will cover more than five acres within these watersheds, the allowable phosphorus export per acre must be adjusted using Appendix F of the DEP manual Phosphorus Control in Lake Watershed: A Technical Guide for Evaluating New Development, (September 1992 or as revised).

The Code Enforcement Officer shall keep an accurate record of permits issued by watershed and estimated phosphorus load of developments approved under this ordinance.

- This Ordinance provides for two options in controlling phosphorous export from development as follows:
  - a. Simplified Phosphorous Method. This method shall apply to non-residential developments which result in total disturbed area of 30,000 square feet in footprint area or less, including building, parking, driveway, lawn, subsurface wastewater disposal systems, and infiltration areas and new or upgraded roads and streets not exceeding three hundred fifty (350) linear feet.

The simplified phosphorous method requires the provision of a permanent, vegetative buffer located downhill from the developed portion of the lot(s)as provided below. Natural buffers must be left in place down gradient of developed areas such that runoff from as much of the lot's buildings, driveway, parking and lawn area as possible drain to the buffer in overland, unchannelized flow. The width (length of fall line through the buffer) of these buffer areas should be as follows:

If the watershed phosphorous budget is 0.05 lb/acre/yr or less (McGrath Pond, Chamberlain Pond, Joe Pond, Wellman Pond)

Wooded buffer= 75 feet Non-wooded buffer- 125 feet

If the watershed phosphorous budget is greater than 0.05 lb/acre/yr Wooded buffer= 50 feet

Non-wooded buffer= 100 feet

Buffers must be clearly identified on the site plan and will be maintained in accordance with the DEP Phosphorous Control standards through a maintenance agreement, deed covenant restriction and/or conservation easement

Commented [GS1]: From this point forward, the paragraph numbering in the existing ordinance is screwed up in this section. I have changed but does not show up as a change for some reason.

# DISCUSSION DOCUMENT: UPDATE/CORRECTION OF PHOPHOROUS EXPORT STANDARDS TO THE BELGRADE LAKES IN COMMERCIAL DEVELOPMENT REVIEW ORDINANCE (pp. 35-38)

Driveways and parking areas must be designed and constructed using best management practices such as swales, ditch turnouts, water bars, broad based drainage dips, and proper grading of gravel drives to prevent runoff from concentrating in the driveway and to divert it into buffer areas as quickly as feasible. Roof runoff must be distributed over stable, well vegetated areas or be infiltrated into the soil using dry wells or other infiltration systems constructed using Best Management Practices.

- b. Development which exceeds the thresholds of the "Simplified Phosphorous Method" above shall be designed by a licensed professional engineer using the procedures and standards in the DEP's manual Maine Stormwater Management Design Manual. Volume II Phosphorous Control Manual (March 2016 or as revised) Phosphorus Control in Lake Watershed: A technical Guide for Evaluating New Development (September 1992, or as revised) to demonstrate that the development will not produce phosphorous in excess of the Permitted Phosphorous Export Standards in the Table in subsection 4 above.
- 46. Where the planning board finds that, due to unavoidable features or the unique nature of the development, the Phosphorous Control Method does not contain adequate or relevant design standards to meet the intent of this section, the board may require alternative phosphorous control measures to the extent it deems feasible.
- 5. Phosphorous Export from New Roads:

For new or significantly upgraded permanent roads longer than 500 feet and not otherwise covered by phosphorus control standards of this ordinance, the following standards shall apply.

- a. Roads and ditches must be designed and constructed so that a) runoff is quickly shed to protected buffer areas and b) disruption of natural drainage patterns is minimized.
- b. BMP's such as swales, ditch turnouts, water bars, broad based drainage dips, and proper grading of gravel drives and roads should be used to prevent runoff from concentrating in the road and to get it into buffer areas as quickly and feasible.
- c. All new roads must be constructed and maintained using <u>Maine Erosion and Sediment Control BMP's</u> (Maine DEP, <u>May 1992 October 2016 or as revised)</u>.

## DISCUSSION DOCUMENT: UPDATE/CORRECTION OF PHOPHOROUS EXPORT STANDARDS TO THE BELGRADE LAKES IN COMMERCIAL DEVELOPMENT REVIEW ORDINANCE (pp. 35-38)

Maintenance and Use Restrictions for Phosphorus Control Measures Provisions for monitoring, inspections, and maintenance of phosphorus control measures, including buffer strips and infiltration systems shall be established according to 
 Phosphorus Control in Lake Watersheds: A Technical Guide for Evaluating New Development—Maine Stormwater Management Design Manual, Volume II Phosphorous Control Manual (Maine DEP, March 2016, September, 1992 or as revised).

An application for a Utility Scale Solar <u>or Wind Energy</u> Facility—(USSF) permit must include a decommissioning plan. "Decommissioning" means the full and complete physical removal of all components of a solar or wind energy facility, including but not limited to solar panels, wind turbines, associated anchoring systems and foundations, other structures, buildings, roads, fences, cables, electrical components, and associated facilities and foundations. Decommissioning plans <u>must</u>, include<u>ing</u>:

- A description of the trigger for implementing the decommissioning plan. There is a rebuttable presumption that decommissioning is required if no electricity is generated sold commercially to external customers for a continuous period of 12 months. The Applicant may rebut the presumption by providing evidence, such as a force majeure event that interrupts the generation and commercial sale of electricity, that although the project has not generated commercially sold electricity for a continuous period of 12 months, the project has not been abandoned and should not be decommissioned.
- ii. A description of the work required to physically remove all solar panels, wind turbines, associated foundations, buildings, cabling, electrical components, and any and all other associated facilities to the extent they are not otherwise in or proposed to be placed into productive use. All earth disturbed during decommissioning must be graded and re-seeded, unless the landowner of the affected land requests otherwise in writing.

[Note: At the time of decommissioning, the Applicant may must provide evidence of plans for continued beneficial use of any or all of the components of the Solar or Wind Energy Facility. No waste from a decommissioning may be disposed of at the Town of Belgrade Transfer Station. Any changes to the approved decommissioning plan shall be subject to review and approval by the Planning Board.]

- iii. An estimate of the total cost of decommissioning less salvage value of the equipment and itemization of the estimated major expenses, including the projected costs of measures taken to minimize or prevent adverse effects on the environment during implementation of the decommissioning plan. The itemization of major costs may include, but is not limited to, the cost of the following activities: panel or turbine—removal; panel or turbine—foundation removal and permanent stabilization; building removal and permanent stabilization; transmission corridor removal and permanent stabilization. This cost estimate must be updated every three (3) years and submitted to the Planning Board for its approval.
- iv. Demonstration in the form of a performance bond <u>or</u>, surety bond, <u>letter of credit</u>, or other form of financial assurance as may be acceptable to the Planning Board that upon the end of the useful <u>commercial</u> life of the <u>USSF</u> <u>development</u>, the Applicant will have the necessary financial assurance in place for 12500% of the

total cost of decommissioning, less salvage value. The Applicant may propose securing the necessary financial assurance in phases, as long as the total required financial assurance is in place a minimum of 5 years prior to the expected end of the useful life of the USSF. The owner of the facility shall provide the Planning Board with a revised removal cost estimate and structural evaluation prepared by a professional civil engineer licensed in Maine or a professional array construction company every three (3) years from the date of the Planning Board's approval of the solar array complex plan. The financial assurance shall include a provision granting the Town the ability to access the funds and property and perform the decommissioning if the USSF development is abandoned or the Applicant or subsequent responsible party fails to meet their obligations after reasonable notice, to be defined in the agreement and approved by the Planning Board.

Transfer of ownership. Upon a transfer of ownership of a solar or wind energy development subject to a decommissioning plan approved under this ordinance, a person that transfers ownership of the development remains jointly and severally liable for implementation of the plan until the Planning Board approves transfer of the decommissioning plan to the new owner or operator. New owners must demonstrate to the Planning Board's satisfaction an ability to meet the financial assurance requirement.

#### From the KVCOG cell tower template:

#### Bond for Removal

At the time of approval of a permit application, and prior to initiating construction of any personal wireless service facility within the Town of Belgrade, the applicant must post a bond to cover costs for the removal of the personal wireless service facility, including site reclamation. The amount of the bond shall be based on the removal and reclamation costs plus fifteen-twenty-five (215) percent, provided by the applicant and certified by a professional civil engineer licensed in Maine. The owner of the facility shall provide the Planning Board with a revised removal and reclamation cost estimate prepared by a professional civil engineer licensed in Maine every five (5) years from the date of the Planning Board's approval of the site plan. If the cost has increased more than fifteen-twenty-five (215) percent, then the owner of the facility shall provide additional security in the amount of the increase.

#### Abandonment or Discontinuation of Use/Removal

a. A personal wireless service facility that is not <u>commercially</u> operated for a continuous period of twelve (12) months shall be considered abandoned. The Town shall notify the owner of an abandoned facility in writing, certified mail, return receipt requested, ordering the removal of the facility within 180 days of receipt of the written notice. The owner of the facility shall have thirty (30) days from the receipt of the notice to demonstrate to the Town that the facility has not been abandoned.

**Commented [AW1]:** We might consider folding these into the language above so that the same regulations are applied to solar, wind and telecommunications, perhaps excepting that cell towers update their costs every five years.

b. If the owner fails to show that the facility is not abandoned, the owner shall have one hundred fifty (150) days to remove the facility. If the facility is not removed within that time period, the Town shall remove the facility at the owner's expense and the Town may draw upon the bond required in Section XX above to defray the costs of removal of the facility. Removal shall include, but not be limited to, antennas, mounts, equipment shelters and security barriers. The owner of the facility shall pay all site reclamation costs deemed necessary and reasonable to return the site to its pre-construction condition, including the removal of roads, and reestablishment of any vegetation.

#### From the KVCOG wind energy template (very similar to the solar template)

#### **Decommissioning Plan**

Pursuant to section 14.12, the Applicant shall provide a plan for decommissioning a Type 2 or Type 3 Wind Energy Facility. The decommissioning plan shall include, but shall not be limited to the following:

- 4. A description of the trigger for implementing the decommissioning plan. There is a rebuttable presumption that decommissioning is required if no electricity is generated for a continuous period of twelve (12) months. The Applicant may rebut the presumption by providing evidence, such as a force majeure event that interrupts the generation of electricity, that although the project has not generated electricity for a continuous period of 12 months, the project has not been abandoned and should not be decommissioned.
- 4. A description of the work required to physically remove all Wind Turbines, associated foundations to a depth of 24 inches, buildings, cabling, electrical components, and any other Associated Facilities to the extent they are not otherwise in or proposed to be placed into productive use. All earth disturbed during decommissioning must be graded and re-seeded, unless the landowner of the affected land requests otherwise in writing.
  - [Note: At the time of decommissioning, the Applicant may provide evidence of plans for continued beneficial use of any or all of the components of the Wind Energy Facility. Any changes to the approved decommissioning plan shall be subject to review and approval by the Code Enforcement Officer.]
- 2. An estimate of the total cost of decommissioning less salvage value of the equipment and itemization of the estimated major expenses, including the projected costs of measures taken to minimize or prevent adverse effects on the environment during implementation of the decommissioning plan. The itemization of major costs may include, but is not limited to, the cost of the following activities: turbine removal, turbine foundation removal and permanent stabilization, building removal and permanent stabilization, transmission corridor removal and permanent stabilization.
- 3.1. Demonstration in the form of a performance bond, surety bond, letter of credit, parental guarantee or other form of financial assurance as may be acceptable to the Belgrade Planning Board that upon the end of the useful life of the Wind Energy Facility the

Applicant will have the necessary financial assurance in place for 100% of the total cost of decommissioning, less salvage value. The Applicant may propose securing the necessary financial assurance in phases, as long as the total required financial assurance is in place a minimum of 5 years prior to the expected end of the useful life of the Wind Energy Facility.

From: <u>Joel Greenwood</u>
To: <u>Anthony Wilson</u>

**Subject:** RE: follow-up email - Draft language for Wind / Solar / Cell towers

**Date:** Tuesday, October 19, 2021 1:32:15 PM

**Attachments:** image004.png image005.png

Simplified Cell Tower Ordinance Draft - Belgrade Oct 2021.docx Model Wind Energy Ordinance - Belgrade Oct 2021.docx Solar Energy Systems Model Language - Oct 2021.docx

#### **EXTERNAL MESSAGE:**

Hi Anthony,

Here is a slew of model language for each individual issue. Of course a lot of this will have repetitive and redundant "ordinance admin" within it and if it is to be folded into an overarching commercial development review ordinance only the relevant sections on standards etc. would be needed.

A good starting point for discussions though I hope, showing the different areas that need consideration.

Hope this is helpful and I can likely make a Thursday meeting in the future, so let me know when a good time for this will be (November meeting perhaps?)

Good to see you this morning.

Regards,

Joel

## Joel Greenwood

Planning Director Kennebec Valley Council of Governments 17 Main Street, Fairfield, ME 04937 (207) 453-4258 Ext - 219



From: Anthony Wilson <townmanager@townofbelgrade.com>

**Sent:** Friday, October 8, 2021 11:24 AM

To: Joel Greenwood < jgreenwood@kvcog.org>

Subject: FW: follow-up email

Hey, Joel. I followed up with Ole on this email, and he suggested perhaps getting some template ordinances from you for solar farms and the decommissioning of those structures, along with wind turbines and telecommunication towers. Also, I'd like to briefly touch base with you to ensure that

## **TOWN OF BELGRADE**

## UTILITY SCALE SOLAR ENERGY FACILITY ORDINANCE

#### DRAFT 10-18-2021

## Section 1. Purpose

The purpose of this Ordinance is to establish a municipal review procedure and siting standards for Utility Scale Solar Facilities (USSF's). These standards are intended to:

- a. Establish clear guidelines and standards to regulate utility scale solar energy facilities;
- b. Permit the Town to fairly and responsibly protect public health, safety and welfare;
- c. Support the development of utility scale solar energy facilities in a manner that minimizes any potential adverse effects on the scenic, cultural, and natural resource character of the Town;
- d. Provide for the removal of panels and associated utility structures that are no longer being used for energy generation and transmission purpose; and
- e. Support the goals and policies of the Comprehensive Plan, including orderly development, efficient use of infrastructure, and protection of natural and scenic resources.

### Section 2. Authority

This Ordinance is enacted pursuant to the enabling provisions of Article VIII, Part 2, §1 of the Maine Constitution, the provisions of Title 30-A MRSA, §3001 (Home Rule), and the provisions of Title 30-A §4312 et. seq. (Comprehensive Planning and Site Plan Review Regulation, or "Growth Management" Act).

# Section 3. Applicability

- a. No Utility Scale Solar Energy Facility shall be located within the Town of Belgrade without a Permit issued by the Town of Belgrade Planning Board, unless specifically exempted from the permit requirements of this Ordinance. Any physical expansion, reconfiguration, or increase in the Rated Nameplate Capacity of an existing Solar Energy Facility shall also require approval from the same permitting authority as required for a new Utility Scale Solar Energy Facility under this Ordinance. Routine maintenance or replacements do not require a permit.
- b. Exemption. Solar Energy Facilities occupying 800 square feet or less are exempt from the requirements of this Ordinance, but must meet state electrical codes and permitting requirements, and applicable requirements of any other Ordinance of the Town of Belgrade.

#### Section 4. Definitions

As used in this Ordinance, unless the context otherwise indicates, the terms referenced below have the following meanings:

- a. **Financial capacity:** Means the demonstration of current and future financial capacity, which must be unaffected by the owner's or operator's future financial condition, to fully fund decommissioning in accordance with an approved decommissioning plan under this ordinance.
- b. **Rated Nameplate Capacity:** means the maximum rated output of electric power production of the photovoltaic system in watts of Direct Current (DC)
- c. **Residential Dwelling Structure:** means any structure that includes a room or group of rooms with a bathroom, cooking, and sleeping facilities designed and equipped exclusively for use as permanent, seasonal, or temporary living quarters. The term shall include mobile homes and rental units that contain cooking, sleeping and toilet facilities regardless of the time-period rented. Recreational vehicles are not residential dwellings.
- d. **Transfer of ownership**: means a change in the legal entity that owns or operates a solar energy development. A sale or exchange of stock or membership interests or a merger is not a transfer of ownership as long as the legal entity that owns or operates the solar energy development remains the same.
- e. **Utility Scale Solar Facility (USSF):** is any solar facility, project, or installation which is intended to and/or in fact does generate solar power and feeds said power into the electric grid supplying the local utility with power. This shall include, but is not limited to, any ground mounted photovoltaic (PV) project that is larger than 0.10 M.W. (ac) in capacity. Residential/commercial solar arrays smaller than 0.10 M.W. (ac) are not included in this definition.

#### Section 5. Administration and Enforcement

- a. This Ordinance will be administered as an additional level of review along with the provisions of the Site Plan Review Ordinance, including Sections II through V, which are hereby incorporated by reference. Specific application requirements, standards of review, and other requirements pertinent to Solar Energy Facilities within this Ordinance shall be added to the Application Requirements and Standards of Approval within the Site Plan Review Ordinance. In case of a conflict, the stricter provision shall apply.
- b. Permit Required. An approval Permit from the Planning Board is required prior to the installation, construction, or expansion of a Utility Scale Solar Energy Facility (USSF). USSF's must meet the requirements of this Ordinance and the Site Review Ordinance. All USSF's must also meet all federal and state electrical codes and permitting requirements.

## Section 6. Specific Application Requirements

In addition to the requirements listed in Section II of the Site Plan Review Ordinance, an application for a USSF Permit must also include the following:

- a. An additional permit / technical review fee to be set by the Board of Selectmen shall be payable at the time of application. This fee will be reviewed and amended as necessary on an annual basis.
- b. A description of the owner of the facility, the operator if different, and detail of qualifications and track record to run the USSF;
- c. If the operator will be leasing the land, a copy of the agreement (minus financial compensation) clearly outlining the relationship inclusive of the rights and responsibilities of the operator, landowner, and any other responsible party with regard to the USSF and the life of the agreement;
- d. A description of the energy to be produced and to whom it will be sold;
- e. A copy of the agreement and schematic details of the connection arrangement with the transmission facility, clearly indicating which party is responsible for various requirements and how they will be operated and maintained;
- f. A description of the panels to be installed, including make and model, and associated major facility components;
- g. A construction plan and timeline, identifying known contractors, site control, and anticipated on-line date;
- h. A full official land survey of the proposed site. Must include any Rights of way and Easements on the property and be sealed and/or stamped by a Maine licensed professional surveyor.
- i. An operations and maintenance plan, including site control and the projected operating life of the facility;
- j. An emergency management plan for all anticipated hazards;
- k. Proof of financial capacity to construct and operate the proposed USSF; and
- 1. A Visual Impact Assessment

An analysis to determine potential visual effect of the USSF must be undertaken.

In all visual impact assessments, scenic resources within the viewshed of the proposed activity must be identified and the existing surrounding landscape must be described. The assessment must be completed following standard professional practices to illustrate the proposed change to the visual environment and the effectiveness of any proposed mitigation measures.

A visual impact assessment must also include narratives to describe the significance of any potential impacts, the level of use and viewer expectations, measures taken to avoid and minimize visual impacts, and steps that have been incorporated into the activity design that may mitigate any potential adverse visual impacts to scenic resources.

The Visual Impact Assessment must include the following elements:

i. A visual and cartographic analysis (Viewshed Analysis)

A geographical representation of all the areas of where the USSF, from its highest points is visible from the surrounding (impact) area should be presented. The radius of the impact area to be analyzed must be based on the relative size and scope of the proposed activity given the specific location. Areas of the impact area from which the activity will be visible, including representative and worst-case viewpoints, must be identified. Line-of-sight profiles constitute the simplest acceptable method of illustrating the potential visual impact of the proposed activity from viewpoints within the context of its viewshed. A line-of-sight profile represents the path, real or imagined, that the eye follows from a specific point to another point when viewing the landscape.

ii. Site inventory and photographic review.

This should provide a comprehensive and objective means by which to analyze and assess the potential visual and aesthetic impacts that may result from the USSF and its associated elements.

iii. Visual Simulations - Visual simulations should be provided to show a photo-realistic perspective view of proposed USSF elements in the landscape, thereby allowing abutters to clearly visualize how a project will really look from their primary residential structure.

The visual impact assessment must be prepared by a design professional trained in visual assessment procedures, or as otherwise directed by the Planning Board.

## m. A decommissioning plan, including:

- i. A description of the trigger for implementing the decommissioning plan. There is a rebuttable presumption that decommissioning is required if no electricity is generated for a continuous period of 12 months. The Applicant may rebut the presumption by providing evidence, such as a force majeure event that interrupts the generation of electricity, that although the project has not generated electricity for a continuous period of 12 months, the project has not been abandoned and should not be decommissioned.
- ii. A description of the work required to physically remove all solar panels, associated foundations, buildings, cabling, electrical components, and any other associated facilities to the extent they are not otherwise in or proposed to be placed into productive use. All earth disturbed during decommissioning must be graded and re-seeded, unless the landowner of the affected land requests otherwise in writing.

[Note: At the time of decommissioning, the Applicant may provide evidence of plans for continued beneficial use of any or all of the components of the Solar Energy Facility. Any changes to the approved decommissioning plan shall be subject to review and approval by the Planning Board.]

- iii. An estimate of the total cost of decommissioning less salvage value of the equipment and itemization of the estimated major expenses, including the projected costs of measures taken to minimize or prevent adverse effects on the environment during implementation of the decommissioning plan. The itemization of major costs may include, but is not limited to, the cost of the following activities: panel removal, panel foundation removal and permanent stabilization, building removal and permanent stabilization, transmission corridor removal and permanent stabilization, and road infrastructure removal and permanent stabilization. This cost estimate must be updated every three (3) years.
- iv. Demonstration in the form of a performance bond, surety bond, letter of credit, or other form of financial assurance as may be acceptable to the Planning Board that upon the end of the useful life of the USSF the Applicant will have the necessary financial assurance in place for 100% of the total cost of decommissioning, less salvage value. The Applicant may propose securing the necessary financial assurance in phases, as long as the total required financial assurance is in place a minimum of 5 years prior to the expected end of the useful life of the USSF. The financial assurance shall include a provision granting the Town the ability to access the funds and property and perform the decommissioning if the USSF is abandoned or the Applicant or subsequent responsible party fails to meet their obligations after reasonable notice, to be defined in the agreement and approved by the Planning Board.
- v. Transfer of ownership. Upon a transfer of ownership of a solar energy development subject to a decommissioning plan approved under this ordinance, a person that transfers ownership of the development remains jointly and severally liable for implementation of the plan until the Planning Board approves transfer of the decommissioning plan to the new owner or operator.

### Section 7. Standards for Approval

In addition to the requirements in Section III of the Site Plan Review Ordinance, the following standards must also be met:

- a) Legal Responsibilities: The Applicant must provide proof of authorization to construct, use, and maintain the property and any access drive for the life of the USSF and including the decommissioning of the USSF. The roles and responsibilities of the facility owner, operator, landowner and any other party involved in the project must be clear and meet the satisfaction of the Planning Board that the public interest is protected.
- b) Setbacks: Structures (including fencing) that are part of a USSF shall be setback a minimum of **100 feet** from any existing residential dwelling structure.
- c) Height: The USSF shall be no more than 15 feet high at its tallest point of any equipment.
- d) Utility Notification: No USSF shall be installed until evidence has been given to the Planning Board that the applicant has an agreement with the local utility to accept the power.
- e) Fencing: The Planning Board may require that a USSF be enclosed by fencing to prevent unauthorized access and may also require landscaping to avoid adverse aesthetic impacts of installed fencing to adjacent properties.

