



**EAST PROVIDENCE WATERFRONT
SPECIAL DEVELOPMENT DISTRICT COMMISSION**

P L A N N E R ' S M E M O R A N D U M

To: Design Review Committee
Hearing Panel
Waterfront Commission

From: Pamela Sherrill, AICP, Executive Director

Date: February 13, 2020

Re: *Advisory Recommendations to the Design Review Committee, Hearing Panel, and Waterfront Commission* based on presentation and comments at the February 20, 2020 public hearing

Project: Kearsarge Solar Facility

Property Owner: Arpad J. Merva Revocable Living Trust

Applicant: Kearsarge Solar LLC

Location: 0, 7, and 105 Dexter Road

Assessor's: Map 204, Block 01, Lots 17, 17.1 and 18

Zoning: Dexter Road Sub-district

Proposed: 2,807 kilowatt direct current solar array system with interconnection to National Grid

INTRODUCTION

The property is located within the East Providence Waterfront Special Development District (Dexter Road Sub-District). The East Providence Waterfront Special Development District Commission ("the Commission") was created to oversee development review and approval for properties located within the East Providence Waterfront Special Development District. Development in the waterfront district is subject to the waterfront zoning amendments adopted by the City Council on March 2, 2004, as amended. The Waterfront Zoning requires design review by the Waterfront Design Review Committee (DRC) and the Hearing Panel for review as a conditional use prior to final action by the Waterfront Commission.

Pre-application meetings were held September 11, 2019 with Waterfront Commission staff and on January 23, 2020 with city staff. The Applicant's plans were received by the Waterfront Commission on January 9, 2020, certified complete on February 3, 2020, and revised February 7, 2020 (filed in the East Providence Land Development and Subdivision Review Decision Index Book 10, Page 107). Plans were reviewed by staff of the Department of Planning, Department of Public Works, City Engineer, Fire Marshall, and the Commission's consulting architect and landscape architect, Glen Fontecchio and Sara Bradford, respectively. The January 9, 2020 submission was updated and submitted January 30, 2020 to reflect comments at the January 23, 2020 staff review meeting. See link to January 30, 2020 Plan Set (9 sheets): [EPWC Hearing Packet 02-20-20](#) and attached GZA February 6, 2020 narrative and memos and emails from the landscape architecture consultant, City Engineer and GZA response, and Fire Marshall and response. Glen Fontecchio, architectural consultant, defers to Bradford Associates' landscape architectural comments.

The Planning Board reviewed the proposed solar facility at its February 3, 2020 meeting and voted unanimously, 7-0, that the proposed application is consistent with the comprehensive plan. See attached February 10, 2020 memo from the Planning Department.

Combined notice of the February 20, 2020 DRC, Hearing Panel, and Waterfront Commission public

hearings has been sent by certified mail to all abutters within a two-hundred foot radius and was advertised in the *East Providence Post* on February 6, 2020 in accordance with Sec. 19-477 of East Providence Zoning Ordinance.

At the February 20, 2020 hearings, the DRC will hear design details and issue an advisory opinion to the Waterfront Commission. The Hearing Panel will review the application for a conditional use of “public utilities not otherwise mentioned” at its hearing and issue an advisory opinion to the Waterfront Commission. The full Waterfront Commission will hear the advisory opinions of the DRC and the Hearing Panel.

Proposed Project

Kearsarge Solar LLC has submitted an application for a 2,807 kilowatt direct current solar array system proposed for installation on a 9.3-acre site which is undergoing active environmental remediation. Power generated by the system will be conveyed to National Grid’s electrical distribution system on Dexter Road.

