Burlington Planning Commission

149 Church Street
Burlington, VT 05401
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Yves Bradley, Chair
Bruce Baker, Vice-Chair
Andrew Saba
Lee Buffinton
Harris Roen
Andy Montroll
Jennifer Wallace-Brodeur
Vacant, Youth Member

Burlington Planning Commission Minutes

Tuesday, April 8, 2014 - 6:30 pm

PC Present: Y. Bradley, A. Montroll, H. Roen, B. Baker, E. Lee
Absent: L. Buffinton, J. Wallace-Brodeur
Staff: S. Thibault

I. Agenda

No change.

II. Public Forum

Y. Bradley- Opened the public forum at 6:35 to accommodate visitors.

Ernie Pomerleau -There has been great work done in the City recently with planBTV and the new FBC that is coming, under which there will be no ORB review for the architecture of a building. He watched the process for proposed Champlain College project on St-Paul which addressed the shortage of housing and for which the city council approved the deal on the parking lot This project is located in the transition zone and there are larger buildings all around. The permitting process offers no predictability now. What do we do in the community to meet the goals of planBTV on the ground? He was very surprised that this project proposal was denied and that there is no action to turn it around. He was proud of what was proposed and would love to hear what to do now. Should not have happened?

K. Devine, BBA Director -In the last few days, she has heard from many people on the dismay about the denied of the Champlain College project It has been an exciting year and the BBA was closely involved in planBTV. Solving the housing crisis is the other main issue to deal with and is vital to the economic future of the city. She would love to live in Burlington and cannot, and many others are in the same predicament How do we solve that? Adding student housing will help. She is working on the parking initiative under way and it would have been great to see surface parking lot to go away as well as increase more tax revenue. The parking initiative is looking at starting a public-private partnership to better manage parking downtown but the deny of the project last week makes her job much harder to develop that partnership in the future and sell that idea to private owners. Let us know how we can address the disconnect.

Katie Taylor with the Chamber and GBIC- Burlington is working hard to create more density and the way to do that is by going up. How to improve the economic vitality of our downtown is by increasing housing which is a statewide issue. The Commission has done a lot of work with planBTV and is now trying to move toward regulations that will provide that predictability. The denial of the project last week was a step in the wrong direction and she is dismayed about the decision. So much thought was put into the process and to see it denied. She wants to be part of the discussion in the future and get back on the right path.

F. Von Turkovich - The Commission can do something about it. The Development Review Board implements the ordinance that the Commission writes. It is a terrible feeling not to know what will happen when a developer comes forward, no predictability.

III. Report of the Chair

The Chair provided the following report:

- He wanted to discuss the vote by the DRB to deny Champlain College's project on St-Paul Street, which may end up in environmental court. The project was designed and proposed to

fit into planBTV and creating denser infill development and dealing in part with the housing problems we face. The project had support from planning staff and DAB and the Mayor Office. There seems to be an issue - Commission is going in one direction and DRB going in a different direction. He is very disappointed and believes the project should have gone through.

IV. Report of the Director

The director provided the following report:

- Dealing with projects under review by the office.
- He has been working on the Form-Based Code with S. Thibault and made a presentation to staff yesterday about the code, how it's organized. Next month, work will begin with the Commission and conversation with City Council for process review.

V. Joint Institution Parking Management Plan

D. White - Heard a presentation by CATMA on the current update to the Joint Parking Management Plan three meetings ago. The Commission requested more time to review the document at the last meeting. The Commission's role is to make a recommendation to the DRB on the adequacy of the document. Plan allows the institutions to be more creative and show how they do that with TDM and others mechanisms. Number of years around their work is now available and how well it has been working the past.

E. Lee - The plan doesn't address how to get people to live closer to the institutions rather than have to commute. She would love to see an initiative from the institutions to encourage their employees to live in Burlington and therefore reducing the need to commute into the city.

B. Baker - The Commission didn't pass this along at the last meeting, did it impact the decision of the DRB on the Champlain College project.

D. White – The update would have added greater clarity but the application was made at the time the current plan was in place. Students to live in the Eagles Club are already part of the plan and simply moved from Winooski.

B. Baker - The Commission has been very good at not being political and should remain that way. Need to make sure that we don't delay other processes.

E. Lee – She is the one who asked for the extension and had offered to abstain from the vote if the Commission wanted to move it forward that night.

On a motion by B. Baker, seconded by A. Montroll, the Commission unanimously recommended approval of the Joint Parking Management plan and sent to DRB.

VI. Act 248 Solar

D. White - Act 248 projects are exempt under local control, but there is a chance for the Commission to comment. While the project under development, the City Council asked the Conservation Board to look at the proposal and what impact it might have. The Conservation Board Chair is here tonight to discuss their recommendations after three public meetings. There is a very short timeline left for comments to the Public Service Board. If the Commission wants to offer comments it needs to happen tonight to then go to Council tomorrow for their meeting Monday night.

H. Roen- There is a full application coming and to be able to comment on that, we need to let the PSB know that we want to comment.

S. Gustin – Comment period is open now, within the 45 day. There is a separate timeframe for party status once the application has been filed.

As approved by the Burlington Planning Commission on May 13, 2014.

F. VonTurkovich- Present what the project is, where it is located and what the purpose and intent of the project is. A 1/3 of the site now remains as upland. Solar farm to go on 18 acres of the site; the upland area and some of the wetland area. Keep the southern part of the land open as wetland. BED needs the power to be generated locally, would produce 2.5MWH of electricity. Today, it makes sense financially and functions as a place holder in lieu of future development.

Metal posts in the ground are an accepted use by the state into wetlands. They should get at least 25 years of use of the project with BED agreement. The adjacent neighborhoods don't want housing there, but this present an opportunity to use the land. There are still questions with regards to the wetlands permit. Need to be sure that any change in cover type on the land addressed after development not to increase stormwater runoff into Strathmore development

E. Lee – Why did you chose the one side from the other?

F. VonTurkovich – The open area is a more important wetland and should be excluded. Want to make sure we get as much light as possible.

E. Lee – Will the wetland still function underneath the panels?

F. VonTurkovich – There will be no fill allowed in the area. Posts themselves do not constitute fill under the state regulations.

M. Moore, CB Chair - Applicant came to the board three times in response to the City Council resolution to address stormwater, wetland and buffer zones. The Conservation Board has discussed the meaning and intent of the project. The burden is on the applicant to come and address these issues and responded to all 60 questions and applicant can now move forward with the application. The Board passed a motion to general endorses the concept of the project by noting a few items that the applicant should provide more information on, i.e.: buffer to vernal pool, impact of the forest canopy, removal of shrubs in the wetland. Would comment to the DEC office putting forth skepticism as to the methodology the applicant used to calculate the impact to the wetland. Applicant has stated the impact is only the post = 90 square feet. Why is the 10 acres of clearing not used to describe the impact?

H. Roen – Is having the panels as an umbrella having an impact on the wetlands?

M. Moore - The clearing and its impact on the wetland is the main issue. The stormwater issue is ok for the most part. A board member did a 10 yr. analysis of the impact of stormwater and a 100yrs analysis should be done as well.

H. Roen – Is there precedent in the state?

F. VonTurkovich – 42 project have been approved in the state in wetlands.

B. Baked – He feels this project is not under the purview of the Commission and commissioners were not there to hear the debate at Conservation Board meetings. The board has the expertise to comment on the wetland and stormwater issues, the Commission doesn't.

S. Gustin- The Conservation Board is looking at this at the request of the Council. The Commission can play a role in this and comment independently which may result in the Commission saying something and Council saying something else. Does this make sense from the Municipal Development Plan standpoint is what the Commission could address.

A. Montroll - There is a role for the PC. The RPC is looking at this as well. To weigh in meaningfully, we would have to put more effort into it and understand all the issues. Is it more appropriate for housing or this type of project? The owner has tried in the past for housing and didn't happen.

Y. Bradley - He is ok with the Conservation Board and Council to weigh in and there is no need for the commission to delve into this as well. He trusts others to take care of this.

On a motion by B. Baker, seconded by A. Montroll, the Commission agreed to take no action on this proposal. H. Roen opposed.

As approved by the Burlington Planning Commission on May 13, 2014.

VII. Committee Reports

Executive Committee – meeting on April 10.

Long Range Planning Committee – meeting on April 15.

Ordinance Committee – met last week and talked about Major Impact, Conditional Use criteria and more.

VIII. Commissioners Items

A Montroll – Champlain College project. There is a question of what role the PC can play. Looking forward there is a role. This parcel, the city has been looking at for more than 10 years along the lines of this project. Several sites were identified in the past and then in planBTV we expanded on that as well, to add and create more density. When I see deny of that application on something that looks like something the city has been gearing on for many years. When the denial is on massing and density, there is a disconnect between policies the city has with the review process. The Commission should take a close look at the DRB decision and see if there is a disconnect and what it is. How should that part of the city to be developed. Is there something that needs to change in the zoning to make that happen? Are the regulations really giving us what we are looking for?

B. Baker - Make sure predictability is in the ordinance.

D. White - Talked with DRB members for training on a regular basis.

Y. Bradley - Issues raised could have been taken care of but the denial sent it to Environmental Court. The new mall owner wants to redevelop it with lots of money and for them to see these kinds of denial makes them worried and doesn't send the right message.

E. Lee - 287-289 South Winooski Ave – listed on the national register. Garage torn down because of an order from the building inspector.

D. White – Being taken down with a dangerous building order.

E. Lee – The owner are getting what they want when they let it go and neglected to keep the building up.

D. White – More discussion needs to happen around demolition by neglect. Disconnect between desire to see these structures maintained and restored, and the fact that people just neglect the buildings.

E. Lee – Can we hear back at the next meeting about this application? Project on Pearl St. where the former dentist office was. Proposing a 10 foot tall retaining wall next to someone's property. Are retaining walls allowed in the setback?

IX. Minutes/Communications

X. Adjourn

On a motion by A. Montroll, seconded by H. Roen, the Commission unanimously adjourned at 8:00pm.

Y. Bradley, Chair

S. Thibault, recording secretary

As approved by the Burlington Planning Commission on May 13, 2014.

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Burlington Planning Commission

REGULAR MEETING
Tuesday, April 8, 2014 - 6:30 P.M.
Conference Room #12, Ground Floor, City Hall, 149 Church Street

AGENDA

Note: times given are approximate unless otherwise noted.

I. Agenda

II. Public Forum - Time Certain: 6:35 pm

The Public Forum is an opportunity for any member of the public to address the Commission on any relevant issue.

III. Report of the Chair (5 min) – Yves Bradley, Chair

IV. Report of the Director (5 min) – David E. White, Director

V. Joint Institution Parking Management Plan (20 min)

The Commission will discuss the 2014-2019 update of the Joint Institution Parking Management Plan. **(Copies of the plan available for review at the Planning & Zoning Department Office, City Hall, Ground Floor)**

VI. Keystone Development Corp. VT Sec. 248 Certificate of Public Good (utility permit) application

The Commission will discuss this application for Certificate of Public Good in relation to potential solar utility installation at 0 Sunset Cliff Road.

VII. Committee Reports (5 min)

VIII. Commissioner Items (5 min)

IX. Minutes/Communications (2 min)

The Commission will review minutes from the March 25, 2014 meeting.

X. Adjourn (8:00 p .m.)

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South Forty Solar, LLC
300 Swift St.
South Burlington, Vermont 05403
Telephone: (802) 578-2536

March 5, 2014

By Hand Delivery

Burlington City Council
and
Burlington Planning Commission
149 Church Street
Burlington, VT 05401

Chittenden County Regional Planning Commission
110 West Canal Street, Suite 202
Winooski, VT 05404-2109

Re: Proposed Solar Project — Sunset Cliff Road, Burlington, Vermont
45-Day Notice of Petition to be filed Under Section 248 at Vermont Public Service Board

Dear Councilors and Commissioners:

Pursuant to 30 V.S.A. §248(f) and Vermont Public Service Board ("PSB") Rule 5.402(A), South Forty Solar, LLC ("SFS") submits the following pre-application notice ("45 Day Notice Letter") concerning its proposed 2.5 megawatt (MW) solar project, to be sited on land off of Sunset Cliff Road in Burlington, Vermont. SFS anticipates filing a formal Section 248 petition with the PSB soon after the 45-day notice period expires, in mid-April 2014.

Introduction

SFS intends to seek a Certificate of Public Good ("CPG") from the PSB, to install and operate a 2.5 MW +/- (AC) solar electric generation facility to be known as the South Forty Solar Farm (the "Project") in Burlington, Vermont. The Project would be sited on a 39.2 acre parcel of land that is accessed from Sunset Cliff Road (a private road). The electricity from the Project will be sold to Burlington Electric Department ("BED") under a long-term Purchase Power Agreement ("PPA") recently approved by the Burlington City Council.

In preparation for filing the Section 248 Petition, SFS has been gathering information concerning the site's solar resource characteristics, interconnection requirements to the BED system, and environmental and other land-use conditions. This 45 Day Notice Letter will briefly describe the proposed Project and surrounding conditions including: (1) SFS's plans for construction and operation of the Project; (2) the expected benefits of the Project; (3) a preliminary impact assessment and consideration of on-site alternatives; (4) the expected date a

Section 248 Petition will be filed with the PSB; and (5) the rights of the local and regional planning commissions to comment on the Project plans in accordance with Board Rule 5.402(A).

Included with this letter are a location map (*Attachment A*), site plan (*Attachment B*), equipment specifications (*Attachment C*), and preliminary aesthetics assessment (*Attachment D*).

1. Project Site, Equipment, and Construction Plans

The proposed South Forty Solar Farm is a 2.5 Megawatts (+/-) (MW) (AC) solar electric generation facility located on Sunset Cliff Road, in Burlington, Vermont. The Project is expected to generate approximately 3,750,000 kilowatt hours (kWh) of electrical energy per year, which is enough to serve approximately 700 average Burlington households.[1]

The Project will be sited on a 39.2 (+/-) acre property held by Keystone Development Corporation (an affiliate of SFS) under a long term lease. The Project parcel is currently undeveloped although in the past it was used for agricultural purposes. The parcel is bordered to the west and east by residential lots ranging from 1/8 to 3/4 acre in size. The southern boundary is comprised of similar single family house lots, but a small park and open space area provide a buffer to the parcel. The northern boundary of the tract is bordered by Sunset Cliff Road (located on Keystone's parcel) and a 19-acre parcel with seasonal "camps" located beyond, on the shore of Lake Champlain.

The Project's site plan was designed to meet a number of objectives: minimize the project footprint while maintaining the economic viability of the solar electric generation facility; maintain appropriate separation or screening from surrounding land uses; minimize shading of the solar panels; and minimize impacts to environmental resources including wetlands and sensitive natural communities. The solar array area will be located on the northern portion of the property which consists of a mix of open field, scrub/shrub vegetation and upland forest. This area will be cleared of vegetation to allow optimal solar generation.[2] *See Attachments A and B.*

Solar Panels and Racking System

SFS intends to install approximately 11,000 300-watt solar panels, with a combined rating of 3.3 MW (DC). *See Attachment C.* The final panel selection will be made prior to the initiation of construction based upon market conditions, but, in any case, the panels used will be materially similar to the panels shown in Attachment C.

The solar cells in each panel are dark blue in color and the panel glass is treated with an anti-reflective (AR) coating that lowers the overall reflectivity of a typical panel to less than 5%, which is well below the reflectivity of surrounding vegetation.

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[1] Based on the average residential use of approximately 5,400 kWh per year, as reported by BED.

[2] A final layout will be included with SFS's Section 248 Petition. Any variations between the attached site plan and the final plan are not expected to be substantial.

The individual solar panels comprising each "array" are mounted on a rack system. The solar arrays and associated equipment will occupy approximately 18.5 acres of the parcel. Approximately 506 arrays will be utilized, depending on the final panel selection. The arrays will be set on driven steel foundation piles to hold the solar panels at a fixed angle of 30 degrees, to maximize solar radiance collection. The use of a driven pile foundation will not require any significant excavation or placement of precast concrete under the panel array and thus will minimize soil and vegetation disturbance. The support structures are designed to hold the bottom of the solar panels at approximately 4 feet above existing grade, which will allow snow to shed without creating buildup on the ground that might compromise energy production. The top of the solar panels will be approximately 10.5 feet above grade.

