

8.1-Megawatt Solar Facility Development

Major Land Development Project Application

Natick Avenue - Assessor's Plat 22-3; Lot(s) 108 and 119

For: Southern Sky Renewable Energy RI, LLC

Prepared By: Pimentel Consulting, Inc.

3 December 2018

INTRODUCTORY STATEMENT

Southern Sky Renewable Energy RI, LLC (hereafter 'applicant') has retained my professional land use planning and zoning consulting services, in order to evaluate the proposed '**By-Right**' 8.1 Megawatt 'Solar Power Facility' (hereinafter 'Solar Facility') development. The referenced solar facility development has been deemed a Major Land Development Project, pursuant to the Subdivision and Land Development regulations. Considering the development is defined as a Major Land Development Project (hereinafter 'Major LDP'), it entails three-stages of formal review (Master, Preliminary, and Final Plan), with the Master Plan stage conceptually vesting the project provided it can be shown to be consistent with the local Comprehensive Plan and in accordance with the respective Major LDP 'standards' of review.

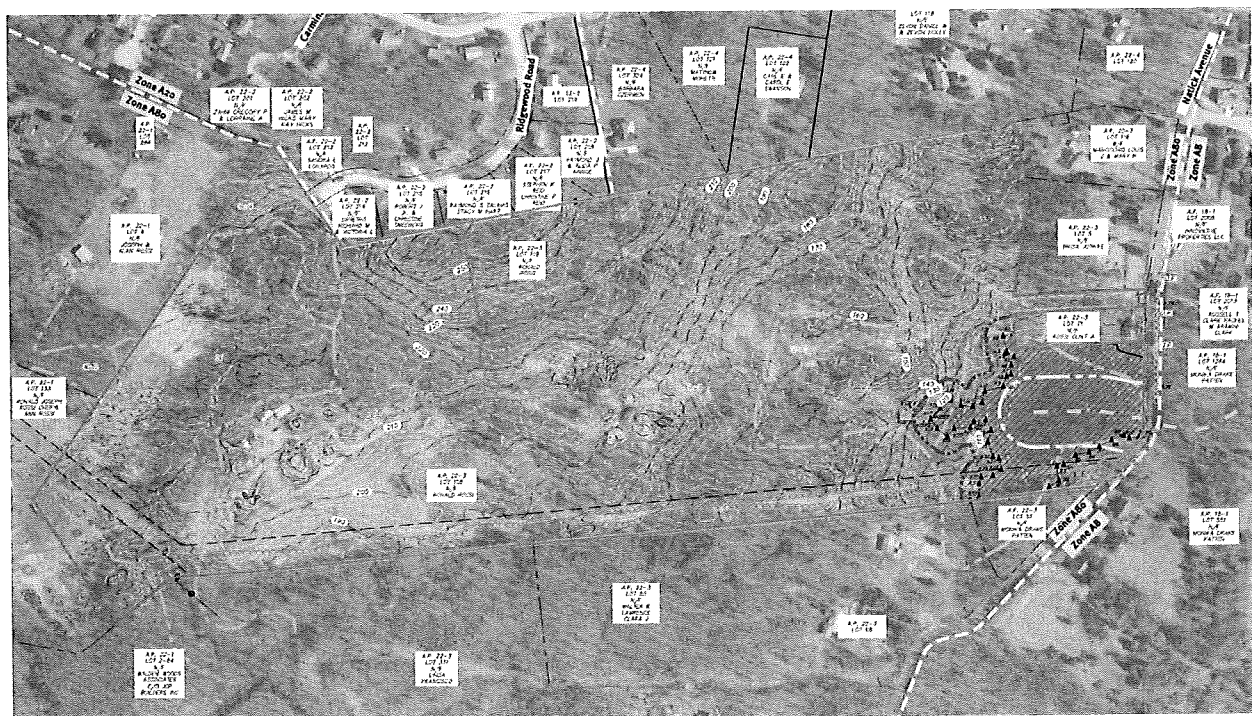
The proposed solar facility is permitted as a matter-of-right, and will be designed in such a manner to realize full dimensional compliance; the applicants desire to introduce a development that compliments the surrounding neighborhood and furthers the Community's clean energy aspirations. The proposed solar facility will not only realize provision of clean, efficient and affordable energy (both locally and regionally), in furtherance of the respective City of Cranston Comprehensive Plan, Zoning Ordinance and State Energy Plan goals and objectives (said goals and objectives being **quite recently** reflected in an amendment to the local Comprehensive Plan), but also contribute to the economic well-being of the community by introducing a new tax generating stream. Solar facility developments, unlike other utilities, contribute on a variety of levels without any corresponding negative concerns, such as may be associated with the introduction of wind turbines.

