

Town of Amherst Zoning Bylaw – Section 10.38 Specific Findings Required

10.380 The proposal is suitably located in the neighborhood in which it is proposed and/or the total Town, as deemed appropriate by the Special Permit Granting Authority.

ASD Shutesbury MA Solar LLC (the “Applicant”) is sited on property that is set back from residential properties along Shutesbury Road and is expected to have no long-term impact on neighbors. The proposed project (the “Project”) is located on backland to the southeast of residents along Shutesbury Road and will be built with adequate setbacks away from abutting residents as well as deploying adequate visual screening. The closest distance between the array and adjacent residential abutter’s property line is 274 feet.

The Applicant proposes to install screening vegetation to protect the views of the Shutesbury Road neighbors as shown on the Site Plan. Notably, the portion of the Project closest to abutters is sited at an elevation ranging from 380 feet to 420 feet above sea level, which is topographically lower than those residential dwelling units along Shutesbury Road, for which average elevation is approximately 440 feet. The viewpoint of nearby residences would be directed towards existing tree canopy or installed visual buffer. Aside from abutting residences to the northwest, all other boundaries of the Project abut woodland and cannot be seen from any other viewpoint in town.

Ground mounted solar is allowed by Special Permit in the zoning district, and is appropriately and suitably sited within the town of Amherst given the array siting and screening.

10.381 The proposal is compatible with existing Uses and other Uses permitted by right in the same District.

The Project is in the RO (Outlying Residential) zone and spans the following three parcels: 9B-11, 9B-12, and 9D-27. In accordance with Section 3.340.0 of the Zoning Bylaw, energy facilities are permitted in the RO district by a Special Permit from the Zoning Board of Appeals. Conventional Residential Subdivisions, Cluster Developments, Planned Unit Residential Developments, and Open Space Community Developments are all allowed in the RO zoning district with varying degrees of permitting. For example, a sewage treatment plant is allowed by right with site plan review, whereas a transportation facility or earth removal operations/quarries and processing of those materials are allowed by special permit. Given that Amherst has a permissive zoning bylaw, similar uses that are not identified may be allowed.

The design is sensitive to environmental considerations and the location of the array is compatible with existing use. After the construction period, which is regulated by the conditions of the approval restricting days of construction (M-F) and hours of construction (7am-6pm), along with the phasing of construction, the Project will be remotely monitored with maintenance to occur only as-needed but at least once annually, thereby reducing potential impact to the surrounding neighborhood.

The planned pollinator meadow underneath the array is a compatible habitat as it will be in close proximity to similar edge of forest field habitats. The minimum 211-foot setback from the neighbors and the natural screening features of the site will result in minimal visual disturbance from the neighbors’ field of view.

10.382 The proposal would not constitute a nuisance due to air and water pollution, flood, noise, odor, dust, vibration, lights, or visually offensive structures or site features.

The Project is appropriately and thoughtfully sited, taking into considerations topography, neighborhood, and important environmental features. The Project has received preliminary feedback from the Amherst Conservation Commission and has been designed by a registered professional engineer. The Project is fully surrounded by woodland, which will serve as a visual and auditory buffer. The proposal includes adequate setbacks and installation of screening vegetation to protect the views of abutting residents. No lighting is proposed for the Project. The only noise or vibration associated with the Project after construction is due to the inverters and battery equipment, which have extremely low sound profiles and are situated on the south portion of the project away from abutting residents. The closest distance between this equipment and an abutting residential property is 860 feet and will not produce noise discernable from typical suburban levels. The corner of the equipment pad to the Robert J Bezucha (147 Shutesbury Rd property) is 805 feet. The inverter manufacturer's specification sheet lists noise levels at about 79dB at a 1-meter distance from the inverter. Using the inverse square law, the estimate of noise levels from the inverter at the nearest residence is about 30dB. This noise level is about that of a whisper, and it is less than the typical ambient noise levels of a forest.

