Town of Belgrade Planning Board

June 16, 2022 / 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 https://us02web.zoom.us/j/83033101494

AGENDA

Call to order

1. OLD BUSINESS

A. Discussion and consideration of Commercial Development Review Ordinance amendments addressing commercial solar facilities.

2. NEW BUSINESS

- A. COMMERCIAL APPLICATION Applicant(s): Kaplan Thompson Architects. Location: 58 Alfond Lane. Map 12 Lot 10-8. Purpose: Demolition of existing cottage down to the foundation. Replace with a new cottage on the existing foundation. This is a non-conforming lot and structure.
- **B. CEO UPDATE**. Permit update. Four Shore land applications and one incomplete.

3. OLD BUSINESS

- A. Consideration of May 19, 2022 and June 2, 2022 Planning Board minutes (Contingent upon receiving them).
- 4. ADJOURN

Amendments to Existing Ordinance Requirements

ARTICLE 1: GENERAL PROVISIONS

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).

ARTICLE 2: PURPOSE

SECTION 1 PURPOSE

G. To pPermit the Town to fairly and responsibly protect public health, safety and welfare;

H. To support the goals and policies of the Comprehensive Plan, including orderly development, efficient use of infrastructure, and protection of natural and scenic resources.

ARTICLE 3: APPLICABILITY

SECTION 1 APPLICABILITY

D. The establishment of a new non-residential use, including but not limited to gravel pits, mining operations, cemeteries, golf courses, non-residential solar energy-producing facilities, and telecommunication and wind power towers, even if no buildings or structures are proposed.

SECTION 2 USES NOT REQUIRING REVIEW

G. The following solar energy producing facilities:

- 1. A facility only providing electricity to the owner's residential land use or off-setting the electrical utility bill of a residential land use by means of net metering, and when the facility is located on property owned by the owner of the residential land use.
- 2. Roof-mounted solar energy facilities on any legally permitted non-residential or residential principle or accessory structure;
- 3. Building-integrated solar power, including shingle, roof, hanging or canopy solar modules, windows, skylights, or walls, installed in a legally permitted non-residential or residential principle or accessory structure; and,
- 4. Repair or replacement of solar modules or other facility components that do not enlarge a non-residential facility's impervious surface area.

ARTICLE 4: ADMINISTRATION AND ENFORCEMENT

SECTION 9 REVISIONS TO AN APPROVED PLAN

Any physical expansion, reconfiguration, or increase in the Rated Nameplate Capacity of an
existing Non-Residential Solar Energy-Producing Facility shall also require approval from the
same permitting authority as required for a new solar facility under this Ordinance.

Commented [AW1]: This replaces the existing language, which does not mention 4312.

Commented [AW2]: This language would be added to the existing language.

Commented [AW3]: Non-residential solar-energy producing facilities added to this existing language.

Commented [AW4]: The Planning Board voted on March 17 to add this paragraph to Section 2 of Art. 3.

Commented [AW5]: Added bullet point to page 16 of existing ordinance.

ARTICLE 8: DEFINITIONS

Community-based renewable energy project: a solar energy-producing facility which meets the definition in state statute (Title 35-A, subsection 3209-A) of a "community-based renewable energy project."

Decommissioning: means the full and complete physical removal of all components of a non-residential solar energy-producing facility, including but not limited to solar panels, associated anchoring systems and foundations, other structures, buildings, roads, fences, cables, electrical components, and associated facilities and foundations.

Distributed generation renewable energy project: a solar energy-producing facility which meets the definition in state statute (Title 35-A, subsection 3209-A) of a distributed generation renewable energy project.

Farmland: means any tract or tracts of land used for commercial farming:

- A. That consists of 5 or more contiguous acres:
- B. That has produced a gross annual farming income of at least \$2,000 per year from the sales value of farm products in one of the 2, or 3 of the 5, calendar years preceding the date of application for registration under Title 7, Part 1, Chapter 2-B.
- C. That is land on which a farm product is produced.

"Farmland" does not include land used for woodlots, homes, farm buildings, roads, lawns or any area covered with non-crop vegetation that borders abutting land.

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.

Net metering: means the same as net energy billing (NEB) as defined by the Maine Public Utilities Commission in Chapter 313, titled "Customer Net Energy Billing," of the Commission's regulations, and includes both kWh credit and tariff rate programs.

Non-residential solar energy-producing facility: any commercial, industrial, institutional or other non-residential solar energy facility producing electricity with ground-mounted solar modules regardless of total size or power output, including, but not limited to, any facility:

- 1) selling power to the regional electric grid;
- 2) that is classified by the Maine Public Utilities Commission as a community-based or a distributed generation renewable energy project;
- 3) producing energy for use by a commercial, industrial or institutional land use; or
- 4) generating and providing electrical power to the grid under a net-metering agreement with Central Maine Power Company in accordance with Chapter 313 of the Maine Public Utilities Commission regulations.

Rated Nameplate Capacity: means the maximum rated output of electric power production of the photovoltaic system in watts of Alternating Current (AC)

Residential Dwelling Unit: A room or group of rooms designed and equipped for use as permanent, seasonal, or temporary living quarters for only one family at a time and containing cooking, sleeping, and toilet facilities. The term shall include mobile homes and rental units that contain cooking, sleeping

Commented [AW6]: The following definitions would be added to the existing definitions in Art. 8.

Commented [AW7]: This definition comes from the state statute cited within the definition.

Commented [GS8R7]: Helpful.

Commented [GS9]: Is this last sentence in the definition of "farmland" from Maine statute correct? Reads like something may be missing from ending.

Commented [AW10]: This language comes directly from the S70

and toilet facilities regardless of the time-period rented. Recreational vehicles are not residential dwelling units.

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.

New Proposed Requirements Specific to Non-Residential Solar Facilities

TOWN OF BELGRADESECTION 5

UTILITY SCALE NON-RESIDENTIAL SOLAR ENERGY-PRODUCING FACILITIESY ORDINANCE

DRAFT 10-18-2021

Section 1. Purpose

The purpose of this Ordinance is to The purpose of this section is to establish a municipal review procedure and siting standards for Utility Scale Non-Residential Solar Energy-Producing Facilities (USSF's NSEPFs hereinafter referred to as "solar facility"). These standards are intended to:

Establish clear guidelines and standards to regulate <u>utility scalenon-residential</u> solar_energy_<u>producing</u> facilities;

<u>2.</u>

Permit the Town to fairly and responsibly protect public health, safety and welfare;

Support Regulate the development of utility scalenon-residential solar energy-producing facilities in a manner that minimizes any potential adverse effects on the scenic, cultural__and natural resource character of the Town;

3.

Provide for the removal of panels and associated <u>solar facilityutility</u> structures that are no longer being used for <u>non-residential</u> energy generation and transmission purpose.; and

 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

Commented [GS11]: Article 7 - Section 5. NON-RESIDENTIAL SOLAR ENERGY PRODUCING FACILITIES

Commented [AW12]: This could be added to the CDRO's Section 2, titled Purpose, as paragraph G on page 2

Commented [GS13R12]: Sorry did not pick up on these comments at last meeting. Suggest add "b" & "e" to existing Purpose section of pg. 2 of ordinance. Locate remainder of this paragraph in the new Section 5 of Article 7 since only apply to solar facilities.