In light of the referenced Solar Facility Development, this land use consultant has conducted a thorough analysis of the respective application, site plan and supporting project materials, as well as the following regulatory documents: City of Cranston Comprehensive Plan 2010 - Amended 2 May 2017: 'Renewable Energy Production' Supportive Goals and Objectives (hereinafter 'Comprehensive Plan'); Zoning Ordinance (hereafter 'Ordinance'); City of Cranston Subdivision and Land Development Regulations (hereinafter 'LDP Regulations'); RI Comprehensive Planning Standards Manual - Revised 14 June 2018 (hereinafter 'Standards Manual'); RI Comprehensive Planning Standards Guidance Handbook Series - Guidance Handbook No. 9 - Planning for Energy - Revised June 2018 (hereinafter 'Energy Guidance Handbook'); State Guide Plan Element Report # 120 - Energy 2035 - Rhode Island State Energy Plan - Approved 8 October 2015 (hereafter 'State Energy Plan'); as well as conducting a thorough analysis of the immediate Natick Avenue neighborhood, said analysis including several site inspections and reviewing Property Record Data for purposes of determining neighborhood appropriateness. The purpose for the subject analysis is two-fold: evaluate the

appropriateness of the proposed solar facility development, in light of the 'standards' for the granting of the Major LDP; as well as render a professional opinion on the consistency of the overall proposal with the recently amended Comprehensive Plan as well as Energy Guidance Handbook.

GENERAL PROPERTY AND NEIGHBORHOOD DESCRIPTION

The property that is the focus of the solar facility development is located directly off of Natick Avenue, and has a secondary access point from the terminus point of Ridgewood Road. The subject property, being further described as Assessor's Plat 22-3, Lot(s) 108 and 119, contains slightly in excess of 64-acres (hereinafter 'Property'). The Property is extensively vegetated, having mature trees throughout (less the lower southwest corner), thereby evidencing the ability to properly screen any future development. Present growth that can serve as a natural buffer, will not only be maintained, but also enhanced (as needed) with the introduction of appropriate new plantings. Although, there is small wetlands pocket located amidst the south-east corner of the property, all requisite setbacks and other safeguard measures will be properly instituted, averting any negative impact. Regardless of the referenced wetlands presence, the property is nevertheless quite suitable for other forms of development, most notably being fiscally draining residential development. The property is illustrated below, as excerpted from DiPrete Engineering (project site plan submission) and the City's GIS, respectively.





Section 17.08.010 - Zoning districts - *"This zoning chapter divides the city into zoning use districts, which include overlay districts and floating zone districts. Regulations and standards are set forth for each land use, type of development or type of building or structure within each district. Zoning use districts are depicted by type and location on the zoning map."*

Considering the quite recent amendments to the Comprehensive Plan, and equally, adoption of 'Solar Power Performance Standards,' it is abundantly clear that the City of Cranston supports the development of solar installations for purposes of realizing renewable energy. It is also well recognized that such developments necessitate large acreage, the sole remaining accommodating sites being located in the western portion of the City, and thus the reasoning for permitting solar power installations as a matter-of-right within the A-80 District.

The following recently adopted Comprehensive Plan [Page 22] amendments (which establishes the foundation for the regulatory Ordinance language supporting solar energy), as well as

'Zoning Map' extracted from the Comprehensive Plan, corroborates both the fact that the vast majority of solar installations will occur within the A-80 District as well as the more specific appropriateness of the subject development.