- f) Signage: Signage shall be required to identify the owner of the USSF and provide a 24-hour emergency contact phone number. This signage shall not be used for advertising except for reasonable identification of the manufacturer or operator of the USSF. A clearly visible warning sign shall be placed at the base of all pad-mounted transformers and substations and on the fence surrounding the USSF, informing individuals of potential voltage hazards, including stating the output of power (AC or DC).
  - Signage indicating the official e911 address of the Facility shall also be required to clearly be visible, from both directions of travel, from the public road or roads from which the USSF is accessed.
- g) Visual Impact: Any USSF should not have any detrimental effect on the scenic resources of the town or degrade the scenic value from abutters properties. In order determine the visual impact of any USSF, the Planning Board will, using the information provided in the Visual Impact Assessment study (See above), consider the following:
  - i. The significance of the potentially affected scenic resources;
  - ii. The existing character of the surrounding area;
  - iii. The expectations of the typical viewer;
  - iv. The project purpose and the context of the proposed activity;
  - v. The extent, nature and duration of the potential effect of the USSF's presence on the public's continued use and enjoyment of the towns scenic resources.
- h) Emergency Services: The USSF owner or operator shall provide a copy of the project summary, electrical schematic, and site plan to the Town of Belgrade Fire Chief. Upon request, the owner or operator shall coordinate with local emergency services in developing an emergency response plan. A "3200 Series KNOX-BOX" shall be provided and installed by the operator to be used to allow emergency service personnel continuous access. All means of shutting down the USSF shall be clearly marked. The owner or operator shall identify a responsible person for public inquiries throughout the life of the installation.
  - Access roads to the USSF shall be of sufficient quality and dimensions to satisfy the fire chief that any emergency response vehicles be able to easily and safely gain access to and around the site.
- i) Maintenance Conditions: The USSF owner or operator shall maintain the USSF and all associated fencing and landscaping elements in good functional condition. Maintenance shall include, but not be limited to, painting, structural repairs, and integrity of security and visual barrier measures. The USSF must be properly maintained and be kept free from all hazards, including, but not limited to, faulty wiring, loose fastenings, being in an unsafe condition or detrimental to public health, safety, or general welfare. Site access shall be maintained to a level acceptable to the Town of Belgrade Fire Chief for emergency response. The owner or operator shall be responsible for the cost of maintaining the USSF and any access road(s).
- j) Modifications: Any material modifications to a USSF made after issuance of the required Town permit(s) shall require approval by the Code Enforcement Officer and/or the Planning Board.
- k) Satisfaction with All Aspects of Capacity and Plans Submitted: The Planning Board must find that the Applicant has the capacity to finance, safely operate and decommission the USSF.

# Legal Disclaimer:

The intent of this model ordinance is to provide Maine municipalities an example as information for review, reference, and consideration, at their sole discretion, regarding potential approaches to local regulation of wind energy development. Provided for informational purposes only, this model ordinance does not and is not intended to render any legal advice. Pertinent factual, legal, and other circumstances vary significantly among municipalities and are subject to changes. Municipalities considering use of this model ordinance or any of its provisions are advised and encouraged to consult with a qualified attorney.

# Wind Energy Facility Ordinance for Belgrade, Maine

1.0	Title
2.0	Authority
3.0	Purpose
4.0	Definitions
5.0	Applicability
6.0	Conflict and Severability
7.0	Effective Date
8.0	Classification of Wind Energy Facilities
9.0	Administration
10.0	Application Submission Requirements
11.0	Meteorological Towers (MET Towers)
12.0	General Standards
13.0	Special Standards for Type 1A and 1B Wind Energy Facilities
14.0	Special Standards for Type 2 and Type 3 Wind Energy Facilities

Appendix A: Application Fees

Appendix B: Type 2 and Type 3 Noise Control Standards

Appendix C: Type 2 and Type 3 Decommissioning Plan Standards

#### 1.0 Title

This Ordinance shall be known as the Wind Energy Facility Ordinance for Belgrade.

# 2.0 Authority

This Ordinance is adopted pursuant to the enabling provisions of Article VIII, Part 2, Section 1 of the Maine Constitution; the provisions of 30-A M.R.S. § 3001 (Home Rule), and the provisions of the Planning and Land Use Regulation Act, 30-A M.R.S. § 4312, et seq.

### 3.0 Purpose

The purpose of the Ordinance is to provide for the construction and operation of Wind Energy Facilities in Belgrade, subject to reasonable conditions that will protect the public health, safety, and welfare.

### 4.0 Definitions

Applicant is the legal entity, including successors and assigns, that files an application under this Ordinance.

<u>Approved Residential Subdivision</u> means a residential subdivision for which all applicable land use permits have been issued, provided that the time for beginning construction under such permits has not expired.

<u>Associated Facilities</u> means elements of a Wind Energy Facility other than its Generating Facilities that are necessary to the proper operation and maintenance of the Wind Energy Facility, including but not limited to buildings, access roads, Generator Lead Lines and substations.

<u>DEP Certification</u> means a certification issued by the Department of Environmental Protection pursuant to 35-A M.R.S. § 3456 for a Wind Energy Development.

<u>Generating Facilities</u> means Wind Turbines and electrical lines, not including Generator Lead Lines, that are immediately associated with the Wind Turbines.

Generator Lead Line means a "generator interconnection transmission facility" as defined by 35- A M.R.S. § 3132 (1-B).

<u>Historic Area</u> means an Historic Site administered by the Bureau of Parks and Recreation of the Maine Department of Conservation, with the exception of the Arnold Trail.

<u>Historic Site</u> means any site, structure, district or archaeological site which has been officially included on the National Register of Historic Places and/or on the Maine Historic Resource Inventory, or which is established by qualified testimony as being of historic significance.

<u>Locally-Designated Passive Recreation Area</u> means any site or area designated by a municipality for passive recreation that is open and maintained for public use and which: a) has fixed boundaries, b) is owned in fee simple by a municipality or is accessible by virtue of public easement, c) is identified and described in a local comprehensive plan and, d) has been identified and designated at least nine months prior to the submission of the Applicant's Wind Energy Facility permit application.

Meteorological Tower (MET Tower) means a Tower used for the measurement and collection of wind data that supports various types of equipment, including but not limited to anemometers, data recorders, and

solar power panels. MET Towers may also include wildlife related equipment such as ANABAT detectors, bird diverts and wildlife entanglement protectors.

<u>Municipal Reviewing Authority</u> means the municipal planning board, agency or office, or if none, the municipal officers.

<u>Nacelle</u> means the frame and housing at the top of the Tower that encloses the gearbox and generator.

<u>Non-Participating Landowner</u> means any landowner, other than a Participating Landowner whose land is located within [Belgrade].

Occupied Building means a residence, school, hospital, house of worship, public library or other building that is occupied or in use as a primary residence or is customarily frequented by the public at the time when the permit application is submitted.

<u>Participating Landowner</u> means one or more Persons that hold title in fee or a leasehold interest with sublease rights to property on which Generating Facilities or Associated Facilities are proposed to be located pursuant to an agreement with the Applicant or an entity that has entered into an appropriate agreement with the Applicant allowing the Applicant to demonstrate the requisite right, title and interest in such property.

<u>Person</u> means an individual, corporation, partnership, firm, organization or other legal entity.

<u>Planned Residence</u> means a Residence for which all applicable building and land use permits have been issued, provided that the time for beginning construction under such permits has not expired.

#### Protected Location means any location that is:

- 1. accessible by foot, on a parcel of land owned by a Non-Participating Landowner containing a residence or planned residence, or an approved residential subdivision, house of worship, academic school, college, library, duly licensed hospital or nursing home near the development site at the time an application for a Wind Energy Facility is submitted under this Ordinance;
- 2. within a State Park, Baxter State Park, a National Park, a nature preserve owned by a land trust, the Maine Audubon Society or the Maine chapter of the Nature Conservancy, the Appalachian Trail, the Moosehorn National Wildlife refuge, a federally designated wilderness area, a state wilderness area designated by statute, a municipal park or a locally-designated passive recreation area, or any location within consolidated public reserve lands designated by rule by the Bureau of Public Lands as a Protected Location, or;
- 3. a hotel, motel, campsite, or duly licensed campground that the municipal authority responsible for review and approval of the pending application under 9.1 has designated a Protected Location after making a determination that the health and welfare of the guests or the economic viability of the establishment will be unreasonably impacted by noise in excess of that allowed under section 13.1.3(b).

<u>Residence</u> means a building or structure, including manufactured housing, maintained for permanent or seasonal residential occupancy providing living, cooking and sleeping facilities and having permanent indoor or outdoor sanitary facilities, excluding recreational vehicles, tents and watercraft.

Scenic Resource means either a Scenic Resource of state or national significance, as defined in 35-A M.R.S § 3451 (9) or a scenic resource of local significance located within the municipality and identified as such in a comprehensive plan, open space plan or scenic inventory adopted by the municipal legislative body.

<u>Shadow Flicker</u> means alternating changes in light intensity caused by the movement of Wind Turbine blades casting shadows on the ground or a stationary object.

<u>Short Duration Repetitive Sounds</u> means a sequence of repetitive sounds which occur more than once within an hour, each clearly discernible as an event and causing an increase in the sound level of at least 6 dBA on the fast meter response above the sound level observed immediately before and after the event, each typically less than ten seconds in duration, and which are inherent to the process or operation of the development and are foreseeable.

<u>Sight Line Representation</u> means a profile drawing showing prominent features, including but not limited to topography, buildings, and trees, along and in relation to a line of sight extending from an observer's eye to the lowest point visible on a proposed Tower.

Significant Wildlife Habitat means a Significant Wildlife Habitat as defined in 38 M.R.S. § 480-B(10).

<u>Substantial Start</u> means that construction shall be considered to be substantially commenced when any work beyond excavation, including but not limited to, the pouring of a slab or footings, the installation of piles, the construction of columns, or the placement of a Tower on a foundation has begun.

<u>Tower</u> means the free-standing structure on which a wind measuring or energy conversion system is mounted.

<u>Turbine Height</u> means the distance measured from the surface of the Tower foundation to the highest point of any turbine rotor blade measured at the highest arc of the blade.

<u>Wind Energy Facility</u> means a facility that uses one or more Wind Turbines to convert wind energy to electrical energy. A Wind Energy Facility includes Generating Facilities and Associated Facilities.

Wind Energy Facility, Type 1A means a Wind Energy Facility having a maximum generating capacity of less than 100kW, a maximum of one Wind Turbine and a maximum Turbine Height of 80 feet.

Wind Energy Facility, Type 1B means a Wind Energy Facility having a maximum generating capacity of less than 100kW and either more than one Wind Turbine, or one or more Wind Turbines with a Turbine Height greater than 80 feet.

Wind Energy Facility, Type 2 means a Wind Energy Facility having a maximum generating capacity of 100 kW or greater and which does not require a state permit issued by the Department of Environmental Protection under the Site Location of Development Act, 38 M.R.S. §481, *et seq.* 

Wind Energy Facility, Type 3 means a Wind Energy Facility having a generating capacity of 100kW or greater and which requires a state permit issued by the Department of Environmental Protection under the Site Location of Development Act, 38 M.R.S. §481, et seq.

<u>Wind Turbine</u> means a system for the conversion of wind energy into electricity which is comprised of a Tower, generator, Nacelle, rotor and transformer.

# 5.0 Applicability

- 5.1 This Ordinance applies to any Wind Energy Facility proposed for construction in Belgrade after the effective date of this Ordinance. This Ordinance does not apply to Associated Facilities unless the Generating Facilities are located within Belgrade, in which case this Ordinance applies to both the Generating Facilities and the Associated Facilities.
- 5.2 A Wind Energy Facility that is the subject of an application determined to be complete by the Belgrade Planning Board prior to the effective date of this Ordinance shall not be required to meet the requirements of this Ordinance; provided that any physical modifications after the effective date of the Ordinance shall be subject to the permitting requirements of Section 9.2.

# 6.0 Conflict and Severability

- 6.1 If there is a conflict between provisions in this Ordinance, the more stringent shall apply. If there is a conflict between a provision in this Ordinance and that of another Belgrade ordinance, the provision of this Ordinance shall apply.
- 6.2 The invalidity of any part of this Ordinance shall not invalidate any other part of this ordinance.

#### 7.0 Effective Date

This Ordinance becomes effective on

### 8.0 Classification of Wind Energy Facilities

All Wind Energy Facilities shall be classified in accordance with Table 1 below:

Table 1-Classification of Wind Energy Facilities and Corresponding Local Review and Approval Authority

Facility	Aggregate	Turbine	Max. # of	DEP Site Location	Local Review
1A	<100 kW	< 80'	1	No	Code Enforcement Officer
1B	<100 kW	> 80'	NA	No	Belgrade Planning Board
2	≥100 kW	NA	NA	No ¹	Belgrade Planning Board
3	≥ 100 kW	NA	NA	Yes <sup>2</sup>	Belgrade Planning Board

<sup>1</sup> Per 35-A MRS §3456. DEP Certificate required if energy generated is for sale or use by a Person other than the generator.

<sup>2</sup> Per 38 MRS §482(2)

### 9.0 Administration

## 9.1 Review and Approval Authority

- 1. The Code Enforcement Officer is authorized to review all applications for Type 1A Wind Energy Facilities and MET Towers pursuant to section 11.0, and may approve, deny or approve such applications with conditions in accordance with the standards of the Ordinance.
- 2. The Belgrade Planning Board is authorized to review all applications for Type 1 B, Type 2, and Type 3 Wind Energy Facilities and may approve, deny or approve such applications with conditions in accordance with this Ordinance.

# 9.2 Permit Required

- 1. No Wind Energy Facility shall be constructed or located within Belgrade without a permit issued in accordance with this Ordinance.
- 2. Any physical modification to an existing Wind Energy Facility that materially alters the location or increases the area of development on the site or that increases the Turbine Height or the level of sound emissions of any Wind Turbine shall require a permit modification under this Ordinance. Like-kind replacements and routine maintenance and repairs shall not require a permit modification.

## 9.3 Permit Applications

- 1. Application components. A Wind Energy Facility permit application shall consist of the application form, application fee, and supporting documents, as described below:
  - a. Application Forms. The municipality shall provide the application form which shall be signed by: 1) a Person with right, title and interest in the subject property or; 2) a Person having written authorization from a Person with right, title and interest in the subject property. The signature shall be dated and the signatory shall certify that the information in the application is complete and correct and that the proposed facility will be constructed and operated in accordance with the standards of this ordinance and all approval and permit conditions, if any.
  - b. Application Fees. Application fees shall be assessed and paid upon submission of the application in accordance with Appendix A of this Ordinance.
  - c. Supporting Documents. The application shall include all additional documents necessary to satisfy the applicable submission requirements under section 10 of this Ordinance.
- 2. Application Submission. The Applicant shall submit its application for a Wind Energy Facility permit to the Code Enforcement Officer who shall note on the application the date on which it was received.

## 3. Changes to a Pending Application

- a. The Applicant shall promptly notify the municipal entity responsible for review and approval of a pending application under section 9.1 of any changes the Applicant proposes to make to information contained in the application.
- b. If changes are proposed to a pending application after a public hearing has been held, the Belgrade Planning Board may consider those changes and continue with the review and approval process without a renewed public hearing if it determines that the changes do not materially alter the application. If the Belgrade Planning Board determines that the proposed changes do materially alter the application it shall schedule and conduct another public hearing within 30 days of that determination. In making its determination, the Belgrade Planning Board shall consider whether the proposed changes involve potential adverse effects different than or in addition to those addressed in the initial application.

## 9.4 Permit Application Procedures

## 1. Type 1A Wind Energy Facility Application

- a. Within 10 days after receiving an application, the Code Enforcement Officer shall notify the Applicant in writing either that the application is complete or, if the application is incomplete, the specific additional material needed to complete the application. The Code Enforcement Officer may waive any submission requirement if the Code Enforcement Officer issues a written finding that, due to special circumstances of the application, adherence to that requirement is not necessary to determine compliance with the standards of this Ordinance.
- b. Within 30 days after determining the application to be complete, the Code Enforcement Officer shall issue a written order: 1) denying approval of the proposed Wind Energy Facility, 2) granting approval of the proposed Wind Energy Facility or, 3) granting approval of the proposed Wind Energy Facility with conditions. In making the decision, the Code Enforcement Officer shall make findings on whether the proposed Wind Energy Facility meets the applicable criteria described in sections 12 and 13.c. With the agreement of the applicant, the Code Enforcement Officer may extend the procedural time frames of this section.

# 2. Type 1 B, Type 2 and Type 3 Wind Energy Facility Applications

- a. The Applicant is strongly encouraged to meet with the Code Enforcement Officer before submitting an application. At this pre-application meeting, the Code Enforcement Officer will explain the Ordinance's provisions, application forms, and submission requirements. The Applicant should provide photos of the proposed site and written descriptions of the proposed facility and the proposed site, including its location and lot area.
- b. An application shall be eligible for consideration at a regularly-scheduled meeting of the Belgrade Planning Board only if the applicant submits it at least 14 days prior to the meeting.
- c. Within 30 days after receipt of the application by the Code Enforcement Officer, the Belgrade Planning Board shall notify the Applicant in writing either that the application is complete or, if the application is incomplete, the specific additional material needed to complete the application. The Belgrade Planning Board may waive any submission requirement if it issues a written finding that, due to special circumstances of the

application, adherence to that requirement is not necessary to determine compliance with the standards of this Ordinance.

- d. The Belgrade Planning Board shall hold a public hearing for a Type 3 Wind Energy Facility application within 60 days after determining that the application is complete. The Belgrade Planning Board may decide to hold a public hearing for a Type 1 B or a Type 2 Wind Energy Facility application. If it decides to hold a public hearing for a Type 1 B application, the Belgrade Planning Board shall hold that hearing within 30 days after determining that application is complete. If it decides to hold a public hearing for a Type 2 application, the Belgrade Planning Board shall hold that hearing within 60 days after determining that the application is complete.
- e. Within 60 days after determining that an application for a Type 1 B Wind Energy Facility is complete or within 90 days after determining that an application for a Type 2 or Type 3 Wind Energy Facility is complete, the Belgrade Planning Board shall issue a written order: 1) denying approval of the proposed Wind Energy Facility, 2) granting approval of the proposed Wind Energy Facility with conditions. In making its decision, the Belgrade Planning Board shall make findings on whether the proposed Wind Energy Facility meets the applicable criteria described in sections 12, 13, and 14.
- f. With the agreement of the applicant, the Belgrade Planning Board may extend the procedural time frames of this section.

**Table 2: Procedural Time Frames** 

Facility	Application	Public	Final
1A	<10 days <sup>1</sup>	NA	<30 days <sup>2</sup>
1B	<30 days <sup>1</sup>	<30 days <sup>2</sup>	<60 days <sup>2</sup>
2	<30 days <sup>1</sup>	<60 days <sup>2</sup>	<90 days <sup>2</sup>
3	<30 days <sup>1</sup>	<60 days <sup>2</sup>	<90 days 2

<sup>1</sup> Days after receipt of the application by the Code Enforcement Officer

## 9.5 Notice of Meetings

Ten days prior to any meeting at which an application for a Type 1 B, Type 2, or Type 3 Wind Energy Facility is to be considered, the Belgrade Planning Board shall send notice by first class mail, to the applicant and all owners of property abutting the property on which the Wind Energy Facility is proposed to be located. The notice shall state the date, time and place of the meeting and the proposed location and the classification of the proposed Wind Energy Facility.

# 9.6 Public Hearings

The Belgrade Planning Board shall have notice of the date, time, and place of any public hearing and the proposed location and the classification of the proposed Wind Energy Facility:

<sup>2</sup> Days after the application is determined to be complete

- 1. Published at least once in a newspaper having general circulation within the municipality. The date of the first publication shall be at least 10 days before the hearing.
- 2. Mailed by first class mail to the Applicant and to owners of property within 500 feet of the property on which the Wind Energy Facility is proposed to be located, at least 10 days before the public hearing. The Belgrade Planning Board shall maintain a list of property owners to whom notice is mailed in the application file. Failure of any of these property owners to receive a notice shall not invalidate the public hearing, nor shall it require the Belgrade Planning Board to schedule another hearing.

#### 9.7 Professional Services

In reviewing the application for compliance with this Ordinance, the Belgrade Planning Board may retain professional services, including but not limited to those of an attorney or consultant, to verify information presented by the Applicant. The attorney or consultant shall first estimate the reasonable cost of such review and the Applicant shall deposit, with the municipality, the full estimated cost, which the municipality shall place in an escrow account. The municipality shall pay the attorney or consultant from the escrow account and reimburse the Applicant if funds remain after payment.

## 9.8 Expiration of Permits

Permits shall expire: 1) two years after the date of approval unless a substantial start on construction has occurred and; 2) three years after the date of approval unless construction of the Wind Energy Facility has been completed. If a permit for a Type 2 or Type 3 Wind Energy Facility expires, the Applicant shall implement pertinent provisions of the approved decommissioning plan. Upon the Applicant's written request, the municipal entity responsible for review and approval of the application under section 9.1 may extend either or both expiration time limits by one year.

### 9.9 Access

The Code Enforcement Officer shall have access to the site at all times to review the progress of the work and shall have the authority to review all records and documents directly related to the design, construction and operation of the facility.

#### 9.10 Enforcement

- 1. It shall be unlawful for any Person to violate or fail to comply with or take any action that is contrary to the terms of the Ordinance, or to violate or fail to comply with any permit issued under the Ordinance, or to cause another to violate or fail to comply or take any action which is contrary to the terms of the Ordinance or any permit under the Ordinance.
- 2. If the Code Enforcement Officer or other Person charged with enforcement of municipal laws determines that a violation of the Ordinance or the permit has occurred, the Code Enforcement Officer shall provide written notice to any Person alleged to be in violation of this Ordinance or permit. If the alleged violation does not pose an immediate threat to public health or safety, the Code Enforcement Officer and the alleged violator shall engage in good faith negotiations to resolve the alleged violation. Such negotiations shall be conducted within thirty (30) days of the notice of violation and, with the consent of the alleged violator, may be extended.
- 3. If, after thirty (30) days from the date of notice of violation or further period as agreed to by the alleged violator, the Code Enforcement Officer determines, in the officer's reasonable

discretion, that the parties have not resolved the alleged violation, the Code Enforcement Officer may institute civil enforcement proceedings or any other remedy at law to ensure compliance with the Ordinance or permit.

# 9.11 Appeals

Any Person aggrieved by a decision of the Code Enforcement Officer or the Belgrade Planning Board under this Ordinance may appeal the decision to the Board of Appeals, as provided by Section 10, Subsection B3 of the Belgrade Land Use Ordinance.