Commented [GS14]: We discussed at meeting the awkwardness of repeating "non-residential solar energy producing facility". An alternative to using a non-sensical anacronym is the convention of ... "(hereafter referred to as solar facility)"? Then use "solar facility" in rest of the new Section 5.

Commented [AW15]: Art. 1, Sec 2 on page 1 of the CDRO speaks to authority. It sites 3001, but not 4312. We could replace that entire section with this language.

Commented [GS16R15]: I agree with your suggestion.

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

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 Facilitysolar facility under this Ordinance. Routine maintenance or replacements do not require a permit.

a. 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.

D. The establishment of a new non-residential use, including but not limited to gravel pits, mining operations, cemeteries, golf courses, and telecommunication and wind power towers, even if no buildings or structures are proposed.

Section 4. Definitions

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

-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.

Rated Nameplate Capacity: means the maximum rated output of electric power production of the photovoltaic system in watts of Direct — Current (DC)

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.

Commented [AW17]: This is language from the KVCOG template that could be added as another bullet to Sec. 9.1 on page 16.

Commented [GS18R17]: Agree with suggestion.

Commented [AW19]: These could be added to the alphabetical listing of definitions in Art. 8 beginning on page 45

Commented [GS20R19]: Agree that all definitions should be in the same article of the ordinance.

Commented [GS21]: Is this last sentence in the definition of "farmland" from Maine statute correct? Reads like something may be missing from ending.

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.

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. A. Administration and Enforcement

This Ordinance Regulations related to non-residential solar energy-producing facilities will be administered as an additional level of review along with the provisions of the Site PlanCommercial Development Review Ordinance, including Sections II Articles 1 through 8V, 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.

a. 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.

Commented [AW22]: I BELIEVE this paragraph should be added to Art. 4, Sec. 3.2 on page 6 of the CDRO.

Commented [GS23R22]: I actually think would standout more if in new Section 5 of Article 7, especially given wording. That would ensure an applicant & and the Board are reminded that this section supplements the rest of the ordinance and that the rest of the ordinance also needs to be met

Section 6. B. Specific Application Requirements Specific Application Requirements.

In addition to the requirements listed in Art. 4 Sec. 5.4 tion II of the Site PlanCommercial Development Review Ordinance, an application for a USSF non-residential solar energy-producing facility pPermit must also include the following:

1. An additional permit / technical review fee to be set by the Board of Select<u>personsmen</u> shall be payable at the time of application. This fee will be reviewed and amended as necessary on an annual basis. The Planning Board may at its discretion retain independent technical or legal expertise to assist in review or supplement the evidence presented by the applicant and received during the public hearing. The cost of such assistance shall be borne by the applicant according to the terms of an escrow account set-up at the time the application is submitted as listed in the Permit Fee Schedule established by the Board of Selectpersons.

<u>2.</u>

A description of the owner of the facility, the operator if different, and detail of qualifications and track record to run the USSFnon-residential solar energy-producing facility;

a. 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;

<u>3.</u>

A description of the energy to be produced and to whom it will be sold;

<u>4.</u>

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:

<u>5.</u>

A description of the panels to be installed, including make and model, and associated major facility components;

<u>6.</u>

A construction plan and timeline, identifying known contractors, site control, and anticipated on-line date;

<u>7.</u>

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.

8.

An operations and maintenance plan, including site control and the projected operating life of the facility;

<u>9.</u>

An emergency management plan for all anticipated hazards;

Commented [AW24]: The requirements enumerated here could be added to this portion of the CDRO.

Commented [AW25]: This language mirrors what appears in Sec. 5.5b on page 11 of the CDRO. The board may want to consider whether it wants/needs this language in twice, including in Sec. 5.4.

Commented [GS26R25]: Either location is fine with me at the end of the day. I agree with your suggestion to add a reference to the list of application submissions in Sec. 5.4 B – e.g., and, if required by the Board, an escrow account payment for hirring by the Planning Board of independent technical or legal expertise to assist it in its application review.

Commented [AW27R25]: After watching the April 7 video, I still wasn't clear which language the Board prefers.

10.

Proof of financial capacity to construct and operate the proposed <u>non-residential solar energy-producing facility USSF</u>; and

<u>11.</u>

Name and contact information for solar system installer, and if different, the name, contact information and license number of the supervising Maine licensed electrician;

12.

Written certification by the installer that all electrical components shall be installed in accordance with the National Electrical Code;

<u>13.</u>

<u>Provide a one- or three-line electrical diagram detailing the electrical components installation and electrical inter-connections to the Belgrade fire chief;</u>

14.

Stream crossing detailed design plans;

15.

Prime agricultural soils identification and mapping conducted by a Maine-licensed soil scientist in accordance with the Maine Department of Agriculture, Conservation & Forestry guidelines, Determining Prime Farmland Soils and Soils of Statewide Importance for Siting Solar Projects in Maine, May 2020, or as revised; and,

<u>16.</u>

Maine Inland Fisheries & Wildlife Beginning with Habitat program mapping of high-value plant and animal species habitat on the project parcel and abutting parcels. High and moderate deer yard mapping within 1,500 feet of the development.

17.

b.

A Visual Impact Assessment,

<u>a</u>An analysis to determine potential visual effect of the <u>solar facility</u>, <u>USSF</u> 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, including Sections 4-7, Section 10 and Appendix A of Chapter 315 of the Maine Department of Environmental Protection regulations, Assessing and Mitigating Impacts to Existing Scenic and Aesthetic Uses (except "Planning Board" replaces "Department"), 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:

a. A visual and cartographic analysis (Viewshed Analysis).

A geographical representation of all the areas within a minimum of 3 miles of where the USSF solar facility, from its highest points is visible from the surrounding (impact) area should—shall—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 facility will be visible, including representative and worst-case viewpoints, must be identified. At a minimum, these public recreation and scenic resources within the boundaries of the Town of Belgrade are to be considered viewpoints for inclusion in this analysis: Great Pond, Long Pond, Messalonskee Lake, Salmon Lake, McGrath Pond, Minot Hill Road, areas of the Belgrade Lakes Golf Club open to the general public and above 400 feet elevation, and areas of Belgrade accessible by public road with an elevation above sea level equal or greater than 550 feet. 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.

<u>b.</u>

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.

c. Visual sSimulations.—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.

iv. The visual impact assessment must be prepared by a Maine-licensed landscape architect or other design professional trained in visual assessment procedures, or as otherwise directed by the Planning Board.

Commented [GS28]: Should we include this or similar language as guidance to future PBs & applicants regarding the legal limit of the ordinance's jurisdiction? Future Boards will not be aware of the legal opinion we received during the ordinance development. Sorry did not mention before.