Land Use Plan Element - Key Strategies: Renewable Energy Production and Consumption

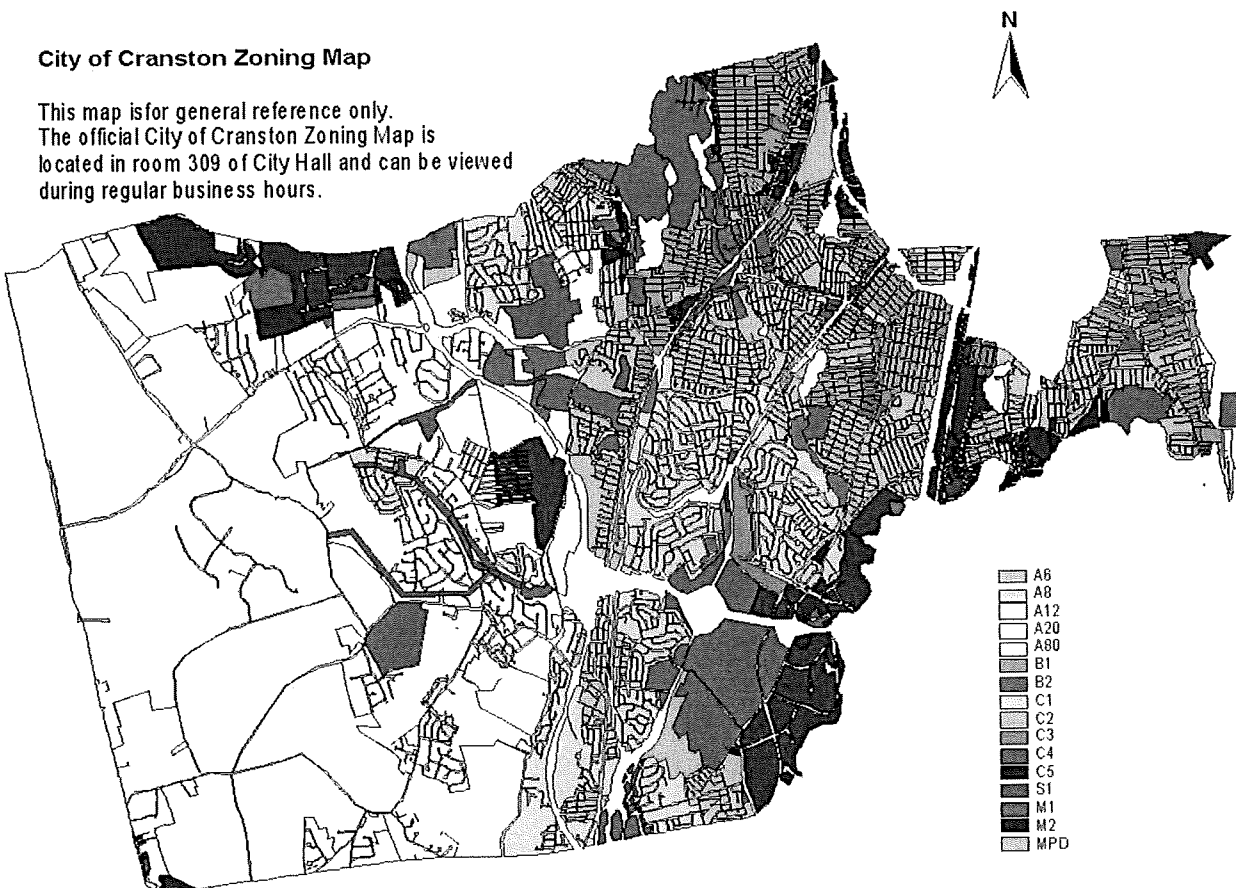
*"Cranston should actively encourage the availability and implementation of energy infrastructure throughout the City. **For example, the Zoning Ordinance should permit the development of renewable energy production facilities in appropriate areas, including, without limitation, in the A-80, M-1, M-2 and S-1 zoning districts, and should promote the development of multiple renewable energy production facilities within the City.** Development of such renewable energy production facilities can advance the City's goals of developing the City's economic resources while limiting the impact of development on surrounding areas and on municipal services. Such developments also further the City's low-impact and green development objectives by improving air quality and reducing reliance on traditional energy sources."*

"The Zoning Ordinance should be modified to identify which types of renewable energy production facilities are to be allowed within the City, the zoning districts in which such facilities are to be located, and the standards by which such facilities are to be developed."