## 10.0 Application Submission Requirements

#### 10.1 General Submission Requirements

- 1. A completed application forms including:
  - a. The Applicant and Participating Landowner(s') name(s) and contact information.
  - b. The address, tax map number, zone and owner(s) of the proposed facility site and any contiguous parcels owned by Participating Landowners.
  - c. The tax map number, zone, current use, owner(s) and addresses of owner(s) of parcels that abut the proposed facility site or abut parcels of Participating Landowners that are contiguous with the proposed facility site (Not required for Type 1A applications)
  - d. An affirmation, signed and dated by the Applicant, that the information provided in the application is correct and that the proposed Wind Energy Facility, if approved and built, shall be constructed and operated in accordance with the standards of this ordinance and all conditions of approval, if any.
- 2. A Receipt showing payment of application fee in accordance with Appendix A.
- 3. A copy of a deed, easement, purchase option or other comparable documentation demonstrating that the Applicant has right, title or interest in the proposed facility site.
- 4. Location map showing the boundaries of the proposed facility site and all contiguous property under total or partial control of the Applicant or Participating Landowner(s) and any Scenic Resource or Historic Site within 2500 feet of the proposed development.
- 5. Description of the proposed Wind Energy Facility that includes the number and aggregate generating capacity of all Wind Turbines, the Turbine Height and manufacturer's specifications for each Wind Turbine (including but not limited to the make, model, maximum generating capacity, sound emission levels and types of overspeed controls) and a description of Associated Facilities.
- 6. Site plan showing the proposed location of each Wind Turbine and Associated Facilities and any of the following features located within 500 feet of any Wind Turbine: parcel boundaries, required setbacks, topographic contour lines (maximum 20-foot interval), roads, rights-of-way, overhead utility lines, buildings (identified by use), land cover, wetlands, streams, water bodies and areas proposed to be re-graded or cleared of vegetation.
  - a. In addition to the information in 6, above, site plans for Type 1 B, Type 2 and Type 3 Wind Energy Facilities shall show the location and average height of tree cover to be retained and the location, variety, planting height and mature height of proposed trees, if any.

- 7. Written evidence that the Environmental Coordinator of the Maine Department of Inland Fisheries and Wildlife (MDIFW) and that the Maine Natural Areas Program (MNAP) have both been notified of the pending application and the location and Turbine Height of all proposed Wind Turbines.
- 8. Written evidence that the provider of electrical service to the property has been notified of the intent to connect an electric generator to the electricity grid, if such connection is proposed.
- 9. Description of emergency and normal shutdown procedures.
- 10. Photographs of existing conditions at the site.
- 11. An application for a Type 1A or 1 B Wind Energy Facility shall include structural drawings of the Tower foundation and anchoring system: a) prepared by the Wind Turbine or Tower manufacturer, b) prepared in accordance with the manufacturer's specifications or, c) prepared and stamped by a Maine-licensed professional engineer.
- 12. An application for a Type 1A or Type 1B Wind Energy Facility shall include:
  - a. a written statement, signed by the Applicant, that certifies that the proposed facility is designed to meet the applicable noise control standards under section 13.1.3 and acknowledges the Applicant's obligation to take remedial action in accordance with section 13.1.6 if the Code Enforcement Officer determines those standards are not being met or;
  - b. a written request for review under section 14.1 along with information required under Appendix B, subsection B (Submissions).
- 13. An Application for Type 1 B, Type 2 or Type 3 Wind Energy Facility shall include the following site line, photographic and, if applicable, screening information, provided that an Applicant for a Type 3 Wind Energy Facility may provide this information as part of a visual assessment if required pursuant to section 14.5:
  - a. Sight Line Representations of each Wind Turbine from the nearest Occupied Building and from at least one other representative location within 500 feet of the Wind Turbine, such as a Scenic Resource or another Occupied Building. Each Site Line Representation shall be drawn at a scale sufficiently large to make it legible. If screening is proposed, the proposed screening device, such as trees, shrubs or fencing, shall be depicted on the drawing along with the sight line as altered by the screening.
  - b. A current four-inch by six-inch color photograph of the proposed site of the Wind Turbine(s) taken from viewpoints corresponding to each of the Site Line Representations.
  - c. One copy of each of the photographs described in b, above, onto which is superimposed an accurately-scaled and sited representation of the Wind Turbine(s).
- 14. An application for a Type 2 Wind Energy Facility that generates energy primarily for sale or use by a Person other than the generator, shall include, if issued at the time of application, certification from the Department of Environmental Protection pursuant to 35-A M.R.S. § 3456 that the Wind Energy Facility:
  - a. Will meet the requirements of the noise control rules adopted by the Board of Environmental Protection pursuant to the Site Location of Development Act, 38 M.R.S. §481, et seq.;

- b. Will be designed and sited to avoid unreasonable adverse Shadow Flicker effects; and
- c. Will be constructed with setbacks adequate to protect public safety.

If such certification has not been issued at the time of application, the Applicant shall include written evidence that the Applicant has applied for certification.

# 10.2 Additional Submission Requirements for an Application for a Type 2 and 3 Wind Energy Facility

- 1. Certificates of design compliance obtained by the equipment manufacturers from Underwriters Laboratories, Det Norske Veritas, or other similar certifying organizations.
- 2. Decommissioning plan in conformance with Appendix C.
- 3. Written summary of operation and maintenance procedures for the Wind Energy Facility and a maintenance plan for access roads, erosion and sedimentation controls and storm water management facilities.
- 4. Standard boundary survey of the subject property stamped by a Maine-licensed surveyor. The Belgrade Planning Board may waive this requirement if it determines that the Applicant has provided information sufficient to identify property boundaries to the extent necessary.
- 5. Visual impact assessment, if required pursuant to section 14.5.
- 6. Stormwater management plan stamped by a Maine-licensed professional engineer.
- 7. Sound level analysis, prepared by a qualified engineer, which addresses the standards of section 14.1.
- 8. Shadow Flicker analysis based on WindPro or other modeling software approved by the Department of Environmental Protection.
- 9. Foundation and anchoring system drawings that are stamped by a Maine-licensed professional engineer.
- 10. Other relevant studies, reports, certifications and approvals as may be reasonably requested by the Belgrade Planning Board to ensure compliance with this Ordinance.

## 11.0 Meteorological Towers (MET Towers)

Applications for Meteorological (MET) Towers shall be subject to the submission and review standards for a Type 1A Wind Energy Facility, as applicable, except that no height limitation shall apply. A permit for a MET Tower shall be valid for 2 years and 2 months from the date of issuance. The Code Enforcement Officer may grant one or more one-year extensions of this permit period. Within 30 days following removal of a MET Tower, the Applicant shall restore the site to its original condition to the extent practicable. The provisions of this section do not apply to permanent MET Towers included as Associated Facilities in approved Wind Energy Facility applications.

#### 12.0 General Standards

### 12.1 Safety Setbacks

Wind Turbines shall be set back a horizontal distance equivalent to 150% of the Turbine Height from property boundaries, public and private rights-of-way and overhead utility lines that are not part of the proposed Generating Facility except that the entity responsible for review and approval of the application may allow a reduced setback if the Applicant submits, in writing: 1) a waiver of the property boundary setback signed by the pertinent abutting landowner or; 2) evidence, such as operating protocols, safety programs, or recommendations from the manufacturer or a licensed professional engineer with appropriate expertise and experience with Wind Turbines, that demonstrates that the reduced setback proposed by the Applicant is appropriate.

#### 12.2 Natural Resource Protection

A Wind Energy Facility shall not have an unreasonable adverse effect on rare, threatened, or endangered wildlife, significant wildlife habitat, rare, threatened or endangered plants and rare and exemplary plant communities. In making its determination under this subsection, the municipal entity responsible for review and approval of the permit application under section 9.1 shall consider pertinent application materials and the written comments and/or recommendations, if any, of the Maine Department of Inland Fisheries and Wildlife (MDIFW) Environmental Coordinator and the Maine Natural Areas Program (MNAP).

## 12.3 Building Permit

All components of the Wind Energy Facility shall conform to relevant and applicable local and state building Code.

## 12.4 Overspeed Controls and Brakes

Each Wind Turbine shall be equipped with an overspeed control system that: 1) includes both an aerodynamic control such as stall regulation, variable blade pitch, or other similar system, and a mechanical brake that operates in fail safe mode; or 2) has been designed by the manufacturer or a licensed civil engineer and found by the municipal entity responsible for review and approval of the application under 9.1, based on its review of a written description of the design and function of the system, to meet the needs of public safety.

## 12.5 Electrical Components and Interconnections

All electrical components of the Wind Energy Facility shall conform to relevant and applicable local, state, and national Code.

#### 12.6 Access

All ground-mounted electrical and control equipment and all access doors to a Wind Turbine shall be labeled and secured to prevent unauthorized access. A Wind Tower shall not be climbable up to a minimum of fifteen (15) feet above ground surface.

### 12.7 Blade Clearance

The minimum distance between the ground and all blades of a Wind Turbine shall be 25 feet as measured at the lowest arc of the blades.

#### 12.8 Signal Interference

The Applicant shall make reasonable efforts to avoid and mitigate to the extent practicable any disruption or loss of radio, telephone, television, or similar signals caused by the Wind Energy Facility.

# 12.9 Structure Type

With the exception of Meteorological (MET) Towers, Towers shall be monopoles with no guy wires. This requirement may be waived if the Applicant demonstrates to the satisfaction of the municipal entity responsible for review and approval of the permit application under section 9.1, that there is no practicable alternative. Bird flight diverters must be installed on any guy wires that are permitted.

#### 12.10 Erosion Control

Erosion of soil and sedimentation shall be minimized by employing "best management practices" in the "Maine Erosion Control Handbook for Construction: Best Management Practices", March 2003.

## 12.11 Building-Mounted Wind Turbines

Building-mounted Wind Turbines are not permitted.

### 12.12 Visual Appearance

- 1. A Wind Turbine shall be a non-obtrusive color such as white, off-white or gray, or as may otherwise be required by another governmental agency with jurisdiction over the Wind Energy Facility.
- 2. A Wind Turbine shall not be lighted artificially, except to the extent consistent with Federal Aviation Administration recommendations or other applicable authority that regulates air safety or as is otherwise required by another governmental agency with jurisdiction over the Wind Energy Facility.
- 3. A Wind Turbine shall not be used to support signs and shall not display advertising except for reasonable and incidental identification of the turbine manufacturer, facility owner and operator, and for warnings.

# 12.13 Visibility of Wind Turbine

The following requirements apply, to the extent practicable, to Type 1 B and Type 2 Wind Energy Facilities:

- 1. To the extent that doing so does not inhibit adequate access to the wind resource, each Wind Turbine shall be located to maximize the effectiveness of existing vegetation, structures and topographic features in screening views of the Wind Turbine from Occupied Buildings and Scenic Resources.
- 2. When existing features do not screen views of a Wind Turbine from Residences and Scenic Resources, screening may be required, where feasible and effective, through the planting of trees and/or shrubs. In order to maximize the screening effect and minimize wind turbulence near the Wind Turbine, plantings should be situated as near as possible to the point from which the Wind Turbine is being viewed. Such plantings should be of native varieties.

## 13.0 Special Standards for Type 1A and Type 1B Wind Energy Facilities

- Noise emanating from a Type 1A or Type1 B Wind Energy Facility shall be controlled in accordance with the provisions of this section or, upon the written request of the applicant, the provisions of section 14.1. If the Applicant chooses review under section 14.1, the provisions of 13.1.1, 13.1.2 and 13.1.6 shall apply, but the provisions of 13.1.3, 13.1.4 and 13.1.5 shall not apply.
  - 1. The sound level limits contained in this section apply only to areas that are defined as Protected Locations and to property boundaries that describe the outer limits of the facility site in combination with any parcel(s) owned by a Participating Land-Owner that are contiguous with the facility site.
  - 2. The sound level limits contained in this section do not apply to the facility site or any parcel(s) owned by a Participating Land-Owner that are contiguous with the facility site.
  - 3. The sound levels resulting from routine operation of a Wind Energy Facility, as measured in accordance with the procedures described in section 13.1.5 shall not exceed the limits specified for the following locations and times:
    - a. At a Protected Location with no living and sleeping quarters: 55 dBA during the Protected Location's regular hours of operation
    - b. At a Protected Location with living and sleeping quarters:
      - i. Area(s) within 500 feet of living and sleeping quarters: 45 dBA between 7:00 p.m. and 7:00 a.m. / 55 dBa between 7:00 a.m. and 7:00 p.m.
      - ii. Area(s) more than 500 feet from living and sleeping quarters: 55dBA at all times.
    - c. At property boundaries that describe the outer limits of the facility site combined with any parcel(s) owned by a Participating Land-Owner that are contiguous with the facility site: 75 dBA at all times.
  - 4. If the Applicant submits the certification and acknowledgement required by Section 10.1.12(1), the municipal entity responsible for review and approval of the application under Section 9.1 shall determine, for purposes of issuing its approval, that the pertinent sound-level limits under section 13.1.1 have been met, subject to the Applicant's obligation to take remedial action as necessary under section 13.1.4.
  - 5. The Code Enforcement Office may perform measurements of sound levels resulting from routine operation of an installed Type 1A or Type 1 B Wind Energy Facility at the officer's own initiative or in response to a noise-related complaint to determine compliance with the pertinent standards in section 13.1.1. Such measurements shall be performed as follows:
    - a. Measurements shall be obtained during representative weather conditions when the sound of the Wind Energy Facility is most clearly noticeable. Preferable weather conditions for sound measurements at distances greater than about 500 feet from the sound source include overcast days when the measurement location is downwind of the Wind Turbine and inversion periods (which most commonly occur at night).
    - b. Sound levels shall be measured at least four (4) feet above the ground by a meter set on the A-weighted response scale, fast response. The meter shall meet the latest

- version of American National Standards Institute (ANSI S1.4.) "American Standard Specification for General Purpose Sound Level Meters" and shall have been calibrated at a recognized laboratory within the past year.
- c. 5 dBA shall be added to sound levels of any Short Duration Repetitive Sound measured in accordance with paragraphs a and b.
- 6. The Applicant shall operate the proposed Wind Energy Facility in conformance with the sound level limits of section 13.1 or section 14.1, as applicable. If, based on post-installation measurements taken in accordance with section 13.1.3 or section 14.1, as applicable, the Code Enforcement Officer determines that the applicable sound-level limits are not being met, the Applicant shall, at the Applicant's expense and in accordance with the Belgrade Wind Energy Facility Ordinance and in consultation with the Code Enforcement Officer, take remedial action deemed necessary by the Code Enforcement Officer to ensure compliance with those limits. Remedial action that the Code Enforcement Officer may require, includes, but shall not be limited to, one or more of the following:
  - a. modification or limitation of operations during certain hours or wind conditions;
  - b. maintenance, repair, modification or replacement of equipment;
  - c. relocation of the Wind Turbine(s); and,
  - d. removal of the Wind Turbine(s) provided that the Code Enforcement Officer may require removal of the Wind Turbine(s) only if the Code Enforcement Officer determines that there is no practicable alternative.

# 13.2 Discontinued Use

- 1. A Type 1A or Type 1 B Wind Energy Facility that is not generating electricity for twelve (12) consecutive months shall be deemed a discontinued use and shall be removed from the property by the Applicant within 120 days of receipt of notice from the Code Enforcement Officer, unless the Applicant provides information that the Belgrade Planning Board deems sufficient to demonstrate that the project has not been discontinued and should not be removed. If the Wind Energy Facility is not removed within this time period, the municipality may remove the turbine at the Applicant's expense. The Applicant shall pay all site reclamation costs deemed necessary and reasonable to return the site to its pre-construction condition, including the removal of roads and reestablishment of vegetation.
- 2. If a surety has been given to the municipality for removal of a Type 1 B Wind Energy Facility, the Applicant may apply to the Belgrade Planning Board for release of the surety when the Wind Energy Facility has been removed to the satisfaction of the Code Enforcement Officer.

### 14.0 Special Standards for Type 2 and Type 3 Wind Energy Facilities

#### 14.1 Control of Noise

Noise emanating from a Type 2 Wind Energy Facility, a Type 3 Wind Energy Facility, or, upon written request of the Applicant pursuant to section 13.1, a Type 1A or Type 1 B Wind Energy Facility shall be controlled in accordance with the provisions of Appendix B

If there is a conflict between a provision of Appendix B and another provision of this ordinance, the provision of Appendix B shall apply.

#### 14.2 Use of Public Roads

- 1. The Applicant shall identify all state and local public roads to be used within Belgrade to transport equipment and parts for construction, operation or maintenance of a Type 2 or Type 3 Wind Energy Facility.
- 2. The Town Engineer, Road Commissioner or a qualified third-party engineer reasonably acceptable to both the Belgrade Planning Board and the Applicant and paid for by the Applicant pursuant to Section 9.7 of the Ordinance, shall document road conditions prior to construction. The Town Engineer, Road Commissioner or third-party engineer shall document road conditions again thirty (30) days after construction is complete or as weather permits.
- 3. The Applicant shall demonstrate, to the satisfaction of the Belgrade Planning Board, that it has financial resources sufficient to comply with subsection 4, below, and the Belgrade Planning Board may require the Applicant to post a bond or other security in order to ensure such compliance.
- 4. Any road damage caused by the Applicant or its contractors shall be promptly repaired at the Applicant's expense.

# 14.3 Warnings

A clearly visible warning sign concerning voltage must be placed at the base of all pad-mounted transformers and substations.

#### 14.4 Artificial Habitat

To the extent practicable, the creation of artificial habitat for raptors or raptor prey shall be minimized. In making its determination under this subsection the Belgrade Planning Board shall consider comments and recommendations, if any, provided by the Maine Department of Inland Fisheries and Wildlife.

#### 14.5 Effect on Scenic Resources

- 1. Except as otherwise provided in this subsection, if a Type 2 or Type 3 Wind Energy Facility is proposed for location in or is visible from a Scenic Resource, the Applicant shall provide the Belgrade Planning Board a visual impact assessment that addresses the evaluation criteria in subsection 14.5.3. There is a rebuttable presumption that a visual impact assessment is not required for those portions of a Type 2 or Type 3 Wind Energy Facility that are located more than 3 miles, measured horizontally, from a Scenic Resource. The Belgrade Planning Board may require a visual impact assessment for portions of the Type 2 or Type 3 Wind Energy Facility located more than 3 miles and up to 8 miles from a Scenic Resource if it finds that a visual impact assessment is needed to determine if there is the potential for significant adverse effects on the Scenic Resource. Information intended to rebut the presumption must be submitted to the Belgrade Planning Board by any interested Person within 30 days of acceptance of the application as complete. The Belgrade Planning Board shall determine if the presumption is rebutted based on a preponderance of evidence in the record.
- 2. The Belgrade Planning Board shall determine, based on consideration of the evaluation criteria in subsection 14.5.3, whether the Type 2 or 3 Wind Energy Facility significantly compromises views from a Scenic Resource such that the proposed facility has an unreasonable adverse effect on the scenic character or existing uses related to scenic character of that Scenic Resource.
- 3. In making its determination pursuant to subsection 14.5.2, and in determining whether an Applicant for a Type 2 or 3 Wind Energy Facility located more than 3 miles from a Scenic Resource must provide a visual impact assessment in accordance with subsection 14.5.1, the Belgrade Planning Board shall consider:

- a. The significance of the potentially affected Scenic Resource;
- b. The existing character of the surrounding area;
- c. The expectations of the typical viewer;
- d. The Type 2 or Type 3 Wind Energy Facility's purpose and the context of the proposed activity;
- e. The extent, nature and duration of potentially affected public uses of the Scenic Resource and the potential effect on the public's continued use and enjoyment of the Scenic Resource; and
- f. The scope and scale of the potential effect of views of the Wind Energy Facility on the Scenic Resource, including but not limited to issues related to the number and extent of Wind Turbines visible from the Scenic Resource, the distance from the Scenic Resource and the effect of prominent features of the Wind Energy Facility on the landscape.

A finding by the Belgrade Planning Board that the Type 2 or Type 3 Wind Energy Facility is a highly visible feature in the landscape is not a solely sufficient basis for determination that it has an unreasonable adverse effect on the scenic character and existing uses related to scenic character of a Scenic Resource. In making its determination under subsection 14.5.2, the Belgrade Planning Board shall consider insignificant the effects of portions of a Type 2 or Type 3 Wind Energy Facility located more than 8 miles, measured horizontally, from a Scenic Resource.

#### 14.6 Shadow Flicker

Type 2 and Type 3 Wind Energy Facilities shall be designed to avoid unreasonable adverse shadow flicker effect at any Occupied Building located on a Non-Participating Landowner's property.

# 14.7 Relationship to DEP Certification and Permitting

- 1. For a Type 2 Wind Energy Facility for which a DEP Certification has been submitted in accordance with section 10.1.14, the Belgrade Planning Board shall consider, to the extent applicable, pertinent findings in that certification when making its determination under sections 12.1, 14.1, and 14.6. There is a rebuttable presumption that a Wind Energy Facility that has obtained DEP Certification meets the requirements of sections 12.1, 14.1, and 14.6. The Belgrade Planning Board may, as a condition of approval of a Type 2 Wind Energy Facility that generates energy for sale or use by a person other than the generator, deem DEP's issuance of a certificate for the development sufficient to meet, in whole or in part, as applicable, the requirements of sections 12.1, 14.1, 14.6.
- 2. If DEP has issued a Site Location of Development Act permit for a Type 3 Wind Energy Facility pursuant to 38 M.R.S. § 484(3), there is a rebuttable presumption that the development meets the requirements of sections 12.1 12.2, 14.1, 14.6, 14.12 and, as it pertains to Scenic Resources of state or national significance as defined by 35-A M.R.S. §3451 (9), section 14.5. The Belgrade Planning Board may, as a condition of approval of a Type 3 Wind Energy Facility, deem DEP's issuance of a permit for the development sufficient to meet, in whole or in part, as applicable, the requirements of sections 12.1, 12.2, 14.1, 14.6, 14.12 and, as it pertains to Scenic Resources of state or national significance, section 14.5.

### 14.8 Local Emergency Services

- 1. The Applicant shall provide a copy of the project summary and site plan to local emergency service providers, including paid or volunteer fire department(s).
- 2. Upon request, the Applicant shall cooperate with emergency service providers to develop and

coordinate implementation of an emergency response plan for a Type 2 or Type 3 Wind Energy Facility.

3. A Wind Turbine shall be equipped with an appropriate fire suppression system to address fires within the Nacelle portion of the turbine or shall otherwise address the issue of fire safety to the satisfaction of the Belgrade Planning Board.

## 14.9 Liability Insurance

The Applicant or an Applicant's designee acceptable to the Belgrade Planning Board shall maintain a current general liability policy for the Type 2 or Type 3 Wind Energy Facility that covers bodily injury and property damage with limits in an amount commensurate with the scope and scale of the Facility. The Applicant or its designee shall make certificates of insurance available to the Belgrade Planning Board upon request.

# 14.10 Design Safety Certification

Each Wind Turbine shall conform to applicable industry standards including those of the American National Standards Institute (ANSI) and at least one of the following: Underwriters Laboratories, Det Norske Veritas, Germanischer Llloyd Wind Energies, or other similar certifying organization.

#### 14.11 Public Inquiries and Complaints

- 1. The Applicant or its designee shall maintain a phone number and identify a responsible Person for the public to contact with inquiries and complaints throughout the life of the Wind Energy Facility.
- 2. The Applicant or its designee shall make reasonable efforts to respond to the public's inquiries and complaints and shall provide written copies of all complaints and the company's resolution or response to the Code Enforcement upon request.

## 14.12 Decommissioning

The Applicant shall prepare a decommissioning plan in conformance with Appendix C.

