WEST WINDSOR TOWNSHIP PLANNING BOARD
REGULAR MEETING
June 12, 2019

The regular meeting of the Planning Board was called to order at 7:03 pm on Wednesday, June 12, 2019 by Chair O'Brien in Meeting Room A of the Municipal Building.

STATEMENT OF ADEQUATE NOTICE

Pursuant to the Sunshine Law, a notice of this meeting's date, time, location and agenda was mailed to the news media, posted on the township bulletin board and filed with the municipal clerk on June 5, 2019.

ROLL CALL AND DECLARATION OF QUORUM

Sue Appelget
Linda Geevers
Curtis Hoberman
Michael Huey
Andrea Mandel
Hemant Marathe
Simon Pankove
Michael Karp
Gene O'Brien
Allen Schectel- Alt I
Anis Baig-Alt II

Chair O'Brien introduced Counsel Muller's associate, Martine Baillie. She will hear applications PB19-10, PB19-11 and PB19-12.

Chair O'Brien mentioned two pieces of correspondence that he received. The first is a June 10, 2019 letter addressed to both him and the Mayor from Aaron Brotman, who appeared before the Board in late May. It deals with the concept hearing on the land on Route One northbound. Chair O'Brien forwarded this on to the Board members. Second is a June 10, 2019 memo from West Windsor Affordable Housing Committee pertaining to Application 19-15. This application is not yet on the projection sheet to be heard.

There were no public comments on non-agenda items.

Mr. Pankove made a motion to approve the Consent Agenda consisting of two sets of minutes, April 17, 2019 and May 15, 2019; seconded by Mr. Huey. Motion approved by voice vote with Mr. Hoberman abstaining because he was not present.

APPLICATIONS:

Mr. Ron Slinn, Chairman of the West Windsor Township Shade Tree Commission, spoke on behalf of the commission. He said that the function of the Shade Tree Commission is to manage township forest resources effectively and efficiently. Trees are valuable community assets, environmentally, economically and aesthetically. For those reasons, the original permit for these parking lots should specify an appropriate number of suitable trees to be planted. The commission is concerned that the removal of trees will have a negative impact on the township's forest resources. If approval is granted to remove a number of trees, the commission recommends that an equivalent number of shade trees and

understory trees be planted on open ground within the township. There is a potential that what is agreed upon will become a new standard for West Windsor.

Chair O'Brien commented that while a standard needs to be created, it is not expected that the proceedings tonight or next week will establish a standard.

a) PB19-09

Kevin Moore, Attorney from Sills, Cummis and Gross, represents Ameresco Inc. He explained that the applicant is seeking approval for eight canopies covered by solar panel arrays over the existing parking lot at Carnegie Center Building 101; Block 9, Lot 67 on the tax map. The property is in the ROM-2 District.

Michael Thomas, P.E., T&M Associates, was sworn in as the first witness. He presented several exhibits.

Exhibit A1 is various aerial and isometric views of the site. Building 101 is the first building on the northern end of Carnegie Center East.

Exhibit A2 is the Master Plan of the Carnegie Center dated June 12, 2019. It shows existing conditions and future conditions that are planned under the current Master Plan. Building 101 is part of the original Carnegie Center East Phase I development.

Exhibit A3 is a colorized representation of the landscaping plan, dated May 20, 2019.

Exhibit A4 is Site Plan sheets numbered 1-16, dated April 26, 2019.

The property is 12.5 acres in size. Building 101 is an existing building with existing parking lot and landscaping. It is a three-story, 143,000 square foot building. There are 481 parking spaces at the site that will remain. The site is adjacent to Route One and Carnegie Way located on the northern end before Carnegie Center East.

There will be one variance that will be requested as part of this application. This utility facility is a permitted accessory use in this zone. The solar arrays meet the setback requirements of the ordinance. Carnegie Center is a very green complex and green initiatives, such as bike facilities, have been added.