Commented [AW29R28]: George, very good idea.

Commented [GS30]: My recollection of the discussion at the 4/21/22 meeting was not that the entire private golf club would be considered a "public recreation and scenic resource", but only the knoll from which the public is allowed access to see the view of Great Pond. We discussed finding the name of the knoll and using that in the ordinance. Did I misunderstand? I've looked at multiple topo maps and that knoll does not seem to have a widely accepted name. An alternative is to use language like " areas of the Belgrade Golf Club open to the general public and above 400 feet elevation". This captures the views from the access road, the parking lots, and the club house/restaurant.

Commented [AW31R30]: Sounds good to me. I've gone ahead and added that. The Board can edit later if need be.

18. An application for a Non-Residential Solar Energy-Producing Facility permit must include a decommissioning plan. "Decommissioning" means the full and complete physical removal of all above- and below-ground components of a solar energy facility, including but not limited to solar panels modules, associated anchoring systems and foundations, other structures, buildings, roads, fences, cables, electrical components, and associated facilities and foundations. Decommissioning plans must include:

a. A decommissioning plan, including:

A description of the trigger for implementing the decommissioning plan. There is a rebuttable presumption that decommissioning is required if no electricity is <u>sold commercially to external customersgenerated</u> 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 <u>and commercial sale of</u> of electricity, that although the project has not <u>commercially sold generated</u> electricity for a continuous period of 12 months, the project has not been abandoned and should not be decommissioned.

<u>b.</u>

A description of the work required to physically remove all solar panels, 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 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.]

<u>c.</u>

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 and submitted to the Planning Board for its approval.

d.

Demonstration in the form of a performance bond, surety bond, an irrevocable letter of credit, 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; 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 solar facility the Applicant will have the necessary financial assurance in place for 12500% of the total cost of decommissioning, less salvage value. T. 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, he 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-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.

<u>e</u>

Transfer of ownership. Upon a transfer of ownership of a <u>commercial</u> 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. New owners must demonstrate to the Planning Board's satisfaction an ability to meet the financial assurance requirement.

Section 7C. Standards for Approval.

In addition to the requirements in <u>Article 6: -Development Standards GenerallySection III of the Site Plan</u> Review Ordinance, the following standards must also be met:

1. Siting prohibitions - The development or construction of a non-residential solar energy producing facility shall be prohibited in the following locations:

a. The Shoreland Zone as mapped in the Belgrade Shoreland Zoning Ordinance map;

<u>b. The Village and Critical Resource Conservation Districts as described and mapped by the Town of Belgrade 2014 Comprehensive Plan;</u>

C

Areas of 20% or greater slope; and,

d. -Areas with elevations above sea level of 550 feet or greater; and-

c. Protect prime farmland and farmland of statewide important agricultural soils/lands—No more than five (5) contiguous acres 10% of the total project area may be located on land with soils defined by the U.S. Dept. of Agriculture's Natural Resources Conservation Services as "prime farmland" or "farmland of statewide importance" as determined by a field survey conducted by a Maine licensed soil scientist and in accordance with the Maine Dept. of Agriculture, Conservation and Forestry's May 2020 guidance document titled "Determining Prime Farmland Soils and Soils of Statewide Importance for Siting Solar Projects in Maine."

2. Other prohibitions:

a. -The development or construction of solar concentrating power plants are prohibited; and

b. Transformers and other electrical equipment using halogen or PCB oils as coolants are prohibited.

3. The solar energy system shall be designed by a Maine-registered electrical engineer.

4. L 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 solar facility and including the

Commented [GS32]: Just simple correction of KVCOG language

Commented [AW33]: I chose to place this under siting prohibitions. The Board may decide another placement is more appropriate.

Commented [GS34]: Good idea

decommissioning of the <u>USSF</u>solar facility. 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.

- 5. Setbacks: Structures (including fencing) that are part of a USSF shall be setback a minimum of 100 feet from any existing residential dwelling structure. Minimum Setbacks:
 - a. Solar modules may not be located less than 250 feet from existing public and private road rights-of-way;
 - b. Solar modules may not be located less than 250 feet from existing residential dwelling units;
 - c. Solar modules may not be located less than 125 feet from adjacent property lines, unless a residential dwelling is within 12500 feet of the property line, in which case the more stringent setback of 250 feet from the dwelling applies:
 - d. Transformers and inverters may not be located less than 150 feet from a property line.
- 6. Clear-cutting and open space: The maximum area of land that is primarily forestland or the maximum area of wooded vegetation that may be cleared for a commercial solar facility is 10 acres. Additionally, a minimum of 15% of a solar facility's developed and disturbed land area is to be reserved as undeveloped and natural open space. The acreage to be reserved as open space is to be indicated on the site plan. Areas included in buffers and setbacks shall not be included in the open space provision.
- 7. Visual screening requirements. The solar facility shall be at least 80-percent visually obscured from property lines, public and private roads, and residential dwelling units by a vegetative screen or buffer, as determined by the visual impact assessment at zero to five (5) feet above the road surface, and zero to 10 feet above the ground surface at residential dwelling units, respectively. Additionally, no more than one-shalf-n-acre of a solar development may should be viewable from Belgrade waters or from the viewpoints designated in-the (viewpoint assessment section/paragraph). Property lines in common with an approved subdivision shall also be provided with visual screening. The screening shall be designed and maintained as follows:
 - a. All vegetative screening shall maximize the retention and use of existing, naturally occurring woodland and shrubs, with clearing limited to hazard trees. Clearing of trees and other natural vegetation prior to receiving development approval from the Planning Board is prohibited. The Planning Board may require augmentation of naturally occurring vegetation with plantings of native trees and shrubs to achieve significant visual screening if sufficient density of growth does not already exist. If damaged by weather, fire or disease at any time over the operating life of the facility, the visual buffer shall be maintained with the planting of trees and shrubs.
 - b. Minimum vegetative screening dimensions:
 - 50 feet in depth along abutting property lines except as provided below.

 i. 200'-feet in depth along public and private roads.
 - ii. 2502 in depth along the common property line(s) with an existing residential dwelling unit that extends along the length of the property line demarcated by a 180-degree arc with a radius of 250' from each corner of the residential dwelling

Commented [AW35]: This was my attempt to craft language expressing the Board's desire.

Commented [GS36]: I had originally suggested the use of the term "disturbed" land in addition to "developed" to capture land that is cleared and bulldozed as part of the overall facility construction, but no modules or other equipment will be situation upon (e.g. to eliminate shading from woodland). Such areas are already defined in the ordinance.

Commented [GS37]: Is the inclusion of the 80% obscuration from a property line when not associated with a road or residence, correct? I only recall discussing in context of screening residential dwellings and public/private roads.