"Ground-mounted solar power facilities are a main type of renewable energy production, and it is encouraged that the Zoning Ordinance be amended to allow this type of renewable energy production within the City, including within residential and commercial zoning districts."

City of Cranston Zoning Map

This map is for general reference only.
The official City of Cranston Zoning Map is
located in room 309 of City Hall and can be viewed
during regular business hours.



Map 2-2 City of Cranston Zoning Map

Preservation of land resources is well detailed throughout the Comprehensive Plan, especially in regard to Western Cranston where the few remaining large lots and those attributed to agricultural practices are located. However, by-right residential development will most assuredly extinguish any ability of realizing said preservation, most assuredly any opportunity for farming related activities in the future. The Comprehensive Plan [Pages 7 - 8] not only details this point, but proffers renewable energy production as one method of averting permanent loss.

ELEMENT 2: LAND USE PLAN - "Rhode Island Comprehensive Planning and Land Use Regulation Act Goals."

"To promote orderly growth and development that recognizes the natural characteristics of the land, its suitability for use, and the availability of existing and proposed public and/ or private services and facilities."

"To encourage the use of innovative development regulations and techniques that promote the development of land suitable for development while protecting our natural, cultural, historical, and recreational resources and achieving a balanced pattern of land uses."

LUG-1 - *"Preserve the rural quality and critical resources of Western Cranston through appropriate land use controls."* [Page 8]

LUP-1.3 - *"Preserve existing farmland and recreational open space areas through land use regulation and taxation policies. Preserve existing farmland and developable land that is currently undeveloped, by temporarily removing the development potential through land banking by allowing the land to be used for passive alternative energy generation such as solar power."*

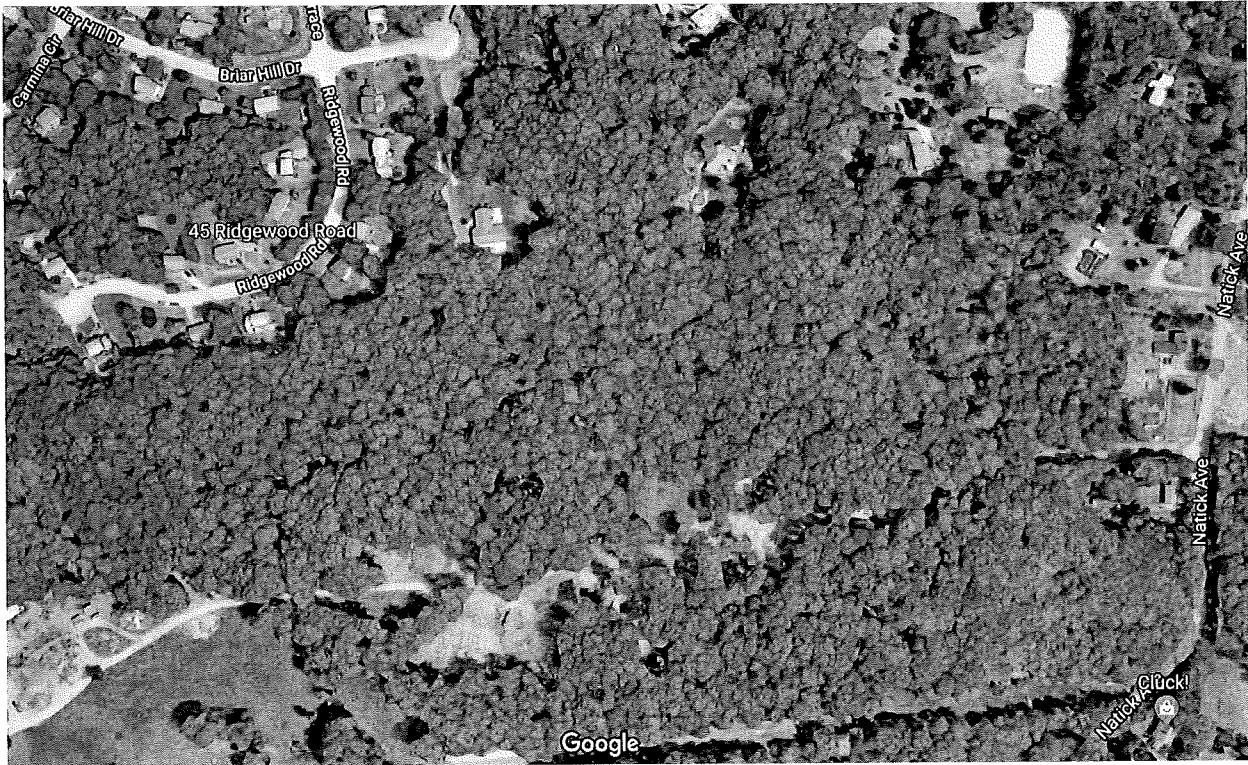
To reiterate, the property is already well vegetated, and therefore will properly screen any future development. Regardless, whatever additional vegetation is necessary, will be properly introduced. Only a smattering of homes are within proximate distance of the property; with the nearest residence being situated within approximately 200-feet, otherwise, the majority of residences are at least several hundred feet distance. However, regardless of distance, vegetative buffering (both present and proposed) will assure that surrounding residences are afforded as much visual screening as absolutely possible. The following illustration (excerpted from Google Earth], exemplifies this point, reflecting existing conditions.