Neighborhood Context

The subject site is located along Dexter Road, a 2,400 foot long dead-end street through an industrial area with a legacy extending nearly a hundred years. Adjacent parcels include Aspen Aerogels immediately to the north, tanks and fueling facility for the Sprague Terminal to the south, and an inactive rail state owned corridor adjacent to the west. Two vacant parcels located between the rail line and the Seekonk River are also owned by the Arpad J. Merva Revocable Living Trust. A signalized grade crossing across Dexter Road controls access on the active Genesee & Wyoming rail line. The rail corridors show extensive use by dirt bikes and off-road vehicles. Other Dexter Road land uses include the 15-acre parcel owned by Kenlin Properties LLC (including Pondview) at the north end of Dexter Road and vacant developable parcels on the east side, north of the rail crossing. Space Storage and Gripnail are located on the east side of Dexter Road, south of the rail crossing and King Phillip Road.

Existing Conditions

A brick two-story 16,200 sf building located immediately north of the active rail crossing was most recently associated with a portable sanitation/toilet company (Sani-Kan) storage. Chain link fences are located around the perimeter of the three parcels (the active rail line, along an easement on Parcel 17.1 is not fenced). Much of the site is relatively flat with weedy scrub growth although a steep slope to the south of the rail line is wooded with saplings. The site was formerly utilized as a petroleum product storage facility which was taken out of service and demolished in the 1980s. See the attached Project Narrative for a description of the site history and ongoing remediation efforts (page 4) regarding free-phase petroleum contamination beneath Parcel 17 and some surface soil samples at concentrations above RIDEM Residential Direct Exposure Criteria on Parcels 17.1 and 18. The current remediation system consists of a small wooden shed, underground piping and Soil Vapor Extraction (SVE) wells on Parcel 17.

The subject site is located north and south of an active Genesee & Wyoming Railroad line which is located in an easement through Parcel 17.1. The active rail line through Parcel 17.1 and the abandoned rail line located to the west of the more southerly parcels appear to be well used by dirt bikes and all-terrain off-road vehicles. A well-established dirt bike path extends from the active rail line, through a portion of Parcel 17.1 and beneath a segment of chain link that has been removed, to the inactive rail line.

An electrical easement and easement designated as “King Phillip Road” along the northern property line, are also located on the site.

Specifics of the Project

Kearsarge Solar LLC, working with the site owner, has obtained a Brownfield Solar Project Grant from the Rhode Island Commerce Corporation to assist in offsetting the higher costs of development associated with a brownfield site. Based on the site's current and future attributes, the applicant has indicated that deployment of solar is seen as one of the highest and best uses for the Site and that solar is the only current opportunity for the site. The deployment of the solar facility, fencing and security measures is the basis of a current submission to RIDEM seeking approval for an Environmental Land Use Restriction (ELUR) across the three parcels. The applicant has indicated that the solar facility will ensure that the owner has adequate funding to continue to fund short-term and long-term remediation and monitoring of the contamination of soil and groundwater. Complete and well maintained fencing will limit trespassing and potential exposure to site contamination.

The proposed solar array system will be rated to produce approximately 2,807kilowatts (kW) of DC power. Approximately 6,684 photovoltaic modules will be used to construct the array. Direct current will be converted to alternating current by multiple string inverters and a pad mounted transformer. Solar array layout and equipment locations are shown on Drawing C-5. Solar Panels will cover approximately 37% of the site. The tilt of the solar panel arrays will be approximately 20-25° inclination from level and will be fixed. The wiring from the back of the panels will connect and run along the racking structure above ground to the string inverters. The wiring from the inverters will then run to panelboards through an above ground conduit or cable tray system, or via direct burial, and extend to a transformer constructed on a 23' x 6' concrete equipment pad located at the northeast corner of the parcel. The applicant proposes to connect all facilities with a conduit installed under the active rail line. Four additional utility poles will be installed in proximity to the existing utility pole at the northeast corner of the site for interconnection to National Grid. The solar array is comprised mostly of steel and glass that are readily recyclable without any hazardous substances.