- 1) At the May 12th meeting I stipulated I would agree to the 125' setback from property lines if the minimum 50' screening from a property line (if not associated with a public road or residence) was limited to when that property line is in common with a Town approved subdivision (I had amended my position from that in my memo upon thinking about Steve Buchsbaum's later comments and said as such at the meeting). Requiring planting of 50' of screening along an unused hay field and an undeveloped property line of land where there are no development plans for the foreseeable future, is unreasonable. I thought we had agreement on this as part of the overall compromise.
- 2) 80% obscuration standard should not apply to all property lines, just those in common with residential dwellings and roads. As written actually requiring hundreds/;thousands of feet of vegetative screening along an undeveloped property line and deeper than 50' since I doubt 50 ft. provides 80% obscuration.

I've offered some possible amendments to make the 80% obscuration standard work to screen the solar facility from actual human receptors (residents of a home, passersby on roads, and even future homeowners in a yet to be developed subdivision). In light blue, but not apply to common property lines with woodlots and other undeveloped land.

Commented [AW38]: This was how I worked in the degree of obscuration favored by the Board.

Commented [GS39]: I hadn't thought of this on May 12th in the course of our discussion, but do we need to specify a height above ground level? For example, planting of vegetated screening will not initially obscure visibility from the second story of a home by 80% absent requiring planting for full size trees. So for example, should the standard be something like "80 percent visually obscured from public and private roads and residential dwelling units at a height of 4' and the first floor, respectively, by a vegetative screen or buffer."

Commented [GS40]: My attempt to capture the discussion in the waning minutes of our 6/2 meeting. Craig made clear he needed more time to think about this. No agreement was reached on this as of yet by the Board.

Commented [AW41]: Ditto here.

unit. Screening will be provided along the greatest length of property line indicated by this measurement method.

iii. Greater depth may be required by the Board to achieve 80-percent obscuration when -determined to be needed by the visual impact analysis from property lines.

iv.

Vegetative screening is to be provided from any property line in common with a residential subdivision previously approved by the Town of Belgrade. Such vegetative screening is to be a minimum of 50' in depth. Eighty percent obscuration from such a property line is not required in this specific instance only.

v. On sites which lack existing woodland, a planted vegetative buffer shall be planted to the same dimensions as stated above in this subsection, sufficient to provide with time year-round screening. The buffer shall consist of a mixture of native conifer tree species (e.g., white pine, balsam fir, white or red spruce, etc.) and understory trees and shrubs. Trees shall be a minimum of 6 feet in height at the time of planting and spaced no more than 30 feet apart, with shrubs and understory trees filling all gaps between the future overstory trees. Trees shall be planted in alternating rows to achieve an effective visual screen of a minimum 80-percent obscuration from public and private roads and residential dwelling units, property lines as determined by a visual impact assessment. All shrubby plant material shall be at least 3 feet in height at the time of planting and the species selected will grow at least to 5 feet at maturity. A planted vegetative visual screen shall be maintained over the lifespan of the facility with all plantings that die replaced as soon as growing conditions allow.

vi. Where no vegetation can be grown due to unique site conditions, the Planning Board may approve a visual screen consisting of fences, walls, berms or a combination thereof that achieve 80-percent obscuration from a property line, provided that such structures are not placed closer than 15 feet to a property line or public or private road right-of-way. Artificial screening shall be a of sufficient height and length to effectively screen the facility from view.

vii. The visual screen shall be planted or installed prior to completion of the development and prior to the start of facility operation.

viii. The Planning Board may approve an alternative, equally effective visual screening for the specified 80-percent obscuration, but only when supported by the findings of the visual impact analysis conducted in accordance with the requirements of this ordinance and its associated visual impact mitigation measures.

7. Natural Resource Setbacks and Buffers: The following setbacks and natural vegetation buffers shall be maintained throughout the life of the solar facility from the following natural resources:

a. Maintain 100' setback and buffer? of natural vegetation along any rivers, streams or brooks, except for perpendicular crossings required for vehicle/powerline access. For streams less than 6' wide with less than a 2% slope, stream crossings shall be designed and constructed in accordance with the Maine Department of Transportation's Stream Smart Road Crossing Pocket Guide.

Commented [AW42]: For emphasis.

Commented [AW43]: Added during the discussion

Commented [GS44R43]: As worded this creates the same problems I noted above. I've offered a possible solution.

Commented [AW45]: New section created on May 19 to congregate the various buffers.

Commented [GS46]: Tweaked wording to put into context.

Larger stream crossings shall be designed by a Maine registered professional engineer based on the principles of the Maine Stream Smart program.

b. -250' setback and natural vegetation buffer from habitat of high value plant and animal species as identified and mapped by the Maine Department of Inland Fisheries and Wildlife's Beginning with Habitat program, including but not limited to habitat for state or federally listed endangered species, significant vernal pools, and high or moderate value waterfowl and wading bird habitats.

c. 1,320' setback and natural vegetation buffer from areas identified and mapped by the Maine Department of Inland Fisheries and Wildlife as a high- or moderate-value deer wintering area.

d. 75' setback and naturally vegetated buffer from wetlands included in the U.S. Fish and Wildlife Service's National Wetland Inventory, except for wooded wetlands. May not be located in wooded wetland, but no setback or buffer required Protect prime farmland and farmland of statewide important agricultural soils/lands—No more than 10% of the total project area may be located on land with soils defined by the U.S. Dept. of Agriculture's Natural Resources Conservation Services as "prime farmland" or "farmland of statewide importance" as determined by a field survey conducted by a Maine licensed soil scientist and in accordance with the Maine Dept. of Agriculture, Conservation and Forestry's May 2020 guidance document titled "Determining Prime Farmland Soils and Soils of Statewide Importance for Siting Solar Projects in Maine."

8. Height: The USSF shall be no more than 15 feet high at its tallest point of any equipment Maximum solar module height, as measured from ground level to a module's highest point at full tilt, shall not exceed 12 feet.

<u>H.-9.</u> Utility Notification: No <u>non-residential solar energy producing facility USSF</u> 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.

10. L. Fencing: Provide safety fencing around all solar modules and electrical equipment. Fencing shall be "Solid Lock Game Fence" or of similar design with 8-inch by 12-inch holes at bottom, or shall be elevated five (5) inches above ground level to allow small wildlife passage. Fencing shall be located between the required visual screening and the electrical components of the solar facility. Access gates may be located outside the required visual screening.

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.

11. J.

Signage: Signage shall be required to identify the owner of the non-residential solar energy-producing facility 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 solar facility. 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 solar facility, informing individuals of potential voltage hazards, including stating the output of power (AC or DC).

Signage indicating the official e911 address of the solar fFacility shall also be required to clearly be visible, from both directions of travel, from the public road or roads from which the USSF facility is accessed.

12. K.-Emergency Services: The solar facility 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

Commented [GS47]: Correct paragraph alphabetic labels.

Commented [GS48]: Yes

Commented [AW49]: Does this meet the Board's intent?

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 solar facility 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 solar facility 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.

13.