As shown in *Attachment B*, the arrays will be arranged in rows running east-west. The rows will be set a sufficient distance apart (approximately 35 feet) to minimize self-shading. The arrays will be connected via electrical cable in conduit to the inverters, which in turn will connect to transformers (see below). In areas outside of the wetlands and its 50-foot buffer zone, the electrical lines from the arrays to the inverter and the primary voltage lines to the BED interconnection point will be buried underground in conduit. In areas delineated as wet meadow or buffer zones, conduit for electrical and monitoring lines will be placed above ground supported by the array rack system.

Inverters and Transformers

SFS currently anticipates using five (5) Advanced Energy AE500NX (500 kW) inverters, or the equivalent, placed at two locations within the array rows. *See Attachment B*. The inverters will be housed in two prefabricated enclosures (1.5 MW and 1 MW), each of which is approximately 35 feet long by 12 feet wide by 10 feet high in dimension. The enclosures will also house controls, metering, and other necessary electrical equipment. The inverters in each structure will be connected to a medium voltage transformer located on each structure's steel deck. The transformers will use a non-toxic, biodegradable cooling oil. In addition, each structure will be equipped with a secondary oil containment pan under each transformer. The transformers will step up the inverter output (480V) to distribution voltage for interconnection to BED's distribution circuit (upgraded to 3 phase power) located on Starr Farm Rd. *See Attachments B and C – Site Plan and Equipment Specs.*

Other Project Components

A 24 foot x 48 foot maintenance "shed" will be constructed at the northwest corner of the site. The building will be used to store maintenance equipment and as a staging area for any service work that, from time to time, may need to be performed on the system. The location of the maintenance building is depicted on the site plan. In addition, a driveway and small parking area are also proposed to be constructed near the maintenance barn so that service personnel will not have to park on Sunset Cliff Road. Lastly, an information kiosk containing information

about the system is proposed to be located at the northwest corner of the site to provide invitees with an opportunity to view the Project.[3]

The solar arrays and other equipment will be surrounded by a 6-foot high wire mesh fence that is consistent with fencing at other Vermont solar projects and satisfies the National Electrical Code. *See Attachment C, sheet 9.*

Construction and Operation

Project construction is expected to take approximately 16 weeks. The general sequence of construction will be as follows: The first phase of construction will include the clearing of the treed area sited for panel installation. Soils in the upland area will be rehabilitated to enhance their capacity to infiltrate stormwater runoff. After clearing, a gravel access road to the inverter locations will be constructed and underground 3-phase primary wiring will be installed to the point of interconnection with BED. The second phase of construction will involve construction of the array support structures. The final phase of the construction will involve installation of the solar modules, placement of the inverter enclosures, and wiring to the enclosures. Following completion of these activities, the system will be tested and commissioned for operation.

The Project incorporates low-impact design characteristics including:

- Impervious surfaces will be limited to a 12-foot wide gravel access road, maintenance shed and parking area.
- Solar array support structures in the wetland areas will be pile driven causing very limited soil disturbance.
- Native soils will remain in place. Forested areas to be cleared will be tilled and the soils amended to improve infiltration rates. The areas beneath and around the arrays will remain vegetated, although the land inside the fence (and a 10 foot strip outside) will be routinely mowed.
- Tree clearing and pruning will be the minimum needed to avoid shading of the solar panels.

Daily access to the array is not required. The solar array production will be monitored remotely, with technicians dispatched to the site on only an as-needed basis.

Site Access and Equipment Delivery

The Project will be accessed from North Avenue to Starr Farm Road and then onto Sunset Cliff Road to the site parcel. The service road through the solar arrays will provide access to the two inverter/transformer enclosures.

[3] SFS intends, on occasion, to invite schools and other interested persons and organizations to visit the site.

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The solar panels and rack components will be shipped on pallets, typically delivered by standard tractor-trailer truck. SFS expect approximately 20 (+/-) truckloads will be needed to deliver the solar panels and racks over a 6-week period. In addition, the two inverter enclosures with transformers will be delivered by tractor-trailer after the solar array is installed. All other equipment and material including wire, cable, conduit, etc., will be transported to the site utilizing standard-width trucks.

Construction equipment for installing electrical conduit and the solar array will likely include a tire or track mounted excavator and a small pile driver to install the foundation posts. A crane will be used for placement of the two inverter/transformer stations.

2. Project Benefits

The South Forty Solar Farm's owner, South Forty Solar, LLC, a Vermont limited liability company, has entered into a long term (25 year) power purchase agreement to sell 100% of the Project's output to BED. This will provide the city with a long term energy source at stable prices, serving its electrical needs by supplying approximately 3,750,000 kWhs of solar power annually. The Project will also benefit the broader Vermont economy in other ways: by the payment of municipal and education taxes, by employing Vermont businesses for the development work, and, where commercially feasible, by purchasing Project equipment from Vermont companies and by employing Vermont businesses for construction, installation, and maintenance work.

The solar energy produced by the Project will result in substantial environmental benefits. BED has established the goal of increasing its supply of renewable energy sources in order to lower greenhouse gas emissions and provide stable long-term rates. The Project will support achievement of that goal and is in conformance with BED's approved 2012 Integrated Resource Plan. Likewise, the Vermont Legislature has set a goal for the state to receive 20% of its electrical energy from new renewable resources by the year 2017. The solar energy produced by this Project will result in less electricity needed in the New England region from plants that use fossil fuel or nuclear energy. It will produce no emissions, and thus will help in a small but measureable way to reduce global warming, acid rain, and the negative public health effects associated with the use of fossil fuel and the waste storage challenges presented by nuclear energy production.

3. Preliminary Impact Assessment

SFS has employed a team of engineers and environmental and energy consultants with substantial experience with projects of this type. Based upon their assessment of conditions at this site, as well as work on other similar solar projects, SFS submits that the Project has been planned so that it will not cause undue adverse impacts to environmental resources, public health and safety, or aesthetics.

The solar array area is planned to be located on approximately 18.5 -acres at the northern portion of the property which consists predominantly of open field and upland forest. Approximately 8 acres of trees and 3 acres of shrubs will be cleared to allow placement of the solar panels and equipment. An additional clearing extent area (shrub management zone) is necessary beyond the fence line to allow for adequate solar gain. An additional selective tree height management zone within the designated 50 foot natural communities buffer is needed to allow for maintenance of optimal solar generation. *See Attachment B.*

The solar array racks are installed using driven piles,[4] a practice allowed under federal wetlands regulation). A State of Vermont Wetlands Permit is necessary for a small amount of wetland impact and for forest clearing within parts of the wetlands and the wetlands buffer. SFS has submitted its wetlands permit application to the Vermont Agency of Natural Resources. The application includes a vegetation management plan to regulate maintenance activities within the shrub management zone and the wetland/natural community buffer area.

To avoid and minimize environmental impacts, the project has been designed as follows:

- No earth moving, grading or excavation will be required in the wetlands or buffer zone.
- Solar array support structures and inverter enclosure foundations will be pile-driven steel to eliminate the need for concrete footings and foundation excavation in the wetlands and buffer zone.
- Electrical conduit will be run above grade in the wetlands and buffer zone.
- Accepted erosion control measures will be used to minimize the amount of sediment discharged to the wetlands.
- Soil restoration measures will be implemented in uplands to increase their capacity to retain rainfall and reduce both the peak rate and volume of stormwater leaving the site.
- The rare wetland natural community (Wet Sand-Over-Clay Forest) on the project parcel will not be impacted by the Project. In addition, because this natural community currently contains a variety of invasive species, SFS is proposing to perform invasive species control in this area.
- Clearing of forest vegetation in wetland limited to approximately 0.5 acres within wetlands and 0.9 acres of wetlands buffer. Direct impacts to wetlands limited to approximately 84 square feet of wetlands and 6 square feet of wetlands buffer.
- No undue adverse impact on the quality of wildlife habitat. A wildlife study and an avian habitat study found that wildlife species on this site are common and typical of that found

[4] Based on Public Service Board requirements, the piles and all other project infrastructure will be removed at the time the Project is decommissioned.

in a suburban environment. The Vermont Wetlands Program has indicated that the wetlands on the site rate low for the wildlife function.

An operational stormwater permit (General Permit 3-9015) is not required for the project because the total amount of impervious surface proposed is under the jurisdictional threshold of one acre. A Construction General Permit (General Permit 3-9020) will be obtained as more than one acre of earth disturbance is anticipated. During construction, stormwater Best Management Practices will be implemented in accordance with ANR guidelines.

The Project will meet the safety standards of the National Electrical Code and utility interconnection standards for safe and reliable operation of solar electric plants. The Project will not impose undue burdens on fire, police, or water/sewer services.

Electrical – System Impact Study

A System Impact Study will be completed by BED. BED has created an initial interconnection and facility plan for the Project that indicates the existing single phase power line along Sunset Cliff Road will need to be upgraded to 3-phase power conductors that tie into existing 3-phase power at the corner of Starr Farm Road and Curtis Avenue.

Aesthetics

A preliminary visual assessment was conducted by the S.E. Group. S.E. Group's assessment indicates that the site is well suited to support the Project with minimal impact to nearby areas. If more extensive impacts are found to exist after review of the design presented to the PSB, the site and surrounding landscape lend itself to effective mitigation measures such as landscaping, context-appropriate fencing and inverter screening. A full aesthetics analysis will be included with the Section 248 Petition. The preliminary visual assessment is included as *Attachment D.*

The projected sound levels produced by the Project will meet noise guidelines/standards adopted by the USEPA, the WHO, and the Public Service Board. The estimated sound levels affecting the nearest residence to any of the noise producing components (645 feet in a northeasterly direction) would be 20 dBA (+/-). This low sound level is likely to be the same or lower than daytime background levels in the area.

On-Site Alternatives

SFS has entered into a PPA with BED to provide power from the Project. This is the only property owned or controlled by SFS that can satisfy the commitment under the PPA. Once the site was selected, SFS and its consultants reviewed various configurations within the parcel in order to minimize and avoid environmental, aesthetic, and other impacts while maintaining a viable project with minimal shading. The proposed configuration utilizes a low-impact design and locates the solar array so as to avoid sensitive environmental resources.

4. **Expected Petition Filing Date with Vermont Public Service Board**

SFS intends to file a Section 248 Petition and supporting materials with the PSB soon after the 45-day notice period expires, estimated in mid-April. Once the Section 248 Petition is filed, SFS would request the Board schedule any hearings and other necessary steps in the proceedings in time to render a decision by the fall of 2014. This schedule will allow the Project to be constructed and operational in 2015.

5. **Municipal and Regional Planning Commissions' Comments to the Vermont Public Service Board**

Under 30 V.S.A. Section 248(f), municipal and regional planning commissions "shall make recommendations, if any, to the Public Service Board and to the petitioner at least 7 days prior to filing of the petition with the Public Service Board." In addition, the planning commissions are entitled to provide revised recommendations "within 45 days of the date on which petitioner has filed a petition with the Board if the petition contains new or more detailed information that was not previously included in the petitioner's filing with the municipal and regional planning commissions pursuant to Section 248(f)." *See PSB Rule 5.402(A)(2).*

For additional information regarding this process, including your planning commission's right to participate in the Board proceeding, please refer to the "Citizens' Guide to the Vermont Public Service Board's Section 248 Process," which can be found by navigating to http://psb.vermont.gov/sites/psb/files/publications/Citizens%27%20Guide%20to%20248%20February%2014%202012.pdf.

Thank you for your attention to this matter. We look forward to progressing through the Section 248 process and welcome your input and suggestions to make this a successful Project.

Sincerely,

SOUTH FORTY SOLAR, LLC
By: Jericho Management Company, LLC, Manager

Frank von Turkovich, Managing Member

Attachment A

TRUDELL CONSULTING ENGINE
802.879.6331 www.tcevt.com

Project Location

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Legend

Project Parcel

Notes

Sources: Bing aerial photography (2012);
VT E911 Roads (2011);
Project Parcel by TCE (2013).

Disclaimer: The accuracy of information presented is determined by its sources.TCE is not responsible for any errors or omissions that may exist. Questions of on-the-ground location can be resolved by site inspections and/or surveys by a registered surveyor. This map is not a replacement for surveyed information or engineering studies.

South Forty Solar Farm
Sunset Cliff Road
Burlingtron, VT

Location Map

Project: 2013113
Prepared By: LMJ
02/21/14
1 Inch = 500 Feet

Attachment B

Field Book:

Project Reference:

tce

TRUDELL CONSULTING
479 BLAIR PARK ROAD | WILLI
802 879 6331 | WWW.

Revisions
No. Description

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Use of These Drawings
1. Unless otherwise noted, these Draw
preliminary planning, coordination wi
utilities, and/or approval from the reg
They are not intended as construction
as such.

2. Only drawings specifically marked
intended to be used in conjunction w
documents, specifications, owner/co
and to be fully coordinated with othe
but not limited to, the Architect. If app
Drawings shall not be used for constru
TCE for any construction surveying ser
electronic data suitable for construcf

3. These Drawings are specific to the
transferable. As instruments of servic
copies thereof, furnished by TCE are
Changes to the drawings may only b
errors or omissions are discovered, the
the attention of TCE immediately.

4. By use of these drawings for constr
the Owner represents that they have
and accepted the drawings and hav
applicable parties/disciplines to insur
properly coordinated with other aspe
Owner and Architect, are responsible
shown, including an area measured
around any building.

5. It is the User's responsibility to ensure
most current revisions.

STATE OF VER
JASON M. MAYO
No. 7637
CIVIL
LICENSED
PROFESSIONAL EN

Project Title

South Forty So
Sunset Cliff
Burlington, V

Sheet Title

Overall Site

Date:
Scale:
Project Number:
Drawn By:
Project Engineer:
Approved By:

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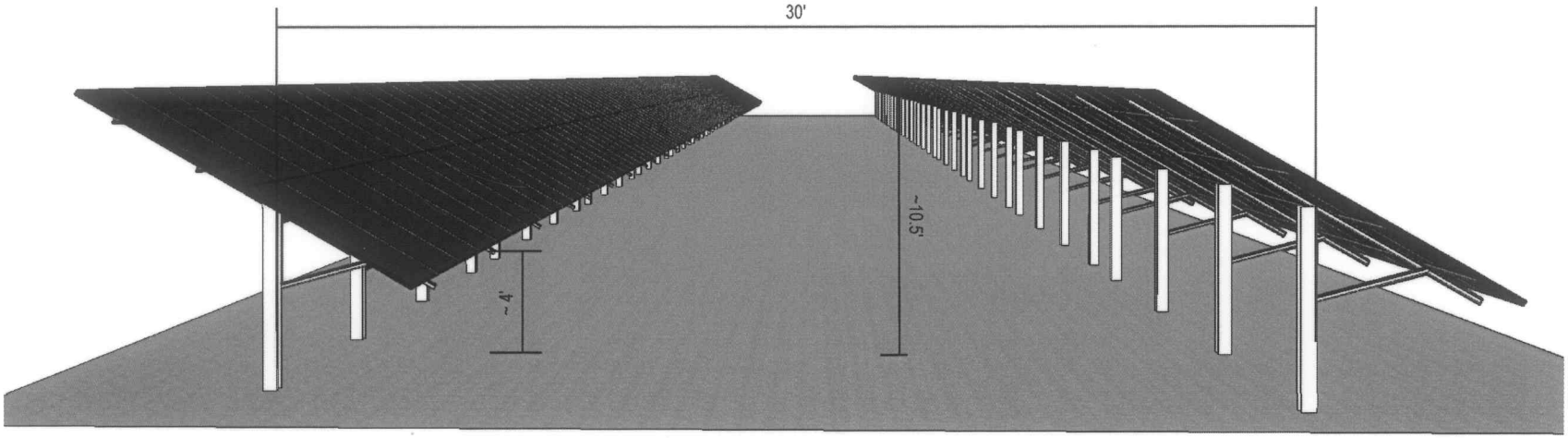
Not for Construction



Typical Rack Height & Row Repeat Distance

L.W. SEDDON, LLC
13 Bailey Ave.
Montpelier, VT 05602 USA
Tel: 802-272-7284

Client:
South Forty Solar, LLC
300 Swift St.
S. Burlington, VT 05403

Project:
South Forty Solar Farm
Sunset Cliff Rd.
Burlington, VT 05401

AC Capacity: 2.5 MW AC
Array Size : 3.34 MW DC
Annual Output = 3,750 MW
Module: 300 Watts
Mounting: driven pile
Module tilt: 30 degrees
Azimuth: 180 degrees (Tr