GENERAL 'SOLAR POWER' DEVELOPMENT PROPOSAL

The applicant seeks to introduce a '**By-Right**' Solar Facility, in accordance with the 'Table of Use Regulations', of the Ordinance. The proposed solar facility installation is in direct accord with the recently amended Comprehensive Plan, as evidenced by the following:

Element 4: Economic Development Goal and Policies [Page 12]

EDG-2: *"Attract capital into the Cranston area and expand the City's economic base."*



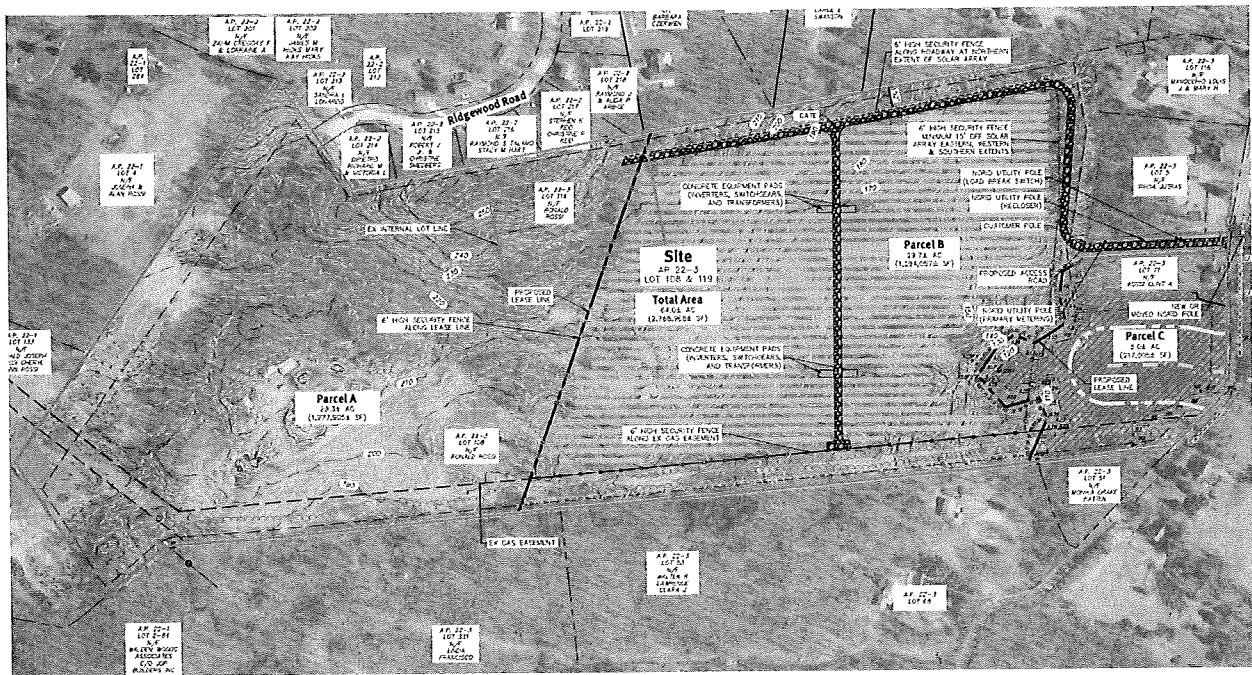
EDP-2.4: **"Encourage the development of renewable energy facilities."**