A ground penetrating radar survey was done to identify underground utilities. The proposed utilities will not have direct conflict with other utilities.

Sheet 5 shows that eleven trees will be removed to accommodate solar arrays. The arrays will be located entirely over the existing parking spaces. A central boulevard runs down the middle of Building 101 parking area. There will be four arrays on each side of the boulevard in various sizes. The smallest size is 179 feet by 40.28 feet and the largest is 291.7 feet by 46.94 feet. The minimum clearance height is 13 feet 6 inches and the maximum is 22 feet 6 inches.

There will be numerous steel columns around each of the individual arrays to support the canopies. The columns are supported by a concrete foundation system flush to where the existing grade is today.

According to the State of New Jersey, the columns of the solar panels are the only component to be considered impervious coverage, because rainwater passes off the arrays and goes right down to the ground surface. Most of the arrays are already over impervious surfaces, but there are a few that stretch and expand over existing landscape islands that are on site. There is a variance request with regard to impervious coverage within the existing landscape areas. The increase in impervious coverage is approximately 175 square feet or an increase from 50.65 percent to 50.67 percent.

The arrays are designed to handle snow loads up to 30 lbs. per square foot.

Sheet 6 shows the layout of trunk lines that collect storm water that run down the columns and discharge to a proposed sub-surface drainage system. The applicant would like to make a waiver request to eliminate the sub-surface drainage system and allow the drainage downspouts that run along the columns to discharge on to the ground surface. One of the reasons for this is cost savings. Because there are so many column locations on site, the ability for a significant amount of runoff to discharge in a particular area is very low. One of these columns on the south side of the array has eight downspouts that would discharge at eight column locations. The drainage area that is associated with the proposed individual collections at the eight columns is very small; so the effect will be similar to what is happening today.

Mr. Huey asked about the ability of the V-shaped arrays to absorb the sun. Mr. Thomas explained that the degree of tilt on the V-canopy system is 1.2 degrees, allowing sun absorption.

Ms. Mandel asked if the downspouts are going between the rows of cars. Mr. Thomas advised that the individual discharge points will be in existing parking spaces or in between. There is an existing drainage system on site that will remain and function.

Mr. Hoberman asked if there is a need for modification of the slope of the parking lot to get water from the downspouts to the drainage locations. Mr. Thomas said the parking lot is already designed to facilitate runoff to the catch basin.

Ms. Mandel asked about icing in the parking lot in the winter. Mr. Thomas said that Boston Properties has a maintenance plan, which includes de-icing.

Mr. Thomas explained the difference between a concentrated flow, where water accumulates and funnels to the catch basin, and a sheet flow, where rain hits the surface and spreads out and eventually funnels to the catch basin. Whether concentrated or sheet flow, water goes to the designated spot.

Mr. Baig asked how vehicles will be protected from hitting the columns.

Mr. Thomas said that the downspouts are located on the inner, more hollow side of the arrays and not directly in front of the vehicle. To the greatest extent possible, columns are located between two spaces and not head on.

Sheet 7 of the Site Plan is the Lighting Plan. The lighting is designed to meet the ordinance requirements. Several existing light poles on this site are lower in height causing deficient lighting levels in the parking lot. As a result, the arrays are a little lower. The lower structure lessens the ability for the light to spread out. These existing light poles are being upgraded to meet the 25-foot light stanchion. The lights will be

directly under the canopies and face downward. The light stanchions will also be pointed downward with outside shields on them. The intent is for the lighting to not go beyond the property line.

The individual foot candles represent photometric lighting levels through the parking lot. Mr. Guzik thought that the foot candles should be higher at specific locations of the proposed light poles. T&M Associates will go back and check those areas and correct the lighting levels.

Mr. Moore advised that waivers are needed for lighting in excess of one foot-candle at the property line and for the 2.2 foot-candle in certain places under the canopy.

Mr. Guzik was sworn in. He asked about the current lighting deficiency mentioned by Mr. Thomas. Mr. Thomas said that Boston Properties brought the deficiency to their attention. An existing condition lighting analysis was not done.