Dust associated with Project construction will be mitigated through adequate and best practice for dust suppression (such as a watering truck on site and attention to weather conditions). The Project contains no hazardous materials as defined in 310 CMR 30.000. As a matter of further precaution, the equipment pads housing battery systems are built with a raised edge such that no theoretical discharge could leave the pad itself. The pad is impervious and contains no drains. The Project will not create any air or water pollution. The Project will not generate any odors.

All areas beneath the solar arrays and setbacks are pervious; the only impervious surfaces will be the gravel road and the equipment pad. In total, this amounts to 1.3 acres on the parcel or 1.3% of the total land area, with the remaining land area being permeable. The solar panels cover approximately 10.3 acres of the site (approximately 10% of the site). Lot coverage is approximately 11.81 acres, representing 11.52% coverage. The stormwater design specifically maximizes on site retention and infiltration.

Before start of construction, the applicant will obtain all necessary permits and notify town officials of the commencement of construction. Dig Safe will be called at least 72 hours prior to excavating at any location. Wetland boundary flags will be refreshed as needed prior to the start of excavation or erosion control work. Limits of work will be established in the field based on the site plan and existing survey conditions. Selective site clearing will occur to install the erosion control measures as shown on the plans. Once minimal required clearing has occurred, erosion and sediment controls will be installed on the site and at the construction entrance.

During construction, the area under the array will be cleared of the remaining trees, stumped, grubbed, and transitioned to a pollinator meadow. The entire site will be stumped with all wood moving offsite as stumping occurs. The site will then be cleared and grubbed in phases in accordance with the approved phasing plan and narrative. Once a section is cleared and grubbed, the stormwater civil work will begin for that phase of clearing. This includes construction of the retention basins and removal of all vegetation from the development area per the site plan. The subgrade will be prepared and compacted, and drainage will be installed according to the stormwater management plan. If the phase of clearing includes the access road, soil will be excavated to the depth necessary to construct the access road and

its stormwater features. This approach will allow exposed areas to stabilize with temporary vegetation before additional areas are exposed. This approach minimizes the risk for potential washouts.

10.383 The proposal would not be a substantial inconvenience or hazard to abutters, vehicles or pedestrians.

The Project will not be a substantial inconvenience or hazard to abutters, vehicles or pedestrians. Once established, the Project will have occasional maintenance vehicles visit the site, but this vehicle traffic is very minimal.

During construction, multiple vehicles will access the site at a daily frequency. This period of increased vehicular access road use will last approximately four to six months. The site is subject to a 5mph limit to ensure minimal engine noise and prevent accidents. For more details on the phases of construction, please see the Phasing Plan and Phasing Plan Narrative.

10.384 Adequate and appropriate facilities would be provided for the proper operation of the proposed use.

Adequate and appropriate facilities will be provided for the proper operation of the Project. The major system components are the modules, racking, inverters, and battery equipment. See Exhibit 3.10B-F for details. Fire access will be reviewed and approved by the Fire Prevention Officer for adequate egress and the Applicant has offered to provide training as necessary to the Fire Department. Electrical schematics will be approved by an electrical inspector.

10.385 The proposal reasonably protects the adjoining premises against detrimental or offensive uses on the site, including air and water pollution, flood, noise, odor, dust, vibration, lights or visually offensive structures or site features.

See sections 10.380, 10.381, and 10.382 above. The proposed Project will reasonably protect the adjoining premises against detrimental or offensive uses on the site, including air and water pollution, flood, noise, odor, dust, vibration, lights or visually offensive structures or site features.

10.386 The proposal ensures that it is in conformance with the Parking and Sign regulations (Articles 7 and 8, respectively) of this Bylaw.

Signs alerting the public to the electrical hazard at the Project will be posted on the perimeter fence and electrical equipment in accordance with the Plans. Parking locations have been designated on the Site Plan. Contact information for the Project owner and the Operations and Maintenance contractor will be located at the site access gate. All signs will conform to the Parking and Sign regulations (Articles 7 and 8, respectively) of the Zoning Bylaw. For examples of proposed electrical signage, refer to Exhibit 2.9.