# Model Wind Energy Facility Ordinance – Appendix A

# **Application Fees**

To be determined by Planning Board / Selectmen / Town Council

## Control of Noise

Pursuant to section 14.1, noise emanating from a Type 2 Wind Energy Facility, a Type 3 Wind Energy Facility, or, upon written request of the Applicant pursuant to section 13.1, a Type 1A or Type 1B Wind Energy Facility, shall be controlled in accordance with the following provisions:

### A. Sound Level Limits

- (1) Sound from Routine Operation of Facility.
  - (a) Except as noted in subsections (b) and (c) below, the hourly sound levels resulting from routine operation of the facility and measured in accordance with the measurement procedures described in subsection F shall not exceed the following limits:
    - (i) At any property line of the facility site or contiguous property owned by the Applicant or Participating Land Owner(s), whichever is farther from the proposed facility's regulated sound sources:

75 dBA at any time of day.

(ii) At any Protected Location in an area for which the zoning, or, if unzoned, the existing use or use contemplated under a comprehensive plan, is not predominantly commercial, transportation, or industrial;

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60 dBA between 7:00 a.m. and 7:00 p.m. (the "daytime hourly limit"), and 50 dBA between 7:00 p.m. and 7:00 a.m. (the "nighttime hourly limit").
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(iii) At any Protected Location in an area for which the zoning, or, if unzoned, the existing use or use contemplated under a comprehensive plan, is predominantly commercial, transportation, or industrial:

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70 dBA between 7:00 a.m. and 7:00 p.m. (the "daytime hourly limit"), and 60 dBA between 7:00 p.m. and 7:00 a.m. (the 'nighttime hourly limit').
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- (iv) For the purpose of determining whether the use of an unzoned area is predominantly commercial, transportation, or industrial (e.g. non-residential in nature), the Code Enforcement Officer shall consider the municipality's comprehensive plan, if any. Furthermore, the usage of properties abutting each Protected Location shall be determined, and the limits applied for that Protected Location shall be based upon the usage occurring along the greater portion of the perimeter of that parcel; in the event the portions of the perimeter are equal in usage, the limits applied for that Protected Location shall be those for a Protected Location in an area for which the use is not predominantly commercial, transportation, or industrial.
- (v) When a proposed facility is to be located in an area where the daytime pre-development

ambient hourly sound level at a Protected Location is equal to or less than 45 dBA and/or the nighttime pre-development ambient hourly sound level at a Protected Location is equal to or less than 35 dBA, the hourly sound levels resulting from routine operation of the facility and measured in accordance with the measurement procedures described in subsection F shall not exceed the following limits at that Protected Location:

55 dBA between 7:00 a.m. and 7:00 p.m. (the "daytime hourly limit"), and 45 dBA between 7:00 p.m. and 7:00 a.m. (the "nighttime hourly limit").

For the purpose of determining whether a Protected Location has a daytime or nighttime predevelopment ambient hourly sound level equal to or less than 45 dBA or 35 dBA, respectively, the Applicant may make sound level measurements in accordance with the procedures in subsection F or may estimate the sound-level based upon the population density and proximity to local highways. If the resident population within a circle of 3,000 feet radius around a Protected Location is greater than 300 persons, or the hourly sound level from highway traffic at a Protected Location is predicted to be greater than 45 dBA in the daytime or 35 dBA at night, then the Applicant may estimate the daytime or nighttime pre-development ambient hourly sound level to be greater than 45 dBA, respectively.

NOTE: Highway traffic noise can be predicted using the nomograph method of FHWA Highway Traffic Noise Prediction Model, FHWA-RD-77-108, December 1978.

- (vi) Notwithstanding the above, the Applicant need not measure or estimate the pre-development ambient hourly sound levels at a Protected Location if he demonstrates, by estimate or example, that the hourly sound levels resulting from routine operation of the facility will not exceed 50 dBA in the daytime or 40 dBA at night.
- (b) If the Applicant chooses to demonstrate by measurement that the daytime and/or nighttime predevelopment ambient sound environment at any Protected Location near the facility site exceeds the daytime and/or nighttime limits in subsection 1(a)(ii) or 1(a)(iii) by at least 5 dBA, then the daytime and/or nighttime limits shall be 5 dBA less than the measured daytime and/or nighttime pre-development ambient hourly sound level at the location of the measurement for the corresponding time period.
- (c) For any Protected Location near an existing facility, the hourly sound level limit for routine operation of the existing facility and all future expansions of that facility shall be the applicable hourly sound level limit of 1(a) or 1(b) above, or, at the Applicant's election, the existing hourly sound level from routine operation of the existing facility plus 3 dBA.
- (d) For the purposes of determining compliance with the above sound level limits, 5 dBA shall be added to the observed levels of any tonal sounds that result from routine operation of the facility.
- (e) When routine operation of a facility produces short duration repetitive sound, the following limits shall apply:
  - (i) For short duration repetitive sounds, 5 dBA shall be added to the observed levels of the short duration repetitive sounds that result from routine operation of the facility for the purposes of determining compliance with the above sound level limits.

- (ii) For short duration repetitive sounds which the municipal entity responsible for review and approval of a pending application under section 9.1 determines, due to their character and/or duration, are particularly annoying or pose a threat to the health and welfare of nearby neighbors, 5 dBA shall be added to the observed levels of the short duration repetitive sounds that result from routine operation of the facility for the purposes of determining compliance with the above sound level limits, and the maximum sound level of the short duration repetitive sounds shall not exceed the following limits:
  - (a) At any Protected Location in an area for which the zoning, or, if unzoned, the existing use or use contemplated under a comprehensive plan, is not predominantly commercial, transportation, or industrial:
    - 65 dBA between 7:00 a.m. and 7:00 p.m., and 55 dBA between 7:00 p.m. and 7:00 a.m.
  - (b) At any Protected Location in an area for which the zoning, or, if unzoned, the existing use or use contemplated under a comprehensive plan, is predominantly commercial, transportation, or industrial:
    - 75 dBA between 7:00 a.m. and 7:00 p.m., and 65 dBA between 7:00 p.m. and 7:00 a.m.
  - (c) The methodology described in subsection 1 (a)(iv) shall be used to determine whether the use of an unzoned area is predominantly commercial, transportation, or industrial.
  - (d) If the Applicant chooses to demonstrate by measurement that the pre-development ambient hourly sound level at any Protected Location near the facility site exceeds 60 dBA between 7:00 a.m. and 7:00 p.m., and/or 50 dBA between 7:00 p.m. and 7:00 a.m., then the maximum sound level limit for short duration repetitive sound shall be 5 dBA greater than the measured pre-development ambient hourly sound level at the location of the measurement for the corresponding time period.
  - (e) For any Protected Location near an existing facility, the maximum sound level limit for short duration repetitive sound resulting from routine operation of the existing facility and all future expansions and modifications of that facility shall be the applicable maximum sound level limit of (e)(ii)(a) or (e)(ii)(b) above, or, at the Applicant's election, the existing maximum sound level of the short duration repetitive sound resulting from routine operation of the existing facility plus 3 dBA.

NOTE: The maximum sound level of the short duration repetitive sound shall be measured using the fast response [LAFmax]. See the definition of maximum sound level.

### (2) Sound from Construction of a Facility

- (a) The sound from construction activities between 7:00 p.m. and 7:00 a.m. is subject to the following limits:
  - (i) Sound from nighttime construction activities shall be subject to the nighttime routine operation sound level limits contained in subsections 1(a) and 1(b).
  - (ii) If construction activities are conducted concurrently with routine operation of the facility,

then the combined total of construction and routine operation sound shall be subject to the nighttime routine operation sound level limits contained in subsections 1(a) and 1(b).

- (iii) Higher levels of nighttime construction sound are permitted when a duly issued permit authorizing nighttime construction sound in excess of these limits has been granted by the Code Enforcement Officer.
- (b) Sound from construction activities between 7:00 a.m. and 7:00 p.m. shall not exceed the following limits at any Protected Location:

Duration of Activity	Hourly Sound Level Limit	
12 hours	87 dBA	
8 hours	90 dBA	
6 hours	92 dBA	
4 hours	95 dBA	
3 hours	97 dBA	
2 hours	100 dBA	
1 hour or less	105 dBA	

(c) All equipment used in construction on the facility site shall comply with applicable federal noise regulations and shall include environmental noise control devices in proper working condition, as originally provided with the equipment by its manufacturer.

#### (3) Sound from Maintenance Activities

- (a) Sound from routine, ongoing maintenance activities shall be considered part of the routine operation of the facility and the combined total of the routine maintenance and operation sound shall be subject to the routine operation sound level limits contained in subsection 1.
- (b) Sound from occasional, major, scheduled overhaul activities shall be subject to the construction sound level limits contained in subsection 2. If overhaul activities are conducted concurrently with routine operation and/or construction activities, the combined total of the overhaul, routine operation and construction sound shall be subject to the construction sound level limits contained in subsection 2.

#### **B.** Submissions

(1) Facilities with Minor Sound Impact.

An Applicant proposing facility with minor sound impact may choose to file, as part of the permit application, a statement attesting to the minor nature of the anticipated sound impact of their facility. An applicant proposing an expansion or modification of an existing facility with minor sound impact may follow the same procedure as described above. For the purpose of this ordinance, a facility or an expansion or modification of an existing facility with minor sound impact means a facility where the Applicant demonstrates, by estimate or example, that the regulated sound from routine operation of

the facility will not exceed 5 dBA less than the applicable limits established under Section A. It is the intent of this subsection that an applicant need not conduct sound level measurements to demonstrate that the facility or an expansion or modification of an existing facility will have a minor sound impact.

### (2) Other Facilities

Technical information shall be submitted describing the Applicant's plan and intent to make adequate provision for the control of noise. The applicant's plan shall contain information such as the following, when appropriate:

- (a) Maps and descriptions of the land uses, local zoning and comprehensive plans for the area potentially affected by sounds from the facility.
- (b) A description of major sound sources, including tonal sound sources and sources of short duration repetitive sounds, associated with the construction, operation and maintenance of the proposed facility, including their locations within the proposed facility.
- (c) A description of the daytime and nighttime hourly sound levels and, for short duration repetitive sounds, the maximum sound levels expected to be produced by these sound sources at Protected Locations near the proposed facility.
- (d) A description of the Protected Locations near the proposed facility.
- (e) A description of proposed major sound control measures, including their locations and expected performance.
- (f) A comparison of the expected sound levels from the proposed facility with the sound level limits of this regulation.

## C. Terms and Conditions

The municipal entity responsible for review and approval of the pending application under 9.1 may, as a term or condition of approval, establish any reasonable requirement to ensure that the Applicant has made adequate provision for the control of noise from the facility and to reduce the impact of noise on Protected Locations. Such conditions may include, but are not limited to, enclosing equipment or operations, imposing limits on hours of operation, or requiring the employment of specific design technologies, site design, modes of operation, or traffic patterns.

The sound level limits prescribed in this ordinance shall not preclude the municipal entity responsible for review and approval of the pending application under 9.1 from requiring an Applicant to demonstrate that sound levels from a facility will not unreasonably disturb wildlife or adversely affect wildlife populations in accordance with 12.2. In addition, the sound level limits shall not preclude the municipal entity responsible for review and approval of the pending application under 9.1, as a term or condition of approval, from requiring that lower sound level limits be met to ensure that the Applicant has made adequate provision for the protection of wildlife.

#### D. Waiver from Sound Level Limits

[Belgrade] recognizes that there are certain facilities or activities associated with facilities for which noise control measures are not reasonably available. Therefore, the municipal entity responsible for review and approval of the pending application under section 9.1 may grant a waiver from any of the sound level limits contained in this ordinance upon (1) a showing by the Applicant that he or she has made a comprehensive assessment of the available technologies for the facility and that the sound level limits cannot practicably be met with any of these available technologies, and (2) a finding by the municipal entity responsible for review and approval of the pending application under section 9.1 that the proposed facility will not have an unreasonable impact on Protected Locations. In addition, a waiver may be granted by the municipal entity responsible for review and approval of the pending application under section 9.1 if (1) a facility is deemed necessary in the interest of national defense or public safety and the Applicant has shown that the sound level limits cannot practicably be met without unduly limiting the facility's intended function, and (2) a finding is made by the municipal entity responsible for review and approval of the pending application under section 9.1 that the proposed facility will not have an unreasonable impact on Protected Locations. The municipal entity responsible for review and approval of the pending application under section 9.1 shall consider the request for a waiver as part of the review of a completed permit application. In granting a waiver, the municipal entity responsible for review and approval of the pending application under section 9.1 may, as a condition of approval, impose terms and conditions to ensure that no unreasonable sound impacts will occur.

#### **E.** Definitions

Terms used herein are defined below for the purpose of this noise regulation.

- (1) AMBIENT SOUND: At a specified time, the all-encompassing sound associated with a given environment, being usually a composite of sounds from many sources at many directions, near and far, including the specific facility of interest.
- (2) CONSTRUCTION: Activity and operations associated with the facility or expansion of the facility or its site.
- (3) EMERGENCY: An unforeseen combination of circumstances which calls for immediate action.
- (4) EMERGENCY MAINTENANCE AND REPAIRS: Work done in response to an emergency.
- (5) ENERGY SUM OF A SERIES OF LEVELS: Ten times the logarithm of the arithmetic sum of the antilogarithms of one-tenth of the levels. [Note: See Section F(4.2).]
- (6) EXISTING FACILITY: A Wind Energy Facility legally constructed before the effective date of this ordinance or a proposed Wind Energy Facility for which the Application is found complete on or before the effective date of this ordinance. Any facility with an approved permit application which has been remanded to the municipal entity responsible for review and approval of the application under 9.1 by a court of competent jurisdiction for further proceedings relating to noise limits or noise levels prior to the effective date of this ordinance shall not be deemed an existing facility and the ordinance shall apply to the existing noise sources at that facility.
- (7) EXISTING HOURLY SOUND LEVEL: The hourly sound level resulting from routine operation of an existing facility prior to the first expansion that is subject to this ordinance.

- (8) EQUIVALENT SOUND LEVEL: The level of the mean-square A-weighted sound pressure during a stated time period, or equivalently the level of the sound exposure during a stated time period divided by the duration of the period. (NOTE: For convenience, a one hour equivalent sound level should begin approximately on the hour.)
  - (9) HISTORIC AREAS: Historic sites administered by the Bureau of Parks and Lands of the Maine Department of Conservation, with the exception of the Arnold Trail.
  - (10)HOURLY SOUND LEVEL: The equivalent sound level for one hour measured or computed in accordance with this ordinance.
  - (11)LOCALLY-DESIGNATED PASSIVE RECREATION AREA: Any site or area designated by [Belgrade] for passive recreation that is open and maintained for public use and which:
  - (a) has fixed boundaries,
  - (b) is owned in fee simple by [Belgrade] or is accessible by virtue of public easement,
  - (c) is identified and described in [Belgrade] comprehensive plan, and
  - (d) has been identified and designated at least nine months prior to submission of the Applicant's Wind Energy Facility permit application.
  - (12)MAXIMUM SOUND LEVEL: Ten times the common logarithm of the square of the ratio of the maximum sound to the reference sound of 20 micropascals. Symbol: LAFmax.
  - (13)MAXIMUM SOUND: Largest A-weighted and fast exponential-time-weighted sound during a specified time interval. Unit: pascal (Pa).
  - (14)RESIDENCE: A building or structure, including manufactured housing, maintained for permanent or seasonal residential occupancy providing living, cooking and sleeping facilities and having permanent indoor or outdoor sanitary facilities, excluding recreational vehicles, tents and watercraft.
  - (15)PRE-DEVELOPMENT AMBIENT: The ambient sound at a specified location in the vicinity of a facility site prior to the construction and operation of the proposed facility or expansion.
  - (16) PROTECTED LOCATION: any location that is:
    - 1) accessible by foot, on a parcel of land owned by a Non-Participating Landowner containing a Residence or planned Residence, or an approved residential subdivision, house of worship, academic school, college, library, duly licensed hospital or nursing home near the facility site at the time an application for a Wind Energy Facility permit is submitted under this ordinance; or
    - 2) within a State Park, Baxter State Park, a National Park, a nature preserve owned by a land trust, the Maine Audubon Society or the Maine chapter of the Nature Conservancy, the Appalachian Trail, the Moosehorn National Wildlife refuge, a federally designated wilderness area, a state wilderness area designated by statute, a municipal park or a locally-designated passive recreation area, or any location within consolidated public reserve lands designated by rule by the Bureau of Public Lands as a Protected Location.

At Protected Locations more than 500 feet from living and sleeping quarters within the above noted buildings or areas, the daytime hourly sound level limits shall apply regardless of the time of day.

Houses of worship, academic schools, libraries, State and National Parks without camping areas, Historic Areas, nature preserves, the Moosehorn National Wildlife Refuge, federally-designated wilderness areas without camping areas, state wilderness areas designated by statute without camping areas, and locally-designated passive recreation areas without camping areas are considered protected locations only during their regular hours of operation.

Transient living accommodations are generally not considered Protected Locations; however, in certain special situations where it is determined by the municipal entity responsible for review and approval of the application under 9.1 that the health and welfare of the guests or the economic viability of the establishment will be unreasonably impacted, the municipal entity responsible for review and approval of the application under 9.1 may designate certain hotels, motels, campsites and duly licensed campgrounds as protected locations.

This term does not include buildings and structures located on leased camp lots, owned by the Applicant used for seasonal purposes.

For purposes of this definition, (1) a Residence is considered planned when the owner of the parcel of land on which the Residence is to be located has received all applicable building and land use permits and the time for beginning construction under such permits has not expired, and (2) a residential subdivision is considered approved when the developer has received all applicable land use permits for the subdivision and the time for beginning construction under such permits has not expired.

- (17)ROUTINE OPERATION: Regular and recurrent operation of regulated sound sources associated with the purpose of the facility and operating on the facility site.
- (18)SHORT DURATION REPETITIVE SOUNDS: A sequence of repetitive sounds which occur more than once within an hour, each clearly discernible as an event and causing an increase in the sound level of at least 6 dBA on the fast meter response above the sound level observed immediately before and after the event, each typically less than ten seconds in duration, and which are inherent to the process or operation of the facility and are foreseeable.
- (19) SOUND COMPONENT: The measurable sound from an audibly identifiable source or group of sources.
- (20)SOUND LEVEL: Ten times the common logarithm of the square of the ratio of the frequency-weighted and time-exponentially averaged sound pressure to the reference sound of 20 micropascals. For the purpose of this ordinance, sound level measurements are obtained using the A-weighted frequency response and fast dynamic response of the measuring system, unless otherwise noted.
- (22)SOUND PRESSURE: Root-mean-square of the instantaneous sound pressures in a stated frequency band and during a specified time interval. Unit: pascal (Pa).
- (23)SOUND PRESSURE LEVEL: Ten times the common logarithm of the square of the ratio of the sound pressure to the reference sound pressure of 20 micropascals.
- (24)TONAL SOUND: for the purpose of this ordinance, a tonal sound exists if, at a Protected Location, the one-third octave band sound pressure level in the band containing the tonal sound exceeds the arithmetic average of the sound pressure levels of the two contiguous one-third octave bands by 5 dB for center frequencies at or between 500 Hz and 10,000 Hz, by 8 dB for center frequencies at or between 160 and 400 Hz, and by 15 dB for center frequencies at or between 25 Hz and 125 Hz.

Additional acoustical terms used in work associated with this ordinance shall be used in accordance with

the following American National Standards Institute (ANSI) standards:

ANSI S12.9-1988 - American National Standard Quantities and Procedures for Description and Measurements of Environmental Sound, Part 1;

ANSI S3.20-1973 - American National Standard Psychoacoustical Terminology; ANSI S1.1-1960 - American National Standard Acoustical Terminology.

#### F. Measurement Procedures

(1) Scope. These procedures specify measurement criteria and methodology for use, with applications, compliance testing and enforcement. They provide methods for measuring the ambient sound and the sound from routine operation of the facility, and define the information to be reported. The same methods shall be used for measuring the sound of construction and maintenance activities.

### (2) Measurement Criteria

### 2.1 Measurement Personnel

Measurements shall be supervised by personnel who are well qualified by training and experience in measurement and evaluation of environmental sound, or by personnel trained to operate under a specific measurement plan approved by the municipal entity responsible for review and approval of the pending application under 9.1.

#### 2.2 Measurement Instrumentation

- (a) A sound level meter or alternative sound level measurement system used shall meet all of the Type 1 or 2 performance requirements of American National Standard Specifications for Sound Level Meters, ANSI S1 .4-1983.
- (b) An integrating sound level meter (or measurement system) shall also meet the Type 1 or 2 performance requirements for integrating/averaging in the International Electrotechnical Commission Standard on Integrating-Averaging Sound Level Meters, IEC Publication 804 (1985).
- (c) A filter for determining the existence of tonal sounds shall meet all the requirements of-American National Standard Specification for Octave-Band and Fractional Octave-Band Analog and Digital Filters, ANSI S1.11-1986 for Order 3, Type 3-D performance.
- (d) An acoustical calibrator shall be used of a type recommended by the manufacturer of the sound level meter and that meets the requirements of American National Standard Specification for Acoustical Calibrators, ANSI S1 .40-1984.
- (e) A microphone windscreen shall be used of a type recommended by the manufacturer of the sound level meter.

#### 2.3 Calibration

(a) The sound level meter shall have been calibrated by a laboratory within 12 months of the measurement, and the microphone's response shall be traceable to the National Bureau of Standards.

- (b) Field calibrations shall be recorded before and after each measurement period and at shorter intervals if recommended by the manufacturer.
- 2.4 Measurement Location, Configuration and Environment Except as noted in subsection (b) below, measurement locations shall be at nearby Protected Locations that are most likely affected by the sound from routine operation of the facility.
- (a) For determining compliance with the 75 dBA property line hourly sound level limit described in subsection A(1)(a)(i), measurement locations shall be selected at the property lines of the proposed facility or contiguous property owned by the Applicant, as appropriate.
- (b) The microphone shall be positioned at a height of approximately 4 to 5 feet above the ground, and oriented in accordance with the manufacturer's recommendations.
- (c) Measurement locations should be selected so that no vertical reflective surface exceeding the microphone height is located within 30 feet. When this is not possible, the measurement location may be closer than 30 feet to the reflective surface, but under no circumstances shall it be closer than 6 feet.
- (d) When possible, measurement locations should be at least 50 feet from any regulated sound source on the facility.
- (e) Measurement periods shall be avoided when the local wind speed exceeds 12 mph and/or precipitation would affect the measurement results.
- 2.5 Measurement Plans. Plans for measurement of pre-development ambient sound or post-facility sound may be discussed with the Code Enforcement Officer.

### (3) Measurement of Ambient Sound

#### 3.1 Pre-development Ambient Sound

Measurements of the pre-development ambient sound are required only when the Applicant elects to establish the sound level limit in accordance with subsections A(1)(b) and A(1)(e)(ii)(d) for a facility in an area with high ambient sound levels, such as near highways, airports, or pre-existing facilities; or when the Applicant elects to establish that the daytime and nighttime ambient hourly sound levels at representative Protected Locations exceed 45 dBA and 35 dBA, respectively.

- (a) Measurements shall be made at representative Protected Locations for periods of time sufficient to adequately characterize the ambient sound. At a minimum, measurements shall be made on three different weekdays (Monday through Friday) during all hours that the facility will operate. If the proposed facility will operate on Saturdays and/or Sundays, measurements shall also be made during all hours that the facility will operate.
- (b) Measurement periods with particularly high ambient sounds, such as during holiday traffic activity, significant insect activity or high coastline waves, should generally be avoided.
- (c) At any measurement location the daytime and nighttime ambient hourly sound level shall be computed by arithmetically averaging the daytime and nighttime values of the measured one hour

## Model Wind Energy Facility Ordinance - APPENDIX B

equivalent sound levels. Multiple values, if they exist, for any specific hour on any specific day shall first be averaged before the computation described above.