Element 5: Natural and Cultural Resources Goals and Policies [Page 14]

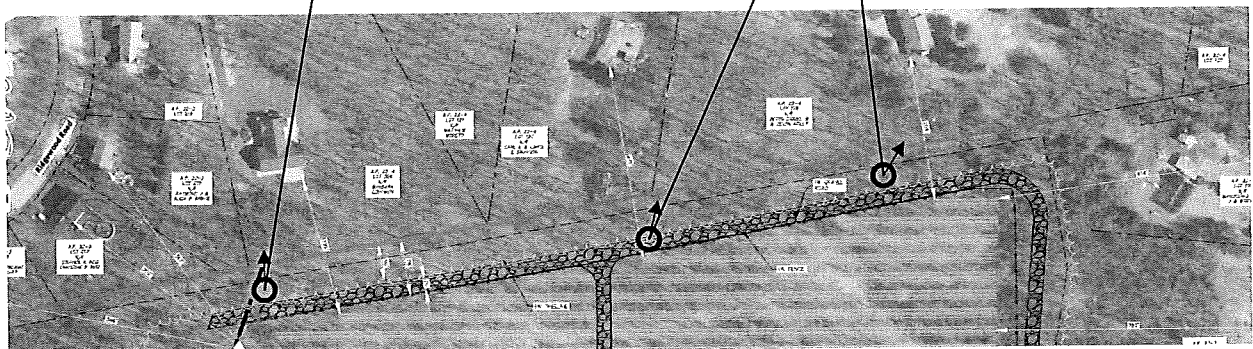
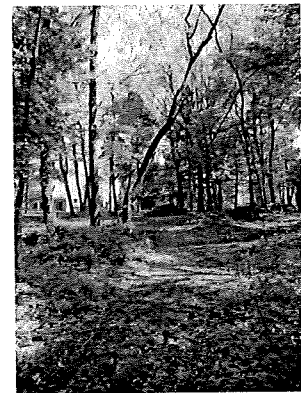
NRG-1: *"Protect and enhance Cranston's natural environment and resources. Establish a balance between natural resource protection and growth-related needs."*

NRP-1.9: **"Encourage the development of renewable energy facilities in appropriate locations supporting economic growth while fostering low impact development."**

The proposed Solar Facility development will be primarily situated throughout the easterly portion of the property, directly off of Natick Avenue. The total solar array installation lease area will be approximately 30-acres, and accessed throughout by a 'pervious' gravel driveway. In fact, clearing will be limited to what is absolutely required for array installation, and vegetative materials planted to assure minimal, if any, impervious surface coverage. Greater than one-half of the land resources will remain in a naturally vegetated state, to include throughout the westerly portion of the property and circumventing the development proper. The proposed development is illustrated below, excerpted from the DiPrete Engineering - Site Plan Package.



To reiterate, there are only a smattering of residences situated in proximity to the proposed Solar Facility development, a handful of which are approximately 200-foot distance. DiPrete Engineering prepared a modified 'View Shed' analysis (furnished below) to illustrate how present conditions are already well-vegetated. One again, it must be emphasized that existing conditions will be enhanced (as required) by additional plantings.



Furthermore, given the overall minimized height of the proposed solar panel array (maximum 12-feet in overall height), and present thick vegetation to be maintained as a natural buffer, it is difficult to comprehend how any possible visual, or other negative impact, could possibly be realized. The proposed Solar Facility development, unlike other 'permissible' land uses, such as a residential subdivision, will occupy the property for some period of time, but is not permanent. The Solar Facility development is therefore quite appropriate given its limited size, limited disturbance, and having a defined period of operation. Therefore, reuse for alternative solar energy purposes, is directly in accord with the Comprehensive Plan. The subject Solar Facility development maintains the rural landscape and averts straining otherwise non-present municipal resources (i.e., water and sewer), while attaining reasonable economic development.