10.387 The proposal provides convenient and safe vehicular and pedestrian movement within the site, and in relation to adjacent streets, property or improvements. If the Special Permit Granting Authority deems the proposal likely to have a significantly adverse impact on traffic patterns, it shall be permitted to require a traffic impact report, and the proposal shall comply with Section 11.2437 of this Bylaw.

The Project itself will be fenced so that it cannot be accessed by the public. Occasional long-term maintenance will be conducted onsite, but the project is not anticipated to have any adverse impact on traffic patterns. Traffic will increase for a temporary period during construction.

Deliveries will occur during permitted hours and be subject to a traffic management plan that will prevent out-of-hours deliveries. Deliveries and traffic movements will occur more frequently at the start of the project and decline as crews move closer to project completion with less equipment remaining to install. Adequate safety measures and tracking pads will be used to protect the community. No idling will occur on public roads.

10.388 The proposal ensures adequate space for the off-street loading and unloading of vehicles, goods, products, materials and equipment incidental to the normal operation of the establishment or use.

The Project Site is sufficiently adequate to host the Project and all of its ancillary infrastructure for its normal operation, including sufficient space for construction staging, parking, and installation. Parking for maintenance is also provided, as shown on the plans.

10.389 The proposal provides adequate methods of disposal and/or storage for sewage, refuse, recyclables, and other wastes resulting from the uses permitted or permissible on the site, and methods of drainage for surface water.

The proposed Project does not generate waste during its lifetime and will be decommissioned after its operational use in accordance with the Decommissioning Plan provided with the application. Under this plan the Applicant shall be responsible for removing and appropriately disposing of all panels, racking equipment, concrete, fencing, and electrical equipment. Temporary outhouses will be erected onsite for worker use during construction. Waste in these outhouses will be contained to these structures and properly disposed of offsite by the construction firm periodically and removed entirely once construction completes.

Additionally, the Applicant has provided an engineered stormwater infrastructure design and stormwater management report for the facility.

10.390 The proposal ensures protection from flood hazards as stated in Section 3.228, considering such factors as: elevation of buildings; drainage; adequacy of sewage disposal; erosion and sedimentation control; equipment location; refuse disposal; storage of buoyant materials; extent of paving; effect of fill, roadways or other encroachments on flood runoff and flow; storage of chemicals and other hazardous substances.

The proposed Project is located outside of the 100-year floodplain, as shown on the Site Plan, and the Applicant has provided an engineered stormwater infrastructure design and stormwater management report.

10.391 The proposal protects, to the extent feasible, unique or important natural, historic or scenic features.

The site does not contain any known unique or important natural, historic, or scenic features other than its wetlands which have received an Order of Resource Area Delineation (ORAD) from the Amherst Conservation Commission in August 2020. The Applicant has consulted with the Massachusetts

Historical Commission (MHC) to confirm that there are no historic features on-site. Communications between the MHC and the Applicant can be found in Exhibits 3.18A-D.

10.392 The proposal provides adequate landscaping, including the screening of adjacent residential uses, provision of street trees, landscape islands in the parking lot and a landscape buffer along the street frontage. When a non-residential use adjoins a residential district, an uninterrupted vegetated buffer shall, to the extent feasible, be established and maintained between buildings associated with uses under this section and the nearest residential property boundaries. Where natural, undisturbed vegetation already exists on-site prior to site preparation and clearing, the majority of that vegetation may be retained and included as part of the buffer, along with the addition of such new plantings, selective removals, and other management of site plantings as are determined to be necessary to maintaining an effective year-round visual screen. See Section 11.3.

An approximate 210 foot no touch buffer will exist where the project parcel boundary abuts residential lots, with the exception of the access road. An additional 50-60 feet of visual buffer area will contain landscaping vegetation to be planted between the natural buffer abutting residences and the Project. The landscaping plan consists of 2 staggered rows of Arborvitae to accentuate the visual buffer maintained by leaving existing tree cover between residences and the project. Additional landscaping details are located on pages C2.01 and C2.02 of Exhibit 1.2, Site Plan.