## 3.2 Post-Facility Ambient Sound

- (a) Measurements of the post-facility ambient one hour equivalent sound levels and, if short duration repetitive sounds are produced by the facility, the maximum sound levels made at nearby Protected Locations and during representative routine operation of the facility that are not greater than the applicable limits of subsection C clearly indicate compliance with those limits.
  - (b) Compliance with the limits of subsection A(1)(b) may also be demonstrated by showing that the post-facility ambient hourly sound level, measured in accordance with the procedures of subsection 3.1 above during routine operation of the facility, does not exceed the pre-development ambient hourly sound level by more than one decibel, and that the sound from routine operation of the facility is not characterized by either tonal sounds or short duration repetitive sounds.
  - (c) Compliance with the limits of subsection A(1)(e)(ii)(d) may also be demonstrated by showing that the post facility maximum sound level of any short duration repetitive sound, measured in accordance with the procedures of subsection 3.1 above, during routine operation of the facility, does not exceed the pre-development ambient hourly sound level by more than five decibels.
  - (d) .If any of the conditions in (a), (b) or (c) above are not met, compliance with respect to the applicable limits must be determined by measuring the sound from routine operation of the facility in accordance with the procedures described in subsection 4.
- (4) Measurement of the Sound from Routine Operation of Facility. 4.1 General
  - (a) Measurements of the sound from routine operation of facilities are generally necessary only for specific compliance testing purposes in the event that community complaints result from operation of the facility, for validation of an Applicant's calculated sound levels when requested by the municipal entity responsible for review and approval of the pending application under 9.1, for determination of existing hourly sound levels for an existing facility or for enforcement by the Code Enforcement Officer.
  - (b) Measurements shall be obtained during representative weather conditions when the facility sound is most clearly noticeable. Preferable weather conditions for sound measurements at distances greater than about 500 feet from the sound source include overcast days when the measurement location is downwind of the facility and inversion periods (which most commonly occur at night).
  - (c) Measurements of the facility sound shall be made so as to exclude the contribution of sound from facility equipment that is exempt from this regulation.
  - 4.2 Measurement of the Sound Levels Resulting from Routine Operation of the Facility.
  - (a) When the ambient sound levels are greater than the sound level limits, additional measurements can be used to determine the hourly sound level that results from routine operation of the facility. These additional measurements may include diagnostic measurements such as measurements made close to the facility and extrapolated to the Protected Location, special checkmark measurement techniques that include the separate identification of audible sound sources, or the use of sound level meters with pause capabilities that allow the operator to exclude non-facility sounds.

## Model Wind Energy Facility Ordinance - APPENDIX B

- (b) For the purposes of computing the hourly sound level resulting from routine operation of the facility, sample diagnostic measurements may be made to obtain the one hour equivalent sound levels for each sound component.
- (c) Identification of tonal sounds produced by the routine operation of a facility for the purpose of adding the 5 dBA penalty in accordance with subsection A(l)(d) requires aural perception by the measurer, followed by use of one-third octave band spectrum analysis instrumentation. If one or more of the sounds of routine operation of the facility are found to be tonal sounds, the hourly sound level component for tonal sounds shall be computed by adding 5 dBA to the one hour equivalent sound level for those sounds.
- (d) Identification of short duration repetitive sounds produced by routine operation of a facility requires careful observations. For the sound to be classified as short duration repetitive sound, the source(s) must be inherent to the process or operation of the facility and not the result of an unforeseeable occurrence. If one or more of the sounds of routine operation of the facility are found to be short duration repetitive sounds, the hourly sound level component for short duration repetitive sounds shall be computed by adding 5 dBA to the one hour equivalent sound level for those sounds. If required, the maximum sound levels of short duration repetitive sounds shall be measured using the fast response [LAFmax]. The duration and the frequency of occurrence of the events shall also be measured. In some cases, the sound exposure levels of the events may be measured. The one hour equivalent sound level of a short duration repetitive sound may be determined from measurements of the maximum sound level during the events, the duration and frequency of occurrence of the events, and their sound exposure levels.
- (e) The daytime or nighttime hourly sound level resulting from routine operation of a facility is the energy sum of the hourly sound level components from the facility, including appropriate penalties, (see (c) and (d) above). If the energy sum does not exceed the appropriate daytime or nighttime sound level limit, then the facility is in compliance with that sound level limit at that Protected Location.
- (5) Reporting Sound Measurement Data. The sound measurement data report should include the following:
  - (a) The dates, days of the week and hours of the day when measurements were made.
  - (b) The wind direction and speed, temperature, humidity and sky condition.
  - (c) Identification of all measurement equipment by make, model and serial number.
  - (d) The most recent dates of laboratory calibration of sound level measuring equipment.
  - (e) The dates, times and results of all field calibrations during the measurements.
  - (f) The applicable sound level limits, together with the appropriate hourly sound levels and the measurement data from which they were computed, including data relevant to either tonal or short duration repetitive sounds.
  - (g) A sketch of the site, not necessarily to scale, orienting the facility, the measurement locations, topographic features and relevant distances, and containing sufficient information for another investigator to repeat the measurements under similar conditions.
  - (h) A description of the sound from the facility and the existing environment by character and location.

## Model Wind Energy Facility Ordinance - APPENDIX C

#### APPENDIX C

## **Decommissioning Plan**

Pursuant to section 14.12, the Applicant shall provide a plan for decommissioning a Type 2 or Type 3 Wind Energy Facility. The decommissioning plan shall include, but shall not be limited to the following:

- 1. A description of the trigger for implementing the decommissioning plan. There is a rebuttable presumption that decommissioning is required if no electricity is generated for a continuous period of twelve (12) months. The Applicant may rebut the presumption by providing evidence, such as a force majeure event that interrupts the generation of electricity, that although the project has not generated electricity for a continuous period of 12 months, the project has not been abandoned and should not be decommissioned.
- 2. A description of the work required to physically remove all Wind Turbines, associated foundations to a depth of 24 inches, buildings, cabling, electrical components, and any other Associated Facilities to the extent they are not otherwise in or proposed to be placed into productive use. All earth disturbed during decommissioning must be graded and re-seeded, unless the landowner of the affected land requests otherwise in writing.

[Note: At the time of decommissioning, the Applicant may provide evidence of plans for continued beneficial use of any or all of the components of the Wind Energy Facility. Any changes to the approved decommissioning plan shall be subject to review and approval by the Code Enforcement Officer.]

- 3. An estimate of the total cost of decommissioning less salvage value of the equipment and itemization of the estimated major expenses, including the projected costs of measures taken to minimize or prevent adverse effects on the environment during implementation of the decommissioning plan. The itemization of major costs may include, but is not limited to, the cost of the following activities: turbine removal, turbine foundation removal and permanent stabilization, building removal and permanent stabilization, transmission corridor removal and permanent stabilization and road infrastructure removal and permanent stabilization.
- 4. Demonstration in the form of a performance bond, surety bond, letter of credit, parental guarantee or other form of financial assurance as may be acceptable to the Belgrade Planning Board that upon the end of the useful life of the Wind Energy Facility the Applicant will have the necessary financial assurance in place for 100% of the total cost of decommissioning, less salvage value. The Applicant may propose securing the necessary financial assurance in phases, as long as the total required financial assurance is in place a minimum of 5 years prior to the expected end of the useful life of the Wind Energy Facility.

## **TOWN OF BELGRADE**

## PERSONAL WIRELESS SERVICE FACILITIES SITING ORDINANCE

#### 1. Title and Purpose

This ordinance shall be known and cited as the "Town of Belgrade Personal Wireless Service Facilities Siting Ordinance" hereinafter referred to as "this Ordinance".

The purpose of this Ordinance is to establish balanced regulations for the siting of personal wireless service facilities within the Town of Belgrade. The requirements of the Ordinance are intended to:

- a. Provide for siting of personal wireless service facilities while avoiding potential damage to abutting properties;
- b. To minimize any adverse impact on sensitive environmental areas as designated by the Department of Inland Fisheries and Wildlife;
- c. To maximize the use of approved or preexisting sites within the coverage area to reduce the number of personal wireless service facilities needed to serve the community; and
- d. To maintain to the greatest extent possible, the character of the existing site.
- e. To accommodate the communication needs of residents and businesses, while protecting the public health, safety and general welfare of the community.

#### 2. Authority

This Ordinance is adopted pursuant to Home Rule provisions of Title 30-A of the Maine Revised Statutes Annotated, Section 3001, et. seq.

#### 3. Conflict with other Ordinances

- a. Any applications shall be subject to all applicable Federal, State and Town of Belgrade regulations as well as this Ordinance.
- b. Whenever a provision of this Ordinance conflicts with or is inconsistent with any other Federal, State or Town of Belgrade ordinance or standard, the more restrictive provision shall apply.

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## 4. Severability

Should any section or provision of this Ordinance be declared by any court to be invalid, such decision shall not invalidate any other section or provision.

#### 5. Effective Date

The effective date of this Ordinance shall be the date of adoption by voters at a Town Meeting scheduled for this purpose.

#### 6. Definitions

As used in this Ordinance, unless the context otherwise indicates, the terms referenced below have the following meanings:

- "Accessory Structure" is a structure which is incidental and subordinate to the principal use or structure.
- "Accessory Use" is a use which is incidental and subordinate to the principal use. Accessory uses, when aggregated, shall not subordinate the principal use of the lot.
- "Alternative Tower Structure" is defined as clock towers, church steeple, light poles, water towers and similar alternative-design mounting structures that camouflage or conceal the presence of towers.
- "Antenna" is the surface from which electromagnetic frequency signals are sent or received by the personal wireless service facility.
- "Camouflaged" means personal wireless service facilities are disguised, hidden, part of an existing or proposed structure or placed within an existing or proposed structure.
- "Co-location" means the use of a single mount on the ground by more than one carrier and/or several mounts on an existing building or structure by more than one carrier.
- "Equipment Shelter" is an enclosed structure, shed or box at or near the base of the mount within which are housed equipment for personal wireless service facilities, such as batteries and electrical equipment. Equipment shelters sometimes are referred to as base receiver stations.
- "FAA" means the Federal Aviation Administration, or its lawful successor.
- "FCC" means the Federal Communications Commission, or its lawful successor.
- **"Guyed Tower"** is a tower that is tied to the ground or other surface by diagonal cables for lateral support.
- "Height" means, when referring to a tower or other structure, the distance measured from ground level to the highest point on the tower or other structure, even if said highest point is an antenna.

- "Lattice Tower" means a type of mount that is self-supporting with multiple legs and cross-bracing of structural steel.
- "Licensed Carrier" is a company authorized by the FCC to construct and operate a commercial mobile radio services system.
- "Mast" is a pole that resembles a street light standard or telephone pole.
- "Monopole" is a type of mount, normally thicker than a mast that is self supporting with a single shaft of concrete, steel or wood, which is designed for the placement of antennas or arrays along the shaft.
- "Mount" is the structure or surface upon which antennas are mounted. Antennas may be mounted on the roof of a building (roof-mounted), on the side of a building (side-mounted), mounted on the ground (ground-mounted), or mounted on a structure other than a building (structure-mounted).
- "Parabolic Antenna" means an antenna which is bowl-shaped, designed for the reception and/or transmission of electromagnetic radiation signals in a specific directional pattern.
- "Personal Wireless Service Facility" or "Wireless Service Facility" or "Facility" means any structure, antenna, tower or other device which provides personal wireless services.
- "Personal Wireless Services" includes any personal wireless service defined in the Federal Telecommunications Act of 1996, which includes FCC licensed commercial wireless telecommunications services, including cellular, personal communications services (PCS), specialized mobile radio (SMR), enhanced specialized mobile radio (ESMR), paging and unlicensed wireless services, and common carrier wireless exchange access services.
- **"Propagation Studies"** are computer generated estimates prepared by a professional radio frequency engineer of the signal emanating, and prediction of coverage, from antennas or repeaters sited on a specific personal wireless service facility or structure.
- "Site" means the lot, tract or parcel upon which the personal wireless service facility is located.
- "Structure" means anything built for the support, shelter or enclosure of persons, animals, goods or property of any kind, together with anything constructed or erected with a fixed location on or in the ground, exclusive of fences.
- **"Tower"** means any structure, whether free standing or in association with a building or other permanent structure, primarily for the purposes of supporting one or more antennas, including self-supporting lattice towers, guy towers, or monopole towers.

#### 7. Exemptions

The following are exempt from the provisions of this Ordinance:

- a. Amateur (Ham) radio stations licensed by the FCC.
- b. Parabolic antennas of 10 feet or less in diameter that are an accessory use of the property.
- c. Maintaining or repair of a personal wireless service facility and existing equipment, provided that there is no change in the height or other dimensions of the facility.
- d. Temporary personal wireless service facility in operation for a maximum period of 30 (thirty) days.
- e. Residential antennas that are an accessory to a residential dwelling unit, such as a television or radio antenna.

### 8. Permit Required

No person shall place, construct, erect, or expand a wireless service facility unless a permit first has been obtained from the Town of Belgrade Planning Board.

## 9. General Filing Requirements

An application for a personal wireless service facility siting permit must include the name, address, and telephone number of the applicant and any co-applicants, including landowners, as well as agents for the same. Signed permission is required from the registered landowner of any site.

## 10. Specific Application Requirements

- a. An application for a personal wireless service facility siting permit must also include the following, at the cost of the applicant:
- b. A site plan prepared and reviewed by a professional engineer registered to practice in Maine indicating the location, type, and height of the proposed facility and any accessory structure, loading/antenna capacity, on-site and abutting off-site land uses, means of access, and setbacks from property lines. The site plan must include certification by a professional engineer registered in Maine that the design and construction of the proposed facility meets accepted industry standards and satisfies all federal, state, and local building code requirements. The Board may also require an independent review of the site plan by a professional engineer or independent consultant at the applicant's expense.
- c. A United States Geological Survey 7.5 minute topographical map showing the current location of all structures and personal wireless service facilities above 100 feet in height from ground level, except antennas located on roof tops, within a 5 mile radius of the proposed facility.
- d. A list of all abutting property owners and evidence that written notification has been provided to them (through certified mail delivery) of the intended application.

- e. Documentation of the applicant's search for appropriate sites for the location of a personal wireless communications facility and the rationale for selecting the site under consideration.
- f. Verification of contact with all other owners of facilities for commercial mobile radio or wireless transmission operating within a 5 mile radius, inquiring as to the feasibility of colocating the proposed personal wireless service facility on a pre-existing tower or structure.
- g. Proof of the need for a new structure and that co-location on an existing structure is not available. In addition, the applicant shall present proof that there is a contracted first tenant. Propagation studies for the proposed location as well as for any existing or approved personal wireless service facility within a 5 mile radius of the proposed site.
- h. Photo simulations of the proposed facility taken from perspectives determined by the Planning Board. Each photo should be labeled with line of sight, elevation, and the date taken. Photos must demonstrate the color of the proposed facility and method of screening.
- i. Elevation drawings of the proposed facility, showing height above ground level.
- j. A landscaping plan indicating the proposed placement of the facility on the site; location of existing structures, trees, and other significant site features; the type and location of plants proposed to screen the facility; the method of fencing, the access road design and the color of the structure.
- k. A balloon test, illustrating the proposed height and location of a personal wireless service facility, may be required at applicant expense. Adequate notice to the public of the test shall be given by the applicant. The Planning Board will determine what photos will be taken.

#### 11. Location/Co-location

- a. Co-Location Opportunities: Applicants seeking approval for siting of new personal wireless service facilities shall first evaluate the suitability of existing structures or approved sites. Only after finding that there are no suitable existing structures or approved sites for co-location, shall a provider propose a new ground mounted facility. Personal wireless service facilities that may be suitable for co-location include but are not limited to buildings, water towers, flag poles, telecommunication facilities, utility poles or existing personal wireless service facilities and related facilities.
- b. Burden of Proof: The applicant shall have the burden of proving that there are no colocation opportunities which are suitable to locate its personal wireless service facility.
- c. The applicant and owner shall allow other future wireless service carriers, using functionally equivalent personal wireless technology to co-locate antennas, equipment and facilities on the personal wireless service facility they are proposing, unless satisfactory evidence is presented and the Planning Board concurs that technical constraints prohibit co-location. In addition, space shall be provided at no charge to public agencies that benefit the Town of Belgrade; namely police, fire, ambulance, communication and highway, including internet access if requested at the time of review

of the application by the Planning Board and as determined to be appropriate by the Planning Board.

#### 12. Dimensional Requirements

- a. The height of any proposed personal wireless service facility shall not exceed two hundred (200) feet. No expanded personal wireless service facility shall exceed the height of two hundred (200) feet.
- b. Subject to approval of a Town of Belgrade Planning Board permit, new personal wireless service facilities that are located on water towers, electric transmission and distribution towers, utility poles and similar existing utility structures, guyed towers, lattice towers, masts, and monopoles, may be increased in height, but in no event shall the resulting height be more than two hundred (200) feet.

### 13. Setbacks/Appearance

- a. All personal wireless service facilities, guys and accessory facilities shall be setback from any residences or property lines by a minimum of 125% (percent) of the height of the facility; however it may not be closer than two hundred and fifty (250) feet of a structure located on abutting property without written consent of the abutting property owner.
- b. All personal wireless service facilities shall be galvanized steel or finished in a neutral color so as to reduce visual obstructiveness.
- c. When a personal wireless service facility extends above the roof height of a building on which it is mounted, every effort shall be made to conceal or camouflage the facility within or behind existing or new architectural features to limit its visibility from public ways.

#### 14. Lighting/Signage/Security/Access Roads/Equipment Shelters

- a. Personal wireless service facilities shall not be artificially lit, except for manually operated emergency lights for use when operating personnel are on site.
- b. A security fence or wall of not less than eight (8) feet in height from the finished grade shall be provided around the tower. Access to the tower shall be through a locked gate.
- c. No advertising signs or signage is permitted on personal wireless service facilities, except for signs that are needed to identify the property and the owner and to warn of potential hazards. A clearly visible sign with emergency contact information should be provided on site
- d. Road access to the personal wireless service facility shall be limited to a single roadway, which must be designed to harmonize with the topographic and natural features of the site by minimizing filling, grading, excavation, or similar activities which result in unstable soil conditions and soil erosion. The access roadway must follow the natural contour of the land and should not involve excessive grading or tree removal. Curvilinear roads shall be used as access roads to prevent direct line of site from the town road access point to the tower site. Existing vegetation should be maintained to the extent practical. All practical steps must be taken to prevent a visible scar up or across a ridgeline.

- e. The base of the tower shall not be located in a wetland or floodplain.
- f. At the site, the design of the facility and accessory structures shall use materials, colors, textures, screening and landscaping that will blend the personal wireless service facility to the natural setting as much as possible. The required security fence shall also use materials that blend in to the natural setting as much as possible. The Planning Board will determine if the style of fencing and/or landscape buffer is compatible with the surrounding area.

## 15. Application Procedure

- a. Applicants must fulfill the application requirements as outlined in this Ordinance and present the material to the Belgrade Planning Board.
- b. A Public Hearing may be called for the application at the discretion of the Planning Board. The applicant is required to cover the additional costs of this process. The fee is to be determined by the Board of Selectmen as below.

#### 16. Application Fee

A non-refundable application fee (at a level determined by the Board of Selectmen) per proposed personal wireless service facility, payable to the Town of Belgrade, must be submitted with the application. In addition, the applicant is responsible for all out of pocket expenses, relating to the application.

#### 17. Hazardous Waste

No hazardous waste shall be discharged on the site of any personal wireless service facility. If any hazardous materials are to be used on site, there shall be provisions for full containment of such materials and the owner or operator of the personal wireless services facility shall comply with all local, state and federal laws, codes, rules regulations, orders and ordinances in the handling and disposal of such materials. An enclosed containment area shall be provided with a sealed floor, designed to contain at least one hundred and ten (110) percent of the volume of the hazardous materials stored or used on site. In the event of leakage, the owner is responsible for all costs related to cleanup of the site and affected surrounding areas.

#### 18. Maintenance

The owner and/or operator of the personal wireless service facility shall maintain the structure in good condition. Such maintenance shall include, but is not limited to: painting, structural integrity of the mount and security barrier, any buffer areas, fencing and landscaping.

## 19. Monitoring

a. On an annual basis, the personal wireless service facility owner shall provide the Town of Belgrade with evidence of compliance with federally mandated safety levels for radio frequency electromagnetic fields and radio frequency radiation exposure levels, to include copies of any reports filed with the FCC.

b. The personal wireless service facility owner shall arrange for a licensed structural engineer to conduct regular inspections of the personal wireless service facility's structural integrity and safety at least every five years. A report of the inspection results shall be submitted to the Town of Belgrade Selectmen and members of the Planning Board.

#### 20. Bond for Removal

At the time of approval of a permit application, and prior to initiating construction of any personal wireless service facility within the Town of Belgrade, the applicant must post a bond to cover costs for the removal of the personal wireless service facility, including site reclamation. The amount of the bond shall be based on the removal and reclamation costs plus fifteen (15) percent, provided by the applicant and certified by a professional civil engineer licensed in Maine. The owner of the facility shall provide the Planning Board with a revised removal and reclamation cost estimate prepared by a professional civil engineer licensed in Maine every five (5) years from the date of the Planning Board's approval of the site plan. If the cost has increased more than fifteen (15) percent, then the owner of the facility shall provide additional security in the amount of the increase.

#### 21. Abandonment or Discontinuation of Use/Removal

- a. A personal wireless service facility that is not operated for a continuous period of twelve (12) months shall be considered abandoned. The Town shall notify the owner of an abandoned facility in writing, certified mail, return receipt requested, ordering the removal of the facility within 180 days of receipt of the written notice. The owner of the facility shall have thirty (30) days from the receipt of the notice to demonstrate to the Town that the facility has not been abandoned.
- b. If the owner fails to show that the facility is not abandoned, the owner shall have one hundred fifty (150) days to remove the facility. If the facility is not removed within that time period, the Town shall remove the facility at the owner's expense and the Town may draw upon the bond required in Section 20 above to defray the costs of removal of the facility. Removal shall include, but not be limited to, antennas, mounts, equipment shelters and security barriers. The owner of the facility shall pay all site reclamation costs deemed necessary and reasonable to return the site to its pre-construction condition, including the removal of roads, and reestablishment of any vegetation.

#### 22. Appeals

Appeals involving conditions imposed by the Planning Board, or a decision to deny approval, shall lie from the Planning Board to the Superior Court, according to State law, except that when such appeals involve administrative procedures or interpretation, they may first be heard and decided by the Board of Appeals, as detailed below:

- a. When errors of administrative procedure are found, the case shall be referred back to the Planning Board for rectification.
- b. When errors of interpretation are found, the Board of Appeals may modify or reverse the order or action but may not alter the conditions attached by the Planning Board in a conditional use permit. The Planning Board in accordance with the Board of Appeals' information, other than changes made by the granting of a variance, shall make all changes in conditions.

Appeals involving administrative procedure or interpretation shall lie from the decision of the Planning Board to the Board of Appeals and from the Board of Appeals to the Superior Court according to State Law.