Visual Impact: A <u>non-residential solar facility ny USSF should_shall</u> not have <u>any-</u>detrimental effect on the <u>public recreational and</u> scenic resources of <u>the townBelgrade</u> or <u>significantly</u> degrade the scenic <u>value-yiew</u> from abutters' properties. <u>In orderTo</u> determine the visual impact of any <u>USSF non-residential solar facility</u>, the Planning Board will, using the information provided in the Visual Impact Assessment study (See above), consider the following:

- a. The significance of the potentially affected <u>public recreational and</u> scenic resources;
- b. The existing character of the surrounding area;
- c. The expectations of the typical viewer;
- d. iv. The project purpose and the context of the proposed activity;

<u>e. v.</u> The extent, nature and duration of the potential effect of the <u>USSP's-non-residential solar facility's</u> presence on the public's continued use and enjoyment of <u>the townsBelgrade's</u> <u>public recreational and scenic resources</u>.

The Planning Board shall consider Belgrade's public recreational and scenic resources to include, but not be limited to, the following: areas of Great Pond, Long Pond, Messalonskee Lake, Salmon Lake and McGrath Pond within the Town of Belgrade; the Minot Hill Road; that portion of the Belgrade Lakes Golf Club open to the general public and with an elevation of 400 feet or greater; and locations in Belgrade accessible by public road with an elevation of 600 feet or greater.

In addition to the considerations listed above in ai. through ex. of this subsection, the Planning Board shall implement the visual impact standard in part using a rebuttable presumption that during those times of year when deciduous trees have all their leaves and if one-half acre or more of any solar facility is fully visible from areas of Great Pond, Long Pond, Messalonskee Lake, Salmon Lake and McGrath Pond within the Town of Belgrade; the Minot Hill Road; that portion of the Belgrade Lakes Golf Club open to the general public and with an elevation of 400 feet or greater; and locations in Belgrade accessible by public road with an elevation of 600 feet or greater; it will be considered to have a detrimental effect on the public recreational and scenic resources of Belgrade and therefore will have an adverse effect on the scenic and natural beauty of the area under paragraph xvi of Article 5: Review Criteria of the ordinance.

f. vi. Vehicle access and electrical transmission routes shall be combined into a single corridor through required vegetative screening and buffers, or shall be co-located in existing rights-of-way, roads or other existing man-made linear features. Access roads shall have a vehicle travel surface that is no less than 12 feet and no more than 20 feet in width. The width of access roads shall be no less than 12 feet and no greater than 20 feet. When the proposed access road is unable to take advantage of an existing man-made linear feature, -the layout of the road from a public road into the facility is to include at least one curve or angle such that the access road does not provide a straight line-of-sight of the facility's modules or other equipment. Access

Commented [AW50]: Note the placement of this regulation

roads must be maintained year-round, including snowplowing, to ensure emergency vehicle access.

Commented [AW51]: Added per Dan Newman's suggestion.

A. 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.

14. Herbicides: Use of herbicides to manage vegetation within the development is prohibited. Mechanical means are to be utilized, which may include animal grazing.

15. Maintenance Conditions: The non-residential solar facility USSF owner or operator shall maintain the non-residential solar facility USSF and all associated fencing, visual barrier measures 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 non-residential solar facility 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 non-residential solar facility USSF and any access road(s).

16. Inspection Requirements:

a. Project Completion Inspection. Within 30 days of the completion of facility construction and prior to the start of facility operation, a permit and ordinance compliance inspection report by a Maine registered professional engineer shall be conducted and submitted to the CEO, including recommendations for any required remediation measures and a timetable for their implementation.

b. Monthly inspections. A monthly physical inspection shall be conducted of the physical integrity all modules, transformers, inverters and other electrical components, and to identify any evidence of a leak or discharge of a hazardous substance or oil. The inspection shall be conducted by a qualified representative of the facility owner. A written paper or electronic inspection log shall be maintained with at a minimum the following information: inspection date, who conducted it, their initials or electronic signature, and if and where any discharges were found. The inspection log will be maintained at the owner's place of business in Maine and will be made available upon request by the Town code enforcement officer, fire chief or duly authorized public officials from the State of Maine. Evidence of a discharge of a possible hazardous substance or oil shall be reported to the Maine Department of Environmental Protection in accordance with current law and regulations for determination of the need for possible further investigation or remediation.

17.

Modifications: Any material modifications to a <u>non-residential solar facility USSF</u>-made after issuance of the required Town permit(s) shall require approval by the Code Enforcement Officer and /or the Planning Board.

Commented [AW52]: Added May 19 from George's memo.

Commented [GS53]: Reformatted to consolidate both facility inspection requirements into one subsection.

Commented [GS54]: If folks would like to beef up some as an assurance that no soil/ground water contamination is left behind that previously went undetected, it would not be unreasonable to require at the time of decommissioning an environmental site assessment around the transformers and inverters that includes soil testing. Could require to be conducted in accordance with a widely accepted ASTM national protocol. This could be added to the language specifying what should be included in the decommissioning plan. If a gas station can do it, a solar facility can too.

18. 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 non-residential solar facility USSF.

Shoreland	
Certified Contractor	
Number #	
Non Shoreland	

Town of Belgrade, Maine APPLICATION FOR PERMIT

Date Logged Date Rec'd by PB/CEO\$Fee Paid Receipt#	
1. Applicant: Name_KAPLAN THOMPSON ARCHITECTS Mailing Addr_102 EXCHANGE STREET State/Zip_PORTLAND, ME 04101 Phone#207.842.2888 2. Owner (if other than applicant): Name_BELGRADE LAKES REALTY TRUST Mailing Addr_C/O DEXTER ENTERPRISES 2 MONUMENT SQUAR State/Zip_PORTLAND, ME 04101 Phone# 207.828.7999	
3. Specific location of property 58 ALFOND LANE Map# 12 Lot# 10, card #	Ŧ8
Name of Lake/Pond/Stream (if applicable) GREAT POND	
4. Current use of property (check all that apply)	
X_Residential/Recreational;Individual Private Campsite;Commercial;Industrial; Other 5. Proposed construction or change in use: DEMOLITION OF EXISTING COTTAGE DOWN TO FOUNDATION REPLACEMENT W/ NEW COTTAGE ON EXISTING FOUNDATION	
6. Existing sewage disposal system type and capacity: ON SITE SEPTIC	
Present number of bedrooms 5 ; Bedrooms to be added under this application 1	
When did you purchase the property within Shoreland Zone?1947(month/year) If after 11/6/18, attach copy of	
septic system inspection report documenting it is not malfunctioning. 7. Total lot area	
 Square footage of unvegetated surface within shoreland zone including all structures, driveways, parking, walkways and patios3,134 SF 	
9. What is the total area of cleared openings of woody vegetation (Sqft)23,537 SF	
10. Total number of structures on the lots12 A site plan to-scale MUST accompany this application and be prepared in	
accordance with the requirements on the attached Instruction Sheet (Item #10 on the Instruction Sheet). All required	
attachments must accompany this application.	
Present Structure Square Footage 3,699 SF FLOOR AREA 2,411 SF FOOTPRINT AREA	
Proposed Structure Square Footage 3,985 SF FLOOR AREA 2,411 SF FOOTPRINT AREA	
*Required only for structures within Shoreland Zone I/We have obtained and understand the requirements of all Town of Belgrade Ordinance which apply to the proposed	
construction or change of use. The undersigned applies for a permit to build, alter or improve existing structure(s) or	
grounds as stated above on this application and portrayed on the attachments. The information provided is true and	
correct. // / //	
Signature: Signature:	
There may be additional Federal, State or local permits required depending on the nature of the project.	
TOWN USE ONLY Date: PBCEO	
DECISION: APPROVE DISAPPROVED Signatures:	
Conditions	

