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City of Harrisonburg, Virginia

DEPARTMENT OF PLANNING AND COMMUNITY DEVELOPMENT

STAFF REPORT September 10, 2014

REZONING - EASTERN MENNONITE UNIVERSITY MASTER PLAN CHANGE 2014

GENERAL INFORMATION

Applicant:

Eastern Mennonite University, with representative Tony Smith of Secure

Futures LLC

Tax Map:

51-A-1

Acreage:

26.6+/- acres

Location:

1200 Park Road

Request:

Public hearing to consider a request from Eastern Mennonite University to

rezone 26.6+/- acres of their property zoned R-3, Medium Density Residential District and I-1, Institutional Overlay District by amending their master plan.

LAND USE, ZONING, AND SITE CHARACTERISTICS

The Comprehensive Plan designates this area as Institutional. This designation states that these areas are for development by certain nonprofit and public institutional uses such as private colleges and universities, hospitals, offices of nonprofit organizations, community assembly uses and institutions that provide for the shelter and care of people.

The following land uses are located on and adjacent to the property:

Site:

Academic, recreational and residential buildings, parking lots, and common area

associated with the University, zoned R-3/I-1

North:

Across West Dogwood Drive, residential dwellings, zoned R-2

East:

Across Park Road, academic and residential buildings, athletic fields, parking lots,

and common area associated with the University, zoned R-3/I-1

South:

Single family homes and buildings associated with the University, zoned R-3

West:

Academic buildings and common area associated with the University, zoned R-3/I-1

EVALUATION

The applicant is requesting to amend a portion of the Eastern Mennonite University (EMU) Institutional Overlay Master Plan. The Institutional Overlay District provides for distinctive development of certain nonprofit institutional uses, such as colleges and universities, where upon approval of a master plan, development may deviate from the requirements of the underlying zoning district. Every request for an institutional overlay requires the submission of an accompanying master plan showing how development will occur. Subsequent changes to the approved plan are accomplished by the same procedure – via a rezoning application approval.

EMU's Institutional Overlay Master Plan was originally approved in 1998. This plan provided a layout for existing and proposed buildings, the number of stories and overall heights of those buildings, as well as the proposed parking layout throughout the campus. In 2010, EMU amended the plan by adding a parcel, enlarging the Suter Science Center, and introducing green technology in the form of solar panels, to the overall plan. Although allowed by right, the design of the solar panels did not meet all the setback and height requirements of the Zoning Ordinance; therefore, they were included within the 2010 master plan amendment. The panels were proposed for roof top locations on the Hartzler Library and Hillside Dormitory buildings and on structures for the University Commons and turf field parking lots. At this time, the applicants are requesting a minor amendment for particular solar panel heights and locations.

The previously approved parking lot panels were proposed to be attached to carport style support structures and were to vary in height from 8 ½ to 16 feet with support columns spaced 18 feet on center; allowing for vehicles to park underneath the structures. The applicants are requesting to increase the height of the overall structures within the University Commons parking lot to 20 feet, with support columns spaced 18 to 27 feet on center. Along with the requested height adjustment, the applicants are proposing to remove the single row of panels previously planned along the West Dogwood Drive boundary that could have been located up to five feet from the property line. All other rows would remain as shown. The removal of the one row of panels within the parking lot actually reduces the visual impact to residents along West Dogwood Drive even with the height increase.

The second proposed change is in the location of roof top panels. The applicant desires to place panels on the University Commons building instead of on the Hillside Dormitory. As previously noted solar panels are permitted by right; however, because the height of the University Commons building is 50 feet, which is above the maximum height regulations of the R-3 district and approved as part of the 1998 master plan, staff wanted the proposed location change shown within the amendment. The panels would be about two to six inches tall and will not increase the overall height of the building.

The Hartzler Library solar panels have been installed and EMU desires to move forward with these proposed changes. If approved, staff has informed the applicants that they would need to supply a revised and updated copy of the master plan to be kept on file, in addition to the red lined changes provided with the rezoning application. The requested changes are in keeping with the intentions of the I-1 district and staff does not foresee negative impacts to the surrounding neighborhood. Staff recommends approval of the master plan amendment.

