



DEPARTMENT OF COMMUNITY DEVELOPMENT SERVICES

Planning Division

m e m o r a n d u m

TO: The Urbana Zoning Board of Appeals

FROM: Christopher Marx, Planner I

DATE: September 16, 2016

SUBJECT: **ZBA Case ZBA-2016-MAJ-10:** A request by Paul and Jennifer Hixson for a Major Variance to construct a pergola with solar panels that encroaches 12 inches into the 18-inch required east side yard setback at 209 West Indiana Avenue in the R-2, Single Family Residential zoning district.

Introduction

Paul and Jennifer Hixson are requesting a Major Variance to allow the installation of a pergola that encroaches 12 inches into the required side yard at 209 West Indiana Street. The pergola would be located behind the existing garage and would have solar panels mounted on the top. The location was selected for its proximity to the controls for the existing solar panel system and to maximize solar exposure. The adjacent neighbor has indicated support for the project.

Background

The property at 209 West Indiana Avenue is a narrow lot with a single-family home that is zoned R-2, Single Family Residential. The house has an attached garage on the eastern edge of the property. The garage location is legally nonconforming with a setback of nine inches from the eave of the structure to the property line. The applicants propose to place the pergola behind the existing garage and to mount solar panels on the top to expand their current photovoltaic electricity generation capabilities. They already have solar panels located on the roof of the south side of their home.

The pergola would be 11 feet, 4 inches in height, as measured to the roof's midpoint and 272 square feet in area. The top would contain three solar panels that will generate photovoltaic energy. The applicants want to install the pergola behind the garage because of its distance from tree shade cover that could block the panels at certain times of the day. The electrical controls for the existing photovoltaic system are also located behind the garage. The proposed location would allow for an easier and more affordable connection to the system.

Section VI-9 of the Zoning Ordinance states that accessory structures less than 750 square feet in area cannot extend closer than 18 inches from a side property line. The applicants are requesting a variance that would allow the proposed pergola to encroach one foot into the required 18-inch

east side yard so that it would be set back six inches from the property line. Section XI-3.C.2.b(1) states that any request for a side yard deviation greater than 25% shall be considered a Major Variance.

Pursuant to Section XI-3.C.2(d)(1) of the Urbana Zoning Ordinance, in order for a Major Variance to be approved, the Zoning Board of Appeals must recommend approval by a two-thirds majority and forward the case to City Council for final review and approval. During the course of the public process, the request may be amended to require, or the Zoning Board of Appeals may decide to consider, a lesser variance. That change may result in the variance being classified as a Minor Variance. In that instance, the Zoning Board of Appeals may grant a Minor Variance with a majority vote.

Description of the Site

The subject property is a single-family home on a 0.19-acre lot that is located on the eastern edge of the West Urbana neighborhood. It is zoned R-2, Single Family Residential, and is surrounded by other single-family homes that are also zoned R-2. Most of the houses in the neighborhood were constructed in the early-to-mid-twentieth century. The subject property also has a close proximity to Carle Park and Urbana High School.

Zoning and Land Use Table

The following is a summary of surrounding zoning and land uses for the subject site:

Location	Zoning	Existing Land Use	Comprehensive Plan Future Land Use
Subject Property	R-2, Single Family Residential	Single Family Home	Residential
North	R-2, Single Family Residential	Single Family Home	Residential
South	R-2, Single Family Residential	Single Family Home	Residential
East	R-2, Single Family Residential	Single Family Home	Residential
West	R-2, Single Family Residential	Single Family Home	Residential

Discussion

The applicant would like to construct a pergola with top mounted solar panels behind their garage on the east side of the property in the required side yard. The Zoning Ordinance requires an 18-inch separation between any accessory structure and a side property line and the variance request is for an allowed encroachment of 12 inches. The principal structure of the property, that is legally nonconforming, extends four feet and three inches into the required east side yard

setback of five feet. The proposed pergola would encroach three inches further towards the property line than does the principal structure.

The applicants state that the proposed location of the pergola is necessary because it would allow for maximum sunlight exposure and the easiest connection to their existing photovoltaic system controls. The applicant has provided pictures (Exhibit E) that document the back yard showing extensive tree shade cover at certain times of the day. The panels are also meant to complement an existing system of solar panels on the house. The control system for those existing panels is also located near the rear of the garage. Adding solar panels closest to the controls systems would be the most affordable option for the homeowners to expand their home's solar power capabilities.