A-0.0

EG/SBH/GM/PK Design Development

EDGE OF EXISTING HOUSE FOOTPRINT SILT FENCE 100' SETBACK FROM WATER 90.60 sq ft EXISTING DRIVEWAY SITE PLAN

ALFOND HOUSE

58 ALFOND LANE BELGRADE, ME 04917

0

BARN

TTH PARCEL 3671-240

WOODLANDS

FOR THE ALFOND FAMILY CAME **EXISTING CONDITIONS PLAN**

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CONSTRUCTION

-4 TH PARCEL 3671-240

*

130

Z Z

6TH PARCEL 36TI-240

BARN

20

5TH PARCEL 9671-290

BELGRADE, MAINE

A-0.1

POIN ROAD

Sell-24

BTH PARCEL B671-240

9 RD PARCEL 9671-240

WHITING ROAD

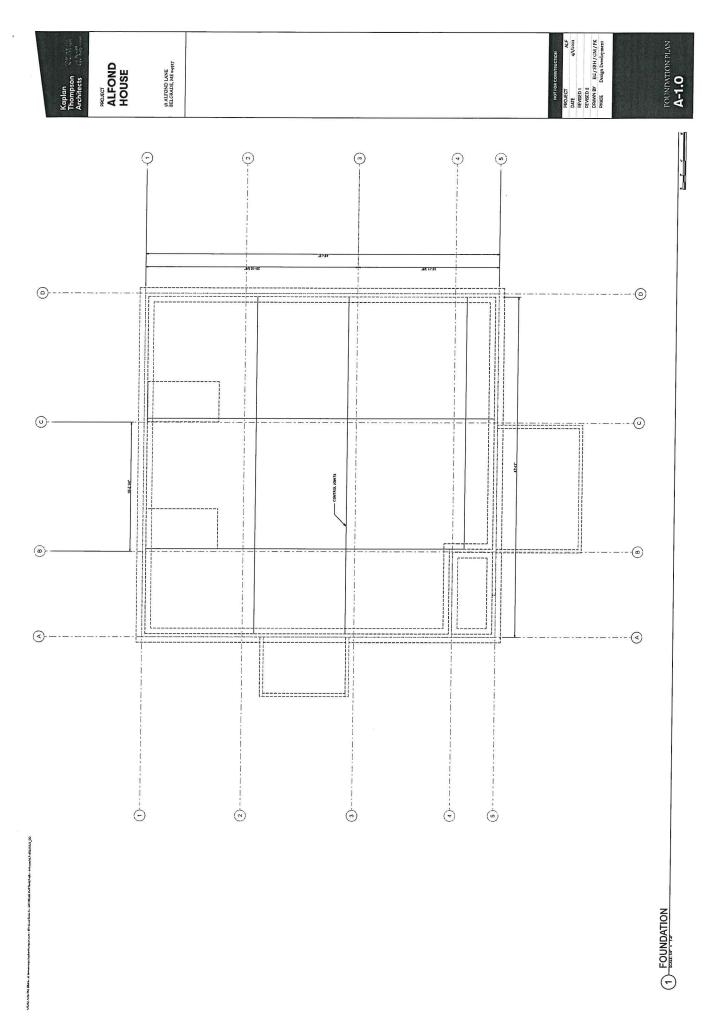
EXISTING CONDITIONS PLAN BASED ON COMPOSITE LOT PLAN PREPARED BY D. HARRIMAN, PLS, AUGUST, 2003; USGS AERIAL PHOTOGRAFHT AND TOPOGRAPH COMPLETED IN 1995, AND FIELD VERIFICATION BY CARROLL ASSOCIATES IN FEBRUARY AND MARCH, 2004.