Eastern Mennonite University

Master Plan Narrative August 2014

The following Master Plan of Eastern Mennonite University is being submitted as an amendment to Item 2, Proposed Facilities, Section 8 <u>Solar Panels</u>, Paragraph b and c of the February 2010 Master Plan Narrative.

Paragraph b to be amended as follows:

b. University Commons parking lot: The parking lot north of the University Commons will serve as a second location for a multi-panel array of solar cells. These panels will rest on a carport style support structure, allowing the current parking lot to remain in use. The cars park underneath the panels, enabling no loss in the number of parking spaces. These panels (or tiles) vary in height from 8.5 to 10 feet in the front to 14 to 16 16 to 20 feet at the rear of the panel. The support columns are spaced 18 to 27 feet on center. These solar arrays will run parallel with and above the current parking stalls, leaving a 20 foot minimum drive aisle open for vehicular access. The solar panels arrayed adjacent to Dogwood Drive will maintain a 5 foot minimum setback with the property line. Since the solar panels are elevated, the 10 foot landscape buffer shall still be maintained.

Note: The proposed single width canopy structure adjacent to Dogwood Drive has been removed from consideration. The array will consist of three identical double width canopy structures. Removing the canopy adjacent to Dogwood from the plan, will allow the visual impact on Dogwood Drive property owners to be reduced by 2' 8" despite the increased height. See attached schematic.

Paragraph c to be amended as follows:

c. Hillside University Commons roof panels: A portion of the south facing roof of the existing Hillside Dormitory University Commons building will serve as the third location for a multi-panel array of solar cells. These panels attach directly to the roof and will be about 2 to 4-6 inches tall. The panels will be installed on the lower level roof only and therefore not increase the overall height of the building and will have no visual impact on any adjacent property owners.

Date Application Received: 8-12-14

Total Paid: #1185 ==

Application for Change of Zoning District City of Harrisonburg, Virginia

Castava	operty Owner's Inform n Mennonite University				
Tutino.	1200 Park Road		и.		
Silect Address.	Linate.				
City/State/Zip: Telephone (work):	(5.40) 400 4407	-, 40	(f	(540) 432-4444	
	ner's Representative		5		
	Futures LLC (Attn: To				
rume.	11 East Beverley, Sui	1- 10	il:	310EVQ	
on cot radices.	Staunton, Va. 24401	Ellia		The state of the s	
Oitjiblato Zip.	(540) 255-1404	(home or cellular):	(f	'ax):	
	scription of Property				
	Idress): 1200 Park	Road			
			Total Land Area (acres or square	e feet): 26.6	
Existing Zoning D	District: R-3/I-1	Pro	oposed Zoning District * : 2-3		
Existing Compreh	ensive Plan Designation:	Institution	ચ		
			ers on separate sheet of paper		
Section 4: App \$375.00 plus \$30		cable, Fees for a Trai	ffic Impact Analysis (TIA) Revi	iew (see below)	
	Would the development from this rezoning require a Traffic Impact Analysis by VDOT? Yes No_X				
j	If yes, then fees must be mo	ide payable to VDOT t	o cover costs associated with the T	TIA review.	
	PLEASE NOTE – If a TIA reviewed.	is required, this applic	cation shall not be considered acco	epted until the TIA has been	
	Would the development from Yes No_X	m this rezoning require	a Traffic Impact Analysis review l	by the City?	
	If yes, then an additional \$1,000.00 must be made payable to the City to cover costs associated with the TIA review.				
	PLEASE NOTE — If a TIA reviewed,	is required, this applic	cation shall not be considered acco	epted until the TIA has been	
Section 5: Nar	mes and Addresses of	Adjacent Property	y Owners (Use separate she	et for additional names)	
3.Yd	ares and reduceses or			,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
East:					
G 4					
XXI					
Section 6: Cer I certify that the in	rtification formation contained herein	is true and accurate. S	ignature: Prop	Rot Derty-Owner	