The proposed pergola would be similarly sized to traditional backyard coverings or canopies. It would be located close to the house and would not significantly increase the physical footprint of structures on the subject property. The open space of the property would be minimally impacted. The homeowners of the neighboring properties around the subject property have written letters of support for the application.

The proposed pergola would be located in an area necessitated by the available sunlight and the existing photovoltaic system infrastructure. It would be designed in a manner that is aesthetically compatible and congruent with the property and surrounding neighborhood. The pergola would encroach into the required side yard by three more inches than the existing encroachment by the house and attached garage.

Variance Criteria

Section XI-3 of the Urbana Zoning Ordinance requires the Zoning Board of Appeals to make findings based on variance criteria. The following is a review of the criteria as they pertain to this case and the criteria outlined in the ordinance:

1. *Are there special circumstances or special practical difficulties with reference to the parcel concerned, in carrying out the strict application of the ordinance?*

The extensive tree shade cover that would block the solar panels without the variance is a practical difficulty for locating the pergola. The location of the photovoltaic control system also favors the proposed location. Placing the unit in other parts of the yard would not allow the solar panels to receive maximum sunlight exposure and would require a more expensive connection due to increased distance from the photovoltaic control system.

2. *The proposed variance will not serve as a special privilege because the variance requested is necessary due to special circumstances relating to the land or structure involved or to be used for occupancy thereof which is not generally applicable to other lands or structures in the same district.*

Some of the trees that extend cover over the backyard are located on other properties. The applicants are unable to affect the shadows being cast over their yard. The location of the system

controls inside the rear of the garage require the panels to be located closely for a proper and economical connection.

3. *The variance requested was not the result of a situation or condition having been knowingly or deliberately created by the Petitioner.*

The lot was platted and the house and garage were constructed many years before the current Zoning Ordinance was enacted and before the applicants owned the property. The applicants also do not have control over the conditions for sun exposure that would give their solar system its most effectiveness. The request was not the result of a situation created by the applicant.

4. *The variance will not alter the essential character of the neighborhood.*

The variance will not alter the character of the neighborhood. The proposed pergola would be minimally visible from the public right-of-way and located directly next to the attached garage. The house with an attached garage is already legally nonconforming with respect to the east side yard setback of five feet.

5. *The variance will not cause a nuisance to the adjacent property.*

The variance would not cause a nuisance to the adjacent property owners. The neighboring property owners to the subject property have written letters of support for the application. The proposed pergola would minimally expand an existing encroachment and would not significantly increase the presence of any principal or accessory structures with respect to the property line.

5. *The variance represents generally the minimum deviation from requirements of the Zoning Ordinance necessary to accommodate the request.*

The proposed location is necessary to maximize sun exposure to the solar panels and provide convenient connection to the existing solar control panel. It would only minimally expand the existing encroachment of the garage.

Summary of Staff Findings

1. Paul and Jennifer Hixson have requested a Major Variance to allow a solar panel pergola that would encroach 12 inches into the 18-inch required side yard setback at 209 West Indiana Avenue.
2. The site is located in West Urbana and is zoned R-2, Single Family Residential.
3. The variance is requested due to special circumstances and practical difficulties with the parcel. The property's tree shade cover and existing photovoltaic control system necessitate the location of the proposed pergola.
4. The variance would not serve as a special privilege to the applicants.

5. The variance request is not the result of a situation or condition that was created by the applicants. Many of the trees responsible for the shade cover are located on other properties or were planted before the applicants purchased their home.
6. The variance would not alter the essential character of the neighborhood. The pergola which would be encroaching into the required setback would be minimally visible from neighboring properties or from the front of the property. It would be located adjacent to an existing house that is legally nonconforming with respect to side yard setbacks.
7. The variance would not cause a nuisance to the adjacent property. The neighboring homeowners have communicated their support for the application.
8. The variance represents the minimum deviation from the requirements of the Zoning Ordinance necessary to accommodate the request.

Options

A Major Variance requires a two-thirds vote by the Board to forward a recommendation for approval to the City Council. The Zoning Board of Appeals has the following options in this case:

- a) The Urbana Zoning Board of Appeals may forward the case to City Council with a recommendation to **approve** the variance based on the findings in this memo; or
- b) The Urbana Zoning Board of Appeals may forward the case to City Council with a recommendation to **approve the variance along with certain terms and conditions**. If the Urbana Zoning Board of Appeals elects to recommend conditions or recommend approval of the variance on findings other than those articulated herein, they should articulate findings accordingly; or
- c) The Urbana Zoning Board of Appeals may **approve a lesser Minor Variance** with a majority vote; or
- d) The Zoning Board of Appeals may **deny** the variances requested. If the Zoning Board of Appeals elects to do so, the Board should articulate findings supporting its denial.