Mr. Guzik also asked about the average point plot values. Mr. Thomas said if the point plot values are higher than 2.1 and 2.2, lighting will be revised to stay within 2.1 and 2.2 foot-candle.

Mr. Hoberman asked if the lighting intensity is consistent throughout the evening hours. Mr. Thomas said there is a manual switch to increase intensity, but it will never be more than what is in the plan.

Mr. Ricciardi, Associate Counsel for Boston Properties, was sworn in. He explained that the building is open 24/7 and that is why the lights will be on from dusk to dawn.

Mr. Thomas added that LED lights are being proposed and all existing lights are being replaced with LED technology.

Sheet 8 is the landscaping plan. Along the central boulevard leading into the site, 111 trees are being removed and being replaced with 138 new trees that will allow sun to hit the arrays all day. The design will mimic Building 804, where there are a couple of trees on the end islands of the arrays, as well as some ground cover, bushes and shrubbery. There will be additional ground cover under the canopies that allow sunlight to pass through.

Sheet 3 shows the demolition plan for trees. The new trees will be 6 ½ to 7 feet tall at planting. The plantings on the two long green islands will receive adequate light to thrive.

Mr. Dobromilsky was sworn in. He said that a large part of the 111 trees have already been removed because of Emerald Ash Borer infestation. Additional trees in the triangle shaped island are also infested and will be removed.

Ms. Mandel brought up the discrepancy in the number of trees in Mr. Dobromilsky's report and Mr. Thomas' testimony. Mr. Dobromilsky said that he did not count 42 arborvitaes and 12 deciduous conifers since they will not be utilized as a shade tree.

Mr. Dobromilsky said that a standard is being established. He suggested a one-to-one ratio standard for shade trees being removed, or to allow 50% to be understory trees at a rate of three-to-one. He made reference to **Sheet 5**, which shows a portion of the panels extends over the landscape island into the drive aisle, decreasing area available to put trees. He suggested that there be gaps with taller trees in between to break up the expanse of the canopy.

Mr. Thomas said that they want to keep the outside of the lot as green as possible, but the power production numbers need to be met. They have already shrunk down the original design; so, if they keep shrinking down, they will not meet the minimal production to make it economically viable.

Mr. Thomas added that ADA parking spaces are not changing. The canopies and structures will not affect the accessible route to the building.

Also, circulation will not change. The canopies are elevated enough so passenger and emergency vehicles and trucks can pass through.

Mr. Yates, Fire and Engineering Service Division Manager, was in agreement.

Mr. Thomas advised Chair O'Brien that there are four electric vehicle-charging stations in Building 101.

The Limit of Disturbance identified on the plan covers most of the parking lot and also the areas where there is existing landscaping that is to be removed or replaced with new landscaping. There will be areas worked on while other areas are not. During construction parking will be available at Building 104 and 105, which is within walking distance of Building 101.

Mr. Guzik went over some of the Checklist Submission Waivers. Checklist Item #3n, bicycle parking, will be shown on the plans in three areas, the 500 series, 200 series and Building 101. Checklist Item #11, barrier free signage, will be installed.

Mr. Moore said that the applicant will provide information outlined in Site Plan Item1.01 of Mr. Guzik's report. The waivers in Site Plan Item 1.02 were requested.

Kate Watson Wagle, Director of Distributive Scale Solar Panel Development with Ameresco, was sworn and explained that solar power offsets fossil fuel, which is the largest source of green house gases. This project will have the affect of removing 312 cars from the road or planting 37,000 trees. This solar project will provide approximately 82 % of the power Building 101 requires. PSE&G will install meters that report how much electricity is being drawn from the grid to supplement the solar power and how much solar power is being provided to the grid.

Chair O'Brien clarified that the solar panels will be connected to the switch in the building, which will distribute the energy to appliances in the building. Anything that the solar panels cannot satisfy will be drawn down from the grid.