2010 approved Master Plan

Eastern Mennonite University

Master Plan Narrative

February, 2010

The attached Master Plan of Eastern Mennonite University is being submitted for review and approval under Section 10-3-106, "Master Plan Requirements". This narrative follows the guidelines of Section 10-3-106, Items 1-4. Note:

Item 1:

The total highlighted property shown in the attached Master Plan, under the control and ownership of Eastern Mennonite University, consists of 93.6 acres. This does not include all property owned by Eastern Mennonite University, as there are other parcels not a part of the institutional overlay zone. Generally, this property (denoted in the Master Plan legend as 'EMU owned property') is described as follows:

Multiple parcels bound by Mt Clinton Pike, Park Road,			
and Dogwood Drive totaling	41.1 acres.		
Multiple parcels South of Mt Clinton Pike totaling			
Multiple parcels bound by Mt Clinton Pike, Park Road, Parkwood Drive,			
and Eastern Mennonite High School totaling	18.0 acres.		
Multiple parcels bound by Parkwood Drive, Park Road, and the Virginia			
Mennonite Retirement Community totaling	33.4 acres.		
TOTAL:	93.6 acres		

Within the property, Smith Street, College Avenue and Park Road are all dedicated public streets. Please refer to the attached Master Plan.

Item 2:

The locations of the existing and the proposed buildings are illustrated on the attached Master Plan. Their respective uses and other data are as follows:

Existing Facilities:

- Academic Facilities: Suter Science Center, Seminary, Astral Hall, Hartzler Library, Art Center, Theater Facility (University Commons) plus some classrooms in the Campus Center.
- Housing Facilities: Northlawn, Roselawn, Hillside, Elmwood, Maplewood, and Cedarwood Dormitories, Martin House, Redmond House, Parkwood Apartments, Village Apartments and Mt. Clinton Pike Apartments
- 3. Assembly Facility: Lehman Auditorium
- 4. Recreation Facility: University Commons which includes a gymnasium
- 5. Student Services: Campus Center, Bookstore and Student Center (University Commons), Discipleship Center, The Cabin
- 6. Administrative Offices: Campus Center
- 7. Maintenance: Physical Plant Building
- 8. Miscellaneous Support Services: Suter, Blosser, Lehman, Guest, Heatwole, Brunk and Anderson Houses.
- 9. Stormwater Management: Three detention ponds all located on the east side of campus.

Proposed Facilities:

- 1. <u>Proposed Welcome Center:</u> Currently shown at the northeast corner of Mt. Clinton Pike and College Ave., a proposed academic/welcome center is to be a two story facility of 5,000 square feet per floor for a total of 10,000 square feet.
- 2. <u>Proposed Academic Building (College Avenue)</u>: An academic building up to 10,000 square feet per floor is proposed to be constructed and located at the west corner of Mt. Clinton Pike and College Ave.
- 3. <u>Proposed Academic Building (Smith Avenue)</u>: An academic building up to 25,000 square feet per floor is proposed to be constructed and located to the west of Northlawn Dormitory.
- 4. <u>Proposed Lehman Auditorium Addition</u>: The existing Lehman Auditorium is proposed to be expanded to the east with a one story addition of 10,000 to 15,000 square feet.
- 5. <u>Proposed Hartzler Library Addition:</u> The existing Hartzler Library is proposed to be expanded with a three story addition of 18,000 to 20,000 square feet.
- 6. Northlawn Dormitory Addition: A proposed kitchen and dining addition to the east side of Northlawn Dormitory is to be a one story addition of 10,000 to 15,000 square feet.
- 7. <u>Suter Science Center Addition</u>: The Science Department and the University have decided on a proposed addition to the south side of the existing Suter Science Center. The total three story square footage addition is expected to be up to 30,000 square feet.
- 8. <u>Solar Panels</u>: Four locations are proposed for the installation of solar panels. These panels will be constructed similar to the manufacturers' documentation as attached. The

energy provide from the solar cells will be utilized by EMU. The four locations are shown on the attached Master Plan drawing and are described as follows:

- a. Hartzler Library roof panels: The roof top of the existing Hartzler Library will serve as the first location for a multi-panel array of solar cells. These panels (or tiles) vary in height from 2" at the front of the panel to about 12" at the rear of the panel. A structural engineer is currently designing the mounting system, but it is planned for these panels to be installed directly on the roof deck. These panels will add no more than 5 feet to the current roof height and therefore increase the overall height of Hartzler Library to no more than 45 feet.
- b. University Commons parking lot: The parking lot north of the University Commons will serve as a second location for a multi-panel array of solar cells. These panels will rest on a carport style support structure, allowing the current parking lot to remain in use. The cars park underneath the panels, enabling no loss in the number of parking spaces. These panels (or tiles) vary in height from 8.5 to 10 feet in the front to 14 to 16 feet at the rear of the panel. The support columns are spaced 18 feet on center. These solar arrays will run parallel with and above the current parking stalls, leaving a 20 foot minimum drive aisles open for vehicular access. The solar panels arrayed adjacent to Dogwood Drive will maintain a 5 foot minimum setback with the property line. Since the solar panels are elevated, the 10 foot landscape buffer shall still be maintained.
- c. Hillside roof panels: A portion of the south facing roof of the existing Hillside dormitory will serve as the third location for a multi-panel array of solar cells. These panels attach directly to the roof and will be about 2 to 4 inches tall. The panels will be installed on the lower level roof only and therefore not increase the overall height of the building.
- d. Future Turf-field parking lot: The future parking lot just east of the existing turf-recreation field is planned for a fourth location for a multi-panel array of solar cells. These panels are similar in concept as the University Commons parking lot where no loss in the number of parking spaces will occur. These panels will setback a minimum of 24 feet from the property line with EMHS in order to allow for a two-way access drive as part of a future parking lot.
- Institutional Overlay addition: Eastern Mennonite University proposes to add 1110 Park Road (TM: 48-H-2, 48-H-3) into the institutional overlay district. The square footage area is approximately 19,244 square feet.

Item 3:

Existing and proposed parking is illustrated in the attached Master Plan. Because of the current campus configuration, new parking may not occur at the new buildings or additions, but be accommodated at another location on the campus. Parking areas will be landscaped with appropriate trees and shrubs in compliance with City Ordinances. The current master plan for existing and future parking is showing 1,690 spaces. University officials have deemed this number of spaces to be adequate for their current planned needs. If additional parking is needed in the future, existing open areas may be utilized upon an amendment to the Master Plan.

The existing vehicular access to the campus will remain the same. There are currently eight points from adjacent public streets: two from Park Road, two from Mt. Clinton Pike, one from Smith Street, one from College Avenue, one from Dogwood Drive, and from Parkwood Drive. It is not anticipated that the additional facilities will place a significant additional burden on the adjacent vehicular system.

Item 4:

The general use of major existing and proposed open space on site will be used for:

- Landscaping
- Recreation
- stormwater detention
- pathways
- woodlands
- green space

The proposed Welcome Center is currently situated approximately 65 feet from the property line on College Avenue, and approximately 80 feet off Mt. Clinton Pike.

The future Academic Building-South will be placed approximately 20 feet off the property line on College Avenue, and approximately 90 feet off Mt. Clinton Pike.

The future Academic Building-North will be placed approximately 517 feet from the Park Road right-of-way.