Staff Recommendation

Based on the analysis and findings presented in the discussion above, and without the benefit of considering additional evidence that may be presented at the public hearing, staff recommends that the Zoning Board of Appeals forward ZBA Case 2016-MAJ-10 to the City Council with a recommendation to **APPROVE** the variance to allow a solar panel pergola that encroaches 12 inches into the 18-inch required side yard setback with the following condition:

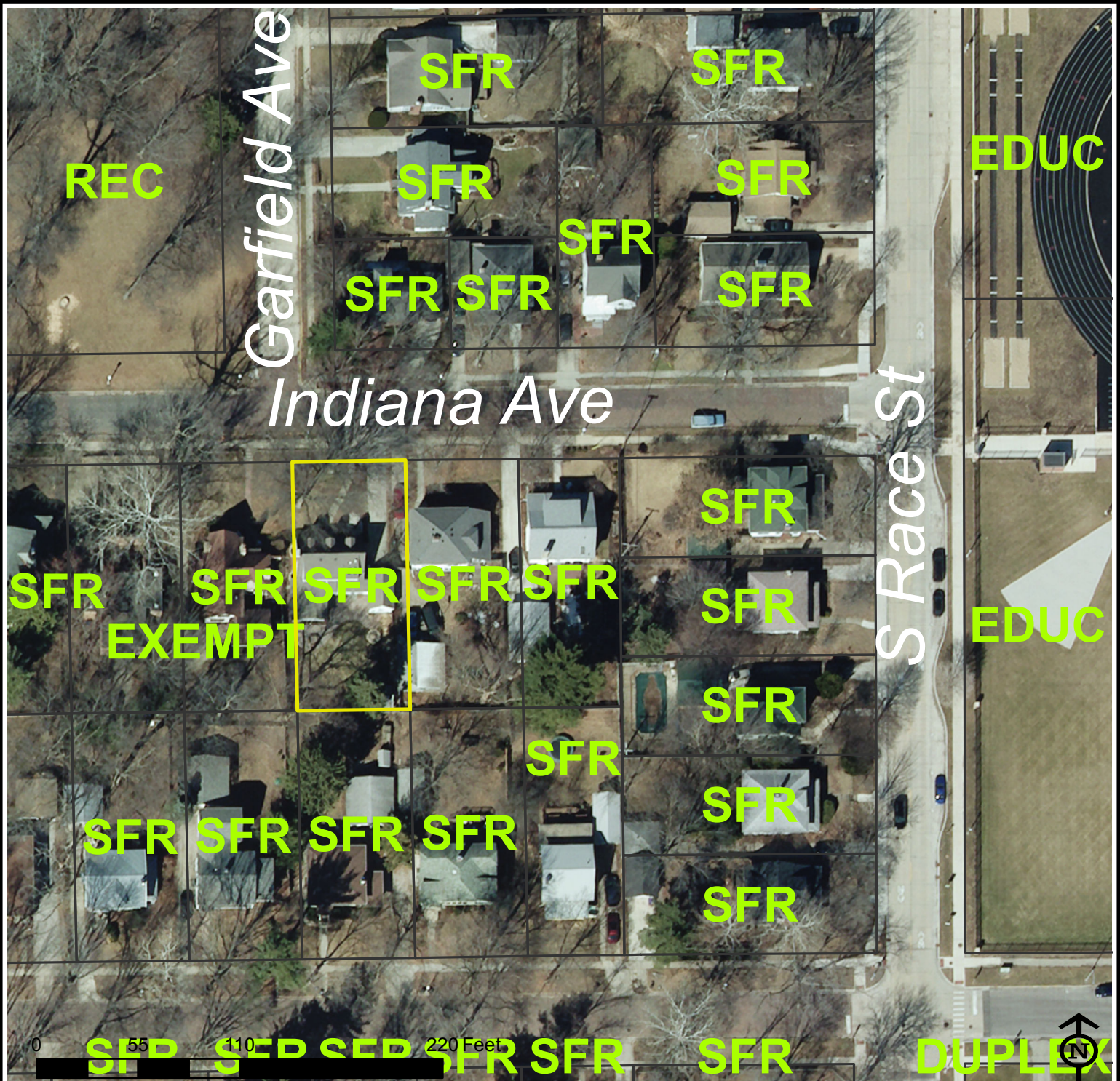
1. The site be developed in general compliance with the attached site plan and rendering.