Vers	By	Date	Chang
1	LWS	21-Feb-2014	
			-

This document is the property of L.
Seddon, LLC. It is intended for the
use of the Customer and Project
indicated in the title block. It is privil
and confidential information that ma
be used, reproduced, disseminated
transferred in any manner, without
written permission of L.W. Seddon,

Drawing:
PV-A03

Description:
Array Elevation, Typical

Scale:
none

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Attachment C

ReneSola

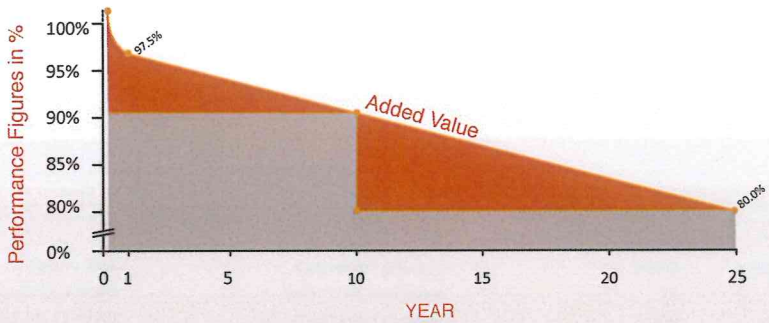
Virtus II

156 Series Polycrystalline
Solar Module

300W, 305W, 310W

- **High Module Conversion Efficiencies**
- **Easy Installation and Handling for Various Applications**
- **Mechanical Load Capability of up to 5400 Pa**
- **Conforms with IEC 61215:2005, IEC 61730: 2004, UL 1703 PV Standards**
- **ISO9001, OHSAS18001, ISO14001 Certified**
- **Application Class A, Safety Class II, Fire Rating C**

Guarantee



10-year
material & workmanship

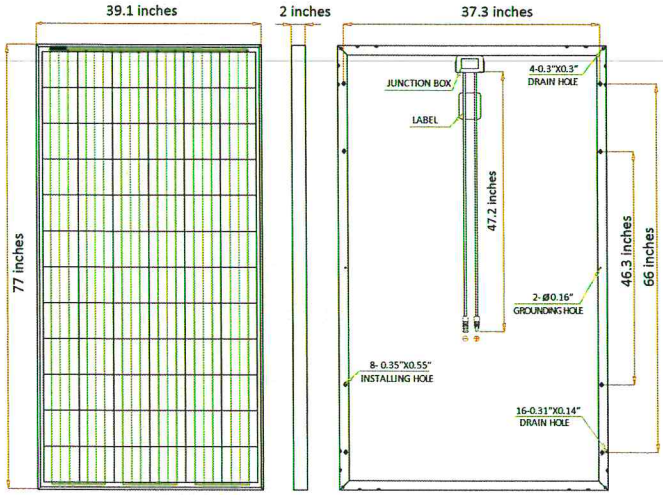
25-year
linear power output

APPROVED PRODUCT

LISTED · Intertek · PV CYCLE

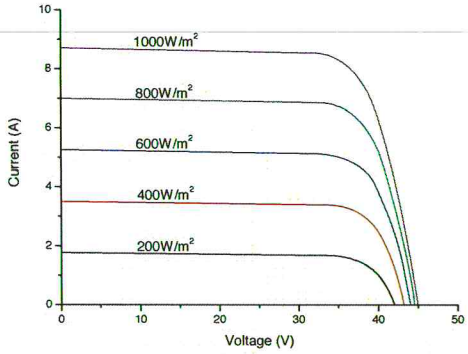
156 Series Polycrystalline
Solar Module
300W, 305W, 310W

Dimensions



Drawing Only for Reference

I-V Curves



Varied Irradiation Efficiencies

Irradiance	200W/m²	400W/m²	600W/m²	800W/m²	1000W/m²
Efficiency	15.8%	16.2%	16.2%	16.1%	16.0%

Electrical Characteristics STC	JC300M-24/Ab	JC305M-24/Ab	JC310M-24/Ab
Maximum Power (Pmax)	300 W	305 W	310 W
Power Tolerance	0 ~ +5W	0 ~ +5W	0 ~ +5W
Module Efficiency	15.5%	15.7%	16.0%
Maximum Power Current (Imp)	8.20 A	8.33 A	8.38 A
Maximum Power Voltage (Vmp)	36.6 V	36.6 V	37.0 V
Short Circuit Current (Isc)	8.69 A	8.73 A	8.80 A
Open Circuit Voltage (Voc)	44.8 V	44.9 V	45.0 V

Values at Standard Test Conditions STC (Air Mass AM1.5, Irradiance 1000W/m², Cell Temperature 25°C)

Electrical Characteristics NOCT	JC300M-24/Ab	JC305M-24/Ab	JC310M-24/Ab
Maximum Power (Pmax)	222 W	226 W	230 W
Maximum Power Current (Imp)	6.67 A	6.72 A	6.80 A
Maximum Power Voltage (Vmp)	33.4 V	33.6 V	33.8 V
Short Circuit Current (Isc)	7.02 A	7.04 A	7.10 A
Open Circuit Voltage (Voc)	41.9 V	42.0 V	42.1 V

Values at Normal Operating Cell Temperature, Irradiance of 800 W/m², spectrum AM 1.5, ambient temperature 20°C, wind speed 1 m/s

Mechanical Characteristics

Cell Type	156 x156 mm Polycrystalline, 72 (6x12) pcs in series
Glass	High Transmission, Low Iron, Tempered Glass
Frame	Anodized Aluminum Alloy
Junction Box	IP65/IP67 rated, with bypass diodes
Dimension	*77 x 39.1 x 2 inches
Output Cable	12 AWG, 47.2 inches
Weight	63.9 lbs
Installation Hole Location	See Drawing Above

Characteristics

Temperature Coefficient of Voc	-0.30%/°C
Temperature Coefficient of Isc	0.04%/°C
Temperature Coefficient of Pmax	-0.40%/°C
Nominal Operating Cell Temperature (NOCT)	45°C±2°C

Packing Information

Container	20' GP	40' GP	40' HQ
Pallets per Container	10	24	24
Pieces per Container	200	480	528

Maximum Ratings

Operating Temperature	-40°F ~ + 185°F
Maximum System Voltage	1000VDC (EU) / 600VDC (US)
Maximum Series Fuse Rating	20A (EU) / 20A (US)

Rev No: JC/TDS/2013.02 *Contact Renesola for tolerance specification

CAUTION: All rights reserved. Design and specification are subject to change without prior notice.

FS System

Features and Benefits

- ETL Listed
- High level of pre-assembled parts
- Proven extremely short installation time
- High quality and sustainable materials
- Easily accessible for ground and system maintenance
- Included certified engineering by professional engineer licensed in the location of the project
- Included soil tests and pull out tests on systems larger than 250 kW
- Options for in field adjustment, if needed

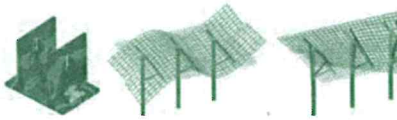
The Schletter FS Racking System has a proven worldwide product and installation history, with over 6 GW of ground mounted installations installed throughout the world with many FS installations ranking among the largest globally. Project specific system calculations and optimized material utilization address the ever increasing pressure to reduce costs in planning PV systems, taking into account balance of system (BoS). Complete structural calculations are provided for system design, while assuring compliance with current building codes and regulations.

With this established history and experience in ground mounted PV installations, the latest generation of the FS System offers a culmination of experience and the highest level of in-house pre-fabrication to date, while always maintaining the focus of making the overall cost of a PV system more competitive. **The result is an attractive system installed quickly, efficiently, and with the durability to last.**

Schletter stands behind the quality, durability, and functionality of its products and services its customers with professionalism. Because of our commitment to customer satisfaction, all Schletter systems have a voluntary 10-year warranty.

For more information, please visit www.schletter.us or call (520) 289-8700.

Technical Data

Material	• Fastening elements, bolts: Stainless steel 304 and 316 • Profiles (rails): Aluminum alloy 6105 T5 • High life-expectancy, high residual value, no disposal costs • Pile driven support posts: Steel, hot-dip galvanized with a G235 process - Easy plant re-powering due to modular design
Logistics	• Quick and simple mounting • Maximum level of prefabrication prior to shipment
Construction	• Can be installed on uneven terrain • Simple adjustment options • Cost optimized configurations for framed and unframed modules
Accessories	• Cable channels, cable ducts • Components for potential equalization/grounding • Clamps for every type of module • Fastening systems for large laminate modules (OptiBond system)
Calculations	• 100% code compliant designs for any locality • Third-party structural PE, stamped drawings and calculations • Individual system structural calculations based on geotechnical report • Individual system design calculations based on regional load values • Design loads according to IBC 2006 or 2009 • Patented profile geometries with optimum material utilization • Verification of all construction components based on FEM-calculation • Earthquake simulation, optional
Available Third-Party Services	• Geotechnical soil investigation and analysis • Ramming of foundations • Optional: rack mounting • Optional: complete module mounting • EPC services • PPA formation 
Terrain maintenance	• Simple terrain maintenance due to single support - Specification of module height above ground possible
Grounding, Potential equalization	• Grounding options available • Components for the internal potential equalization
Warranty and Certifications	• 10-year warranty, optional 20-years

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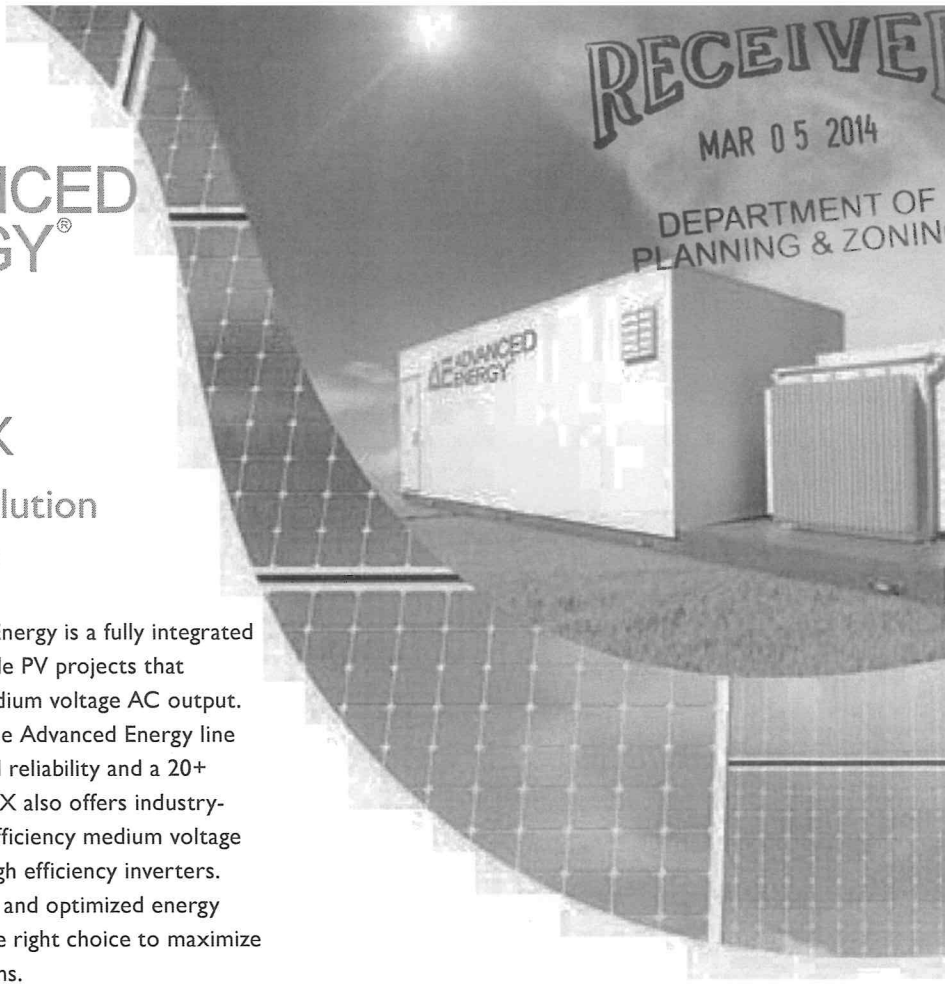
ADVANCED ENERGY®



PowerStation™ TX

Turnkey Integration Solution for MW-Scale Projects

The PowerStation TX from Advanced Energy is a fully integrated power conversion solution for MW-scale PV projects that accepts PV DC inputs and provides medium voltage AC output. The PowerStation TX is built around the Advanced Energy line of TX inverters which offer exceptional reliability and a 20+ year operating life. The PowerStation TX also offers industry-leading efficiency by combining a high efficiency medium voltage transformer with Advanced Energy's high efficiency inverters. This combination of reliability, long life, and optimized energy harvest makes the PowerStation TX the right choice to maximize return on investment in large PV systems.

The pre-wired, outdoor-rated solution reduces project engineering costs, accelerates project schedules, and significantly decreases the cost of on-site labor and installation. The entire package is designed to be pier mounted to further simplify installation. Pad mounting is also available on certain configurations.

The PowerStation TX includes inverters, medium voltage transformer, auxiliary power, and other customer components such as data monitoring and control equipment, all pre-wired and factory tested. The pad mount transformer with integrated medium voltage switch is a compact and cost-effective choice that enables low-cost loop-feed installations and minimizes the need for individual pieces of medium voltage switchgear. The flexible design offers several configuration options to meet local utility requirements and installation preferences.

AE's integrated TX inverters are backed with an industry leading 10-year nationwide warranty with optional, comprehensive 20-year warranty. The balance of the solution carries a 1-year warranty with option to extend to five years. The complete PowerStation TX is supported by the most responsive service and support team in the business.

System Optimization and Management

- Full system application engineering support
- Leverage AE's strategic partnerships with equipment supplie and integrators
- Single point of contact for project coordination and manager
- Job specific composite drawings and project documentation

Superior Reliability

- Low inverter parts count reduces potential failure points
- Increased availability with >99% monitored fleet availability
- Redundant cooling system with Smart Air Management™
- Card cage circuit board system minimizes electronic interconnections and enables fast service
- Complete PowerStation TX solution factory pre-wired and tested, reducing potential for errors