Mr. Ricciardi added that Building 101 is 100% occupied so they will take full advantage of this system.

Once the project is installed, Ameresco will train Boston Property staff and any emergency response personnel. Ameresco has received safety awards and industry leader awards.

In response to Mr. Huey, Ms. Wagle said the break even point is around ten years. The power purchase agreement is good for 20 years with an optional extension.

Mr. Francois Attal, designer of the system for Sun Power, was sworn and discussed the concerns raised by the Board regarding the ability of the structures to take a hit by a motor vehicle. He stated the structures are designed to take a hit by a vehicle.

He addressed Mr. Baig's concern over snow removal in the carport. The columns are spaced 36 feet apart, which is way in excess of a snowplow.

Mr. Baig pointed out an error on **Sheet 13**, Foundation Designs.

Mr. Brian Cuff, Director of Design and Construction for Sun Power, was sworn and said that they will correct the diameter of the cover over the vertical rebar foundation.

Mr. Cuff also explained that the standard for horizontal load is 3,000 lbs., 18 inches above ground. He said that typical carports are built with one of two details, i.e. raised pier or flush mounted column at the base of pavement. Both are good details to withstand a vehicle hit.

After much discussion and concern by the Board over the maximum speed that the pole can tolerate from a motor vehicle, Mr. Ricciardi agreed to install concrete wheel stops where the columns are located, along with signage advising "head in parking only".

Mr. Dobromilsky commented that he would like to avoid wheel stops, as they can be easily hit by snowplows.

Mr. Ricciardi said that Boston Properties has a snow maintenance and deicing plan. The amount of snow plowing at the wheel stop locations will be limited. Boston Properties will maintain and replace wheel stops as needed.

The panel color is light gray. The finish under the canopy is all aluminum, painted, galvanized steel. The wires are hidden.

Ms. Appelget pointed out that one whole section of the double parking is not covered. Mr. Ricciardi explained that originally it was covered, but the design had to be scaled down. He also advised Ms. Appelget that they are unable to provide shorter panels with gaps because it would not be a profitable project. Finally, he advised that the canopies over the drive aisles cannot be extended because it would interfere with fire apparatus.

Mr. Aledria was sworn and talked about the equipment on the wall. The meter shows how much energy is being produced. He said that there is a disconnect switch for the fire department in the event of an emergency. He advised Chair O'Brien that trees and shrubs can be planted to screen the view of equipment hanging on the wall.

Exhibit A5 was presented, showing a picture of the solar array at Summit Medical Center in Florham Park.

Mr. Hoberman asked how winter and snow is accounted for in calculating the benefit and payback period of the solar panels.

Ms. Wagle advised that this is calculated on an annual basis and the model includes snow on the canopy in the winter.

Mr. Martin Truscott, PP, was sworn and went over the variances and waivers on behalf of the applicant.

Counsel Muller recited the variances, waivers and conditions from his notes. He advised there are three variances:

1. MIC;
2. Distance between structures;
3. Solar panels in front yard [200-226.A (1)].

All Township professionals were sworn.

Mr. Novak said that a variance for distance between structures is not needed.

There are ten submission waivers in Mr. Guzik's report as well as a series of other waivers, e.g. foot-candle waiver, storm water management discharge from the pavement rather than the system, and landscaping.

Mr. Ricciardi said that they are asking for a waiver for less trees. They cannot commit to a specific number of shade trees at this time. There are three more applications to be heard and they can work with Mr. Dobromilsky to identify other locations on campus for additional trees.

Mr. Novak commented on testimony stating there are more parking spaces than needed for Building 101. He asked if there is any way to turn those spaces into grass areas.

Mr. Ricciardi responded that the Hyatt utilizes the overflow parking.

Mr. Karp asked if a study has been done to support the proposal for downspouts instead of a sub-surface system. Mr. Ricciardi said that he is confident that the flow running in a concentrated manner to the concrete will not produce ponding.