The specifics of this recommendation may change during the course of formal review of ZBA 2016-MAJ-10. The staff recommendation contained herein represents the professional opinions of the City's planning staff and does not bind or limit the recommendations and decisions which may be made by the City's appointed and elected officials.

Attachments: Exhibit A: Location Map
 Exhibit B: Zoning Map
 Exhibit C: Future Land Use Map
 Exhibit D: Site Plan & Renderings
 Exhibit E: Site Photos
 Exhibit F: Communications from Neighbors
 Exhibit G: Application for Variance

cc: Paul and Jennifer Hixson
 New Prairie Construction

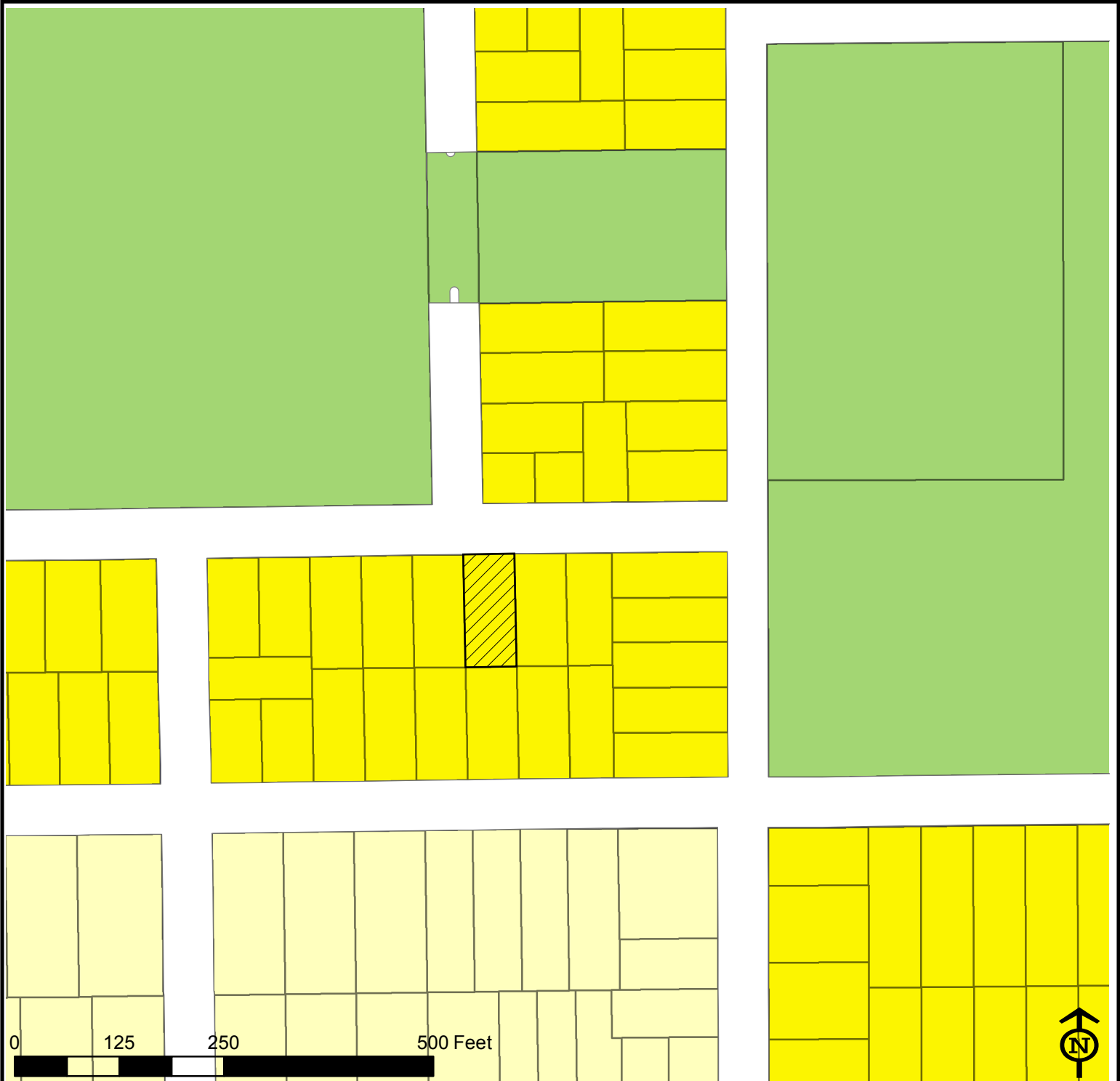
Exhibit A: Location & Existing Land Use Map