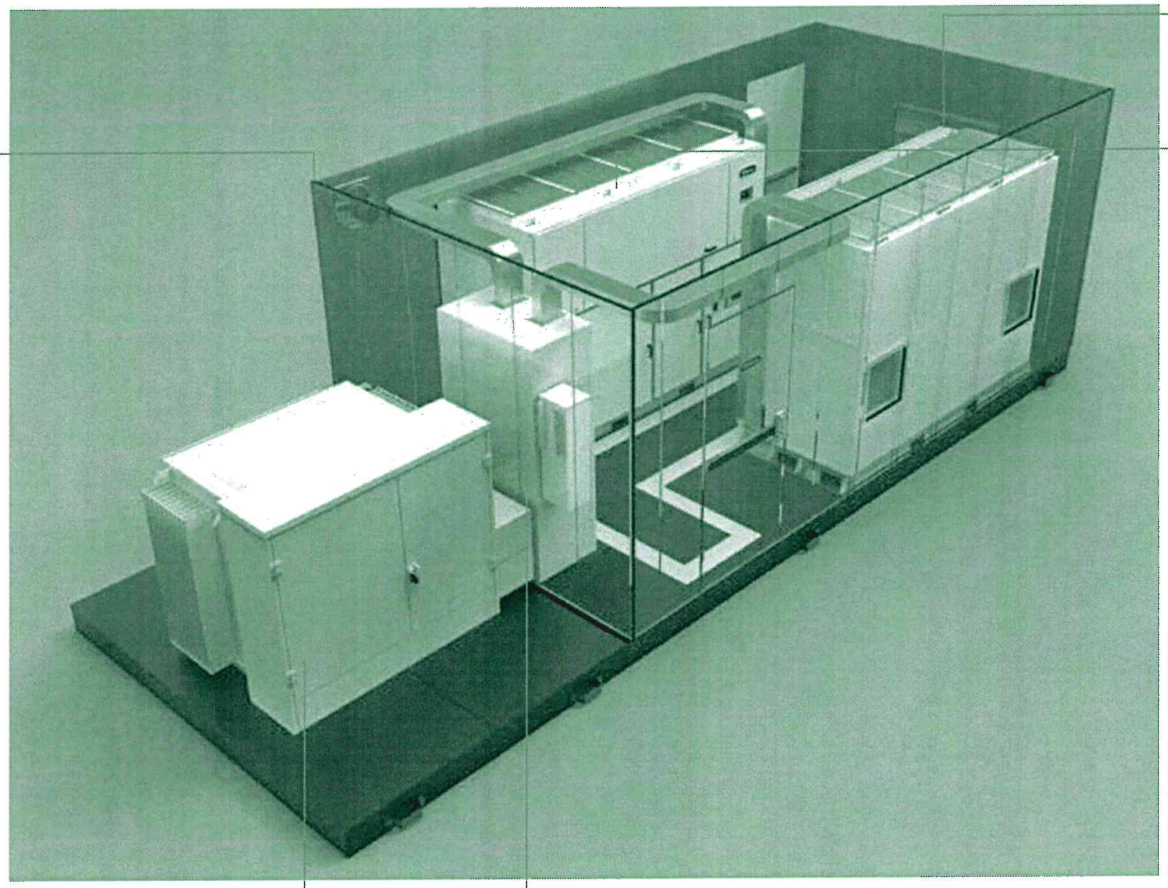
Significant Financial Benefits

- Factory installation and wiring greatly reduces field labor
- Optional pier mount installation reduces pad costs and simplifies conduit entry
- High efficiency and long service life maximize energy harvest every day for 20+ years
- Integration solution reduces project management, engineeri costs, and shortens project construction cycle
- Optional enclosure protects from vandalism without additic fencing or other on-site construction

owerStation™ TX

owerStation TX Solution
Fully assembled, pre-wired, tested, and ready to connect
ncludes inverters, medium voltage transformer, listribution switchboard, auxiliary power, and other custom components required to meet job specific requirements
Open and enclosed options available

lonitoring and Communications (Optional)
Revenue grade metering
Subcombiner monitoring
Central communications box for single point access o all PowerStation data
All control wiring from inverters and monitoring levices to central comm box, factory installed and ested
Power supply, RS485 port, and Ethernet switch ncluded for easy connection to SCADA or third party monitoring system

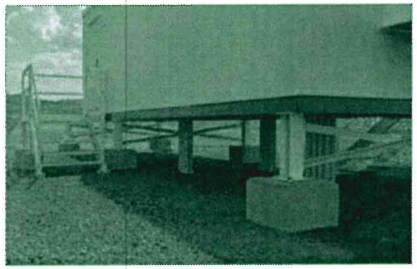


Engineered Cooling System
- Inverter Smart Air Management™ complements the PowerStation TX cooling system
- Enclosure heat removed using a high-efficiency exhaust fan

Shown with (2) 500 kW Commercial Inverters*
- Separate DC in to each inverter
- 97% CEC Efficiency
- 310-600 Volt MPPT Range

* Additional inverter configurations available

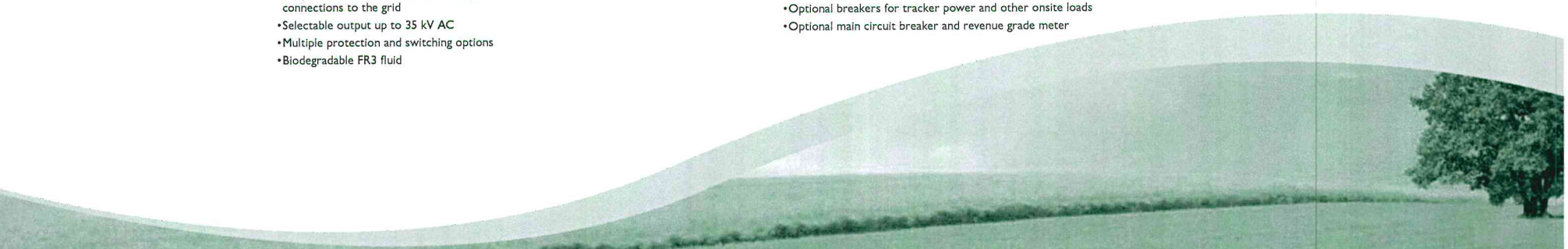
Pier Mount
- Easy access to AC and DC conduits simplifies installation
- Eliminates need to grade and level pad site and stub in conduit
- Reduces installation time and expense
- Pad mount option available for some configurations



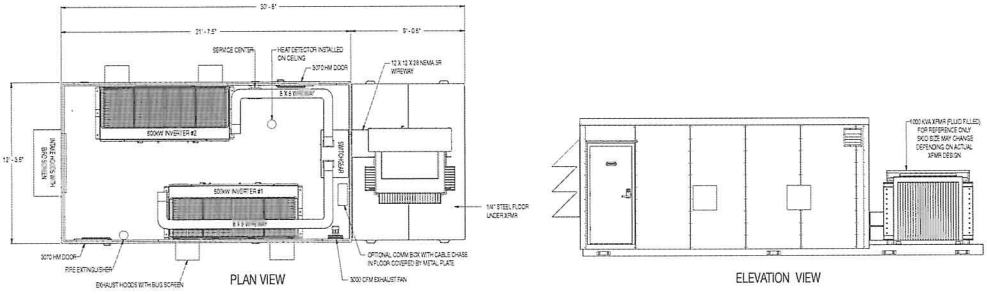
Pier mount PowerStation TX

Medium Voltage Step-up Transformer
- Integrated medium voltage load-break switch
- Loop feed to minimize medium voltage connections to the grid
- Selectable output up to 35 kV AC
- Multiple protection and switching options
- Biodegradable FR3 fluid

Switchboard
- 480/277 V 3 phase, 4 wire
- Inverters are pre-wired to the switchboard and combined into single output to transformer
- Optional breakers for tracker power and other onsite loads
- Optional main circuit breaker and revenue grade meter



Dimensions (not for construction)



Powerstation Summary Specifications

	PowerStation TX
Coninuous Output Power	Up to 1000 kW
Common Configurations	1000 kW
	760 kW
	500 kW
	Custom
Max Inverters per PowerStation	4
Mounting	Pier - All Configurations
	Pad - 1x500 kW or 2x500 kW Configurations
Enclosure	Open or Enclosed
Construction	Power-coated steel base
	Stucco aluminum exterior walls, insulated membrane roof (enclosed only)
Max DC Input Voltage	600 V
AC Nominal Output Range	Up to 35 kV
Approx 1000kW Dimensions	12'4" W x 30'8" L x 10' H
Approx 2000kW Weight	48,000 lb
Reference inverter data sheets for inverter characteristics	

Standard Available Options

Additional Custom Options also Available. Contact AE.

PowerStation Base Frame

Enclosure
Double Epoxy Base Frame Coating
Transformer Fluid Containment

MV Xfmr

Increased Efficiencies
High Elevation Designs
Surge Arrestors
Stainless Steel Tank and Cabinets
Alarm Contacts on Gauges

Switchboard

Main Breaker
Additional 480 V Breakers for Site Loads

Auxiliary Power

1Ph 120/240 V
3Ph 120/208 V
Custom sized xfmrs and panels

DC Recombining

Inverter Integrated Fusing (50 kW-260 kW)
Inverter Integrated DC Circuit Breakers (250kW-500 kW)
CB Recombiners

Communications

Revenue Grade Metering
DC Input Monitoring
Central Communication Box

Extended Warranties

Up to 20 Years on Inverters
Up to 5 Years on Balance of Equipment

Documentation

PE Drawings

Configuration Options

All AE PowerStations are custom engineered and configurable. Each PowerStation TX is designed with site specific goals and resources in mind. Contact your sales representative at sales.support@aei.com for more details.

For more information on AE inverters, visit www.advanced-energy.com/solarenergy.
Specifications are subject to change without notice.

ADVANCED ENERGY®
AE Solar Energy · 115 Nicholson Lane · San Jose, CA 95134 USA
www.advanced-energy.com/solarenergy
877.312.3832 · sales.support@aei.com · invertersupport@aei.com
Please see www.advanced-energy.com for worldwide contact information.

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ENG-PowerStationTX-250-05 6/13

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ENVIROTEMP® FR3™ FLUI

DESCRIPTION

Envirotemp® FR3™ fluid is a Fire Resistant Natural Ester based dielectric coolant specifically formulated for use in distribution transformers where its unique environmental, fire safety, chemical, and electrical properties are advantageous.

Envirotemp FR3 fluid is formulated from edible seed oils and food grade performance enhancing additives. It does not contain any petroleum, halogens, silicones or any other questionable material. It quickly and thoroughly biodegrades in both soil and aquatic environments. The fluid tested non-toxic in aquatic toxicity tests. It is tinted green to reflect its favorable environmental profile.

Envirotemp FR3 fluid has an exceptionally high fire point of 360°C and flash point of 330°C. It has the highest ignition resistance of less-flammable fluids currently available. It is referred to as a High Fire Point or "Less-Flammable" fluid, and is Listed as a Less-Flammable Dielectric Liquid by Factory Mutual and Underwriters Laboratories for use in complying with the National Electric Code® (NEC®) and insurance requirements.

Envirotemp FR3 fluid is compatible with standard transformer insulating materials, components and with fluid processing equipment and procedures. It demonstrates improved thermal characteristics with a viscosity closer to conventional transformer oil, superior dielectric strength in new and continued service applications, and excellent chemical stability over time.

Because of it excellent environmental, fire safety and performance characteristics applications for Envirotemp FR3 fluid have expanded into a variety of other equipment, including sectionalizing switches, transformer rectifiers, electromagnets, and voltage supply circuits for luminaries. Other potential applications under study include voltage regulators, high voltage cables, and power substations. The fluid is also used in retrofill applications for other fluid filled distribution equipment.

TYPICAL INITIAL ENVIROTEMP FR3 FLUID PROPERT

Property	Value	Test Met
Electrical		
Dielectric Strength	56 kV @ 25°C (0.080" gap) 47 kV @ 25°C	ASTM D ASTM D
Relative Permittivity [Dielectric Constant]	3.2 @ 25°C	ASTM D
Dissipation Factor [Power Factor]	0.05% @ 25°C	ASTM D
Volume Resistivity	30 X 10^{12} Ω-cm @ 25°C	ASTM D
Impulse Strength (Sphere to Sphere)	226 kV @ 0.15" gap	ASTM D
Gassing Tendency	-79 (µL/min.)	ASTM D
Physical and Chemical		
Specific Gravity	0.92 @ 25°C	ASTM D
Interfacial Tension	27 mN/m @ 25°C	ASTM D
PH	5.8	EPA 90
Neutralization (Acid) Number	0.022 mg KOH/g	ASTM D
Kinematic Viscosity	33 cSt @ 40°C 8 cSt @ 100°C	ASTM D
Moisture Content	20 mg/kg	ASTM 1
Percent Saturation of Moisture	1 - 2%	CPS Mo
Air Solubility	16% @ 25°C @ 1 atm.	ATSM D
Appearance	Clear, Light Green	ASTM D
Color	L 0.5	ASTM D
Thermal		
Flash Point (Closed Cup)	316°C	ASTM
Flash Point (Open Cup)	330°C	ASTM
Fire Point (Open Cup)	360°C	ASTM
Pour Point	-21°C	ASTM
Thermal Conductivity	4.0 X 10^{-4} cal/(cm • sec • °C) @ 25°C	CPS Mo
Specific Heat	0.45 (cal/gm/°C) @ 25°C	ASTM D
Coefficient of Expansion	7.4 x 10^{-4} /°C @ 25°C	CPS M
Heat Capacity	2.10 @ 50°C 2.39 @ 100°C	ASTM E
Environmental Properties		
BOD/COD Ratio	45%	APH SM52
Aquatic Biodegradation	100%	EPA O 835.3
Acute Toxicity to Trout Fry	Zero Mortality to Test End Point	OECD 20

The typical properties shown above are for new fluid prior to fa shipment. These properties are subject to change without not Contact CPS Dielectric Fluids Products for recommended acc tance values. Ask for Envirotemp FR3 fluid Specification Guid Bulletin 97080.

Bulletin 000
Product Informati
June, 2

(Supersedes May,

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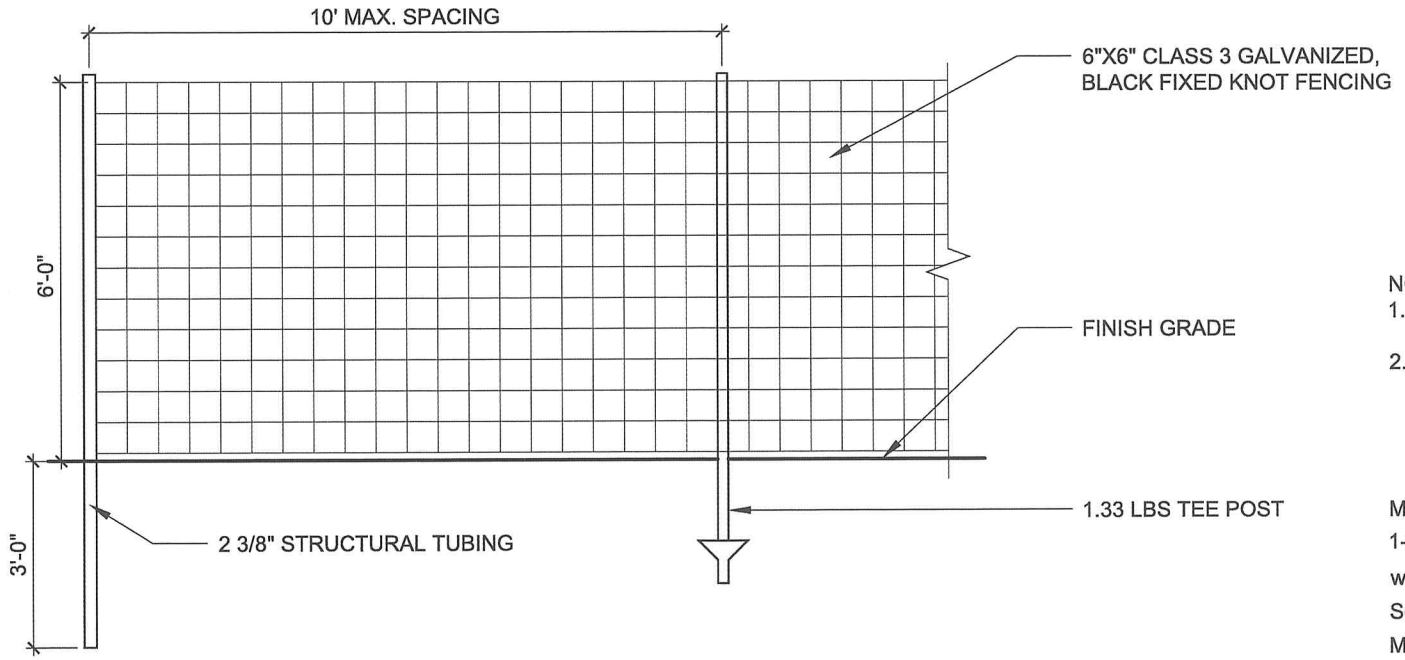

NOTE:
1. ALL FENCING COMPONENTS TO BE BEZINAL + PAINT ADVANCED COATED.
2. INSTALL PER MANUFACTURER'S RECOMMENDATIONS

MANUFACTURER: BEKAERT
1-800-241-4126
www.fencing.bekaert.com
Solidlock - Fixed Knot Game Fence
MODEL: 136261
COLOR: BLACK

6' Solidlock FENCE

SCALE 1/2" = 1'-0"

d-6' Solidlock fence.dwg

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Attachment D

SE GROUP

South Forty Solar Project
Preliminary Aesthetics Assessment for 45 Day Notice Letter

Pursuant to the Section 248 review of energy generation and transmission projects, a preliminary analysis of potential visual and aesthetic impacts of the proposed South Forty Solar Project ("Project") has been completed by SE Group of Burlington, Vermont. The purpose of our analysis was to evaluate the "fit" of the Project relative to its scenic context and whether it poses an undue adverse impact on aesthetics.