Mr. Guzik expressed his concern with the downspouts. He explained that the solar canopies are 46 ½ feet wide from panel to panel and 36 feet on the center. That is almost 1,700 square feet coming through the downspout. This is equivalent to an average single-family house. However, a single-family house has four to six downspouts to spread the discharge onto the property. This is one pipe as a point of discharge for a lot of roof area.

Mr. Guzik also did not understand what would happen in those locations where the columns are in the middle of the landscape aisles. He asked if the water would discharge into the islands or will there be a cut through to discharge out to the pavement.

Mr. Guzik asked about the possibility of a collection system overhead.

Mr. Thomas calculated this as .04 cubic feet/second discharge from the downspout. Mr. Baig said that is 18 gallons per minute.

Mr. Guzik's May 28, 2019 report, Item 5.02(f) raised a question about the details for the canopy light fixture. Mr. Cuff advised that the fixture is a wall back fixture with a swivel mount to achieve a horizontal throw. The canopies are inclined 70% and the wall back fixture gives the ability to swivel the light fixtures so the light goes where it is intended to go. There are two fixtures on either side of the canopy.

Item 6, under "General Comments", Mr. Moore said that they agree to all items except for the performance guarantee. Mr. Guzik asked if any of the landscape being installed addresses the landscape buffer issue. Mr. Moore said that they will guarantee landscape buffering to the extent required.

Mr. Kochenour commented on the truck turning template in his May 28, 2019 report. He asked that the template be redrawn to show that a truck can pass under the solar panel. Mr. Thomas agreed that some areas are too close to call where there is overhang. He will fix this.

Mr. Kochenour is also concerned over the ability for a fire truck or oversized vehicle to navigate though the site. Mr. Ricciardi said that the height is 13 foot, which is the interstate highway bridge clearance requirement.

Mr. Dobromilsky said he is looking for a little more detail on the location of trees that are to remain.

Ms. Appelget asked if the trees that are to remain will provide some control over light pollution.

Mr. Dobromilsky said that the average candle foot is 2.1 and 2.2 in the parking lot. Lighting intensity is relative and if a nearby parking lot's lighting is less intense, then this will look really bright.

Ms. Appelget mentioned that the applicant said they cannot have shorter canopies with gaps for trees, because economically it would not make sense.

Mr. Dobromilsky said longer expanse of solar panels would be fine as long as there were some green shrubbery added at the end of the aisles and the grass area.

Mr. Huey asked about the downspouts. Mr. Ricciardi said that they would like to stick to their proposal. However, they will work with the professionals to come to a solution. One thing they can evaluate is circumference of the downspout.

There were no public comments on the application. Mr. Pankove made a motion to close the public hearing; seconded by Ms. Mandel. Motion approved by voice vote.

Counsel Muller went over the conditions:

1. Correct vertical rebar and scaling on Sheet 13;
2. Install wheel stops where the columns are located;
3. Trees to screen equipment on the building wall;
4. Fix the points where the fire trucks encroach the curb line;
5. Show the exact location of trees to be removed;
6. Work with Mr. Guzik to come up with a storm water management solution. Return to the board if a solution cannot be agreed on.

Additional conditions from Mr. Guzik's report:

- Item 1.02; provide signage with respect to barrier-free parking;
- Item 3.01; identify ADA spaces can be deferred until construction;
- Item 5.02 b; revise and review point plot information so lighting averages do not exceed the requirement;
- Item 6.02; Performance Guarantee needed for landscape buffer.

Mr. Pankove made a motion to approve application PB19-09 subject to three variances, thirteen waivers and numerous conditions; seconded by Mr. Karp. Motion approved, 9-0, by roll call vote.

The other three applications will carry to the June 22, 2019 meeting and if needed, the July 10, 2019 meeting.

With no other business before the Board, Chair O'Brien adjourned the meeting at 10:48 pm.

Respectfully submitted,

Terri Jany
Recording Secretary