Case: ZBA-2016-MAJ-10
 Subject: Side Yard Variance
 Location: 209 West Indiana Avenue
 Petitioner: Paul and Jennifer Hixson

 Subject Property

Exhibit B: Zoning Map



Case: ZBA-2016-MAJ-10
Subject: Side Yard Variance
Location: 209 West Indiana Avenue
Petitioner: Paul and Jennifer Hixson




CRE
R1
R2

 Subject Property

Exhibit C: Future Land Use Map



Case: ZBA-2016-MAJ-10
Subject: Side Yard Variance
Location: 209 West Indiana Avenue
Petitioner: Paul and Jennifer Hixson

 Residential
 Institutional
 Park

 Subject Property

WEST INDIANA AVENUE



60'

EXPOSEMENT

3'

SIDEWALK

5'-2"

3'-0"

DRIVE

10'-7"

36'-5"

3'-5"

6'-6"

135'
(152'-6")
measured

2 STORY

1'-4"
to wall
(16")

GARAGE

12'-6"

20'-4"

7" o.h.
on eave

1 STORY



* Edge of
beam
with
~ 6-7"
of property
line.

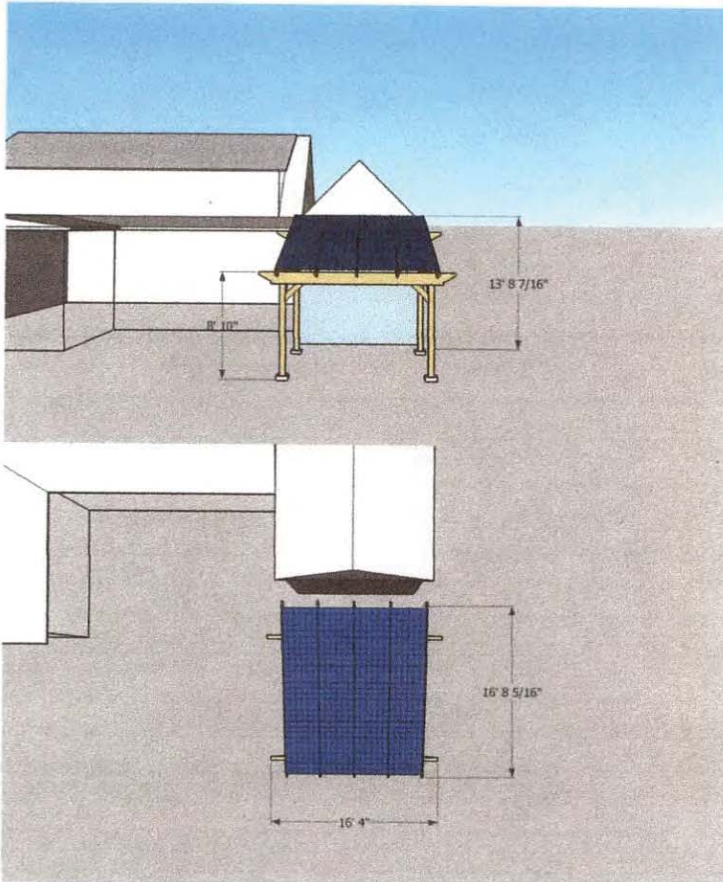
~ 5'-6"