#### 23. Violations

- a. Failure to comply with any conditions of the Site Plan Review subsequent to the receipt of a building permit shall be construed to be a violation of this regulation and shall be grounds for the revocation of any building permit by the Planning Board.
- b. In instances where no new building or construction is proposed, establishment of a new use or resumption of a use which has been discontinued for at least two (2) years, if accomplished without Planning Board approval, shall constitute a violation of this ordinance. Such a violation shall be punishable by a fine of not less than one hundred dollars (\$100) or more than two thousand five hundred dollars (\$2500) for each day that the violation continues to exist after official notification by the Town.
- c. Whenever sedimentation is caused by stripping vegetation, regarding, or other development, it shall be the responsibility of the owner to remove sedimentation from all adjoining surfaces, drainage systems, and watercourses, and to repair any drainage at his expense as quickly as possible. Failure to do so within two (2) weeks after official notification by the Town shall be punishable by a fine of not less than one hundred dollars (\$100) or more than two thousand five hundred dollars (\$2500) for each day the offense continues.

#### 24. Enforcement

- a. Nuisances: Any violation of this Ordinance shall be deemed to be a nuisance.
- b. Code Enforcement Officer: It shall be the duty of the Code Enforcement Officer to enforce the provisions of this Ordinance. If the Code Enforcement Officer shall find that any provision of this Ordinance is being violated, they shall notify in writing the person responsible for such violation, indicating the nature of the violation, and ordering the action necessary to correct it, including discontinuance of illegal use of land, buildings, structures, or work being done, removal of illegal buildings or structures, and abatement of nuisance conditions. A copy of such notices shall be maintained as a permanent record.
- c. Legal Action: When the above action does not result in the correction or abatement of the violation or nuisance condition, the municipal officers, upon notice from the Code Enforcement Officer, are hereby authorized and directed to institute any and all actions and proceedings, either legal or equitable, including seeking injunctions of violations and the imposition of fines, that may be appropriate or necessary to enforce the provisions of this Ordinance in the name of the municipality.
- d. Fines: Any person who continues to violate any provision of this Ordinance, after receiving notice of such violation, shall be guilty of a misdemeanor subject to a fine of not less than one hundred dollars (\$100) or more than two thousand five hundred dollars (\$2500) for each violation. Each day such a violation is continued is a separate offense.

Adopted by Town Meeting June 8, 2021

#### Section 1. Title

This Ordinance shall be known and may be cited as the "Solar Ordinance".

#### Section 2. Purpose

The purpose of this ordinance is to establish a municipal review procedure and performance standards for Solar Energy Systems (SES), including those typically characterized as "solar farms". These standards are intended to:

- Establish clear guidelines, standards and time frames for the Town to regulate Solar Energy Systems;
- b. Permit the Town to fairly and responsibly protect public health, safety and welfare;
- c. Minimize any potential adverse effect of solar development on surrounding land use;
- d. Provide for the decommissioning/removal of panels and associated utility structures that are no longer being used for energy generation and transmission purposes; and
- e. Support the goals and policies of the Comprehensive Plan, including orderly development, efficient use of infrastructure, and protection of natural, scenic, and agricultural resources.

#### Section 3. Applicability

Solar Energy Systems (SES) are subject to location and permitting requirements as set forth in the Readfield Land Use Table (Article 7, Section 5) of the Land Use Ordinance. A Solar Energy System approved for construction prior to the effective date of this Ordinance shall not be required to meet the terms and conditions of this Ordinance. Any physical modification to any existing SES, whether or not existing prior to the effective date of this Ordinance that expands or relocates the footprint of the SES, shall require approval under this Ordinance. Routine maintenance or replacements do not require a permit.

Infrastructure	V	VR	AD	R	RR	SR	RP	SP	CID	MH
Solar Energy System, Large- Scale	N	N	Р	Р	N	N	N	N	Р	U
Solar Energy System, Medium- Scale	N	N	Р	Р	N	N	N	N	Р	U
Solar Energy System, Small / Accessory-Scale – Ground Mounted	P	P	P	P	Р	Р	P	Р	Р	U
Solar Energy System, Small / Accessory-Scale – Roof Mounted	С	С	С	С	С	С	С	С	С	U

#### **Section 4. Definitions**

<u>Solar Energy System (SES):</u> a solar photovoltaic cell, module, or array, or solar hot air or water collector device, including all Solar Related Equipment, which relies upon solar radiation as an energy source for collection, inversion, storage, and distribution of solar energy for electricity generation or transfer of stored heat.

<u>Solar Energy System, Ground-Mounted.</u> A Solar Energy System that is structurally mounted to the ground and is not roof-mounted; may be of any size (small, medium, or largescale).

<u>Solar Energy System, Roof-Mounted.</u> A Solar Energy System that is mounted on the roof of a building or structure; may be of any size (small, medium, or large-scale).

<u>Solar Energy System, Large-Scale.</u> A Solar Energy System whose physical size based on total airspace projected over the ground is equal to or greater than 4 acres (174,240 square feet), and/or that generates a nameplate capacity of 1 MW or greater.

<u>Solar Energy System, Medium-Scale.</u> A Solar Energy System whose physical size based on total airspace projected over the ground is equal to or greater than 3,000 square feet but less than 4 acres (174,240 square feet), and/or that generates a nameplate capacity of 20 kW up to, but not including, 1 MW.

<u>Solar Energy System</u>, Small-Scale. Also known as an <u>Accessory-Scale System</u>. A Solar Energy System whose physical size based on total airspace projected over the ground is less than 3,000 square feet and/or that generates a nameplate capacity of less than 20 kW. Such a system may consist of one (1) or more freestanding ground, or roof mounted, solar arrays, or solar related equipment, and is intended to primarily reduce on-site consumption of utility power or fuels. Such a system generally occupies ~1,750 square feet of surface area or less (equivalent to a rated nameplate capacity of about 10 kW or less).

<u>Kilowatt (kW):</u> a unit for measuring power that is equivalent to 1,000 watts.

Megawatt (MW): a unit for measuring power that is equivalent to one million watts, or 1,000 kilowatts.

Megawatt Hour (MWh): A megawatt hour is equal to 1,000 Kilowatt hours (Kwh). It is equal to 1,000 kilowatts of electricity used continuously for one hour.

<u>Rated Nameplate Capacity.</u> The maximum rated output of electric power production of the photovoltaic system in watts of Direct Current (DC).

Solar Energy. Radiant energy (direct, diffuse and/or reflective) received from the sun.

Solar Array. A grouping of multiple solar modules with the purpose of harvesting solar energy.

<u>Solar Farm.</u> See <u>Solar Energy System</u>.

<u>Solar Related Equipment</u>. Items including a solar photovoltaic cell, module, or array, or solar hot air or water collector device panels, lines, pumps, batteries, mounting brackets, framing, fencing, foundations or other structures used or intended to be used for collection and management of solar energy.

<u>Pure Tone.</u> The simplest periodic sound: a constant sound created as a pressure disturbance that fluctuates sinusoidally as a fixed frequency.

#### Section 5. Application and Permit Fee.

- A. Application Fee:
  - a. Solar Energy System, Large-Scale. The Application Fee is \$2,500.
  - b. Solar Energy System, Medium-Scale. The Application Fee is \$500.
  - c. Solar Energy System, Small-Scale. The Application Fee is the standard building permit fee.
- B. Permit Fee is \$1.00 per kW with a minimum fee of \$25.

#### **Section 6. Specific Application Requirements**

In addition to the requirements listed in Article 6 of the Town's Land Use Ordinance, an application for a Large or Medium Scaled Solar Energy System Permit must also include the following, at the cost of the applicant:

- 1) A description of the owner of the SES, the operator if different, and detail of qualifications and track record to run the facility;
- 2) If the operator will be leasing the land, a copy of the agreement (minus financial compensation) clearly outlining the relationship inclusive of the rights and responsibilities of the operator, landowner and any other responsible party with regard to the SES and the life of the agreement;
- 3) A description of how and to whom the energy produced will be sold;
- 4) A copy of the agreement and schematic details of the connection arrangement with the transmission system (most likely Central Maine Power), clearly indicating which party is responsible for various requirements and how they will be operated and maintained;
- 5) The layout, design and installation shall conform to applicable industry standards, such as those of the American National Standards (ANSI), Underwriters Laboratories (UL), the American Society for Testing and Materials (ASTM), Institute of Electrical and Electronics Engineers (IEEE), Solar Rating and Certification Corporation (SRCC), Electrical Testing Laboratory(ETL), Florida Solar Energy Center (FSEC) or other similar certifying organizations, and shall comply with local ordinances, and with all other applicable fire and life safety requirements. The manufacturer specifications for the key components of the system shall be submitted as part of the application.
- 6) A description of the panels to be installed, including make and model, and associated major system components;
- 7) A construction plan and timeline, identifying known contractors, site control and anticipated on-line date;
- 8) An operations and maintenance plan, including site control and the projected operating life of the system; Such a plan shall include measures for maintaining safe access to the installation, stormwater controls, as well as general procedures for operational maintenance of the installation. Additionally, such plans shall include efforts to promote beneficial flora and fauna (e.g. honeybees,

butterflies, etc.) as well as a commitment to not using pest-control substances (e.g. pesticides, herbicides, fungicides, and/or insecticides).

- 9) An emergency management plan for all anticipated hazards;
- 10) A stormwater management plan, certified by a licensed Maine engineer, that demonstrates stormwater from the SES will infiltrate into the ground beneath the SES at a rate equal to that of the infiltration rate prior to the placement of the system.
- 11) A background noise measurement for the site location as performed by a qualified professional.
- 12) Proof of financial capacity to construct and operate the proposed facility;
- 13) A decommissioning plan, including:
  - a) A description of the trigger for implementing the decommissioning plan. There is a rebuttable presumption that decommissioning is required if 10% or less permitted capacity of electricity is generated for a continuous period of twelve (12) months. The Applicant may rebut the presumption by providing evidence, such as a force majeure event that interrupts the generation of electricity, that although the project has not generated electricity for a continuous period of 12 months, the project has not been abandoned and should not be decommissioned.
  - b) A description of the work required to physically remove all Solar Energy System and Solar Related Components, including associated foundations, buildings, cabling, electrical components, and any other associated facilities to the extent they are not otherwise in or proposed to be placed into productive use. All earth disturbed during decommissioning must be graded and re-seeded, unless the landowner of the affected land requests otherwise in writing and subject to Planning Board approval.
    - i) At the time of decommissioning, the Applicant may provide evidence of plans for continued beneficial use of any or all of the components of the Solar Energy System. Any changes to the approved decommissioning plan shall be subject to review and approval by the Planning Board.
  - c) An estimate of the total cost of decommissioning value of the equipment and itemization of the estimated major expenses, including the projected costs of measures taken to minimize or prevent adverse effects on the environment during implementation of the decommissioning plan. The itemization of major costs may include, but is not limited to, the cost of the following activities: panel removal, panel foundation removal and permanent stabilization, building removal and permanent stabilization, transmission corridor removal and permanent stabilization and road infrastructure removal and permanent stabilization.
  - d) Demonstration in the form of a performance bond, surety bond, letter of credit, or other form of financial assurance as may be acceptable to the Planning Board that upon the end of the useful life of the Solar Energy System the Applicant will have the necessary financial assurance in place for 150% of the estimated total cost of decommissioning, subject to a review of such cost by the Code Enforcement Officer. The financial assurance shall include a provision granting the Town the ability to access the funds and property and perform the decommissioning if the facility is abandoned or the Applicant or subsequent responsible party fails to meet their

obligations after reasonable notice, to be defined in the agreement and approved by the Planning Board. For a Medium Scaled SES, the Applicant may propose securing the necessary financial assurance in phases, as long as the total required financial assurance is in place a minimum of 5 years prior to the expected end of the useful life of the Solar Energy System.

i) Note the applicant may apply to the Code Enforcement Officer for release of the guarantee at such time that it or its assignees remove the system and associated abandoned structures, and such completed removal is found to be satisfactory by the Planning Board.

#### **Section 7. Standard for Approval**

In addition to the Site Review standards and requirements included in Town's Land Use Ordinance, the following standards must also be met:

#### Large and Medium- Scaled Ground-Mounted Solar Energy Systems:

- Lots SES shall not exceed 20% coverage of a lot area. Lot coverage shall be calculated based on the total SES airspace projected over the ground. All SES should be designed and located to ensure solar and physical access without reliance on and/or interference to/from adjacent properties.
- 2. Legal Responsibilities The Applicant must provide proof that it has authorization to construct, use and maintain the property and any access drive for the life of the project and including the decommissioning of the project. The roles and responsibilities of the system owner, operator, landowner and any other party involved in the project must be clear and meet the satisfaction of the Planning Board that the public interest is protected. The owner or operator of a Ground Mounted Solar Energy System shall build and maintain it in compliance with all relevant Federal, State and Local Laws, Regulations, and Ordinances.
- 3. Deed Registration Any Large or Medium Scaled SES system shall be incorporated into the description of the real property in the lot/property deed and registered with the Kennebec County Registry of Deeds as a condition of Planning Board approval.
- 4. Setback Structures within a SES shall be setback a minimum of 200 feet from all lot lines. Any solar photovoltaic cells or arrays shall be subject to a maximum height of 10 feet above the ground surface. Associated SES structures shall be subject to the maximum height regulations specified for principal and accessory buildings within the applicable zoning district.
- 5. Prohibited Locations Components of a ground mounted SES shall not be placed within any legal easement or right-of-way location, or be placed within any stormwater conveyance system, or in any other manner that would alter or impede stormwater runoff from collecting in a constructed stormwater conveyance system.
- 6. Utility Notification No grid-intertied photovoltaic system shall be installed until evidence has been given to the Planning Board that the applicant has an agreement with the utility to accept the power. Off-grid systems are exempt from this requirement.

- 7. Fence Ground Mounted Solar Energy Systems shall be protected by a perimeter fence. Such fences shall allow for small wildlife passage and movement.
- 8. Signage A sign shall be required to identify the owner/operator and provide a 24-hour emergency contact phone number. Solar energy systems shall not be used for displaying any advertising. A clearly visible warning sign shall be placed at the base of all pad-mounted transformers and substations and on the any fence surrounding the SES informing individuals of potential voltage hazards.
- 9. Screening Lots on which Ground Mounted Solar Energy Systems are located shall utilize buffers / screening from roads and residences by plantings, berms, and natural topographical features. Ground mounted SES shall be screened from view to the greatest extent practical of any adjacent property that is residentially zoned or used for residential purposes, as well as any public way. The screen shall consist of a vegetative barrier which provide a visual screen. In lieu of a vegetative screen, a fence that provides visual screening, and meets requirements of the controlling ordinance, may be allowed only if a vegetative screen is deemed impractical by the Planning Board.
- 10. Glare All SES shall be situated to eliminate concentrated glare onto nearby structures or roadways.
- 11. Noise No noise generated by the SES or Solar Related Equipment shall be 10 decibels (dB) greater than the preconstruction / existing background level, nor generate a Pure Tone. The background noise limit will be based on background noise during the quietest period of the night, typically 3:00 am.
- 12. Lighting Lighting shall be limited to that required for safety and operational purposes and shall be shielded from interference with abutting properties. Lighting of the SES shall be directed downward and shall incorporate full cut-off fixtures to reduce light pollution and shall otherwise comply with the provisions of Article 8, Section 15 of the Town of Readfield Land Use Ordinance. Other than required lighting, lighting shall not be used / visible between 9pm and 7am.
- 13. Impervious Assessment The surface area of the arrays of a ground mounted SES, regardless of the mounted angle of any solar panels, may or may not be considered impervious contingent upon conformity with the stormwater management plan.
- 14. Utility Connections Reasonable efforts, as determined by the Planning Board, shall be made to place all utility connections from the solar photovoltaic installation underground, depending on appropriate soil conditions, shape, and topography of the site and any requirements of the utility provider. Electrical transformers for utility interconnections may be above ground if required by the utility provider.
- 15. Emergency Services SES owner or operator shall provide a copy of the project summary, electrical schematic, and site plan to the Fire Chief. Upon request, the owner or operator shall

coordinate with local emergency services in developing an emergency response plan. A "3200 Series KNOX-BOX", or agreed equivalent, shall be provided and installed by the operator to be used to allow emergency service personnel continuous access. All means of shutting down the solar energy system shall be clearly marked. The owner or operator shall identify a responsible person for public inquiries throughout the life of the installation.

- 16. Maintenance Conditions The SES owner or operator shall maintain the facility in good condition. Maintenance shall include, but not be limited to, painting, structural repairs, vegetative screening, fences, landscaping and plantings, and integrity of security measures. The SES must be properly maintained and be kept free from all hazards, including, but not limited to, faulty wiring, loose fastenings, being in an unsafe condition or detrimental to public health, safety or general welfare. Site access shall be maintained to a level acceptable to the fire chief for emergency response. The owner or operator shall be responsible for the cost of maintaining the SES and any access road(s), including regular plowing of snow to maintain road access.
- 17. Satisfaction with All Aspects of Capacity and Plans Submitted -- The Planning Board must find that the Applicant has the capacity to finance, safely operate and decommission the SES.
- 18. Removal When any portion of a ground mounted SES is removed, any earth disturbance must be graded and re-seeded, unless authorized for another developed use.
- 19. Alternatives Assessment As determined by the Planning Board, if a proposed ground-mounted SES does not meet the standards in this Ordinance, associated Town LUO standards, or goals and objectives as established in the Town's Comprehensive Plan, then other potential suitable alternative area(s), on the lot(s) included in the application, where a SES can meet the Town's standards, goals, and objectives needs to be evaluated by the applicant. Alternative lot areas should be evaluated against those same Ordinance standards, and Town goals and objectives.
- 20. Preservation of Town's Character All reasonable efforts, as determined by the Planning Board, shall be made to ensure any SES is consistent with the character of the community via visual consistency with local neighborhood area, maintenance of scenic views, maintenance of open space land and farms, and the Town Comprehensive Plan, and associated Town planning documents.

#### Small-Scaled Ground-Mounted Solar Energy Systems:

- Lots SES shall not exceed 10% coverage of a lot area. Lot coverage shall be calculated based on the total SES airspace projected over the ground. All SES should be designed and located to ensure solar and physical access without reliance on and/or interference to/from adjacent properties.
- 2. Setback Structures within a SES shall be setback a minimum of 50 feet from the side and rear property lines and meet the front setback requirements for structures within the zoning district. Any solar photovoltaic cells or arrays shall be subject to a maximum height of 10 feet above the

ground surface. Associated SES structures shall be subject to the maximum height regulations specified for principal and accessory buildings within the applicable zoning district.

- 3. Prohibited Locations Components of a ground mounted SES shall not be placed within any legal easement or right-of-way location, or be placed within any stormwater conveyance system, or in any other manner that would alter or impede stormwater runoff from collecting in a constructed stormwater conveyance system.
- 4. Signage Solar energy systems shall not be used for displaying any advertising.
- 5. Screening Lots on which Ground Mounted Solar Energy Systems are located shall utilize buffers / screening from roads and residences by plantings, berms, and natural topographical features. Ground mounted SES shall be screened from view of any adjacent property that is residentially zoned or used for residential purposes, as well as any public way. The screen shall consist of a vegetative barrier which provide a visual screen. In lieu of a vegetative screen, a fence that provides visual screening, and meets requirements of the controlling ordinance, may be allowed only if a vegetative screen is deemed impractical by the Planning Board.
- 6. Glare All SES shall be situated to eliminate concentrated glare onto nearby structures or roadways.
- 7. Lighting Lighting shall be limited to that required for safety and operational purposes and shall be shielded from interference with abutting properties. Lighting of the SES shall be directed downward and shall incorporate full cut-off fixtures to reduce light pollution and shall otherwise comply with the provisions of Article 8, Section 15 of the Town of Readfield Land Use Ordinance. Lighting shall not be used / visible between 9pm and 7am.
- 8. Preservation of Town's Character All reasonable efforts, as determined by the Planning Board, shall be made to ensure any SES is consistent with the character of the community via visual consistency with local neighborhood area, maintenance of scenic views, maintenance of open space land and farms, and the Town Comprehensive Plan, and associated Town planning documents.

#### **Roof Mounted Solar Energy Systems:**

- 1. The owner shall provide evidence certified by an appropriately licensed professional that the roof is capable of supporting the collateral load of the SES.
- 2. SES mounted on roofs of any building shall be subject to the maximum height regulations specified for principal and accessory buildings within the applicable zoning district.
- 3. Glare All SES shall be situated to eliminate concentrated glare onto nearby structures or roadways.

- 4. For firefighter access, a minimum three (3) foot buffer zone is required from the ridge and one (1) edge of the roof or parapet.
- 5. Preservation of Town's Character All reasonable efforts, as determined by the Planning Board, shall be made to ensure any SES is consistent with the character of the community via consistency with local neighborhood area, maintenance of scenic views, maintenance of open space land and farms, and the Town Comprehensive Plan, and associated Town planning documents.

#### **Section 8. Decommissioning and Removal**

- Any Ground Mounted Solar Energy System that has reached the end of its useful life, ceases to generate power or has been abandoned shall be removed pursuant to a plan approved by the Planning Board during the application process. The landowner, or SES owner or operator shall physically remove the installation no more than 180 days after the date of discontinued operations. The owner or operator shall notify the Code Enforcement Officer by certified mail, return receipt requested, of the proposed date of the discontinued operations and plans for removal.
- 2. Decommissioning shall consist of:
  - a. physical removal of all solar energy systems, structures, equipment, security barriers and transmission lines from the site:
  - b. disposal of all solid and hazardous waste in accordance with Local, State and Federal waste disposal regulations; and
  - stabilize or re-vegetation of the site as necessary to minimize erosion. The Code
     Enforcement Officer may allow the owner or operator to leave landscaping or designated below-grade foundations to minimize erosion and disruptions to vegetation.
- 3. Absent a notice of a proposed date of decommissioning or written notice of extenuating circumstances, a Ground Mounted Solar Energy System shall be considered abandoned when it fails to generate 10% or less permitted capacity of electricity for a continuous period of twelve (12) months without having first obtained the written consent of the Code Enforcement Officer. Determination of abandonment shall be made by the Code Enforcement Officer.
- 4. If the owner or operator of a Ground Mounted Solar Energy System fails to remove the installation in accordance with the requirements of this section within 180 days of abandonment or the proposed date of decommissioning, the Town of Readfield retains the right to use the performance guarantee and any and all legal or available means necessary to cause an abandoned, hazardous or decommissioned solar energy system to be removed.

#### **Section 9. Modifications**

1. Any physical modification to any existing SES, whether or not existing prior to the effective date of this Ordinance, shall require review and approval under this Ordinance.

- 2. Any modifications to a Medium to Large Scaled Ground-Mounted Solar Energy System made after issuance of the required town permit(s) shall require approval by the Planning Board.
- 3. Any modifications to a Small-Scaled Ground-Mounted Solar Energy System made after issuance of the required town permit(s) shall require approval by the Code Enforcement Officer.
- 4. Application fees for modifications shall be consistent with the overall size of the SES, not solely the modification.
- 5. Permit fees for modifications shall be based on the modified portion of the SES.

#### **Section 10. Authority**

- 1. This Ordinance is adopted pursuant to the enabling provisions of Article VIII, Part 2, Section 1 of the Maine Constitution, provisions of 30-A, M.R.S. § 3001, Ordinance Power, the provisions of 30-A, M.R.S. § 4352, Zoning, and the provisions of Title 30-A §4311 et seq. (Comprehensive Planning and Land Use Regulation, or "Growth Management" Act).
- To the extent that any provision of this Ordinance is deemed invalid by a court of competent jurisdiction, such provision shall be removed from the Ordinance and the balance of the Ordinance shall remain valid.