The minimum distance from the nearest abutting residence's property line on Shutesbury Road to the limit of disturbance is approximately 211 feet, and 274 feet from the panels themselves. The minimum distance from the nearest residential structure to the limit of disturbance is 245 feet. The minimum distance from the nearest residential structure to the panels is 302 feet. The minimum distance from the nearest residential structure to the Equipment Pad is 860 feet.

The project provides a larger buffer to the north due to the presence of wetlands that will not be impacted. The eastern and southern parcel boundaries abut open space and recreational land as well as working forest. These abutting parcels are undeveloped and provide a large natural forest screen to the project.

10.393 The proposal provides protection of adjacent properties by minimizing the intrusion of lighting, including parking lot and exterior lighting, through use of cut-off luminaires, light shields, lowered height of light poles, screening, or similar solutions. Except for architectural and interior-lit signs, all exterior site lighting shall be downcast and shall be directed or shielded to eliminate light trespass onto any street or abutting property and to eliminate direct or reflected glare perceptible to persons on any street or abutting property and sufficient to reduce a viewer's ability to see. All site lighting, including architectural, sign, and parking lot lighting, shall be kept extinguished outside of those business hours established under an approved site management plan, except for lighting determined to be necessary for site security and the safety of employees and visitors.

The Project has proposed no lighting, except for maintenance purposes in the rare instance of a nighttime emergency.

10.394 The proposal avoids, to the extent feasible, impact on steep slopes, floodplains, scenic views, grade changes, and wetlands.

The Project has been sited to avoid impact on steep slopes, scenic views, grade changes, and wetlands; no floodplains exist on the site. Grading will be required for select panel locations, as shown on the Site Plan. Additional considerations for the siting of the Project includes no impact to the 100 foot wetland buffer zone.

10.395 The proposal does not create disharmony with respect to the terrain and to the use, scale and architecture of existing buildings in the vicinity which have functional or visual relationship thereto. Within the B-L, B-VC, B-N, COM, OP, LI and PRP Districts, and any residential zoning district where the project in question occurs within the boundaries of a National Historic Register District, the Special Permit Granting Authority shall, if it deems the proposal likely to have a significant impact on its surroundings, be permitted to use the design principles and standards set forth in Sections 3.2040 and 3.2041, 1) through 9) to evaluate the design of the proposed architecture and landscape alterations. Within the B-G and abutting B-L districts, and for any Town project within any district, the provisions of Section 3.20, Design Review, shall remain in effect.

The Project has been appropriately sited within the terrain, but otherwise this finding is inapplicable because there is no functional or visual relationship to any existing buildings. Further, the Project is neither located in a zoning district aforementioned nor located in a National Historic Register District.

10.396 The proposal provides screening for storage areas, loading docks, dumpsters, rooftop equipment, utility buildings and similar features.

The equipment pad is located at the interior of the Project Site and is therefore screened by the Project itself and the remaining vegetative buffer.

10.397 The proposal provides adequate recreational facilities, open space and amenities for the proposed use.

This finding is inapplicable. However, to the extent applicable, the existing woods roads on the private land that do not overlap the project area will be left in place.

10.398 The proposal is in harmony with the general purpose and intent of this Bylaw, and the goals of the Master Plan.

The proposal is in harmony with the general purpose and intent of the Zoning Bylaw by promoting the general health and welfare of the inhabitants of the Town via providing a renewable energy source, along with furthering the goals of the Master Plan. The Master Plan stresses the need to maintain Amherst's existing community character, balance land preservation objectives with more intensive development in appropriate areas, diversify and expand the economic base, enhance town and university relations and cooperation, and promote an ethics of sustainable environmental and energy practices in all Town activities.

For the duration of the Project, the land under the array will be maintained as a pollinator habitat meadow with native vegetation that is suitable for pollinators and other species. The Project's proximity to Adams Brook provides a clear perennial water source for active pollinator hydration.

The Project will seek to provide a long-term tax benefit through a Payment in Lieu of Tax agreement (PILOT) and will contribute to Amherst's renewable energy objectives while enhancing natural resources

in the area. Additionally, the Project opens up opportunities to partner with the University of Massachusetts and other local colleges.