Although, a formal yield plan was not prepared, the drafted conceptual plan acknowledges that given existing Ordinance and Land Development regulations, which permits a density of one-unit per two-acres, it is quite plausible that the Property could very well accommodate upwards of residential units. Such information is both important and useful. It not only addresses property intensity, but also, long-term impact. A 'by-right' residential development realizes permanent, and potentially inappropriate, property and neighborhood alteration. These include roadway infrastructure, vast land clearing, and potentially negative economic impacts (i.e., education).

COMPREHENSIVE PLAN CONSISTENCY ANALYSIS

As has been repeatedly detailed throughout this report, the Comprehensive Plan was recently amended for the express purpose of recognizing the importance of solar as an acceptable renewable energy source and its appropriateness within the A-80 District. To that end, both the Comprehensive Plan and Ordinance language, alike, were accordingly amended. The referenced language amendments, now provide the regulatory foundation for establishing the supportive performance standards. The referenced amendments, evidencing clear consistency, are as follows:

Table 2-4 Smart Growth – Green Development Action Items: Land Use Action Program

LU-10 - *"Preserve agricultural lands."*

- o **"Temporarily removing the development potential of the land located in western Cranston [land banking] by allowing the land to be used for passive alternative energy generation, such as solar power."** [Page 48]

Table 2-5 Summary of the Actions and Responsibilities for this Plan

LU-10 - *"Preserve agricultural lands."*

- o "Temporarily removing the development potential of the land located in western Cranston [land banking] by allowing the land to be used for passive alternative energy generation, such as solar power." [Page 53]

Part III. Strategies and Actions [Page 85]

Renewable Energy Production and Consumption

"Cranston should develop renewable energy infrastructure for the benefit of the private sector to spur economic activity in the City. Cranston aims to show a continued commitment to environmentally-friendly policies, which in turn will cause businesses to generate renewable energy and benefit from savings that will generate construction jobs, pay for better employee benefits and/or be reinvested in the community. Moreover, the development of renewable energy infrastructure within the City may result in additional tax revenue, jobs and overall economic activity within the City."

The referenced Comprehensive Plan language amendments are in direct accord with the various State Guide Plans (as approved by the State Planning Council), specifically the State Energy Plan. The overall goal of the State Energy Plan is to realize provision of cleaner, more efficient energy, to meet the need of residents and business community alike. Therefore, the statewide directive, downward directed to the individual municipalities, is to carefully consider all energy proposals, introducing regulatory standards as required. This includes all renewables, such as wind, solar, and hydro, as well as more efficient non-renewables given the understanding that an effective statewide energy program must be dependent upon and inclusive of a variety of sources.

Energy Guidance Handbook

Standard 9.2.B - "Include one or more implementations action within the Implementation Program that address:" [Pages 9 - 10]

"Adopting zoning policies and siting standards for renewable energy production facilities."

"It is important that local zoning ordinances address renewable energy production facilities. To provide clarity to the development process, zoning ordinances must include identification of which types of renewable energy production facilities will be allowed within the municipality, whether it be within specific zoning districts, or for the municipality as a whole. Additionally, when appropriate, zoning ordinances may include siting standards for allowed renewable energy production facilities in order to dictate the placement and size of the facilities within a property."

"The main renewable energy production facility types that municipalities are likely to encounter are solar and wind, and, to a lesser extent, hydropower and anaerobic digestion. Municipal ordinances should consider all of the various types of renewable energy production facilities, in which districts they may be appropriate and what dimensional constraints might be reasonable."

RECOMMENDATION 9.4 - “Include implementation actions within the Implementation Program that address: *Enabling the development of renewable energy production facilities by the private sector.*” [Page 14]

In fact, considering the litany of ‘permissible’ land uses, not the least of which is a by-right’ residential subdivision, a solar facility development will have little to no disturbance and negative impact on the overall low-density character of the surrounding neighborhood. The first component of assessing Comprehensive Plan ‘consistency,’ is to investigate those characteristics that are otherwise deemed important from a protection / preservation perspective, and deducing whether introduction of a solar farm will have any consequential impact. DiPrete Engineering has carefully considered all of the pertinent resource and environmental assets, and concluded that there do not appear to be any concerning details. DiPrete Engineering (as excepted from their site plan package), has concluded that the **property is not within** any of the following:

- o Groundwater Protection Area.
- o Community Wellhead Protection Area.
- o Natural Heritage Area.
- o Groundwater Protection Overlay District.
- o S.A.M.P. Area.
- o Non-Community Wellhead Protection Area.