Description of the Project

The Project site is a 39.2 +/- tract of land within the City of Burlington located on Sunset Cliff Road (a private road). The direct footprint of the solar array will occupy approximately 18.5 +/- acres of the property. To the southwest of the property are residential and common area uses associated with the Strathmore neighborhood, while to the east are residential uses associated with Curtis Avenue. Residential areas to the south (also Strathmore) are separated by an existing wet sand-over-clay forest. On the northwest side of the property are seasonal camps situated along the shore of Lake Champlain, but separated from the property by an undeveloped buffer of trees and fields. Finally, the Sunset Cliff neighborhood, consisting of seasonal and single family homes is located to the west, separated from the Project area by heavily treed acreage.

The property is located on a semi-rural part of Burlington, part of its New North End, close to the border with Colchester. The property was part of the original farm assembled by John J. Flynn in the early 1900's and remained in agriculture or open land as recently as the 1970's. The Strathmore development, consisting of single family and multifamily housing was developed in the 1990's. As noted above, a substantial amount of the land in the immediate vicinity of the property (southern and western sides) remains undeveloped or sparsely populated.

At present the property is approximately 75% forested with a combination of mixed-hardwoods (mostly successional) in the northeastern quadrant and wet sand-over-clay forest on the southern half of the land. The open lands within the property are mostly associated with a wet meadow whose vegetation is dominated by small deciduous shrubs and grasses. Topographic grades on the property range from a low of 120 feet at the southwest corner to about 142 feet at a "high point" in the interior of the site. This minimal change in grade across the site gives it a rather "flat" appearance. The property and surrounding areas are shown along with the project limits on **Figure 1**.

The Project will consist of a solar field comprised of 506 +/- solar arrays (the structures that hold the individual solar panels at a fixed position to the sun), set on driven steel piles that place the bottom of the arrays at approximately 48" above existing grade. Setting this height allows the array to shed snow without creating

buildup on the ground that might compromise energy production. Each array is angled at 30 degrees and oriented towards solar south. These arrays will be located in rows set at a sufficient distance apart to minimize shading. The entire solar field will be fenced. The location of the solar field is illustrated on the site plan, **Figure 2**.

Individual solar panels comprising each array are mounted on a rack system. Given the mounting angle and with the bottom elevation at 48" above existing grade, the maximum height of a panel would be approximately 10'-6" above ground surface. The solar cells in each panel are dark blue in color and the panel glass is treated with an anti-reflective (AR) coating that lowers the overall reflectivity of a typical panel to below 5%, well below the reflectivity of surrounding vegetation.

The Project's inverters (converting DC to AC) will be enclosed within two pre-fabricated enclosures (PowerStations) located within the array rows. These enclosures are set on driven steel piles and reach a maximum height of approximately 11'-6". The Project's transformer(s) (stepping up the voltage to interconnect with the Burlington Electric Department line) will be located on the PowerStation deck adjacent to the inverter enclosure. In areas outside of the wetlands and its 50 foot buffer zone, the electrical and data monitoring lines from the array to the inverter will be buried in conduit. In areas delineated as wet meadow or buffer zone, the conduit for electrical and monitoring lines will be placed above ground on the array rack system.

In addition to the above, the Project will include a maintenance building (approximately 24'x 48' and 27' tall), a small parking area, and an informational kiosk. The maintenance building is designed as a barn-like structure which will house the equipment needed to mow and maintain the property and array. The parking area is primarily intended for the periodic use of service vehicles for the Project, but will also provide a convenient place for the Project developer to allow community schools and other interested persons and organizations to visit the site and view the informational kiosk. Information displayed in the kiosk will explain the production of energy from the facility.

The perimeter of the array will be surrounded by a cedar-post knotted mesh style fence, 6 feet in height. This fencing has been used extensively at other solar installations in Vermont and, when placed on cedar posts, maintains a more "agricultural" appearance.

Preliminary Visual Assessment

To initiate our preliminary visual assessment, SE Group conducted a field reconnaissance to the Project site in January 2014. During this visit we observed the Project setting relative to the proposed design and took photographs from various vantage points to help us better understand the visual context and potential impacts. The locations of these photographs are shown on Figures 1 and 2. Our primary objective during this visit was to identify potential viewshed "zones" in and around the

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Project. A viewshed zone is an area that, based on the Project's design and landscape context, has a potential for visibility of some portion of the Project. We documented three viewshed zones for the Project.

The first zone occurs along a stretch of Curtis Avenue, just south of its intersection with Starr Farm Road. Curtis Avenue is a traditional single-family residential neighborhood composed mostly of two-story "raised ranch" style homes. Approximately eleven (11) of the properties along the western side of Curtis Avenue are adjacent to the Project and may have some visibility into the Project site. At present, areas within the backyards of these residences and along the eastern edge of the subject property are wooded. Photographs A-C on **Figure 3** document the existing observed conditions. Public views from this viewshed zone would be limited by the density of existing residential structures as well as the retained vegetation along the shared property line. Any views from this viewshed would be of the back of the arrays which, given their orientation and spacing, tend to be in shadow, reducing their visual prominence.

The second viewshed zone was identified along the frontage of the Project with Sunset Cliff Road. Sunset Cliff Road, running approximately 1500 feet along the western side of the property is a private road, owned by the developer, and serves a number of year-round and seasonal dwellings located further to the west. At present about 50% of the frontage along Sunset Cliff Road is wooded. About mid-point along the frontage the roadside vegetation thins and views into the property open up. Moving further west, immature trees along the roadway appear and continue towards the northwest property line. Photographs D-F on **Figure 3** document the existing observed conditions in this viewshed zone. Public observation of the Project within this viewshed would be for a relatively short duration given that there are no residences located north of the roadway. A traveler heading either east or west on Sunset Cliff Road would have views into the Project site, but such views would be softened by retained roadside vegetation and additional landscape mitigation measures, if needed. Views heading west would be of the "backs" of the panels. Views heading east would largely see the side "profile" of the arrays given their orientation towards solar south.

The third viewshed zone observed is within the Strathmore neighborhood near the intersection of Nottingham Lane and Muirfield Road. Within this area we identified three private residences and the Strathmore development's outdoor pool/recreation structure. The shared property boundary between the Project and these adjacent residential uses is currently wooded with predominantly deciduous trees and shrubs. Residential plantings, including arborvitae and/or cedar were also observed. Some of these form a dense hedge such as the one surrounding the Strathmore pool complex. Photographs G-J on **Figure 4** document the existing observed conditions. Much of the landscape within these residential areas is mature and effective at softening views into the Project site. The photographs taken were during "leaf-off" condition and, given the density of understory shrubs, we would expect considerably more screening

during the summer months, when the outdoor pool complex would be in use. Retaining portions of this buffering landscape and supplementing it with additional landscape mitigation plantings if needed would limit the Project's visibility in these areas.

Cross-Sectional Analysis

We supplemented this field work by reviewing the Project plans and preparing three representative cross-sections as shown on **Figure 2**. These cross-sections highlight the relative position of components of the Project with respect to the property lines, roadways and/or adjacent residential areas. The purpose of these cross-sections is to better characterize the position of the Project and to illustrate the effect of existing vegetation has on limiting potential visibility. It also provides value in identifying the potential effectiveness of mitigation to lessen any impacts.

Cross-section A is positioned to reflect the conditions between Curtis Avenue and the Project. Again, the Project is set 75 feet back from the shared property line and approximately 120 feet back from the residential structures. A 10 foot area outside of the fencing surrounding the arrays will be mowed for maintenance access. Along the southern side of the Project, an area of approximately 15 feet beyond this mowing area will be part of the vegetation management zone for the Project. Within this management zone, taller trees and/or shrubs will be cleared or trimmed to prevent shading and/or falling limbs. Cross-section A also reflects that substantial areas of trees will be retained within a buffer along the edge property, which is generally more than 30 feet in width. As the array is oriented away from this zone, the retention of taller trees is possible without shading the array. While some additional plantings might be needed behind the neighboring properties on Curtis Avenue, it would likely be only in isolated areas where, following site clearing, natural vegetation is either too thin or unsuitable. Cross-section A is provided as **Figure 5**.

Cross-section B is drawn through Sunset Cliff Road into the Project site. Along the frontage, the setback between the roadway and the arrays ranges from 35 to 80 feet. Within the resulting buffer of 20-30 feet, existing trees of less than 30 feet in height would be maintained and additional trees would be provided as needed to help soften views into the site. The section and associated plan are provided as **Figure 6**.

Cross-section C documents the relationship between the Project and the intersection of Nottingham Lane and Muirfield Road within the Strathmore development. As noted above, this area includes the outdoor pool complex for the development. As the section presents, the array itself will be approximately 85 feet from the shared property boundary, with the Project fence being about 30 feet away. This condition leaves approximately 55 feet within which landscape mitigation (in the form of additional plantings and/or fencing) would be added, if needed, to further minimize visibility of the Project. While the exact composition of mitigation measures has not been determined, the cross-section confirms that even relatively low growing plant

materials would be effective in significantly screening potential Project views. This section and its associated plan are provided as **Figure 7**.

3D Analysis

To help further explore the Project in relationship to its surrounding context, we have prepared three 3D perspective renderings. These renderings were created using a 3D model developed of the Project site and the proposed components (solar arrays, interconnection points, access road, maintenance building, and kiosk) which allows the Project to be viewed from any location, onsite or nearby. To help connect these 3D perspectives with the existing conditions, we chose three locations from which we had taken photographs. In this way, we could match the general perspective of the existing conditions photograph in order to provide context to the modelled views.

The prepared model views also include the use of the cedar-posted wire fencing and the addition of new roadside trees along Sunset Cliff Road. These trees, shown at approximately 25 feet in height, (after some maturation) would be installed along the roadway in areas where proposed clearing is to occur and would align with existing roadside trees observed near the western side of the Sunset Cliff Road frontage (see the right side of Photograph D on **Figure 3**).

The first 3D perspective was taken from location D near the northeast corner of the property near the intersection of Sunset Cliff Road and Curtis Avenue. From this vantage point the Project becomes visible for an observer heading west along Sunset Cliff Road for the first time. An observer would see the maintenance shed, information kiosk, access drive and parking area to the left. The new roadside trees are also shown which soften the views of the array and reinforce the linearity of the roadway as it passes the Project site. The 3D perspective view and corresponding photograph from location "D" is provided as **Figure 8**.

The second 3D perspective simulates the view of the Project from location "F" (See **Figure 2** and Photograph F on **Figure 4**). In this view, the observer is heading to the east along Sunset Cliff Road and would see the array to the right. Existing roadside trees between the observer and the array would be retained and supplemented with the addition of new trees as discussed above. The maintenance building is visible in the midground while the cedar-posted fencing which surrounds the array separates the roadside planting area from the panels themselves. This perspective also highlights the fact that the panels are not oriented directly at observers from this orientation. This 3D perspective view and existing conditions photograph are provided as **Figure 9**.

The last 3D perspective prepared is taken from location "J" along Muirfield Road near the Strathmore Pool area. This vantage point (See **Figure 2** and Photograph J on **Figure 4**) is to the west and slightly south of the Project Site. From this vantage point, existing vegetation retained along the property line (see Cross-Section C on **Figure 7**)

has been simulated along with some additional lower-growing shrubs. These additional plantings are shown to help illustrate the potential effectiveness of supplemental landscaping in enhancing the natural and retained vegetated buffer. This 3D perspective is provided on **Figure 10**.

Preliminary Assessment

Overall, the Project is set in a location that has a very limited viewshed; essentially a few partially screened adjacent residential structures and from a sparsely used private roadway. The proposed setbacks from adjacent residential properties will further visually integrate the Project with its setting. The low profile nature of the Project's components assures that they will not project above the existing tree line or be seen from any prominent vantage point. The Project retains significant vegetation along portions of the property to limit offsite views. The Project does not introduce exterior lighting, additional traffic, noise or other impacts that often contribute to a sense of "incompatibility". The supportive components to the Project are designed and planned to be evocative of a more "agricultural" form, softening the appearance of the array and allowing the facility to have a more "finished" style. The dark color and non-reflective nature of solar arrays effectively eliminates annoying glare or reflectivity.

While the assessment of impacts will continue and be presented fully with the petition for a Certificate of Public Good (CPG), our preliminary conclusion is that there will not be an undue adverse impact to the aesthetics and the scenic or natural beauty of the area as a result of the Project. The site is well suited to support the proposed facility like this with minimal visual impact to nearby areas. In addition, the site and surrounding landscape are conducive to supplemental mitigation measures if any are determined to be needed, such as landscaping, context-appropriate fencing and the use of appropriate architectural design to enhance site screening.

Lake Champlain

STARR FARM RD

SUNSET CLIFF RD (PRIVATE)

STARR FARM RD

CURTIS AVE

CURTIS AVE

PLEASANT AVE

PLEASANT AVE

NOTTINGHAM LN

WESTMINSTER DR

MUIRFIELD RD

BURLINGTON

LIMITS OF SOLAR ARRAY

Appletree Park

EDINBOROUGH DR

APPLETREE POINT RD

CUMBERLAND RD

A B C D E F G H I J

Legend

Project Parcel

Project Fence

Photographic Point - See Figure 2 or 3

Notes: The site information depicted on this plan was provided by Trudell Consulting Engineers. The aerial photograph is from Google Earth. SE Group has used this information as part of its analysis of th project, but makes no warrants as to the accuracy of it. This material provided for review purposes only.

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SCALE (ft)

0 125 250 375 500

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CONTEXT/VIEWSHED PLAN | Figur

PROPOSED PROJECT FENCE

PROPOSED STREET TREES

PARKING AREA

BED INTERCONNECTION POINT

NEW BED POLE

SUNSET CLIFF RD (PRIVATE)

STARR FARM RD

CURTIS AVE

MAINTENANCE SHED 24' X 48'

INFORMATION KIOSK

GRAVEL ACCESS ROAD

SECTION B

SECTION C

SECTION A

INVERTER STATION

INVERTER STATION

PROPOSED LANDSCAPE MITIGATION

NOTTINGHAM LN

MUIRFIELD RD

MOWED AREA

VEGETATIVE MANAGEMENT ZONE

50' FOREST ZONE BUFFER

Dense Forest

SOLAR ARRAY

Appletree Park

A B C D E F G H I J

Legend

- Project Parcel
- Limits of Clearing
- 50' Forest Zone Buffer
- Project Fence
- Mowed Area
- Cross-Section Line
- A Photographic Point - See Figure 3 or 4
- A 3D Perspective Point - See Figures 8-10

Notes: The site information depicted on this plan was provided by Trudell Consulting Engineers and L.W. Seddon, LLC. The aerial photograph is from Google Earth. SE Group has used this informatic as part of its analysis of the project, but makes no warrants as to the accuracy of it. This material is provided for review purposes only.

