December 31, 2020

Mr. Jason Pezzulo, Planning Director Cranston City Hall 869 Park Avenue Cranston RI, 02910

# RE: NATICK AVENUE SOLAR PEER REVIEW OF LANDSCAPE PLANS FOR NATICK AVENUE SOLAR, REVITY ENERGY, LLC PRELIMINARY PLAN REVIEW

Dear Mr. Pezzulo,

I am pleased to provide this review for the landscape plans dated 11.30.20, submitted as Landscape Plans for the Natick Avenue Solar Preliminary Plan submission to the City Plan Commission. Plans were initially developed by the applicant's landscape architect to address visual buffers for the proposed solar field. Through successive plans interpreting and balancing the input from the Natick Avenue Solar Advisory Committee with the applicant's solar field layout better and better plans were developed. But there was no final approval.

The neighborhood did not think that the last plan they saw dated 10.21.20 satisfied the Committee's charge to develop plans for an effective visual buffer. The 11.9.20 peer review report however, found that the 10.21.20 plan did provide reasonable visual relief through buffers and strategic plantings for most of the north and east properties at the time of initial planting and particularly as longer term visual screen investment. But there were still serious problems particularly in screening views from the south as well as some concerns about notes and other support information.

The current plans have responded to critical concerns with some notable revisions but there are still important issues to be resolved.

## Area C planting (north and east boundary)

In the design process principal view locations and existing vegetation masses both on and off site were charted making it possible to generally identify the locations, visual buffer character and heights of supplemental screen materials needed for visual buffers. Earlier and current plans describe buffer strategy as 3 layers of screening 1) on and off-site vegetation to remain 2) a 'no cut' zone along the north and north east property line and 3) supplemental planting in repeated patterns of naturalistic groupings of evergreen and deciduous shrubs and trees in critical areas of a clear area in front of the 'no cut' zone. Views into the solar field would not be completely blocked. Abutters will be aware of the solar development, but the past and current plans do provide reasonable visual relief through buffers and strategic planting of sufficient size materials to be effective at initial planting and increasing as the "no cut" buffer naturally fills in and supplemental planting matures.

## Area D planting (screening from south boundary)

Effective visual buffering for area D is more challenging. The intent is for dense mixed planting- shrubs and small trees, and evergreen and deciduous- with enough of the larger materials to provide an effective visual buffer a minimum of 12' high. Planting location and height is critical both for solar access to the nearby panels and for visual buffer. The earlier plan identified the important buffer planting area down slope from panels and generally more than 20' away from them but did not provide plant materials of suitable height. The current plan is a great improvement with planting in the same general area and using a workable plant grouping strategy similar to that of area C. With just 3 plant 10' x 50' groupings this is a little less than the planting extend further west presumably by at least one more 50' long plant grouping. The height of the entire buffer planting is critical. It is most important that trees should be trimmed for a <u>minimum</u> height of 12' and not allow indeterminate trimming that would negate the buffering intent.

Plant materials, species, size and quantities for areas C and D presumably are calculated based on the typical planting patterns. It is unclear why, but possibly acceptable, that there are additional trees and fewer shrubs included on the plant schedule list than are indicated by plant grouping counts.

### Area E (screening from northwest and south east)

Planting outside the perimeter chain link fence in the northwest corner of the solar field was added in the current plans to address views from Ridgewood Road properties. It is important that there is existing woods between those properties and the solar array clearing and those woods should be protected from clearing or thinning by a formal agreement. It is however, deciduous woods that would allow visibility through to the panels in the winter. The proposed evergreen planting at the fence line would however, have little or no visual buffer benefit. The small arborvitae plants would almost certainly be eaten by deer and the few that might survive are ultimately to be trimmed for a maximum height of 12'. The earlier peer report suggested that pines be introduced as an evergreen buffer material at the edge of the clearing far enough away from the solar array so that they could grow naturally, untrimmed to the size of the existing trees.

The peer report also suggested a similar visual buffer in the south east corner where introducing evergreens at the edge of the clearing would potentially help to screen winter time views from Natick Avenue residences.

#### **Specification notes**

The planting notes provide specifications for the landscaping. There were a few questions and suggestions brought up in the earlier review process still to be addressed. Substitutions can be handled appropriately by the applicant's landscape architect with the plant options provided. Substantial completion, other approvals and 'as built' requirements can be defined in other specifications. The most important unresolved question is the warranty period. The current submission backtracks on the plant warranty period. In the previous plan it was two years but is now noted as one year. There needs be a long enough warranty period to assure that there is adequate watering during the plant establishment period. Two years is minimal here and it is suggested that it be three years.

### Seeding

Seeding was not addressed by the Committee although it was acknowledged by the applicant's consultant that disturbed areas of 'C' between or outside the shrub and tree planting areas would be loam and seeded. This is not yet indicated on the drawing or in notes.

Seed for the solar field has been described as species found in New England meadows. The reference to New England meadows presents reasonable implications. For example, first that there would be an appropriate growing medium, assume existing minimally disturbed topsoil or a minimum of 6" of suitable loam, and second that seeding would provide for a strong stand of native or naturalized vegetation including both grasses and broad leaf species. Thus the solar meadow would be seeded at appropriate rate with lower growing grasses such as those listed on the plan as well as a variety of other species all expected to be 2' or less high. This groundcover could provide the needed erosion control but also greater environmental benefit including habitat for pollinators.

An expanded seed mix with seeding rates for the solar meadow as well as those for other disturbed areas such as bioretention areas or steep slopes are yet to be provided.

### Conclusion

The Preliminary Plan Landscape Plan submission includes view transects used in determining the visual buffer strategy, the buffer areas, planting layout, plant material schedule and specification notes. All have been developed and improved with a succession of plans, meetings and reviews.

The few most important remaining areas of concern include the following:

- Area D Trimming limitations to state a minimum trim height to maintain a visual buffer at least 12' high and an extended buffer area.
- Area E Formal protection of the north west corner woods in the A.P. 22-3 lot 119 parcel and introduction of meaningful evergreen screening in that corner of the site and similarly in south east.
- Warranty duration extended to assure adequate care during plant establishment.
- Minimum loam depth and quality for disturbed areas.
- Seeding for solar meadow and other graded or otherwise disturbed areas for environmental contribution as well as specific growing conditions.

I am glad to see that there has been significant progress represented with the revisions provided in the current submission and hope that my suggestions are helpful. If there are question with my review please let me know.

Sincerely,

Sung Forder

Sara Bradford, RLA