Furthermore, DiPrete Engineering (once again as excepted from their site plan package), has concluded that the **property does not contain** any of the following:

- o Historically significant sites or structures.
- o State or local historic sites, districts, or cemeteries.
- o Archaeologically significant sites.
- o State designated scenic area.

The proposed Solar Facility development does not necessitate any infrastructural improvements, and instead of depleting, will in fact contribute economically, by establishing an additional revenue stream without any of the negative concerns associated with a ‘true’ commercial and/or industrial venture. It is clear from the preceding statewide directives that the City of Cranston has appropriately amended its Comprehensive Plan to realize consistency, resulting in the similarly appropriate ‘alternative energy’ Ordinance regulations.

REGULATORY CONSISTENCY ANALYSIS

This section addresses the requisite standards for the Granting of the Major LDP.

LDP Regulations - 'Section III - General Requirements:'

H. Required Findings - *"The requirements listed below shall be applicable to all subdivisions and land developments submitted for approval, unless otherwise specifically provided. Prior to final approval or any subdivision of land development project regulated herein, the Commission, or unless otherwise designated by the Commission, the Administrative Officer shall address the general purposes cited in RIGL 45-23-30 and Section 1(c) of these regulations and shall make positive findings on all of the standards listed below for the project record.⁸ If a negative finding for any of these standards is made, the Planning Commission shall have grounds for denial of the project design."*

1. *"Each subdivision or land development project shall be consistent with the requirements of the City of Cranston Comprehensive Plan or shall satisfactorily address the issues where there may be inconsistencies."*

The thorough analysis of the Comprehensive Plan, inclusive of recent amendments, illustrates clear and indisputable consistency and support for the proposed development.

2. *"For subdivisions, each lot shall conform to the standards and provisions of the Cranston Zoning Ordinance..."*

The proposed development will realize full dimensional compliance.

3. *"There will be no significant negative environmental impacts from the proposed development as shown on the final plan, with all required conditions for approval."*

Once again, a thorough and careful consideration of the Comprehensive Plan was conclusive in detailing the non-presence of any pertinent protective resources. Besides, a solar installation has little to no impact on a property, because it requires no public resources. Expert testimony will be provided further evidencing compliance.

4. *"The subdivision as proposed will not result in the creation of individual lots with such physical constraints to development that building on those lots according to pertinent regulations and building standards would be impracticable."*

The property has some minor constraints resulting from a pocket of on-site wetlands, nevertheless the said wetlands will be accorded all regulatory setbacks and buffering.

5. *"All proposed land developments and all subdivision lots shall have adequate and permanent physical access to a public street. Lot frontage on an accepted or approved street without physical access shall not be considered compliance with this requirement."*

The property will continue to have permanent and direct physical access to Natick Avenue.

6. *"Each subdivision and land development project shall provide for safe and adequate local circulation of pedestrian and vehicular through traffic, for adequate surface water run-off, for suitable building sites, and for preservation of natural, historical, or cultural features that contribute to the attractiveness of the community."*

7. *"The design and location of streets, building lots, utilities, drainage improvements and other improvements in each subdivision shall minimize flooding and soil erosion."*

Expert testimony will be provided addressing each of the respective design elements. Needless to say, solar facility developments require few, if any, resources, and are therefore the most respectful of the environment and character of surrounding neighborhoods.

It should also be noted that the proposed development will be fully compliant with all respective solar installation performance standards pursuant to Section 17.24.020, inclusive of site preparation, lighting, and noise.

CONCLUSION

It is the professional opinion of this land use planning consultant that the subject request to introduce a Solar Facility amidst the subject property, and general Natick Avenue neighborhood, will be consistent with the goals and objectives of the Comprehensive Plan and State Energy Plan, and therefore appropriate for the granting of the Major LDP. My professional opinion is based upon the manner in which the proposed system(s) can be well incorporated into the overall fabric of the surrounding neighborhood - a non-intrusive land use that will be well-buffered, while providing clean efficient and less costly energy, and realizing an additional much-needed revenue stream.