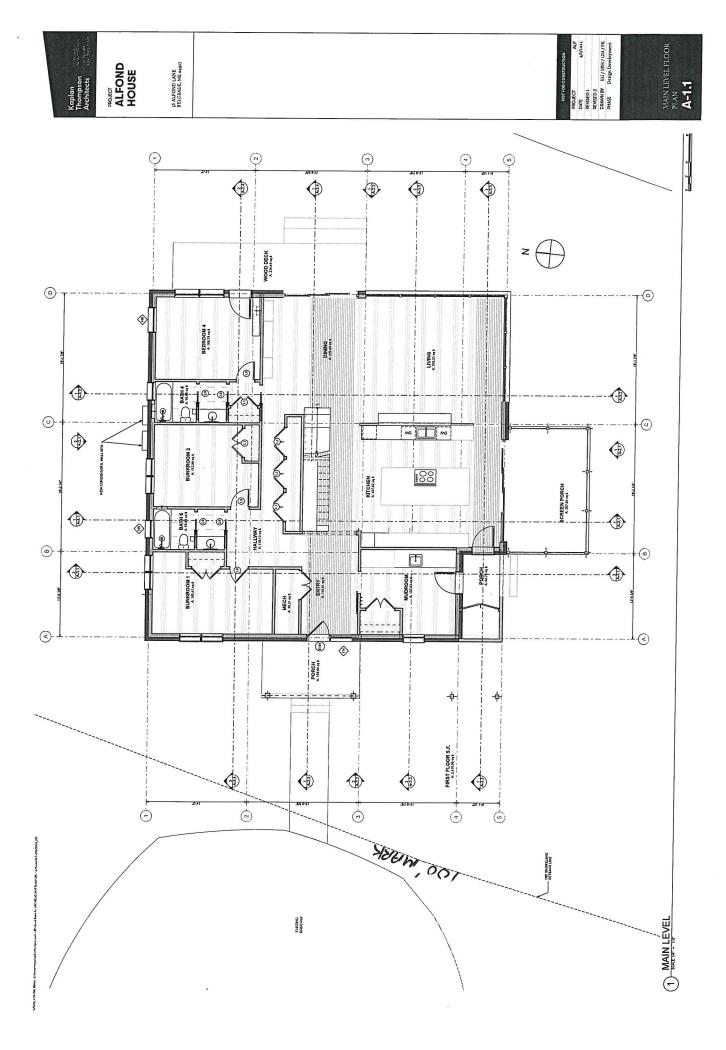
OPEN FIELD

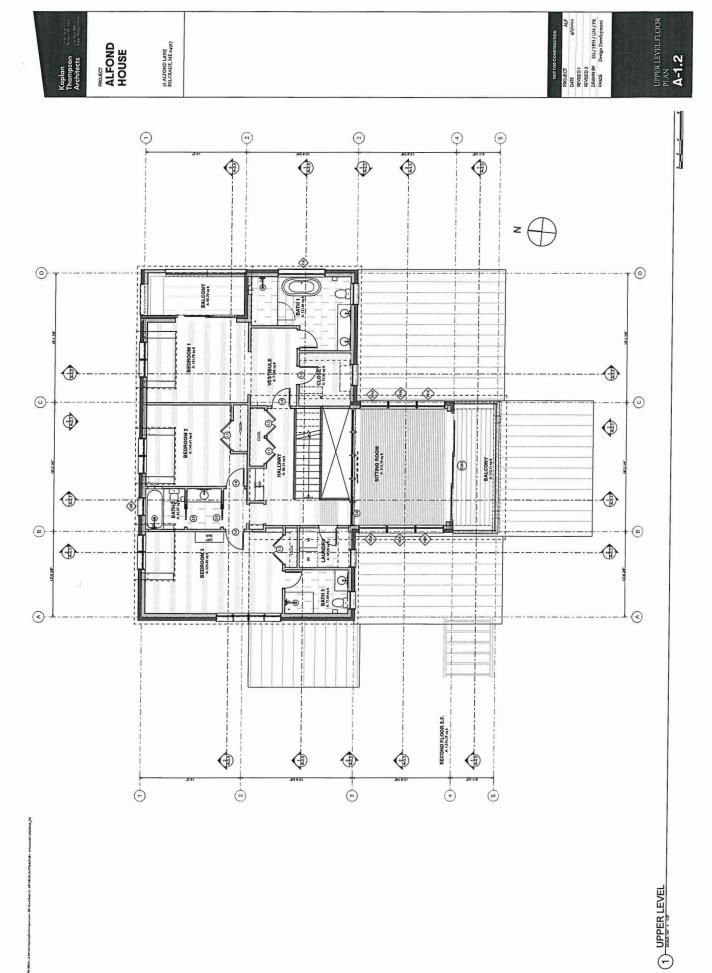
SCALE: |" = 7"