* posts in line
with garage wall

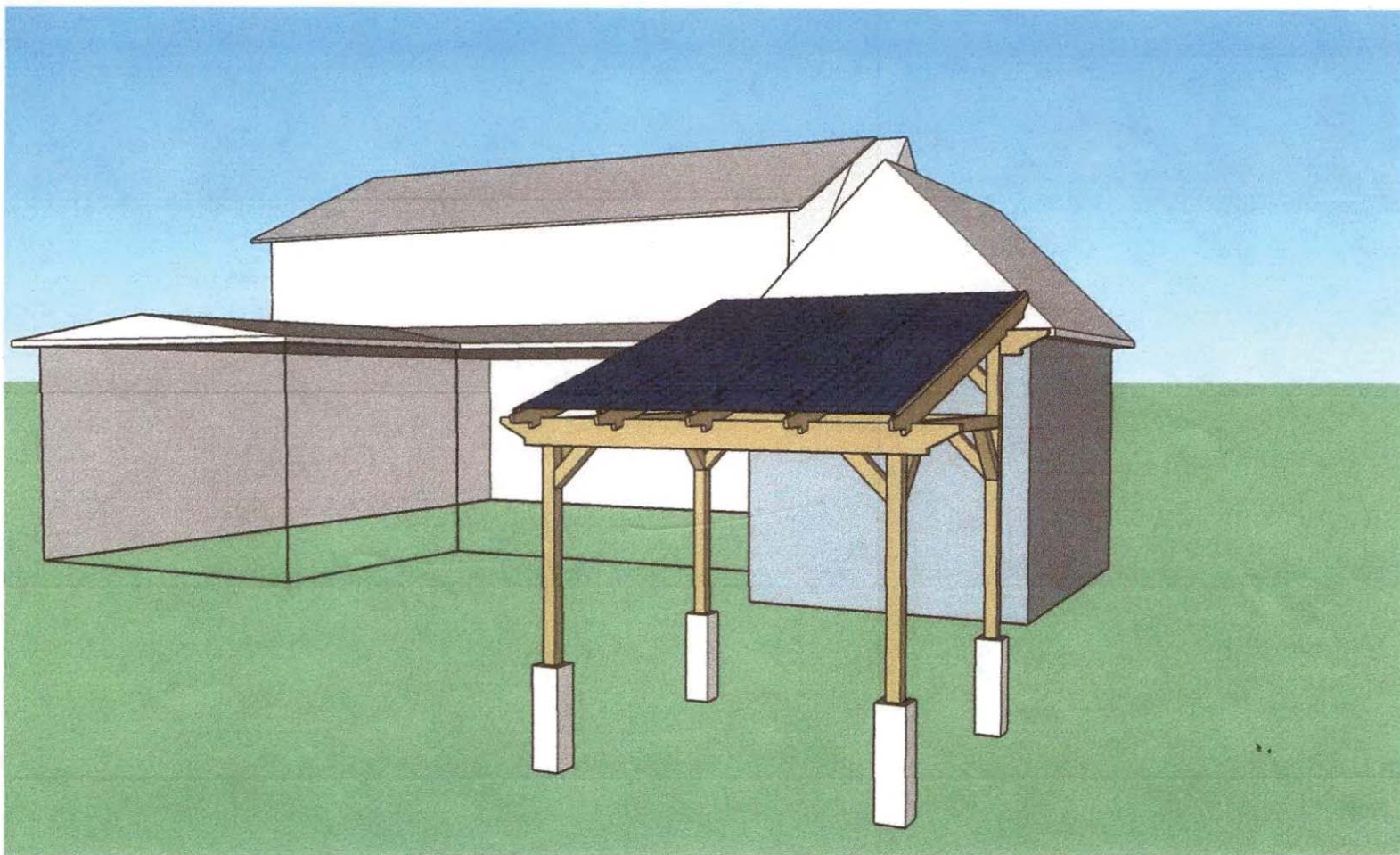
Not to Scale

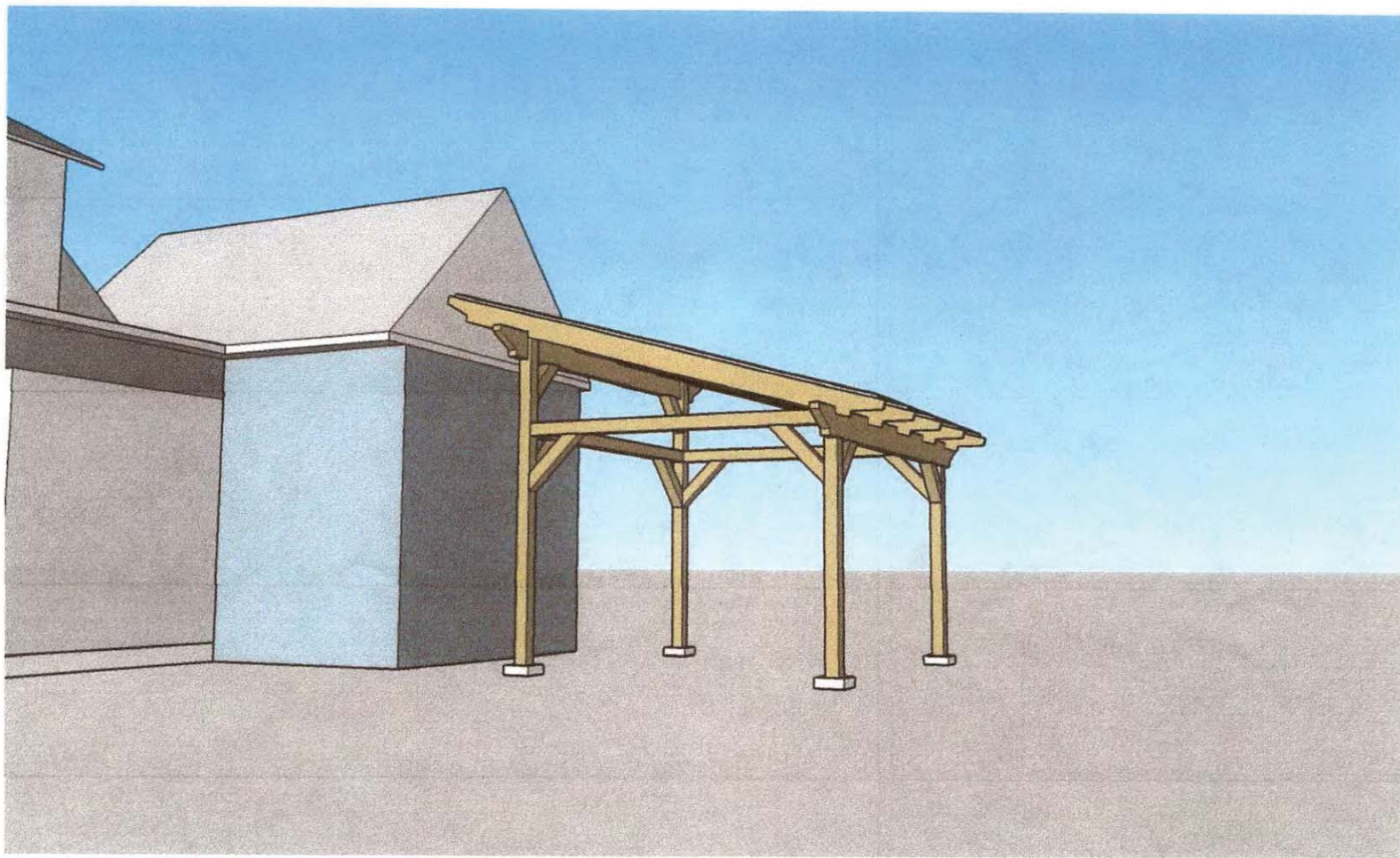
Jill Mulder

From: Matthew Carter <matthew@newprairieconstruction.com>
Sent: Tuesday, August 16, 2016 11:45 PM
To: Jill Mulder; Tonya Randall
Subject: Pergola Dimensions



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Matthew Carter
Carpenter & Solar Energy Specialist
[New Prairie Construction Company](http://www.newprairieconstruction.com)
217.418.5721