Minimal earthwork and grading are expected. The applicant estimates that approximately 1.7 acres of the 9.3-acre site will be disturbed during construction via clearing and grubbing. All vegetation with the exception of trees along the northern property line will be cleared. Paved areas within the site will be retained in accordance with the DEM-approved site remediation plan. The two-story brick building will be demolished and the site filled and seeded. A 200-foot retaining wall (height generally less than 4 feet) on Parcel 17.1 will be removed.

Landscaping, Fencing, Lighting, Security, Signage

A 30-foot front and 20-foot southern side setback and the slope to be cleared of sapplings will be loamed and seeded at the completion of construction. As indicated in sheet C-7, nine 20-foot long beds, spaced 40-feet apart, will be planted with native drought tolerant shrubs (Inkberry, Winterberry, Bayberry, and Black chokeberry) along the inside of the Dexter Road fence. Proposed plantings with the potential for a 6-foot diameter spread, will enable maintenance and emergency vehicle access. Shrubs and not trees have been selected along Dexter Road to avoid interfering with overhead utility lines and to avoid shading solar panels.

As indicated in the attached February 7, 2020 email from Dan Voss, Kearsarge Solar LLC, to Bradford Associates, each bed will contain one species of plant. The final figure set will label which plant species will be planted in each bed. Large shrubs were selected to provide ample screening for the solar array while not shadowing solar panels or interfering with overhead utilities. A 1-year planting guarantee note will be added. Sheet C-7 will be stamped and signed a landscape architect. Final plans will be updated following the hearings.

Fencing will be installed along the building demolition site along Dexter Road and along the rail easement. Although the chain link fence south of the rail crossing is generally in good condition, the fence to the north is in poor condition and will be discontinuous with the demolition of the brick building. As a condition of approval it is recommended that a continuous chain link fence be installed from the railroad crossing north to the property corner along Dexter Road, with a gate of sufficient width to accommodate smaller emergency vehicles. This fence should be similar in character to the fence south of the rail line to upgrade the appearance of the facility from the street. Fencing will be installed along the active rail line easement and any perimeter fencing deemed to be in poor condition will be replaced or repaired as needed.

No site lighting is proposed. Site is operational only during daylight hours. Security cameras will be installed for remote observation. Signage will be limited to the minimal required in accordance with the National Fire Protection Association and Occupational Safety and Health Administration standards: emergency contact information, site shut down instructions, and to post No Trespassing. As suggested by Sara Bradford, the DRC may request that the applicant provide educational signage as a benefit to the community, similar to what Kearsarge has installed at solar facilities adjacent to schools.

Operations and Maintenance

Following a three to five-month construction phase, only limited site visits will be required by Kearsarge to mow two to three times per year, and to perform routine monthly system inspections and adjustments. Others will continue operation and maintenance of the existing Soil Vapor Extraction (SVE) system for site remediation.

Emergency Access

The Fire Marshall has requested that the setbacks and gates be retained for emergency access as indicated in the January 30, 2020 email from Capt. Botelho. The applicant has submitted a sample emergency response plan to Capt. Botelho for consideration.

Impacts

The installation of a solar facility on the existing vacant and contaminated site is a net beneficial impact to the community. The proposed site is located on a dead-end roadway, with traffic generally limited to the adjacent industries. Landscaping and replacement of the Dexter Road fence north of the rail line will help buffer the site and the driveway on Parcel 17 will be improved with a stone surface. As such, the visual impact is limited. For safety and security, fencing proposed along the railroad easement and repair of other perimeter fences will limit public access to this contaminated site. No increase in traffic is projected. Noise from the system is limited to a low-level hum from inverters and the transformer during daylight hours only (equivalent to a residential refrigerator at 5 feet). The facility will therefore not produce any nuisance noise or odors during operation. No public water or sewer use will be required and the site will not be lighted. The solar panels will shed rainwater so the impact on existing discharge patterns will be minimal with most stormwater infiltrating into the underlying ground surface. Straw wattles and equipment tracking pads will help minimize construction impacts.