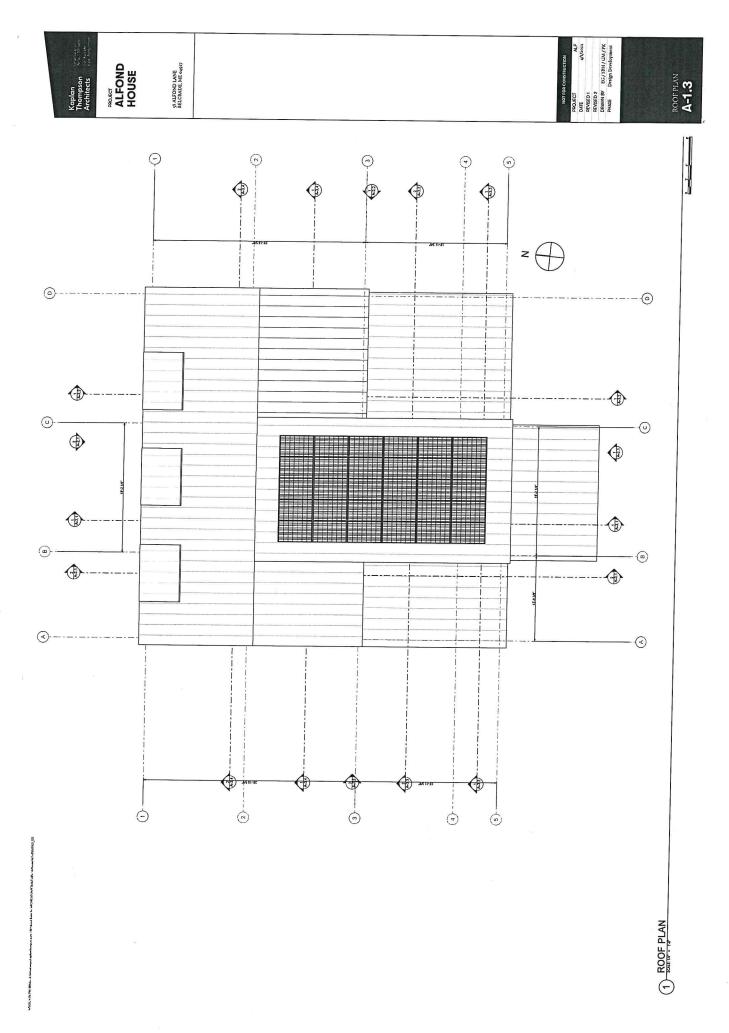
ALFOND HOUSE

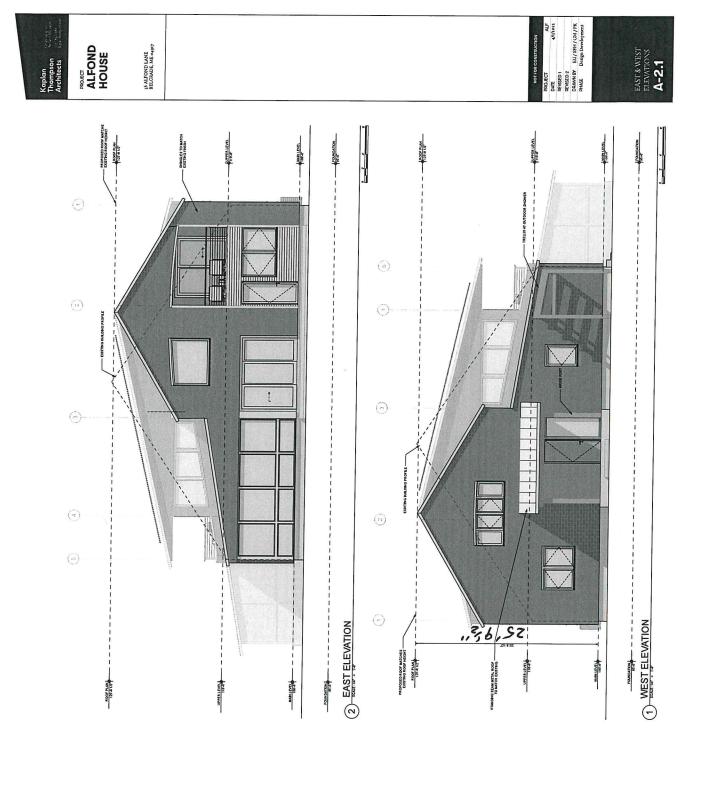
58 ALFOND LANE BELGRADE, ME 04917











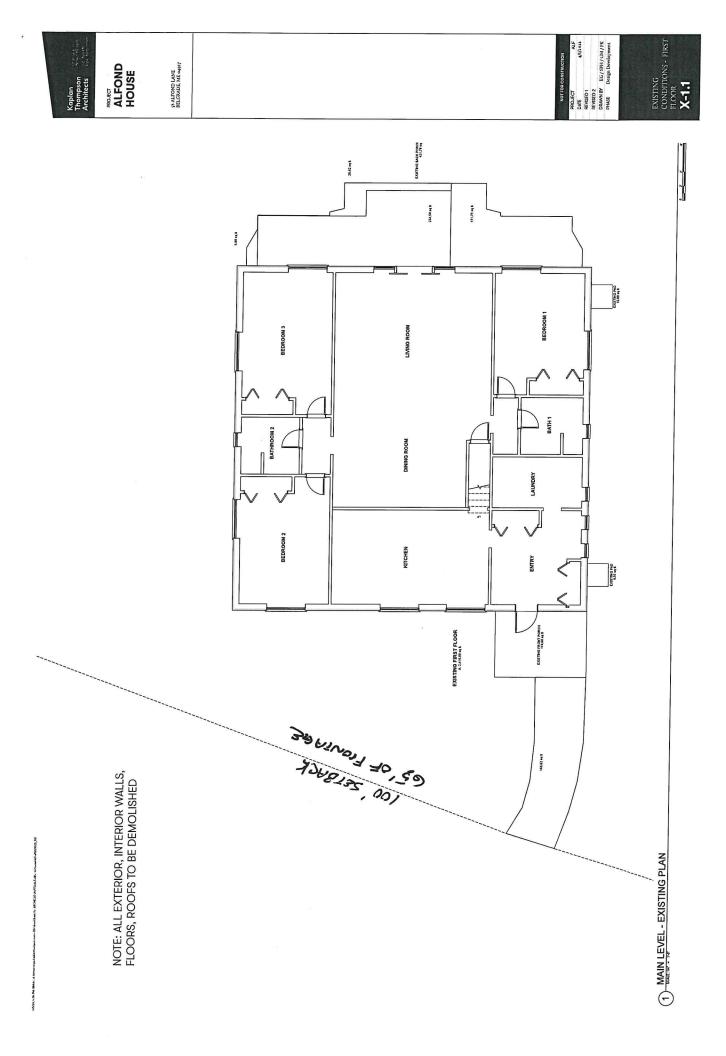


NOKTH & SOUTH ELEVATIONS
A-2.2

STANDING SEAN METAL ROOF. TO MATCH EXISTING FINISH 0 <--(m)-0 <u>---</u>-(a) **(4)** <u>a</u> NORTH ELEVATION SOUTH ELEVATION

ALFOND HOUSE

58 ALFOND LANE BELGRADE, ME 04917



EXISTING CONDITIONS - SECOND PLOOR X-1.2

ALFOND HOUSE

SS ALFOND LANE BELGRADE, ME 04917

PLAYROOM ATTIC BATHROOM 4 LANDING

BATHROOM 3

BEDROOM 4

EXISTING SECOND FLOOR

BEDROOM 6

SECOND LEVEL - EXISTING PLAN

NOTE: ALL EXTERIOR, INTERIOR WALLS, FLOORS, ROOFS TO BE DEMOLISHED



3,133 sq. ft.

487 sq. ft.

Existing footprint to be removed (C through H)

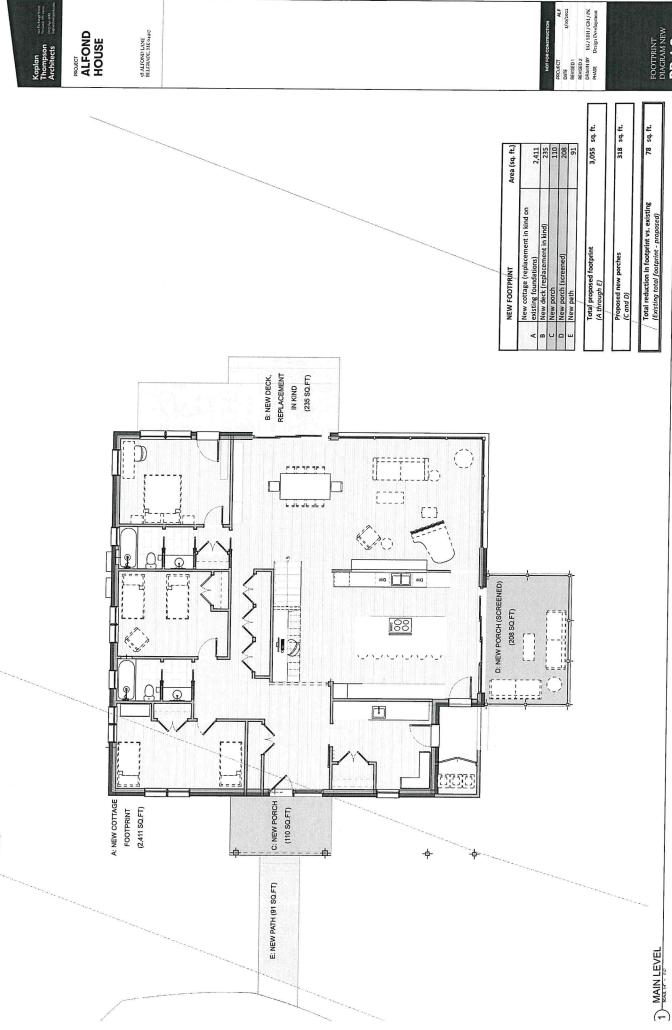
Total existing footprint (A through H)

2,411 235 120 10 10 180 Area (sq. ft.) Existing cottage
Existing deck to replaced in kind
Existing porch to be removed
Existing concrete pad to be removed
Existing concrete pad to be removed
Existing concrete pad to be removed
Existing deck to be removed
Existing deck to be removed
Existing deck to be removed **EXISTING FOOTPRINT** TO BE REMOVED (6 SQ.FT) G: EXISTING DECK - E: EXISTING CONCRETE PAD TO BE REMOVED (10 SQ.FT) TO BE REPLACED B: EXISTING DECK TO BE REMOVED F: EXISTING DECK (235 SQ.FT) (180 SQ.FT) IN KIND LIVING ROOM BEDROOM 3 BATH 1 DINING ROOM -D: EXISTING CONCRETE PAD LAUNDRY TO BE REMOVED (10 SQ.FT) BEDROOM 2 KITCHEN ENTRY C: EXISTING PORCH TO BE REMOVED A: EXISTING COTTAGE FOOTPRINT (2,411 SQ.FT) (120 SQ.FT) TO BE REMOVED (161 SQ.FT) H: EXISTING PATH

ALFOND HOUSE

58 ALFOND LANE BELGRADE, ME 04917

MAIN LEVEL



FOOTPRINT DIAGRAM NEW PB-1.3



Supplemental application materials for building permit: Photographs of existing cottage to be renovated

Location: Applicant:

58 Alfond Lane, Belgrade, ME 04917

Applicant Contact: Kaplan Thompson Architects

Emily Greene

emily@kaplanthompson.com

(207) 842-2888 x214

Existing cottage, west elevation



Existing cottage, south elevation



Existing cottage, east elevation





Existing cottage, north elevation