#### Section 11. Effective Date and Duration

This Ordinance shall take effect on June 8, 2021 upon enactment by the Town of Readfield unless otherwise provided and shall remain in effect until it is amended or repealed.

#### **Section 12. Enforcement Violations and Penalties**

This Ordinance shall be enforced by the municipal officers or their designee. Violation of this Ordinance shall be subject to the enforcement and penalty provisions of 30-A, M.R.S. § 4452, Enforcement of Land Use Laws and Ordinances.

Adopted by Town Meeting June 8, 2021	
Attested: Sherene Gilman, Dep. Town Clerk	

#### CHELSEA SOLAR ARRAY ORDINANCE

#### Section 1. Purpose

The purpose of this ordinance is to accomplish the following objectives with the least possible regulation.

- 1. To encourage the development of on-site energy production and consumption.
- 2. To protect the public health and safety.
- 3. To promote the general welfare of the community.
- 4. To conserve the environment, wildlife habitat, fisheries, and unique natural areas, and
- 5. To fit these systems harmoniously into the fabric of the community by providing standards for alternative energy systems and other types of arrays.

#### Section 2. Authority

- 1. The Chelsea Planning board is vested with the authority to review and approve, approve with conditions, or reject any application for Solar Energy Conversion Arrays (Arrays) as defined in this Ordinance. An array shall have been approved by the Planning Board before a building permit may be issued under the Building Permit and Occupancy Ordinance.
  - 1. In the event the Planning Board requires expert opinions, advice, or testimony during the course of reviewing the application to determine the impact to surrounding properties or public safety implications, or to resolve any other issues regarding the proposal, it shall first use due diligence to obtain and utilize free services from governmental or non-profit sources.
  - 2. Should the Planning Board not be unable to obtain and utilize free services, the Selectboard may authorize the hiring of independent third-party consultants to review array proposals in order to determine the impact to surrounding properties or public safety implications or resolve any other issues regarding the proposal. The Planning Board shall require the applicant to pay for such services after giving notice to the applicant of the name of the expert, the area of qualification of the expert, and the purpose for which the expert is required and the approximate cost of the expert.
  - 3. The applicant shall be provided with an opportunity to meet with the Code Enforcement Officer to arrange a schedule for payment of the costs.
  - 4. The applicant shall have the right to request a public hearing before the Appeals Board to determine if the experts, as noticed by the Planning Board, are necessary to a determination of any issue properly before the Planning Board, and if the approximate costs of the expert are reasonable. The applicant shall request the hearing within 10 days of receipt of the notice establishing the necessity and costs of any independent third-party consultant, or such time as is agreed to by the Planning Board and the applicant. It will be the applicant's burden to prove that the requested expert is unnecessary, or that the cost is not reasonable,

In addition to any other applicable provisions of this Ordinance, before granting a Solar Array Complex Plan approval, the Planning Board must find that the proposed plan will comply with such of the following standards as applicable.

#### Section 3. Exempt Arrays

The following arrays are exempt from this Ordinance:

- 1. Roof-mounted on any legally permitted residential or residential accessory structure.
- 2. Ground or pole-mounted for private use, with a panel area less than 5,000 square feet.
- 3. Building integrated solar (i.e., shingle, hanging solar, canopy, etc...).
- 4. Repair or replacement of array components that do not enlarge the area of the existing array.
- 5. Commercial buildings utilizing solar energy for on-site operational purposes only.

#### Section 4. Solar Array Complex Plan Review

All non-exempt arrays must be approved by the Chelsea Planning Board through this Ordinance.

The following requirements must be included in a Solar Energy Conversion Array application:

- 1. All application materials required under the Building Permit Ordinance and any applicable fee established by the Board of Selectmen.
- 2. A site plan showing property lines, the location of any wetlands or flood zones, the location of proposed panels, equipment, fencing and access roads, and the location and setback of any roads or streets.
- 3. A submission showing results of four soil samples per acre from the site to establish a baseline for soil condition comparison upon decommissioning. The Town reserves the right to request additional samples for sites on or adjacent to former landfills or for sites where contamination is discovered during the soil testing process.
- 4. A decommissioning plan signed by the party responsible for decommissioning and the landowner (if different) whose minimum requirements meet the standards in Section 5 of this Ordinance. Such plan must be filed in the Kennebec County Registry of Deeds prior to the first operation of the array.
- 5. A Waste Stream Management Plan (WSMP) for the construction waste and debris at the site of the said Array, including but not limited to cardboard, wood, scrap metal, scrap wire, and clearing and grading wastes, from the construction site and the disposal site(s) of such waste. Information on the amount of material that is being recycled shall be included in the WSMP. The Code Enforcement Officer shall conduct a final inspection to ensure compliance with the approved plan.

#### Section 5. Guarantee For Removal

At the time of approval of a proposed array, and prior to initiating construction of any array within the Town of Chelsea, the applicant must guarantee the costs for the removal of the facility.

- 1. The amount of the guarantee shall be equal to 125% of the estimated removal cost, provided by the applicant and certified by a professional civil engineer licensed in Maine or a professional array construction company.
- 2. The owner of the facility shall provide the Planning Board with a revised removal cost estimate and structural evaluation prepared by a professional civil engineer licensed in Maine or a professional array construction company every five (5) years from the date of the Planning Board's approval of the Solar Array Complex plan.
- 3. If the cost has increased more than fifteen (15) percent, then the owner of the facility shall provide additional security in the amount of the increase. The applicant may also request adjustments in the guarantee.
- 4. Types and Contents of Guarantee One of the following performance guarantees chosen by the applicant shall be provided on approval of the application,
  - a. Interest-Bearing Escrow Account A cash contribution equal to 125% of the estimated removal cost for the establishment of an escrow account shall be made by either a certified check made out to the Town, direct deposit into a savings account, or purchase of a certificate of deposit.
  - i. For any account opened by the applicant, the Town shall be named as owner or coowner, and consent of the Town shall be required for withdrawal.
  - ii. Any interest earned on the escrow account shall be returned to the applicant unless the Town has found it necessary to draw on the account, in which case the interest earned shall be proportionately divided between the amount returned to the applicant and the amount withdrawn to complete the required work.

#### b. Performance Bond -

A performance bond shall detail the conditions of the bond, the method for release of the entire bond or portions of the bond to the Town, and the procedures for collection by the municipality. The bond documents shall specifically reference the array facility for which approval is sought.

#### C. Irrevocable Letter of Credit -

An irrevocable letter of credit from a bank or other lending institution shall indicate that funds have been set aside for the removal of the array facility and may not be used for any other project or loan. The letter of credit shall detail the procedures for collection by the municipality. The conditions and amount of the performance guarantee shall be determined by the Planning Board with the advice of the Town Selectmen, and/or Town Attorney, expenses paid for by the applicant.

#### Section 6. Decommissioning and Abandonment

- 1. The owner or operator of the facility, or the owner of the parcel if there is no separate owner or operator of the facility or if the owner/operator fails to do so, shall do the following as a minimum to decommission the project:
  - a. Remove all non-utility owned equipment, conduits, structures, fencing, and foundations to a depth of at least four feet below grade.
  - b. Submit the results of 4 soil samples per acre to compare to the original soil samples taken at the time of application. If there is any contamination or pollution in the soils it shall be the responsibility of the operator of the facility to restore the soils to its original state.
  - c. Revegetate any cleared areas with appropriate plantings that are native to the region according to an approved Solar Array Complex plan, unless requested in writing by the owner of the real estate to not revegetate due to plans for agricultural planting or other development subject to the Planning Board's approval.
  - d. Fill in all holes, depressions or divots resulting from the construction of the array.
- 2. All said removal and decommissioning shall occur within 12 months of the facility ceasing to operate.
- 3. Abandonment will occur as a result of any of the following conditions unless the lessee or owner of the facility or of the parcel notifies the Code Enforcement Officer of the intent to maintain and reinstate the operation of the facility within 30 days of the following events:
  - a. The land lease (if applicable) ends; or
  - b. The system does not function for 12 months; or
  - C. The system is damaged and will not be repaired or replaced.
- 4. A notice submitted to the Code Enforcement Officer of the intent to maintain and reinstate the operation of the facility shall be updated every six months with a statement of the progress made towards that goal.
- 5. If the facility has not returned to operational condition within one year from the date of the first notice of the intent to maintain and reinstate the operation of the facility, the Code Enforcement Officer shall find the facility has been abandoned unless there is documentable evidence that the process has had significant progress and in the Code Enforcement Officer's opinion is likely to be completed in a timely manner.
- 6. Upon determination of abandonment based on the foregoing, the Code Enforcement Officer shall notify the party (or parties) responsible by certified mail or by hand delivery with signed receipt that they must remove the facility and fully restore the site in accordance with section 6 subsection (1) of this ordinance within three hundred and sixty (360) days of notice by the Code Enforcement Officer. A copy of the notice shall be forwarded by the Code Enforcement Officer to the Board of Selectmen.

- a. In the event the lessee of the facility fails to decommission the facility as outlined above, the landowner shall decommission the facility within 90 days of notice by the Code Enforcement Officer.
- b. In the event the landowner fails to remove the facility as stated above, the Town of Chelsea shall have the facility removed and shall reimburse the Town's costs by accessing any performance guarantee provided.
- c. Any unpaid costs associated with the removal after one year of removal shall be enforced as a special tax to be assessed against the real estate of the array site,

#### Section7. General Standards for all Arrays

- 1. Unless otherwise specified through a written contract, lease or other agreement, a copy of which is on file with the Chelsea Code Enforcement Officer, the property owner of record will be presumed to be the responsible party for owning and maintaining the array.
- 2. Approval under this Ordinance is conditional upon compliance with all other Chelsea Ordinances, the Maine Plumbing and Electrical Codes, Natural Resources Protection Act, Storm water Management Law or other applicable regulations and any requirements of the local utility if any array is to be connected to any existing electric grid.
- 3. An array shall not be constructed until the Solar Array Complex plan has been approved by the Planning Board and a Building Permit has been issued by the Code Enforcement Officer and any applicable appeal period having passed without an appeal being filed.
- 4. All arrays shall be operated and located such that no disruptive electromagnetic interference with signal transmission or reception is caused beyond the site. If it has been demonstrated that the system is causing disruptive interference beyond the site, the system operator shall promptly eliminate the disruptive interference or cease operation of the system.
- 5. All on-site electrical wires or piping associated with the system shall be installed underground except for "tie-ins" from above-ground mounted installations and to public-utility company transmission & distribution poles, towers and/or lines. This standard may be waived by the Planning Board if the project terrain is determined to be unsuitable for underground installation.
- 6. The array site shall not display any permanent or temporary signs, writing, symbols, logos, or any graphic representation of any kind except appropriate manufacturer's or installer's identification and warning signs,
- 7. Array placement must be designed to minimize or negate any solar glare onto nearby properties, or roadways.
- 8. If lighting is provided at the site, lighting shall be shielded and downcast such that the light does not spill onto the adjacent parcel or the night sky. Motion sensor control is preferred.
- 9. Any point of potential contact of people or animals with generated electric current must be secured.

- 10. The boundaries of any nonexempt array that borders any road or any abutting residential dwelling lot shall consist of a vegetated buffer the width of the required setback along that border, in addition to any fence that may be erected, and existing vegetation should be used to satisfy these planting requirements where possible. Berms with vegetation are encouraged as a component of any buffer and the Planning Board may allow up to 25% reduction in the required buffer width where a berm is to be constructed. The buffer shall screen the array from view by the abutting road or any nearby residences to the greatest extent practical. In the event no natural vegetation exists a plan by a licensed arborist shall be submitted to the Planning Board for approval. The plan shall contain indigenous species of conifers or evergreens and must be maintained to adequately screen the array.
- 11. Arrays covering permanent parking lots and other hardscape areas approved by the Planning Board are encouraged in order to limit the amount of stormwater flowage. Where the array will cover existing hardscape (impermeable surface) areas, the Planning Board may in its discretion waive the vegetated buffer requirement so long as the required setback is met.
- 12. If electric storage batteries are included as part of any array system, they must be installed according to all requirements set forth in the National Electric Code and State Fire Code when in operation. When no longer in operation, the batteries shall be disposed of in accordance with the laws and regulations of the Town of Chelsea and any other applicable laws and regulations relating to solid, special, or hazardous waste disposal.
- 13. Financial gain from "Net metering' for electric power is not considered a commercial activity if used to offset energy costs of private individuals only.

#### Section 8. Dimensional and Design Standards

- 1. Setbacks: All parts of the array shall be setback from all property lines a distance equal to the required minimum setback required by the Building Permit and Occupancy Ordinance plus ten (10) feet for each 100,000 square feet or fraction thereof of array collector surface area.
- 2. Height: A ground or pole mounted SECA shall have a maximum height of 20 feet as measured from the ground level to the system's highest point at full tilt,
- 3. Roof Load: The weight of any array proposed to be roof mounted on any non-exempt structure must be calculated and the applicant must submit a determination by a registered engineer with stamped certification or finding that the load rating of the underlying structure can accommodate the additional weight of the SECA.
- 4. Lot Coverage: The maximum surface area of a ground or pole mounted panel system, regardless of the mounted angle, shall be calculated as part of the overall lot coverage or area of the structure, for the purposes of any applicable Town of Chelsea ordinance.
- 5. Design Standards:

- a. Any height limitations of this Ordinance shall not be applicable to roof-mounted solar collectors provided that such structures are erected only to such height as is reasonably necessary to accomplish the purpose for which they are intended to serve.
- b. Array installations shall not obstruct solar access to neighboring properties.
- c. The array structure shall be a non-reflective color that blends the system and

its components into the surrounding landscape to the greatest extent possible and incorporates non-reflective surfaces to minimize any visual disruptions.

#### Section 9, Retroactive Clause

Notwithstanding the provisions of 1 M.R.S.A §302, and regardless of the date on which it is approved by the voters, this Ordinance shall be effective as of February 1, 2021 and shall govern any and all applications for permits or approvals required under the applicable laws of The Town of Chelsea Maine that were or become pending before any officer board or agency of The Town of Chelsea on or at any time after February 1 2021.

#### Section 10. Conflicts; Savings Clause

Any provisions of the Town's ordinances that are inconsistent with or conflict with the provisions of this Ordinance are hereby repealed to the extent applicable. If any section or provision of this Ordinance is declared by a Court of competent jurisdiction to be invalid, such a declaration shall not invalidate any other section or provision.

#### Section 11. Violations and Enforcement

Violations of this Ordinance shall be subject to per-day penalties in accordance with 30-A M.R.S. § 4452 and the violator shall be assessed the Town's reasonable attorney fees and costs. The Code Enforcement Officer shall have authority to enforce this Ordinance.

#### **DEFINITIONS**

Array: A Solar Energy Conversion Array.

For the purposes of this Ordinance, any single antenna or panel greater than 5,000 square feet of surface area is included in this definition.

Examples of arrays are, but are not limited to, solar heating panels, solar photovoltaic panels, concentrated solar thermal installations, and antenna arrays.

Berm: A barrier constructed of landscaped earth, four (4) feet or more in height measured from the outside base of the berm. Berms may be pierced with reasonable access ways no more than twelve (12) feet in width as approved by the Planning Board.

Solar Energy Conversion Array (SECA): The components and subsystems required to convert solar energy into electric or thermal energy suitable for use. The term applies, but is not limited to, solar photovoltaic (PV) systems, solar thermal systems, concentrated solar thermal installations, and solar hot water systems.

## Model Site Plan Regulations and Conditional Use Permits to Support Solar Energy Systems in Maine Municipalities

This document describes and models two land-use tools Maine municipalities may use to permit small-, medium-, and large-scale solar energy systems, including both ground-mounted and roof-mounted solar installations. The purpose of this document is to assist Maine municipalities in supporting development of solar energy systems in ways that address the needs of their community. Communities will need to carefully consider how model language may be modified to suit local conditions and where it should be inserted into an existing zoning ordinance, if applicable. Further, it is highly recommended that any language adapted from these models be reviewed by municipal counsel prior to adoption.



## Selecting a Land-Use Tool

Several land-use tools are available to accommodate solar energy systems, including overlay zones, floating zones, conditional-use permits, and site plan regulations. The two land-use tools addressed here, site plan regulations and conditional-use permits, were selected to respond to the variations in planning resources across Maine municipalities. Site-plan regulation may be more appropriate for municipalities that do not have a zoning ordinance in place; a combination of Site Plan Review and conditional-use permits may be appropriate for municipalities that have an existing zoning ordinance. That said, municipalities with an existing zoning ordinance that wish to allow solar may not need to amend their ordinance in advance of development; the model site-plan regulation standards may be sufficient to meet a community's needs in the short-term as they consider amending their ordinance for development over the long-term.

Furthermore, roof-mounted and small-scale ground-mounted solar energy systems may not require any regulatory or permitting changes, or additional oversight by a municipal planning authority, at all. Many communities allow these land uses as-of-right, for example, if they meet standards such as accessory structure requirements in the case of small ground-mounted systems. This means that development may proceed without the need for a conditional use permit, variance, amendment, waiver, or other discretionary approval. These projects cannot be prohibited, and can be built once a building permit has been issued by the inspector of buildings, building commissioner, or local inspector. See page 7 for model definitions (including square footage) for small-, medium-, and large-scale solar energy systems, as well as definitions for roof- and ground-mounted solar energy systems.

## **Navigating This Document**

The document contains model site plan regulations and conditional use permit language. Model site plan regulation language begins on page 3 and model conditional use language begins on page 7. Content in the yellow boxes includes additional context and information for readers to consider as they contemplate how the model language may suit their municipality. Content in brackets should be modified to fit a municipality's particular resources and nomenclature. This content, a long with the model language, may also provide municipalities the information they need to create different land use tools to guide solar development in their community.

Readers may also want to consider a Maine-based Frequently Asked Questions document that addresses solar power development from a community and municipal perspective and recommended Best Practices for Low Impact Siting, Design, and Maintenance from some of Maine's leading natural resource and agricultural organizations. These documents can be found at maineaudubon.org/solar.

#### For More Information

Please contact Eliza Donoghue, Director of Advocacy and Staff Attorney for Maine Audubon, at edonoghue@maineaudubon.org.

## I. MODEL SITE PLAN REGULATION LANGUAGE

#### Site Plan Review and Performance Standards

Site Plan Review may be appropriate when medium-scale ground-mounted systems are sited within natural resource protection districts. Site Plan Review may be appropriate for large-scale ground-mounted systems when they are sited anywhere within the community.

Site Plan Review procedures and requirements may stand alone or as a separate section of a municipality's zoning ordinance. There are also instances when communities that have a zoning ordinance have separate Site Plan Review provisions and procedures pertaining to a particular use or development type.

As discussed previously (see 'Selecting a Land-Use Tool', above), performance standards are generally sufficient for roof-mounted and small-scale ground-mounted solar energy systems.

## Standards for Roof-Mounted and Small-Scale Ground-Mounted Solar Energy Systems

- (a) Roof-mounted and building-mounted solar energy systems and equipment are permitted by right, unless they are determined by the [Code Enforcement Officer, with input from the Town Engineer and the Fire Chief] to present one or more unreasonable safety risks, including, but not limited to, the following:
  - (i) Weight load;
  - (ii) Wind resistance;
  - (iii) Ingress or egress in the event of fire or other emergency; or
  - (iv) Proximity of a ground-mounted system relative to buildings.
- (b) All solar energy system installations shall be installed in compliance with the photovoltaic systems standards of the latest edition of the National Fire Protection Association (NFPA1) adopted by [Town].
- (c) All wiring shall be installed in compliance with the photovoltaic systems standards of the latest edition of the National Electrical Code (NFPA 70) adopted by [Town].
- (d) Prior to operation, electrical connections must be inspected and approved by the Electrical Inspector.

## Additional Standards for Medium- and Large-Scale Ground-Mounted Solar Energy Systems

In addition to the standards in [Sec. \_\_], medium- and large-scale ground-mounted solar energy systems shall comply with the following:

(a) Utility Connections: Overhead or pole-mounted electrical wires shall be avoided to the extent possible within the facility.

- (b) Safety: The solar system owner or project proponent shall provide a copy of the Site Plan Review application to the [Fire Chief] for review and comment. The [Fire Chief] shall base any recommendation for approval or denial of the application upon review of the fire safety of the proposed system.
- (c) Visual Impact: Reasonable efforts, as determined by the [Planning Board], shall be made to minimize undue visual impacts by preserving native vegetation, screening abutting properties, or other appropriate measures, including adherence to height standards and setback requirements.
- (d) Land Clearing, Soil Erosion, and Habitat Impacts: Clearing of natural vegetation shall be limited to what is necessary for the construction, operation and maintenance of ground-mounted solar energy systems or as otherwise prescribed by applicable laws, regulations, and bylaws/ordinances. Ground-mounted facilities shall minimize mowing to the extent practicable. Removal of mature trees shall be avoided to the extent possible. Native, pollinator-friendly seed mixtures shall be used to the extent possible. Herbicide and pesticide use shall be minimized. No prime agricultural soil or significant volume of topsoil shall be removed from the site for installation of the system.

## **Solar Energy System Fencing**

The National Electric Code requires fencing for certain sized, ground-mounted solar energy systems. To allow for wildlife passage, fences should be elevated by a minimum of 5 inches. To maximize wildlife's ability to permeate fencing, municipalities may consider requiring the use of 'Solid Lock Game Fences'. Such fencing would start with 8 by 12-inch openings at the bottom (ground) with progressively smaller openings at the top of the fence. This type of fencing meets the National Electric Code for human safety. Additionally, municipalities may consider requiring the placement of five-inch or larger diameter wooden escape poles in two or more corners of the perimeter fence as an alternative means for wildlife to escape the enclosed area.

- (e) Fencing: Where fencing is used, fences should be elevated by a minimum of 5 inches to allow for passage of small terrestrial animals.
- (f) Removal: Solar energy systems that have reached the end of their useful life or that has been abandoned consistent with this ordinance shall be removed. The owner or operator shall physically remove the installation no more than 365 days after the date of discontinued operations. The owner or operator shall notify the [Code Enforcement Officer] by certified mail of the proposed date of discontinued operations and plans for removal. Decommissioning shall consist of:
  - (i) Physical removal of all solar energy systems, structures, equipment, security barriers, and transmission lines from the site.
  - (ii) Disposal of all solid and hazardous waste in accordance with local, state, and federal waste disposal regulations.
  - (iii) Stabilization or re-vegetation of the site as necessary to minimize erosion. Native, pollinator-friendly seed mixtures shall be used to the maximum extent possible.

#### (g) Abandonment:

- (i) Absent notice of a proposed date of decommissioning or written notice of extenuating circumstances, a large-scale ground-mounted solar energy system shall be considered abandoned when it fails to operate for more than one year.
- (ii) If the owner or operator of the solar energy system fails to remove the installation within 365 days of abandonment or the proposed date of decommissioning, the [Town] retains the right to use all available means to cause an abandoned, hazardous, or decommissioned large-scale ground-mounted solar energy system to be removed.