A net positive fiscal impact may be anticipated to the City of East Providence with collection of tangibles tax at a state-set rate of \$5/kilowatt for a net increase of \$14,000 per year. Property tax on the underlying land would not be expected to change. As outlined on page 5-6 of the narrative, additional fiscal impacts over the 25-year life include \$280,000 in new property taxes to the City of East Providence, \$2,378,000 in new wages and \$196,000 in local grid infrastructure improvements. Construction of the solar array would result in the creation of 40 skilled union jobs. Energy credits have

been offered to Rhode Island public entities, including a school district and a state organization, which will result in a savings of approximately \$250,000 annually or \$6.2 million dollars over twenty-five years.

Annually the array would produce energy for 350 homes and, over 25 years, would remove 137.5 Million pounds of CO₂ from the local environment. Carbon sequestering would be equivalent to 3,232 acres of forest per year (based on the EPA's Greenhouse Gas Equivalencies Calculator).

Decommissioning

Removal of the solar facility is an important consideration for the long-term redevelopment of the site. The applicant has indicated that an independent engineer will provide an estimate of decommissioning with a plan and that Kearsarge will establish a surety approved by the Waterfront District Commission. The surety must also be approved by the City of East Providence solicitor. The applicant has indicated that all material used in the facility is recyclable and that the decommissioning cost would likely be limited to labor. Following decommissioning and completion of environmental remediation, the 9-acre site would be available for development at a highest and best use, in accordance with the Waterfront Plan.

Consistency with the 2003 Waterfront Plan

The proposed solar facility will enable continued funding for the site restoration of a vacant contaminated site. As solar panels become more efficient in the future, it is likely that less land area will be required for generation of 2,807 kilowatt direct current set through agreement with National Grid. This has the potential to open up some area for redevelopment sooner than the 25 year life of the installation.

As executive director, I concur with the statement of consistency on page 6 of the GZA narrative, especially regarding reclaiming brownfields and encouraging redevelopment and reuse, alleviating physical and economic blighting conditions, mitigating conditions that contribute to soil and groundwater contamination, and protecting and improving the water quality of the rivers and bay through use of best management practices in developments.

DESIGN REVIEW COMMITTEE HEARING

DRC DRAFT RECOMMENDATION

VOTE (*Draft motion*): To send a (positive) advisory opinion to the Waterfront Commission for a proposed 2,807 kilowatt direct current solar array system with installation on a 9.3-acre site which is undergoing active environmental remediation, as indicated in Kearsarge Solar LLC's application, February 6, 2020 narrative, and plan set received January 30, 2020, based on comments from City staff, the Planner's Memorandum, the Commission's landscape architectural consultant, the Applicant's testimony and public testimony. The project is in conformance with the reviewing criteria set forth in Section 19-477 of the East Providence Zoning Ordinance and the purposes of Article IX, "Waterfront Special Development Districts" regulations of the East Providence Zoning Ordinance. The DRC recommends Waterfront Commission approval, subject to the following conditions:

- A. The final landscape plan shall be approved by Bradford Associates, landscape architectural consultant.
- B. The existing chain link fence from the railroad crossing north to the property corner along Dexter Road shall be replaced with a gate of sufficient width to accommodate smaller emergency vehicles.

- C. The applicant shall provide a one-year guarantee on planted specimens to assure survival through the first growing season.
- D. (Educational signage shall be installed demonstrating the environmental benefit of the solar installation – *for consideration by the DRC*).

HEARING PANEL HEARING

An advisory opinion to the Waterfront Commission is required from the Hearing Panel for a conditional use of “public utilities not otherwise mentioned.” As indicated above, Kearsarge Solar LLC has applied for an interconnection agreement with National Grid and is at the final review step. The point of electrical interconnection between the solar array system and public utility grid will be the utility pole located near the existing site entrance on Parcel 18, at the northeast corner of the site. Approval of ISO New England is expected within the next two months.