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SCALE (ft)

0 75 150 225 300

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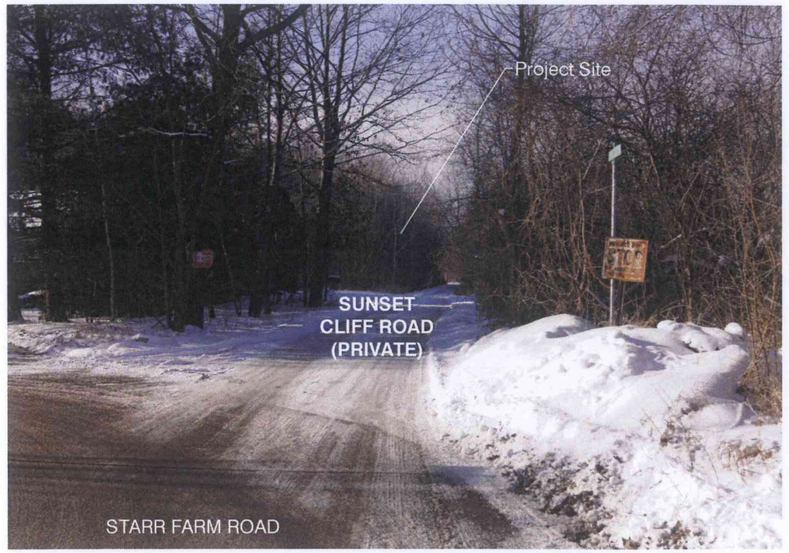
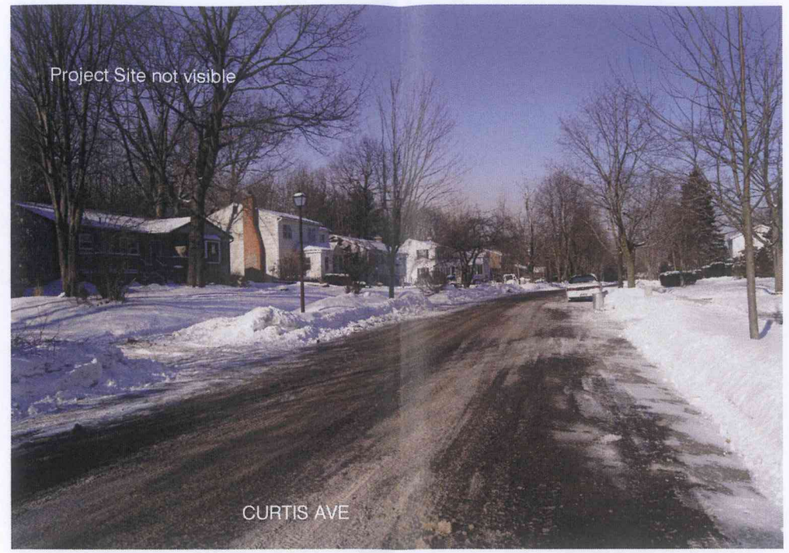
SITE PLAN | Figur



A- VIEW LOOKING SOUTH AND WEST FROM STARR FARM ROAD TOWARDS PROJECT SITE DOWN SUNSET CLIFF ROAD

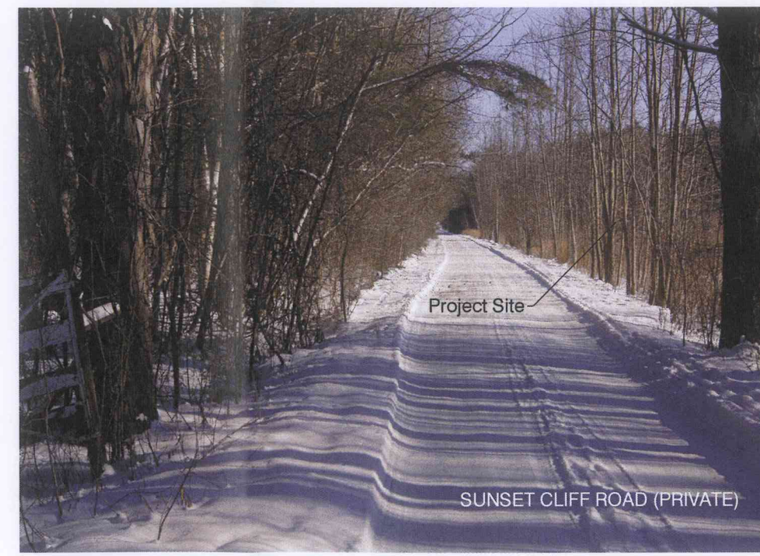


B - VIEW LOOKING NORTH AND WEST UP CURTIS AVENUE PROJECT SITE OBSCURED FROM THIS VANTAGE POINT

C - VIEW LOOKING WEST FROM CURTIS AVENUE FILTERED VIEWS OF PROJECT S
THROUGH RESIDENCES

D - VIEW LOOKING SOUTH AND WEST DOWN SUNSET CLIFF ROAD FROM NEAR THE PROPERTY BOUNDARY TOWARDS THE PROJECT SITE

E- VIEW LOOKING SOUTH TOWARDS PROJECT SITE AND STRATHMORE DEVELOPMENT FROM SUNSET CLIFF ROAD



F- VIEW LOOKING NORTH AND EAST DOWN SUNSET CLIFF ROAD FROM NEAR TH
PROPERTY BOUNDARY TOWARDS THE PROJECT SITE

All Photographs taken by SE Group using a Sony SLT A55V camera w
52mm focal length (35 mm equivalent) on 01/22/2014 from 9:45- 11:00

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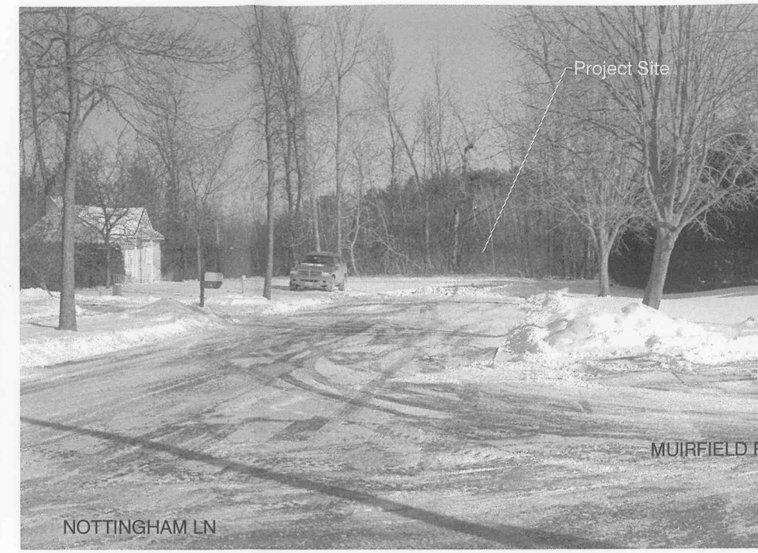
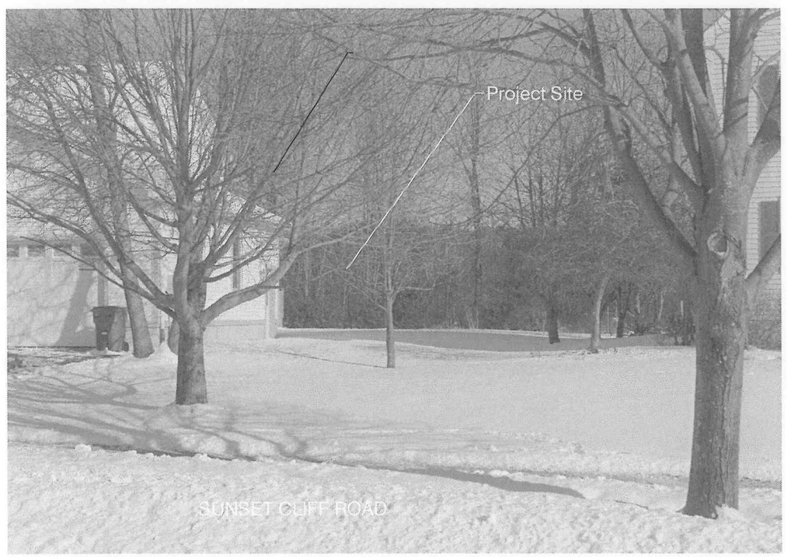
SITE PHOTOGRAPHS | Figur

G - VIEW LOOKING NORTH FROM THE END OF NOTTINGHAM LANE TOWARDS PROJECT SITE NEXT TO STRATHMORE POOL AREA

H - VIEW LOOKING SOUTH FROM WITHIN PROJECT SITE TOWARDS STRATHMORE RESIDENCE



I - VIEW LOOKING SOUTH FROM CORNER OF MUIRFIELD ROAD AND NOTTINGHA
LANE TOWARDS PROJECT SITE NEAR STRATHMORE POOL AREA



J - VIEW LOOKING NORTH TOWARDS PROJECT SITE FROM MUIRFIELD ROAD

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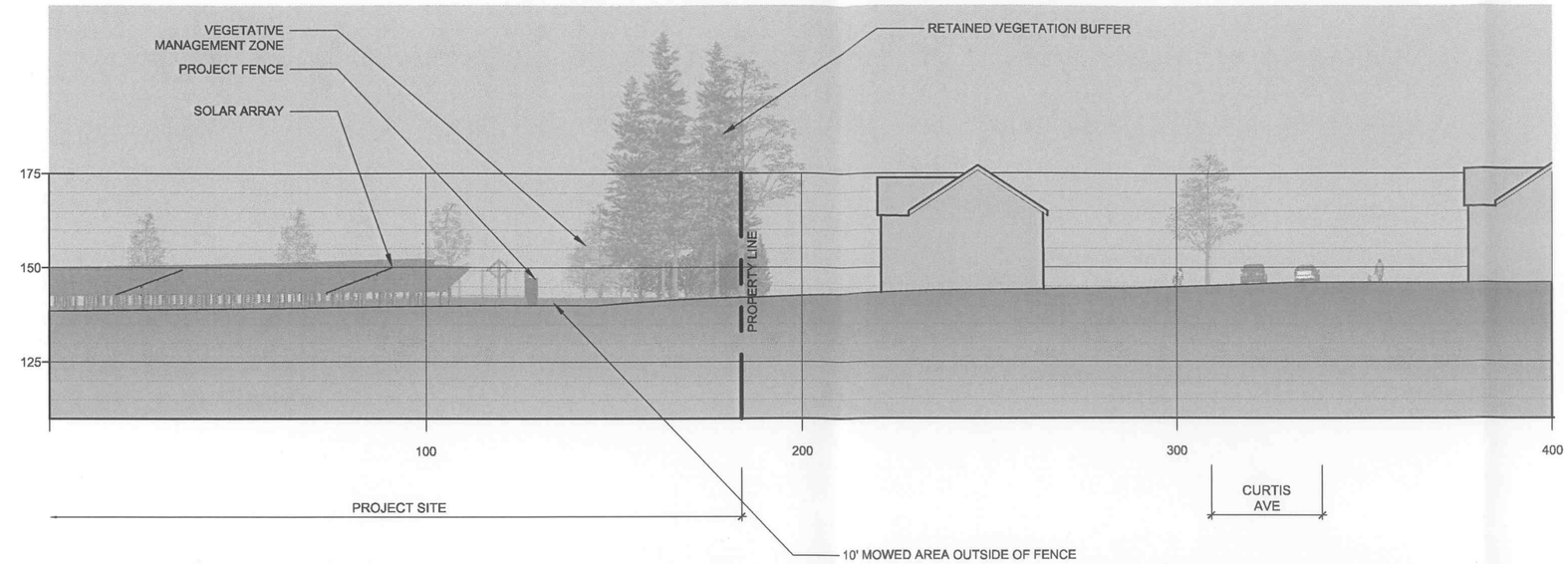
All Photographs taken by SE Group using a Sony SLT A55V camera w
52mm focal length (35 mm equivalent) on 01/22/2014 from 9:45- 11:0

Prepared By:

SE GROUP

South Forty Solar F

SITE PHOTOGRAPHS | Figu



CROSS-SECTION A

Prepared By:

SE GROUP

SCALE (ft)

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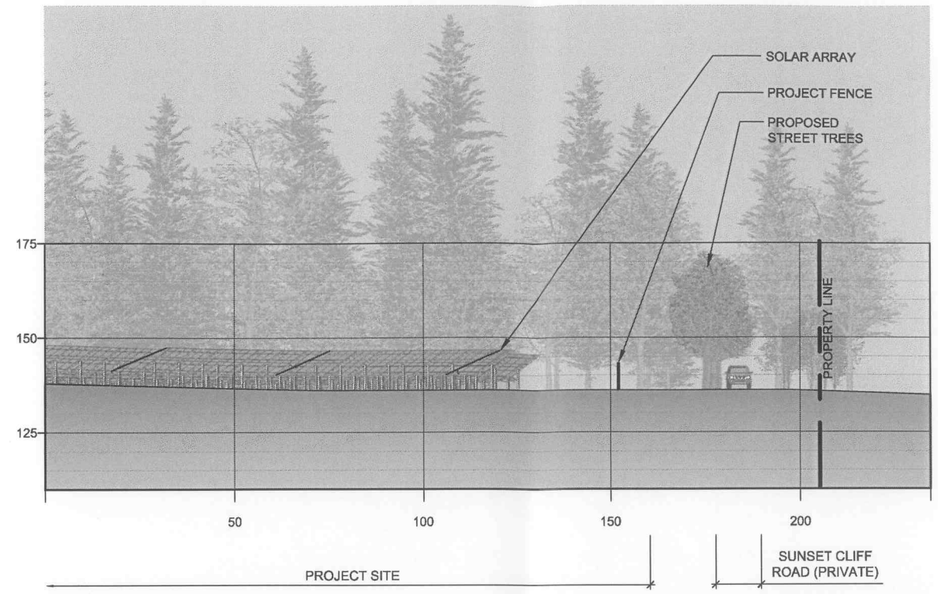
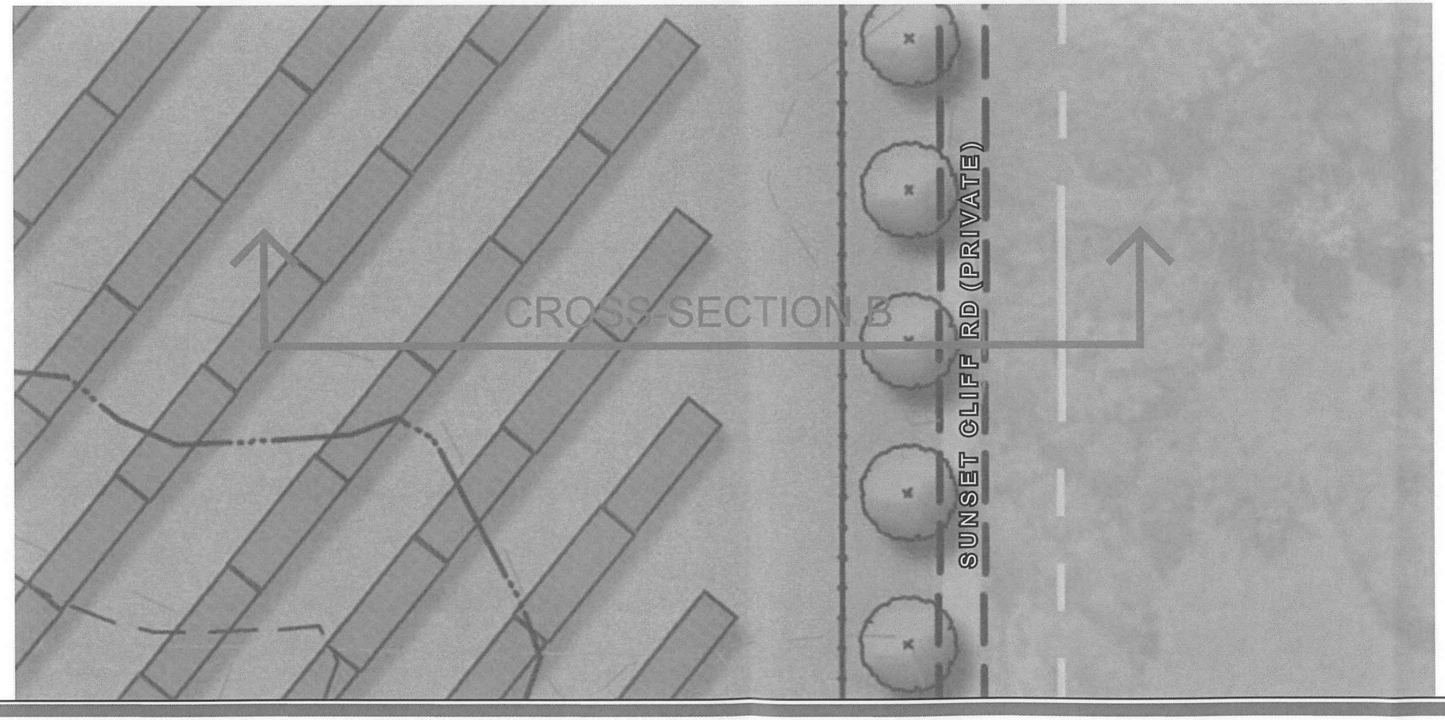
South Forty Solar F

CROSS SECTION A | Figur



CROSS-SECTION B



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Prepared By:

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SCALE (ft)
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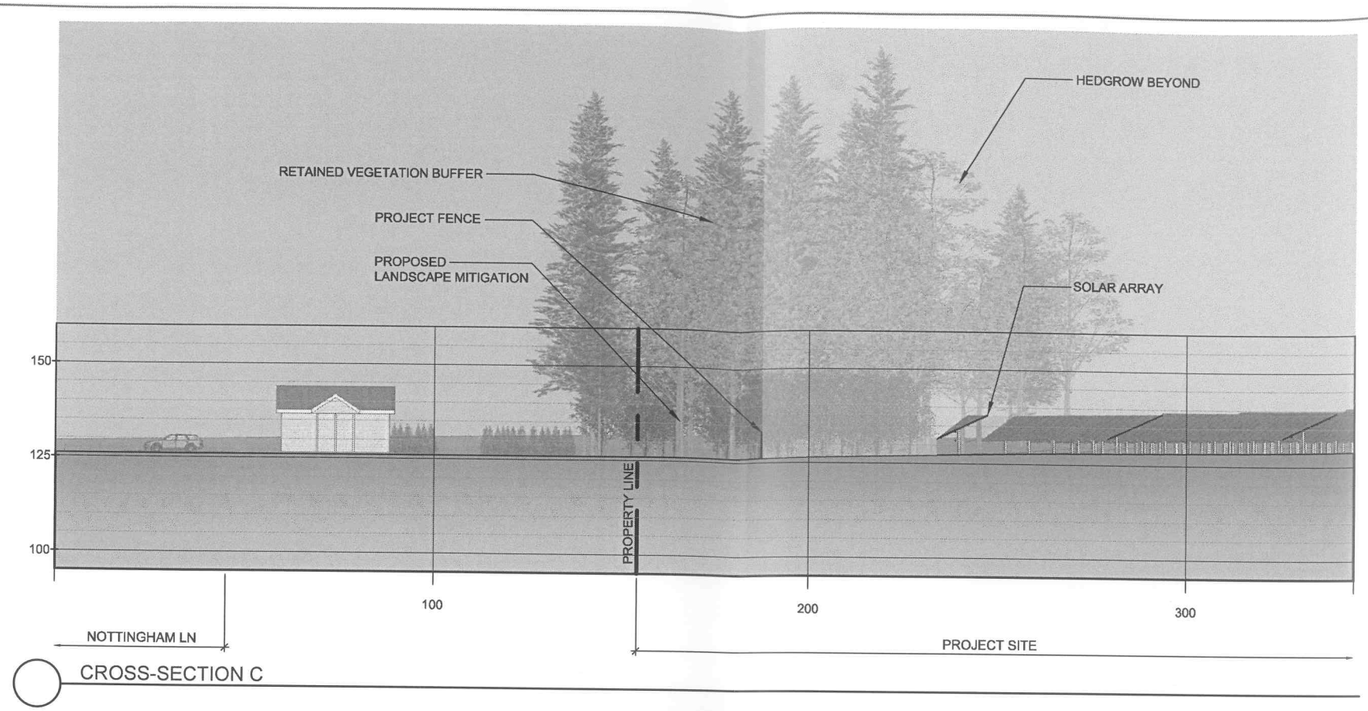
South Forty Solar F

CROSS SECTION B | Figur



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SCALE (ft)
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CROSS SECTION C | Figure

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3D PERSPECTIVE D | Figur

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3D PERSPECTIVE F | Figu

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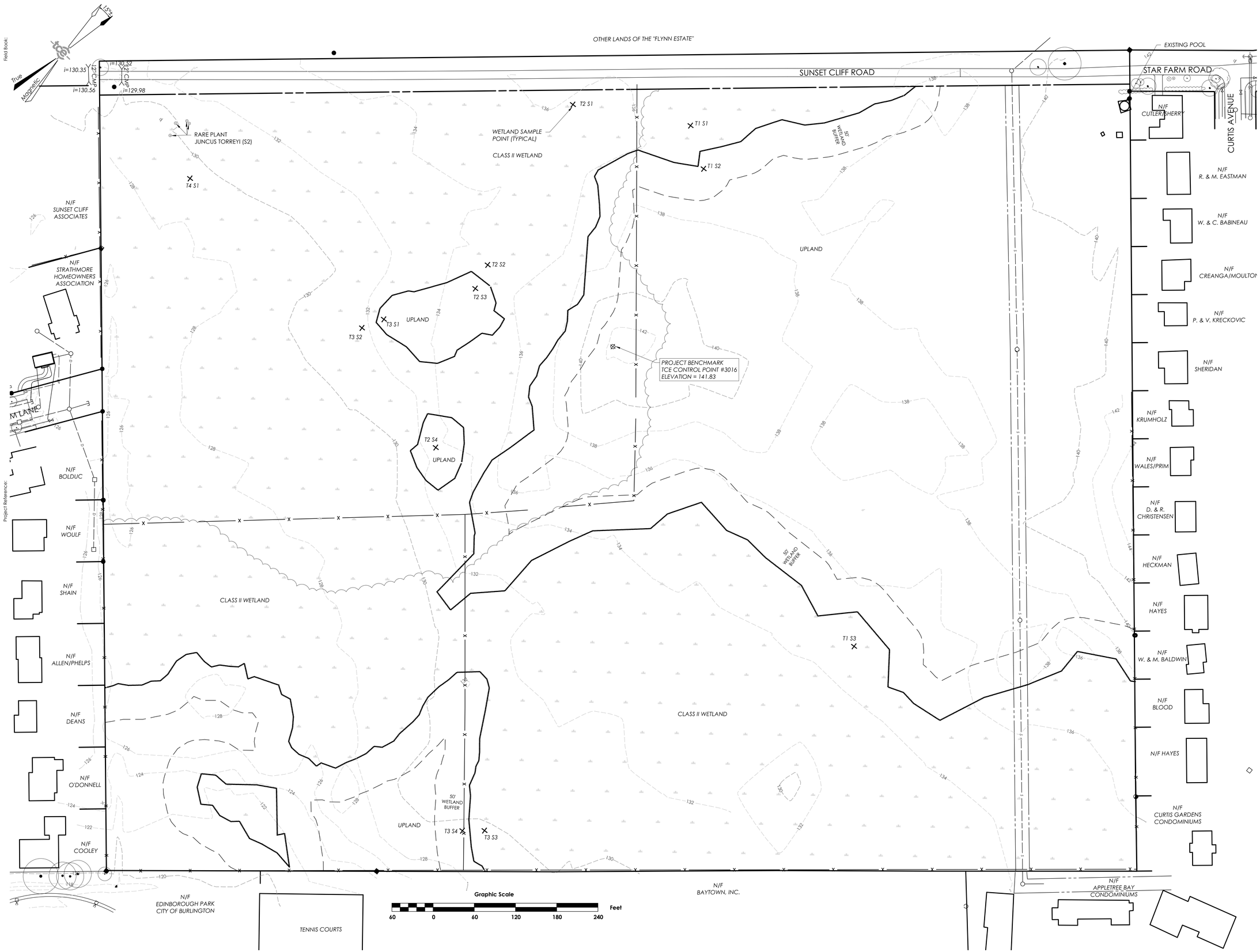
3D PERSPECTIVE I | Figure



TRUDELL CONSULTING ENGINEERS
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802 879 6331 | WWW.TCEVT.COM

Revisions

No.	Description	Date	By

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5. It is the User's responsibility to ensure this copy contains the most current revisions.

STATE OF VERMONT
JEREMY M. MILOT
No. 7637
CIVIL
LICENSED
PROFESSIONAL ENGINEER

Project Title

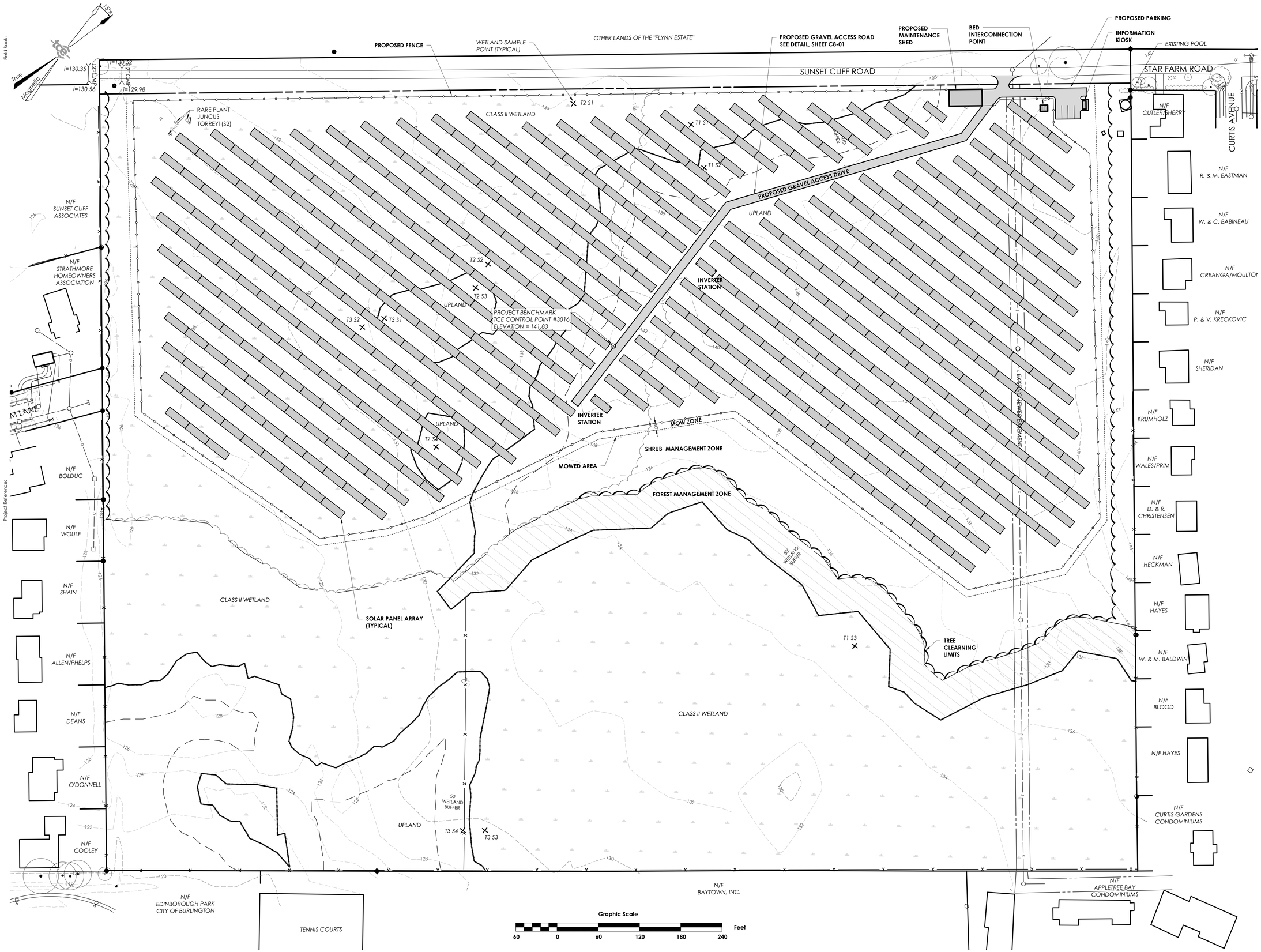
South Forty Solar Farm
Sunset Cliff Road
Burlington, Vermont

Sheet Title

Existing Conditions

Date:	02/24/2014
Scale:	1" = 60'
Project Number:	2013113
Drawn By:	RMP
Project Engineer:	JMM
Approved By:	

C1-01



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802 879 6331 | WWW.TCEVT.COM

Revisions

No.	Description	Date	By

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STATE OF VERMONT
JEREMY M. MATOTT
No. 7637
CIVIL
LICENSED PROFESSIONAL ENGINEER

Project Title

South Forty Solar Farm
Sunset Cliff Road
Burlington, Vermont

Sheet Title

Site Plan

Date:	02/24/2014
Scale:	1" = 60'
Project Number:	2013113
Drawn By:	RMP
Project Engineer:	JMM
Approved By:	

C2-02

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802.470.6331 www.tcevt.com

Project Location

Legend

- Project Area Boundary
- Stream

Notes

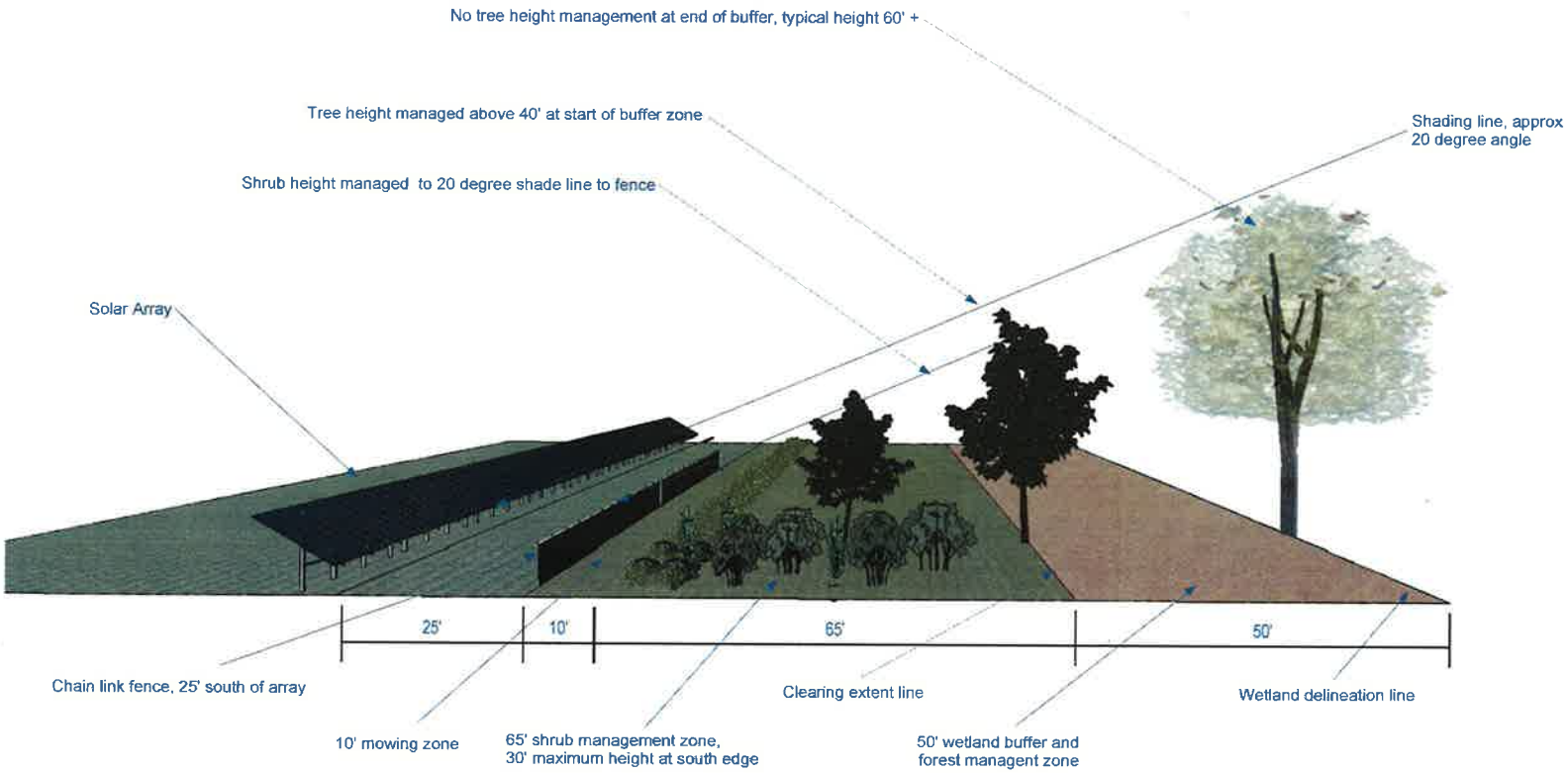
Sources: Bing aerial photography (2012); VT E911 Roads (2011); Streams by ANR (2012); Project Area Boundary by TCE (2013).

Disclaimer: The accuracy of information presented is determined by its sources.TCE is not responsible for any errors or omissions that may exist. Questions of on-the-ground location can be resolved by site inspections and/or surveys by a registered surveyor. This map is not a replacement for surveyed information or engineering studies.