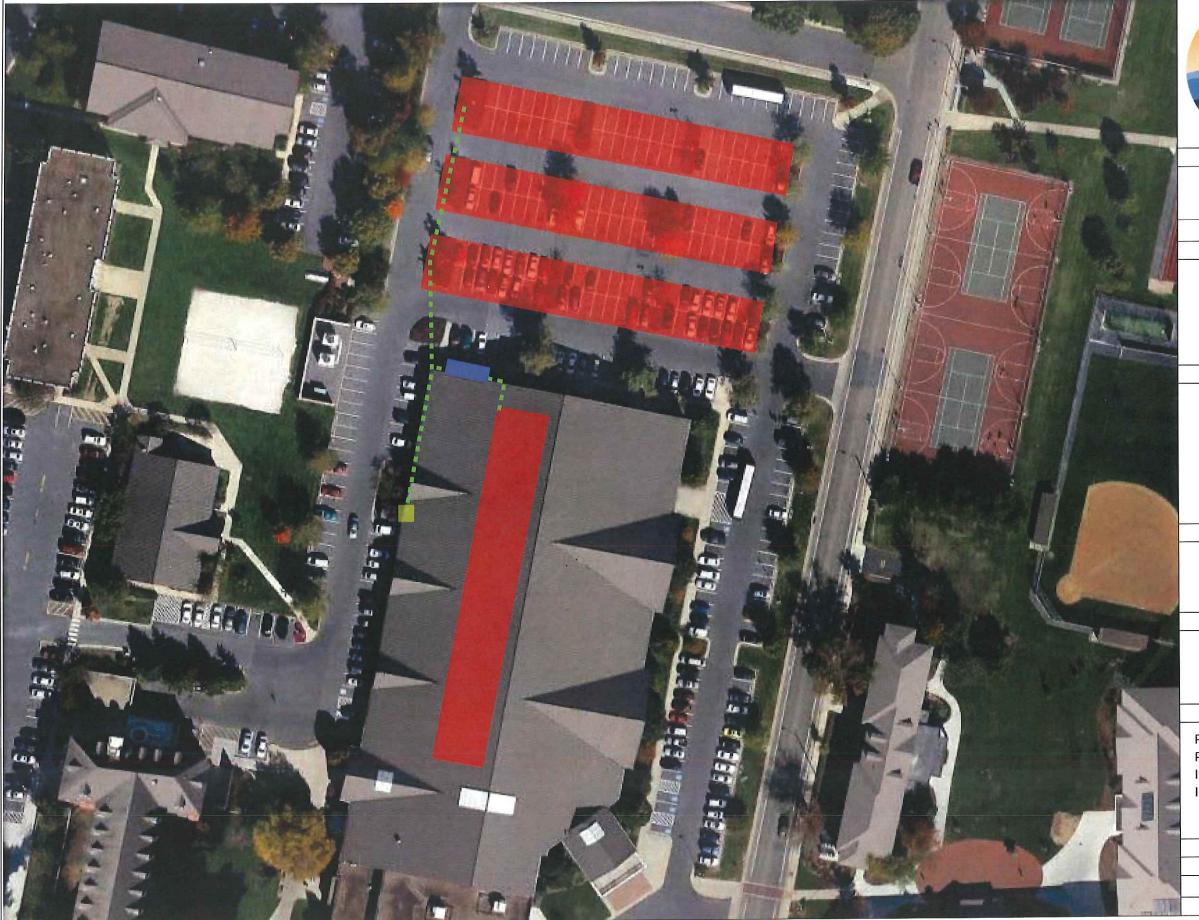
The proposed Lehman Auditorium Addition will be situated east of the existing facility approximately 365 feet from the Park Road right-of-way.

The proposed Hartzler Library Addition will be situated south of the facility approximately 110 feet from the Park Road right-of-way.

The proposed Kitchen/Dining Addition at Northlawn Dormitory will be situated approximately 365 feet from the Park Road right-of-way.

The proposed Suter Science Center Addition will be approximately 425 feet from the east property line, shared with Eastern Mennonite High School.

It is understood that this submission is for Master Plan review and approval only, and that each individual project will require its own approval according to the provisions of the City's development regulations. Furthermore, it is acknowledged that there is limited capacity for adequate fire flow and domestic water delivery in this area and improvements necessary to meet these requirements will be determined during the design and review of specific building proposals, or as part of a broader water system analysis, as appropriate.