## Additional Standards for Large-Scale Solar Energy Systems

- (a) Large-scale ground-mounted solar energy systems shall not be considered accessory uses.
- (b) Operations and Maintenance Plan: The project proponent shall submit a plan for the operation and maintenance of the large-scale ground-mounted solar energy system, which shall include measures for maintaining safe access to the installation as well as other general procedures for operational maintenance of the installation.
- (c) Signage: A sign shall be placed on the large-scale solar energy system to identify the owner and provide a 24-hour emergency contact phone number.
- (d) Emergency Services: The large-scale ground-mounted solar energy system owner or operator shall provide a copy of the project summary, electrical schematic, and site plan to the [Fire Chief]. Upon request, the owner or operator shall cooperate with the [Fire Department] in developing an emergency response plan. All means of shutting down the system shall be clearly marked. The owner or operator shall provide to the [Code Enforcement Officer] the name and contact information of a responsible person for public inquiries throughout the life of the installation.

## Site Plan Application and Review

- (a) Applicability:
  - Roof-mounted systems and small-scale ground- mounted systems are not subject to Site Plan Review.
  - (ii) Medium-scale ground-mounted solar energy systems are not subject to Site Plan Review, except in natural resource protection districts and as may be required if conditional use permits are needed.
  - (iii) Large-scale ground-mounted solar energy systems are subject to Site Plan Review.
- (b) In addition to the [Town's] site plan application requirements, the Applicant shall submit the following supplemental information as part of a site plan application:
  - (i) A site plan showing:
    - (1) Property lines and physical features, including roads, for the project site;
    - (2) Proposed changes to the landscape of the site, grading, vegetation clearing and planting, exterior lighting, screening vegetation or structures;
    - (3) Blueprints or drawings of the solar energy system showing the proposed layout of the system, any potential shading from nearby structures, the distance between the proposed solar collector and all property lines and existing on-site buildings and structures, and the tallest finished height of the solar collector;
    - (4) Documentation of the major system components to be used, including the panels, mounting system, and inverter(s);
    - (5) Name, address, and contact information of the proposed system installer, the project proponent, project proponent agent, and all co-proponents or property owners, if any; and
    - (6) A one- or three-line electrical diagram detailing the solar photovoltaic installation, associated components, and electrical interconnection methods.

If the following are not addressed in existing Site Plan Review regulations, then the community may wish to include them:

- (7) Locations of important plant and animal habitats identified by the Maine Department of Inland Fisheries and Wildlife or [Town of ], or rare and irreplaceable natural areas, such as rare and exemplary natural communities and rare plant habitat as identified by the Maine Natural Areas Program.
- (8) Locations of wetlands and waterbodies.
- (9) Locations of "Prime Farmland" and "Farmland of Statewide Importance".
- (10) Locations of floodplains.
- (11) Locations of local or National Historic Districts.
- (12) A public outreach plan, including how the project proponent will inform abutters and the community.

#### **Review Processes**

- (a) For projects that are subject to permitted uses, [Town staff] will review the application and make final determination within 5 days of receipt.
- (b) For all projects that require Site Plan Review, the following administrative procedures shall take effect:
  - (i) Prior to submitting an application and the start of the review process, a pre-application conference is recommended. The conference is initiated by the Applicant and is scheduled with the Applicant and a member of the planning staff to discuss pertinent requirements.
  - (ii) The Applicant shall submit the required number of copies of their application at least seven days in advance of the meeting when the project is scheduled for a [Planning Board] agenda.
  - (iii) Applications are processed in the order in which they are received.
  - (iv) Within 10 days of receipt of the application in the [Department of Planning and Development], the Applicant will be notified if their application is complete or incomplete. If it is incomplete, a list of outstanding items will be included in the notification letter. Each time revisions are submitted on an incomplete application, the [Town] has another 10 days to review the revised materials to make a determination of completeness.
  - (v) Once an application is deemed to be complete, the project will be reviewed by [Town staff] for compliance with the ordinance standards. The Applicant will be notified of staff comments regarding the project and the Applicant may make revisions to address these comments.
  - (vi) When the project is scheduled for a [Planning Board] agenda, the planning staff will prepare a written report that discusses the project and makes a recommendation to the [Planning Board] as to a decision. The report is available to the Applicant on the [\_\_\_\_ day] preceding the [Planning Board] meeting. The [Board] will hold the public hearing on the application within 30 days of receipt of a complete application and make a decision within 10 days of that hearing. A decision may be postponed, with agreement of the applicant, to allow time for revisions to a plan.
  - (vii) The applicant or a duly authorized representative should attend the [Planning Board] meeting to discuss the application.

## II. MODEL CONDITIONAL-USE PERMIT LANGUAGE

## **Purpose**

- (a) Solar energy is a local, renewable and non-polluting energy resource that can reduce fossil fuel dependence and emissions. Energy generated from solar energy systems can be used to offset energy demand on the grid, with benefits for system owners and other electricity consumers.
- (b) The use of solar energy equipment for the purpose of providing electricity and energy for heating and/or cooling is an important component of the [Town's] sustainability goals.
- (c) The standards that follow enable the accommodation of solar energy systems and equipment in a safe manner while still allowing the quiet enjoyment of property.
- (d) This ordinance is intended to balance the need for reasonable standards and expedited and streamlined development review procedures.

Within a Zoning Ordinance the definition section usually stands alone, but may be included in a subsection within other sections of the Zoning Ordinance.

#### **Definitions**

**Electrical Equipment:** Any device associated with a solar energy system, such as an outdoor electrical unit/control box, that transfers the energy from the solar energy system to the intended location.

#### Electricity Generation (production, output):

The amount of electric energy produced by transforming other forms of energy, commonly expressed in kilowatt-hours (kWh) or megawatt-hours (MWh).

**Height of building:** The vertical measurement from grade to the highest point of the building, except that utility structures such as chimneys, TV antennae, HVAC systems, and roof-mounted solar energy systems shall not be included in this measurement, nor shall any construction whose sole function is to house or conceal such structures.

**Mounting:** The manner in which a solar PV system is affixed to the roof or ground (i.e., roof mount, or ground mount.

**Power:** The rate at which work is performed (the rate of producing, transferring, or using energy). Power is measured in Watts (W), kilowatts (kW), Megawatts (MW), etc. in Alternative Current (AC).

**Solar Array:** Multiple solar panels combined together to create one system.

**Solar Collector:** A solar PV cell, panel, or array, or solar thermal collector device, that relies upon solar radiation as an energy source for the generation of electricity or transfer of stored heat.

**Solar Energy System:** A solar energy system whose primary purpose is to harvest energy by transforming solar energy into another form of energy or transferring heat from a collector to another medium using mechanical, electrical, or chemical means. It may be roof-mounted or ground-mounted, and may be of any size as follows:

- 1. Small-scale Solar Energy System is one whose physical size based on total airspace projected over a roof or the ground is less than 15,000 square feet (approximately one-third of an acre);
- 2. Medium-scale Solar Energy System is one whose physical size based on total airspace projected over a roof or the ground is equal to or greater than 15,000 square feet but less than 87,120 square feet (two acres); and
- 3. Large-scale Solar Energy System is one whose physical size based on total airspace projected over a roof or the ground is equal to or greater than 87,120 square feet (two acres).

**Solar Energy System, Ground-Mounted:** A Solar Energy System that is structurally mounted to the ground and is not roof-mounted; may be of any size (small-, medium- or large-scale).

**Solar Energy System, Roof-Mounted:** A Solar Energy System that is mounted on the roof of a building or structure; may be of any size (small-, medium- or large-scale).

**Tilt.** The angle of the solar panels and/or solar collector relative to horizontal. Tilt is often between 5 and 40 degrees. Solar energy systems can be manually or automatically adjusted throughout the year. Alternatively, fixed-tilt systems remain at a static tilt year-round.

## **Use Regulations**

Within a Zoning Ordinance, the Use Regulations describe which land uses are allowed within different zoning districts of the community, as well as which permits are required. The Use Regulations typically include a Use Table and/or narrative description of the principal and accessory uses that are allowed, prohibited, and/or allowed only through a conditional use permit or are subject to Site Plan Review within each zoning district.

The example provided in this section demonstrates how roof-mounted, small-scale ground-mounted, medium-scale ground-mounted, and large-scale ground-mounted solar energy systems can be incorporated into a municipality's Use Regulations as a Use Table. A town may elect instead to list uses.

In this model, roof-mounted solar energy systems, regardless of size, are allowed as-of-right throughout the community. This means that development may proceed without the need for a conditional-use permit, variance, amendment, waiver, or other discretionary approval. These projects cannot be prohibited, and can be built once a building permit has been issued by the inspector of buildings, building commissioner, or local inspector.

## **Ground-Mounted Systems**

For ground-mounted systems, there is a distinction between how small-scale, medium-scale and large-scale systems are treated and where each are allowed as-of-right, via Site Plan Review, or by conditional use permit. The model zoning allows small-scale ground-mounted systems as-of-right throughout the community except for in natural resource protection zones, in which a conditional use permit is required. These are of a size that would service a house, small businesses, or small municipal building. The model zoning allows medium-scale ground-mounted systems in all districts except as a principal use in natural resource protection zoning districts; in these or similar districts, medium-scale ground-mounted systems are only allowed as an accessory use through Site Plan Review.

As drafted, the model zoning requires Site Plan Review for all large-scale ground-mounted systems and prohibits such systems in natural resource protection districts. Alternatively, a municipality may choose to prohibit large-scale ground-mounted systems in residential districts, due to housing or other growth or land use needs. Site Plan Review is discussed in more detail earlier in this document (see page 3), but in general it establishes criteria for the layout, scale, appearance, safety, and environmental impacts of certain types and/or scales of development. Typically, site plan approval must be obtained before the building permit is issued.

## **Siting Best Practices**

"Low Impact Solar Siting, Design, and Maintenance", a resource created by Maine-based environmental and agricultural NGOs, describes how Maine communities can realize solar energy systems' climate and economic benefits while avoiding or significantly reducing undue impacts to wildlife, farming, and critical natural resources. This resource can be found at maineaudubon.org/solar. The practices described in the resource, coupled with the standards outlined in the model site plan regulation language, can ensure that solar energy systems are thoughtfully sited within a community.

## **Applicability**

- (a) Notwithstanding the provisions of 1 M.R.S.A section 302 or any other law to the contrary, the requirements of this [Chapter] shall apply to all roof-mounted and ground-mounted solar energy systems modified or installed after the date of its enactment.
- (b) All solar energy systems shall be designed, erected, and installed in accordance with all applicable codes, regulations and standards.
- (c) Any upgrade, modification or structural change that materially alters the size, placement or output of an existing solar energy system shall comply with the provisions of this [Chapter].
- (d) For the purpose of this [Chapter], the [Town's] zoning districts are mapped and categorized as follows:

  [see Use Table on next page].

## **Permitting**

- (a) A solar energy system or device shall be installed or operated in the [Town] provided it is in compliance with this ordinance.
- (b) Permitting shall be determined by the locational zone within the [Town], type of solar system, and proposed size. The [Town] has designated the proper permitting process for each solar system in the attached matrix entitled "Permitting Required for Solar Energy Systems."
- (c) Permitted Use: Roof-mounted solar energy systems are permitted in all zoning districts, subject to the dimensional standards of [Sec. 5] and the additional standards outlined in [Sec. 5] and [Sec. 6].

## Permitting Required for Solar Energy Systems

	Commercial	Industrial	Residential	Rural Residential	Rural Farm and Forest	Natural Resource Protection
Principal Use						
Medium-scale Ground-mounted SES	Y	Y	CU	CU	CU	N
Large-scale Ground-mounted SES	SPR	SPR	SPR or N	SPR	SPR	Ν
Accessory Use						
Rooftop SES	Y	Y	Y	Y	Y	Y
Small-scale Ground-mounted Solar	Y	Y	Y	Y	Y	CU
Medium-scale Ground-mounted Solar	Y	Y	Y	CU	CU	SPR

Y = Allowed; N = Prohibited; CU = Conditional Use; SPR = Site Plan Review

## **Dimensional Regulations**

In most cases, the existing dimensional standards in a Zoning Ordinance will allow for the development of small-, medium-, and large-scale solar energy systems. However, if a municipality finds alternate dimensional standards are necessary to allow solar energy energy systems while protecting public health, safety, and welfare, it may impose them.

## Height

It is recommended that for purposes of height, roof-mounted solar energy systems should be considered similar to chimneys, television antennae, roof-top mechanical equipment and other appurtenances that are usually either allowed a much higher maximum height (e.g., 100 feet instead of 35 feet) or are exempted altogether from building height requirements. Such an exemption can be stated in the definition of "Building Height" or through language similar to that provided in the following example.

#### **Dimensional Standards**

- (a) Height: In mixed-use and non-residential commercial/industrial zones, solar energy systems shall be considered to be mechanical devices and, for purposes of height measurement, are restricted only to the extent consistent with other building-mounted mechanical devices.
- (b) Height standards for ground-mounted solar energy systems are dependent on location and zoning district:
  - (i) In residential and mixed-use zoning districts, such systems shall not exceed twelve (12) feet in height when oriented at maximum tilt, except that the maximum height is twenty-two (22) feet for systems set back at least thirty (30) feet from any property line.
  - (ii) In all other zoning districts, such systems shall conform to the building height requirements of the zoning districts in which they are located.

#### **Setbacks**

It is recommended that small- and medium-scale ground-mounted solar energy systems that are accessory to a primary building or structure on a lot be provided with more flexible setback requirements than those that would typically apply to a primary structure. Many communities already provide some flexibility for "accessory structures" like sheds, allowing these to be closer to the lot line than the primary structure. For example, where a front/side/rear yard setback for the primary structure may be 50 feet, setbacks of 20 feet may be allowed for accessory structures. When ground-mounted solar energy systems are developed as accessory structures to a home, business or other building or structure, they should be afforded at least the same flexibility.

If a community does not have this type of reduced setback already built into the Zoning Ordinance, a provision could be added that effectively reduces the setback distance just for this use.

- (c) Setbacks for Ground-Mounted Solar Energy Systems
  - (i) Notwithstanding any other provision of this ordinance to the contrary, the setbacks for ground-mounted solar energy systems shall be as follows:
    - (1) Minimum front yard: In residential zoning districts, fifty (50) feet. In mixed use and non-res idential zoning districts, whatever the front yard setback is for that zoning district, but in no event less than ten (10) feet.
    - (2) Minimum rear yard: Whatever the rear yard setback is for accessory buildings in that zoning district.
    - (3) Minimum side yard: Whatever the rear yard setback is for accessory buildings in that zoning district.
  - (ii) Additional setbacks may be required to mitigate visual and functional impacts.

## Lot Coverage

A number of communities use "maximum lot coverage" or "maximum impervious surface" as one of their dimensional standards. While it is clear that such features as driveways or buildings would be included in any calculation of lot coverage, many other features may be more ambiguous depending on how clearly the definition in the Zoning Ordinance is written. Regardless of the definition, it is recommended that solar energy systems with grass or another pervious surface under them be exempted from lot coverage or impervious surface calculations. However, if the area is to be paved or otherwise rendered impervious then this land area should in fact count toward any coverage or impervious surface limit. For the purposes of municipal stormwater regulations, panels could have the effect of altering the volume, velocity, and discharge pattern of stormwater runoff, however, vegetated cover beneath arrays should not be considered fully impervious.

#### Example:

Solar energy systems shall not be included in calculations for lot coverage or impervious cover as defined in [Sec. \_\_ ].

## Created by

Maine Audubon, with significant review, feedback, and support from Maine-based solar developers, municipal planners, agricultural organizations, and solar advocates.

Please contact Eliza Donoghue at edonoghue@maineaudubon.org with questions.

Town of Belgrade Planning Board Oct. 21, 2021 / 6 p.m.

Belgrade Town Office 990 Augusta Road Belgrade, ME 04917

This meeting was conducted in person. The recording can be seen online at: https://youtu.be/4CpReAf-nQ

## MINUTES

Present: Planning Board Members, Chairman Peter Rushton, George Seel, Craig Alexander, Rich Baker, Planning Board Secretary Julie Morrison, Town Manager Anthony Wilson, Ryan Eldridge

Called to order at 6:00 by Chairman Peter Rushton

#### 1. OLD BUSINESS

- a. SHORELAND APPLICATION- Applicant: Ryan Eldridge of Maine Cabin Masters. Owner: John Janice Rooney. Location: 122 Snug Harbor Road (Great Pond), Map 41 Lot 1B. Purpose: Jack and level camp, add full foundation. Will not increase footprint (non-conforming structure on a nonconforming lot). Discussion of height of building, set back, front porch removal and drainage. Ryan Eldridge voided and signed the 4 drawings that were attached to the original application. New drawings were attached. The findings of fact were completed.
  - Motion by Rich Baker to approve application with the following conditions: DEP Certified Contractor number submitted to the Town Office before start of project and DEP Best Stormwater practice followed, 2<sup>nd</sup> by Craig Alexander. Application approved 4-0
- b. Discussion and consideration of the proposed subdivision ordinance timeline. Jan 1<sup>st</sup> 96-page document will be turned over to the Town Attorney and will be done by January 19<sup>th</sup>. The Planning Board will hold an informational meeting during their regular meeting on November 4<sup>th</sup> from 6-7 p.m. The November 18<sup>th</sup> meeting will be used to go over any changes. The December 2<sup>nd</sup> planning board meeting will be used to have final draft voted on. The final meeting will be at the January Selectmen meeting with Planning Board members present.

#### 2. NEW BUSINESS

a. Preliminary discussion of ordinances related to solar, wind and telecommunications.

Same timeline as the Proposed subdivision ordinance.

#### 3. OLD BUSINESS

**a.** Consideration of October 7, 2021, Planning Board minutes.

Corrections were needed.

- 1. Rich Baker was not present; it was Pete Sargent, correction needed where Rich Baker's name typed.
- 2. Add "A number of outstanding issues discussed."
- 3. Add "The Selectmen" want an informational meeting.
- 4. Correct in old business public hearing to "1 Email comment"
- 5. Add language regarding the discussion regarding handicap parking and resulted in resolution to Kate DiBernardino.
- 6. Correct the spelling in present for Kate DiBernardino

Motion to approve minutes as amended, 2<sup>nd</sup>. Approved 3-0

Meeting adjourned 7:55 p.m.

# Town of Belgrade Planning Board

Nov. 4, 2021 / 6 p.m.

Belgrade Town Office 990 Augusta Road Belgrade, ME 04917

This meeting was conducted in person. The meeting can be viewed at: https://youtu.be/oKGBD\_gs/Y

Present: Belgrade Planning Board Members, Peter Rushton, Rich Baker, Craig Alexander, George Seel, Sara Languet, Town Manager Anthony Wilson, Planning Board Secretary Julie Morrison, Thomas & Dianne Dowd, Charlie Baeder, Tyler Evans, Norma Blazer, W. Minot Wood, Steve Buchsbaum, Richard Bourne, Joel Greenwood, KVCOG, Sandra Colt, Leonard Reich, Penny Morrell, B. Allen & L. Reich, Matti, Paul Feinberg, Nicholas Alexander, S. Gardner, Carol Dunson, Dave Wendall, Fred Perkins, Janna Townsend.

Called to order by Chairman Peter Rushton at 6:02 p.m.

#### 1. NEW BUSINESS

a. Public Discussion of proposed subdivision ordinance rewrite.
 The Planning board had a memo from Paul Feinberg and he was present to

discuss his memo. W. Minot Wood, who is a professional engineer, stated the Board did a fantastic job on the rewrite. His suggestion was to change 6 acres to 7 acres which would have 1 dwelling unit per 100,000 sq. ft.

Thomas Dowd owner of Belgrade lakes Marina and Storage had a question regarding the effects on his existing property, would he need a profession engineer to add a storage building if his is internally drained.

Paul Feinberg suggested a major subdivision have a Peer review, hire an engineer at the expense of the applicant to go over application and educate the Planning Board. (Art. 7 in memo) Also impact on water quality regarding phosphorus, why not require zero impact of phosphorus in lake (Art. 1 2-r) minor. Does Belgrade have a municipal engineer? The Board answered: NO. The cluster development has a lot of blanks and too little open space.

Another resident also voice interest in zero level of phosphorus.

The Board then Clarified Questions and gave answers:

Mr. Dowd: It should not impact a gravel pit its specifically residential. The Planning Board has an option of a waiver. Larger scale require engineer smaller do not.

The issue of 6 to 7 acres. The Board discussed and decided a minor subdivision would get larger and would need to see what other provisions could be needed. More discussion will happen at the next meeting.

The Planning Board discussed that a Peer Review would be too expensive for the applicant. Estimate of \$5-10,000.

Zero Impact- That is not possible to accomplish when moving dirt. There are ways to keep soil from entering the water while under construction. The Planning Board tells the applicant what is expected and expects them to follow it. Not sure if more language would ensure compliance. Education is needed. The rewrite would replace the 1988 version and is a significant improvement. New would include DEP standards. Zero impact is not possible.

A resident asked if CEO should be checking after permit is issued: Yes, but it would be impossible for the CEO to check every construction site every day. The next meeting is a work session and not another public discussion. 7:05 pm Public Discussion ended.

**B.** Discussion of Commercial Development Review Ordinance amendments addressing decommissioning solar, wind and telecommunications infrastructure, and phosphorous export standards.

Discussion of the wording in KVCOG, Chelsea and Readfield decommissioning solar documents. George Seel made a motion to start with KVCOG definition of decommissioning solar. Rich Baker 2<sup>nd</sup>. 5-0 in favor. Reword "Sale" instead of generated. Paragraph 4 cross out "less salvage value". #2 section 5 of Chelsea definition Financial Assurance part, Striking the language in last sentence.

Paragraph i: change wording to add full removal physical removal of solar area.2<sup>nd</sup> paragraph ii: Explanatory note: recycling of components. Do away with note and require recycling by maximum extent per market. No waste to the Town Solid was facility. End of iii: Itemize cost/add be submitted to the Planning Board for approval. In the End-Transfer of ownership: new owner must prove to the Planning Board financial assurance mechanisms.

Cell Tower template: Model after the Solar – leave language as is.

Wind towers: model after the Solar and same language.

Anthony will make the changes and give a copy to the Planning Board and Joel Greenwood of KVCOG.

**C.** Pre-application meeting for a **potential multi-family dwelling application.** 

The potential applicant had questions regarding the maximum height of 35' because the existing barn is 40'. Also questioned the set back of 100' between dwellings.

After much discussion the Planning Board requested a letter from the Fire Chief regarding the 40' and 100' not being a problem with the Fire Department. A waiver would be considered. The property is in the Village District which allows for multi-family dwellings and would fall under the comprehensive plan.

#### **D.** Town Manager's report.

The Selectmen are requesting a Planning Board member be present at the November 16, 2021, meeting at 6:30 pm. They will be discussing short term rental to consider an ordinance. The meeting agenda will be sent to all Planning Board Members. Craig Alexander and Sara Languet stated they would be there.

Anthony Wilson raised concern about All Season coming to the Planning Board for Commercial Development Permit. Anthony requested an onsite by 2 members of the Planning Board to get an understanding of the property. The owner requested Craig Alexander and Anthony requested Pete Rushton, chairman. Dave Savage, CEO would also be invited. A possible date of Tuesday, November 9th at 9am was set. Pete and Craig will send their schedule of availability and c.c. the CEO. George Seel will recuse himself as that is his neighbor.

2 interviews were held for CEO position.

#### 2. OLD BUSINESS

a. Consideration of October 21, 2021, Planning Board minutes.

The Planning Board secretary missed the 1<sup>st</sup> 15 minutes of the meeting and was having trouble with the recorded meeting. We will give more time for the meeting to be viewed and will consider the Oct. 21<sup>st</sup> minutes at next meeting.

Sara Languet motion to adjourn, 2<sup>nd</sup> by George Seel.

Meeting adjourned 8:50 p.m.