South Forty Solar, LLC
Sunset Cliff Road
Burlingtron, VT

Locus Map

Project: 2013113
Prepared By: LMJ
11/25/13
1 Inch = 500 Feet



L.W. SEDDON, LLC
13 Bailey Ave.
Montpelier, VT 05602 USA
Tel: 802-272-7284

Client:
South Forty Solar, LLC
300 Swift St.
S. Burlington, VT 05403

Project:
South Forty Solar Farm
Sunset Cliff Rd.
Burlington, VT 05401

AC Capacity: 2.5 MW AC
Array Size : 3.28 MW DC
Annual Output = 3,870 MWH
Module: 300 Watt
Mounting: driven pile
Module tilt: 30 degrees
Azimuth: 180 degrees (True)

Vers	By	Date	Changes
1	LWS	13-Nov-2013	

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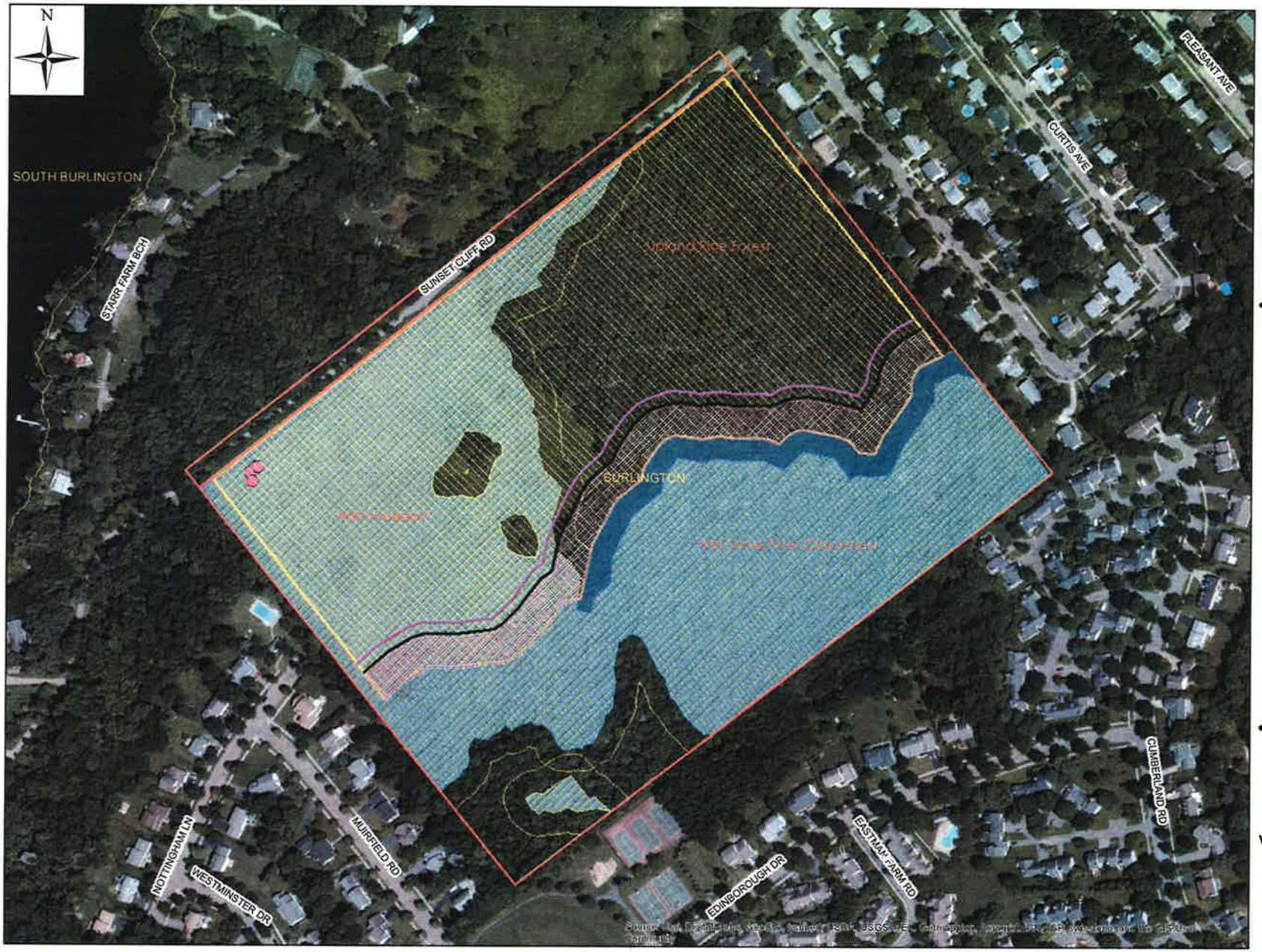
Drawing:
PV-A05

Description:
Buffer Zone Shade line

Scale:
N.T.S.
(Printed 11x17)



TRUDELL CONSULTING ENGINEERS
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Project Location

Legend

- Surveyed Parcel Boundary
- 2 Foot Contour
- Shrub Mgmt Zone (65')
- Forest Mgmt Zone/Wetland Buffer (50')
- Wet Sand-Over-Clay Forest
- Solar Array Boundary
- Fence Line
- Wetland Buffer (50')
- Solar Array Clearing Limit (+/-22ac)
- Juncus Torreyi
- Delineated Wetland (+/-22ac)
- Stream

Notes

Sources: Bing aerial photography (2012); VT E911 Roads (2011); Streams by ANR (2012); 2 ft Contour from VCGI by TCE (2013); Wetlands, Clearing limits, Solar Array, Project Area Boundary, Fence Line, Management Zones by TCE (2013).

Disclaimer: The accuracy of information presented is determined by its sources.TCE is not responsible for any errors or omissions that may exist. Questions of on-the-ground location can be resolved by site inspections and/or surveys by a registered surveyor. This map is not a replacement for surveyed information or engineering studies.

South Forty Solar, LLC
Sunset Cliff Road
Burlingtron, VT

Vegetation Management Plan

Project: 2013113
Prepared By: KED, LMJ
12/12/13
1 Inch = 200 Feet

Burlington Planning Commission

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Yves Bradley, Chair
Bruce Baker, Vice-Chair
Andrew Saba
Lee Buffinton
Harris Roen
Andy Montroll
Jennifer Wallace-Brodeur
Vacant, Youth Member

Burlington Planning Commission Minutes

Tuesday, March 25, 2014 - 6:30 pm

PC Present: L. Buffinton, H. Roen, J. Wallace-Brodeur, B. Baker, E. Lee
Absent: Y. Bradley, A. Montroll
Staff: S. Thibault, E. Tillotson, K Sturtevant

I. Agenda

No change to order of agenda.

H. Roen: Had sent an email to Commission members stating that he wanted to discuss the proposed solar farm tonight.

B. Baker: So shall we do Commissioner Items now since other people are here to discuss it also?

H. Roen: Did not want to discuss the merits of the project but the process or procedure for addressing the subject, and what the Planning Commission wants to do. He understands it is the preliminary application now and the comment period will close early in April. If the Commission is going to comment, there is opportunity now, the full application will come later.

S. Thibault: Has discussed with S Gustin the timing issue. The Conservation Board met March 10 and will discuss it again on April 7. The Department of Environmental Conservation will be meeting April 2nd. The pre-application has a 45 day period which is open for comments which ends April 18. The Conservation Board will send their comments by April 16. Comments from the City need to be filed a week before the applicant files its actual application. Staff has discussed this application and concluded that the Conservation Board is the place for stormwater and conservation issues.

H. Roen: The Conservation Board will do a thorough job on conservation and stormwater research. What about comments to the Conservation Board from the public?

S. Thibault: All items received from the public have been included in the Commission packets.

II. Public Forum

B. Baker – Opened the public forum at 6:35 to accommodate visitors.

T. Papp, President of the homeowners association, addresses the proposed solar farm.

1. The Association is not against solar but does have some concerns.
2. The Conservation Board does not have Public Service Board acknowledgement, the regional and local Planning Commissions are the entities that have a seat at this table.
3. The Association believes the current application is incomplete, more information from the developer was requested four months ago.
4. The developer, in the past, has clear cut and stumped the property creating stormwater problems.
5. A 45-day notice is invalid because the application is not complete.

There are wetland and stormwater issues as well as some set back issues. The Association Board has a fiduciary duty to its members to represent their interests.

As approved by the Burlington Planning Commission on.

J. Boucher, legal counsel for the Association: Comments that according to the PBS rules, the plans must include sufficient information to understand the project. At present information is lacking.

H. Roen: Could the Conservation Board be considered a part of the Planning Commission for review purposes?

B. Baker: Is concerned about having a public hearing without proper notice and the next opportunity for a warned meeting is April 8.

L. Buffinton: The public hearing is about content, is this procedural since there no information to review? It is imperative that the Planning Commission take some action, plans are lacking, the Commission should address the 45 day concern.

B. Baker: The City Council will comment based on the Conservation Board's comments and research. Do we need to comment in any other way?

J. Boucher: His reaction this evening, is that the City Council is in an odd situation. It is unusual for the Planning Commission to have equal status to the City Council, but the PSB hearing is to look at all issues. The Planning Commission has its own authority and mission. He would suggest asking the PSB to send report to the Commission. Without adequate information an evaluation cannot be made. It seems that the developer should start the clock again.

T. Papp: The Regional Planning Commission discussed the same problem.

J. Boucher: The PSB wants to hear all sides of the issues.

J. Wallace-Brodeur: Can the Commission act independently or not?

H. Roen: Can the Commission say that we agree with the recommendation of the Conservation Board? They have done an extremely thorough job.

S. Thibault: The Conservation Board meets the day before the next Commission meeting making it a very tight timeline for reacting.

B. Baker: We can put this on the agenda for April 8.th

L. Buffinton: If there is no stormwater plan, can we indicate that we believe the plan is not complete?

J. Wallace-Brodeur: And can somebody from staff help with process and information? She would like land use analysis to understand if the is current policy speaks to this issue, etc.

L. Krohn: The Commission has an opportunity to proceed or comment, generally relevant issues are linked to the act 250 process but policies in the Municipal Plan are relevant. He hasn't seen the application, but cautions to be careful with process.

B. Baker: – Closed the public forum at 6:59pm.

III. Report of the Chair

None, since he is not present.

IV. Report of the Director

Report by S. Thibault: Work on the Form Based Code has slowed somewhat due to complications with staff. They have reached out to the NPAs offering to visit in May or June to expose the public to the proposed changes, they will meet with Wards 4 and 7 in late April, and again in June for changes specific to Burlington. In April they will start to work with Commission to familiarize them with the new FBC. This is specific to the Planbtv study area, the downtown area. The hope is to visit all NPAs.

V. Affirmatively Furthering Fair Housing Training

Ted Wimpy, Director of Fair Housing Project at CVOEO, and Lee Krohn from the RPC

T. Wimpy: This is a statewide program in outreach providing information and advice training to developers, providers, planners, etc., basically anyone who relates to fair housing issues. Federal and state laws protect people from discrimination. HUD wants to see that people in positions to affect housing, receive training around fair housing issues. He will be leading training for the Burlington Development Review Board. Lee Krohn has also had some training and he will give an overview.

L. Krohn: He has been a planner for many years in Manchester. The Commission is familiar with their own community needs. In Burlington there is pressure on housing stock from colleges and businesses. There are many ways to provide fair housing but Burlington is the only city that has inclusionary housing. Champlain College and UVM are proposing to build student rentals to relieve housing pressure. There is a lot of strain on families to find housing which creates social issues, inability to participate in civic events, difficulty in owning the experience of belonging. Housing is the biggest piece of the puzzle and the real challenge is the political will to approve and stand up for projects that meet city policy. The standards need to be clear and predictable. It is tough issue, more housing is needed, there is demand but the cost of housing is a challenge. VHFA has done a study for Burlington and has, as well, information for many towns.

T. Wimpy: The need is there, in the entire county and state. Every municipality is supposed to abide by the fair housing laws, the object is to go beyond requirements. Race, color, religion, family status, gender, public assistance, sexual preferences are all circumstances protected by the fair housing laws. Providing more affordable housing affects lower income people. Policies if not intended to be discriminatory, with disparate impact, can be fair housing policy against a disproportionate number of people in disadvantaged class. He would encourage the City to move assertively toward creating fair housing. Burlington does have an inclusionary housing policy, density bonuses, PUDs of a nature that encourage affordable housing, so the City is doing a pretty good job. There is a need to continue going in the same direction. At one time HUD was not serious about enforcing affirmative fair housing practices, but now there is a different approach.

L. Buffinton: It is good to go through each of pages and see where Burlington stands.

T. Wimpy: Creative interest in transportation/housing policies intersection is a big part of this.

L. Buffinton: Another issue for Burlington is that housing trusts now can get more funding for projects outside of the City which creates a higher cost for housing in Burlington.

T. Wimpy: Creativity linking housing with transportation is key. Conversations with VNRC examine issues within affordability, there seems to be potential for more streams of funding in a creative manner. It would be good to dialogue with neighboring communities to support affordable housing in the area.

J. Wallace-Brodeur: She is pleased with and appreciates the discussion. Some of the issues have to be a subject of further discussion. She appreciates the connection between transportation and housing, it's important to keep talking about.

T. Wimpy: Inclusionary zoning perhaps needs to be tweaked. He hopes everybody is cautious not to roll it back.

VI. Downtown Parking Amendment

S. Thibault: Members all received a memo from D. White last week containing a draft from the comments of the first meetings. We would like to send to it to the City Council as a recommendation.

J. Wallace-Brodeur: The first page, last paragraph refers to parking as a secondary use, what does that mean?

S. Thibault: Without unencumbering the present ordinance, it would be for the Commission to look into allowing the leasing spaces to another entity as a separate use, if they are above and beyond the requirements of the permits.

As approved by the Burlington Planning Commission on.

E. Lee: It seems like a reasonable idea.

H. Roen: It might help downtown with parking for commuters, something which is a problem for the Price Chopper on Shelburne Road for instance.

L. Buffinton: D. White mentioned unencumbering in reference to the equity issue, could we elaborate on this issue? She might suggest that there could be two different approaches so that there is no discrimination.

K. Sturtevant: Yes it is possible to do that based on the use analysis.

L. Buffinton: Why would there need to be two approaches?

K. Sturtevant: Perhaps it doesn't, it may just need more thought and focus.

B. Baker: He thinks the letter is fine. An engineer friend stated that the Burlington requirements are more exacting than those of other towns.

S. Thibault: Yes, we are looking to change some dimensional requirements when FBC is incorporated.

B. Baker: Measurements are relevant to the FBC. Conversations examining the land use perspective need to happen with the Downtown Parking Task Force. The LRPC meeting could be the driving force and Long Range Planning Committee will keep the Commission informed.

On a motion by J. Wallace-Brodeur, seconded by H. Roen, the Commission unanimously approved a motion to provide the City Council with a memorandum on the proposed changes drafted by staff and reviewed by the Board.

VII. Joint Institution Parking Management Plan

Sandy Thibault, CATMA: Are there questions about the presentation at the last meeting?

Lani Ravin, UVM: The DRB will ultimately approve the packet.

E. Lee: Would like a little more time to review the information. She is curious about the college requirements, it seems as if they could have a big impact.

S. Thibault, CATMA: At the Eagles Club location, per ordinance the parking is not changing. College parking is being accommodated off site.

S. Thibault, Planner: The Downtown Transition zone allows for off-site parking.

L. Buffinton: There is concern that students will park on streets.

E. Lee: What is the long term commitment for providing parking if the City Council doesn't retain space for student housing?

S. Thibault, CATMA: Champlain College enforces their parking spaces.

E. Lee: This will be a reduction in publicly provided parking spaces.

S. Thibault, CATMA: She would like to have it approved by the end of April.

L. Buffinton: This is a big plan with lots of documentation.

B. Baker: Where is the "drunk bus", walk by noise is huge problem. It would be nice to provide this.

L. Ravin: I think we do have a late bus.

B. Baker: I think it is shut down. That's what he hears in the community.

S. Thibault, CATMA: 10 pm to 3 in the morning, every ten minutes on Fridays and Saturdays.

J. Wallace-Brodeur: The transportation management plan is a really good resource, important.

This item will be place on the next Commission agenda.

As approved by the Burlington Planning Commission on.

VIII. Committee Reports

Executive Committee - met last week.

Long Range Planning Committee - hasn't met.

Ordinance Committee - scheduled during the storm, didn't happen.

IX. Commissioners Items

J. Wallace-Brodeur: Will miss both meetings in April.

H. Roen: He has been named to the Board of Renewable Vermont.

X. Minutes/Communications

On a motion by H. Roen, seconded by J. Wallace-Brodeur, the Commission unanimously approved the minutes with corrections for February 11 and March 3, 2014.

XI. Adjourn

On a motion by L. Buffinton, seconded by E. Lee, the Commission unanimously adjourned at 7:59 pm.

_____ _____

B. Baker, Vice Chair Date

_____

E. Tillotson, recording secretary

DRAFT

As approved by the Burlington Planning Commission on.