Shenandoah Solar, LLC 1180 South High Street, Suite 100 Harrisonburg, VA 22801 Phone: 888-339-3603 www.shenandoahsolar.us

Project Information

Eastern Mennonite University 1200 Park Road Harrisonburg, VA 22802

Project Number | 2014-0012

Site Data

Municipality: Rockingham County

Design Wind Speed: 90 MPH

Exposure Category: C

High Temperature: 60 °C

Low Temperature:: -20 °C

Structure Design

Racking Structure: | Carport Mounted PV Array

Azimuth: 191°

Tilt: \ ~10°

Racking Structure: Roof Mounted PV Array

Azimuth: 280°

Tilt | ~11.8°

Electrical Design

Modules: Suniva Modules 320w Power One 27.6kW Inverter:

Interconnection: | Electrical Room MDP

System Production

DC System Size:

510.72 kW DC AC System Size : 386.4 kW AC

Key:

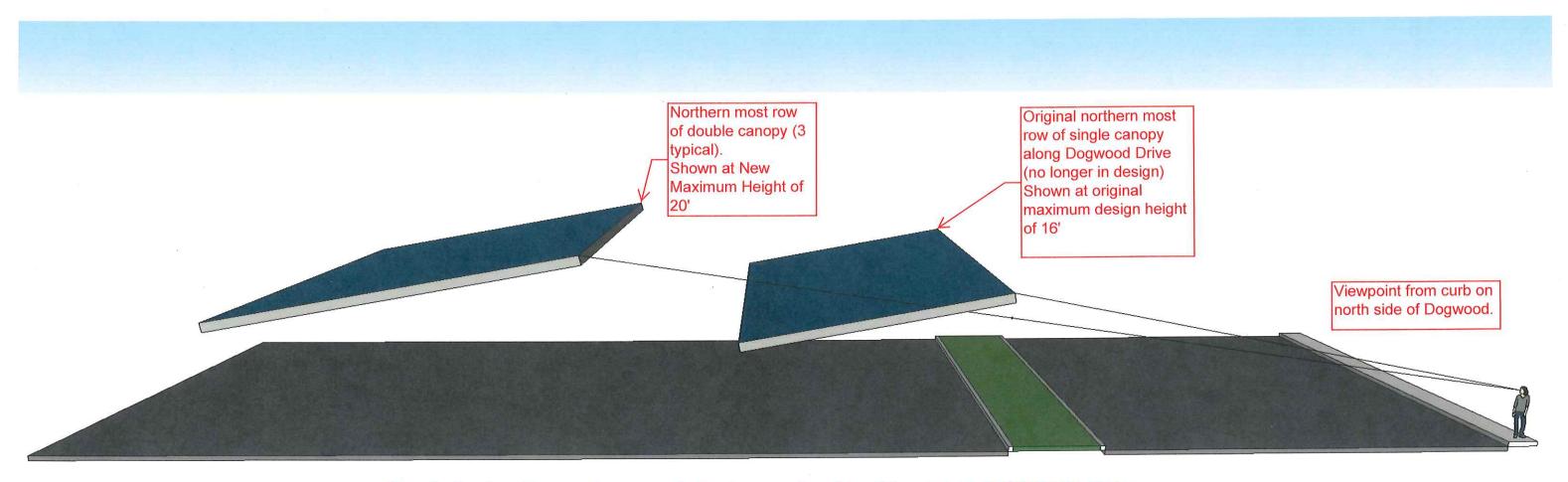
PV Module Area: **Proposed Conduit:** Inverter Location: Interconnection:





Sheet Name:	Preliminary Site Layout	
Revision:	6/24/2014	
Drawn By:	ADH	
Scale:	Not to Scale	





By eliminating the northern most single row, the visual impact to residences along Dogwood Drive is reduced by 2'-8", despite an increase in maximum design height to 20'. The minimum design height remains at 8'-6" for clearance and safety.