As executive director I concur with the discussion on Page 8 of the GZA narrative regrading Zoning & Conditional Use with the following additional points for consideration:

- b) *Convenience and safety of vehicular and pedestrian movement within the site in relation to adjacent streets, properties, improvements and in conformance with the express design intent.* I concur with the presentation however would like to add that the site is attractive to dirt bikers and ATVs. To protect the health and safety of those participating in this activity, it is important that the project adequately fence contaminated areas.
- d) *Provisions of off-street loading and unloading of vehicles incidental to the servicing of the buildings and related uses on the site.* I concur and would like to add that the access gates will accommodate emergency access.

I concur that the GZA narrative, page 8-9, has adequately met the burden of demonstrating that “neither the proposed use nor its location on the site would have a detrimental effect on the public health, safety, welfare or morals” in accordance with Sec. 19-479(e) of Article IX of the zoning ordinance.

DRAFT HEARING PANEL RECOMMENDATION

VOTE (Draft): To send a (positive) advisory opinion to the Waterfront Commission for a conditional use for a “public utility not otherwise mentioned” for a proposed 2,807 kilowatt direct current solar array system with distribution to National Grid as indicated in Kearsarge Solar LLC’s application, February 6, 2020 narrative, and plan set received January 30, 2020, based on comments from City staff, the Planner’s Memorandum, the Applicant’s testimony and public testimony. The Hearing Panel finds that the project is in conformance with the reviewing criteria set forth in Section 19-479 Deviations and conditional use provisions, of the East Providence Zoning Ordinance and the purposes of Article IX, “Waterfront Special Development Districts” regulations of the East Providence Zoning Ordinance.

WATERFRONT COMMISSION HEARING

VOTE (Draft): The Waterfront Commission moves to accept the advisory opinions of the Design Review Committee and the Hearing Panel, based on Kearsarge Solar LLC’s application, February 6, 2020 narrative, plan set received January 30, 2020, comments from City staff, the Planner’s Memorandum,

the Commission's landscape architectural consultant, the Applicant's testimony and public testimony. The Commission finds that the project is in conformance with the purposes of Article IX, "Waterfront Special Development Districts" regulations of the East Providence Zoning Ordinance and therefore votes to approve the conditional use of a "public utility not otherwise mentioned" for a proposed 2,807 kilowatt direct current solar array system with distribution to National Grid subject to the following:

- A. The Applicant shall meet all applicable Federal, State and local requirements and obtain all applicable Federal, State and local permits.
- B. All comments received from the Fire Marshall, City Engineer, and Bradford Associates, landscape architect consultant, shall be addressed.
- C. Design Review Committee landscaping, fencing, (and educational signage) recommendations.
- D. Submission and approval of a decommissioning estimate, plan and surety, to the satisfaction of the Waterfront Commission executive director and the City of East Providence solicitor.

Respectfully submitted,

PAMELA SHERRILL, AICP, EXECUTIVE DIRECTOR

Encl.: GZA Plan Set (9 sheets), received January 30, 2020 (available with the EPWC Hearing Packet
Link: [EPWC Hearing Packet 02-20-20](#))
GZA Narrative, February 67, 2020 (9 pages)
Planning Board memo on Comprehensive Plan Consistency, February 10, 2020
Dan Voss, Kearsarge Solar LLC 2/7/20 response to Bradford Associates, LLC, February 4, 2019
Engineering Division Memorandum, January 21, 2020 and GZA response January 29, 2020
Dan Voss, Kearsarge Solar LLC 2/13/20 response to Capt. Botelho, Fire Marshall, 1/30/20 email

Cc: Waterfront Commission
Mayor DaSilva
City Council
Jim Moran, Planning Director designee
Stephen Coutu, Director of Public Works
Erik Skadberg, City Engineer
Kenneth Botelho, Fire Marshall
Dan Voss, Kearsarge Solar LLC
Christine Engustian, legal counsel for the applicant