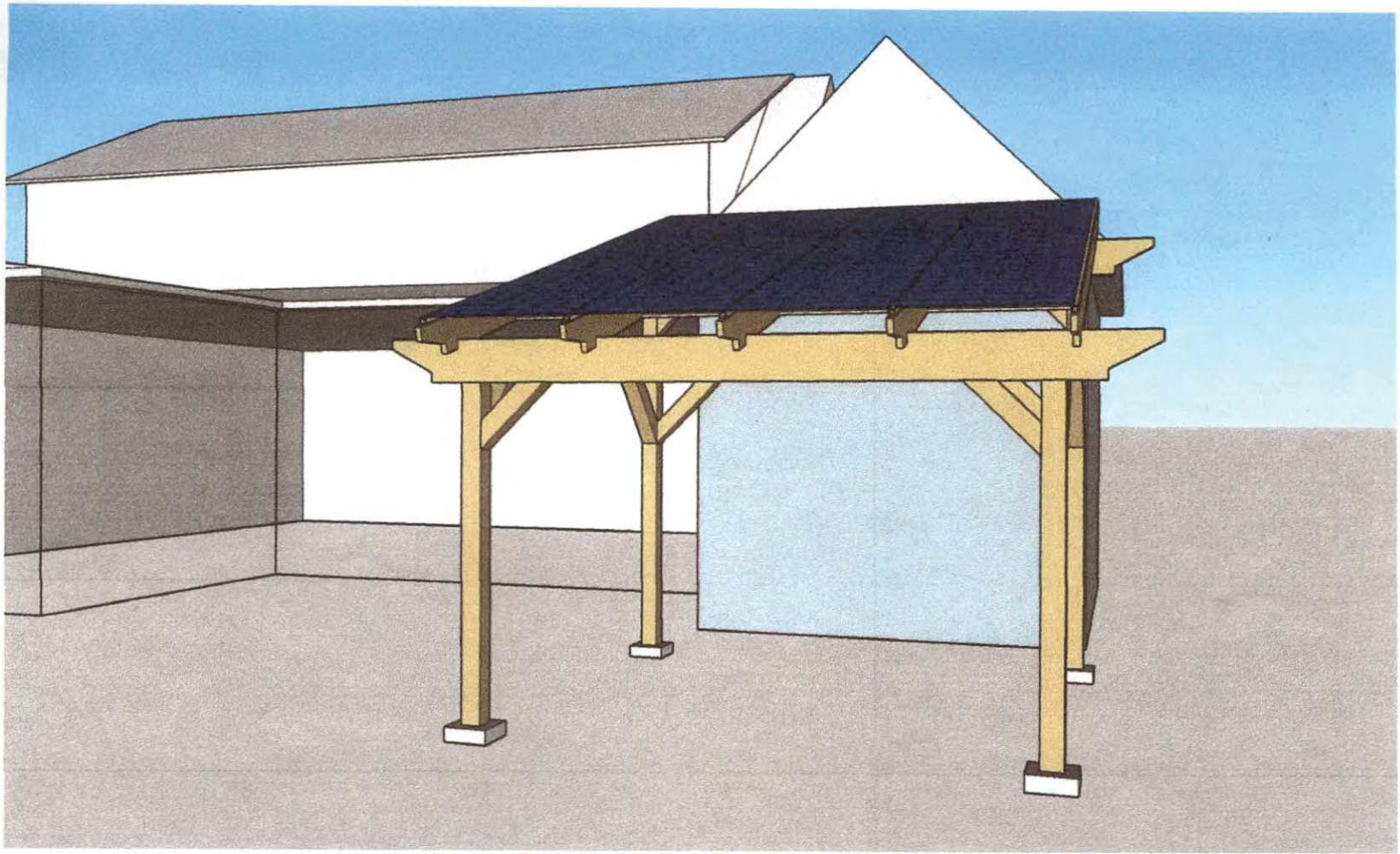


Exhibit E: Site Pictures









September 4, 2016

Mr. Christopher Marx
Dept of Community Development Services,
Planning Division
City of Urbana


Dear Mr. Marx:

This letter is to let you know that I have discussed with my neighbors, Paul and Jennifer Hixson, their desire to build a solar pergola in the area immediately behind their garage. I understand that they are required to obtain a major zoning variance to build the pergola in that location because it will be near the property line and not set back five feet from the line as current zoning standards require.

I support their application for this zoning variance and have no problems with them building the solar pergola in that location.

Thank you for taking my views into consideration when the city evaluates Mr. and Mrs. Hixson's request.

Sincerely,

 (signature)

Mark Enslin (printed name)

207 W Indiana Ave (address)
Urbana IL 61801

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Planning Division
City of Urbana

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Thank you for taking my views into consideration when the city evaluates Mr. and Mrs. Hixson's request.

Sincerely,

 (signature)

Joseph A. Clougherty
(printed name)

208 W. Michigan Ave.
(address)

September 4, 2016

Mr. Christopher Marx
Dept of Community Development Services,
Planning Division
City of Urbana

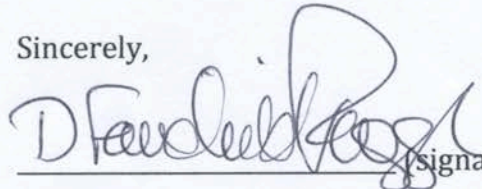
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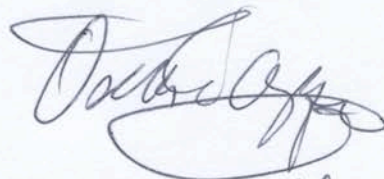
Thank you for taking my views into consideration when the city evaluates Mr. and Mrs. Hixson's request.

Sincerely,

 (signature)

D. FAIRCHILD ROGGER (printed name)

9/4/2016 (address)



Oscar E. Vazquez 9/4/2016

301 W. INDIANA AVE
URBANA, IL



Application for Variance

ZONING BOARD OF APPEALS

APPLICATION FEE – \$175.00 (Major) and \$150.00 (Minor)

The Applicants are responsible for paying the cost of legal publication fees as well. Estimated costs for these fees usually run between \$75.00 to \$225.00. The applicant is billed separately by the News-Gazette.

DO NOT WRITE IN THIS SPACE - FOR OFFICE USE ONLY

Date Request Filed _____ ZBA Case No. _____
Fee Paid - Check No. _____ Amount _____ Date _____

PLEASE PRINT OR TYPE THE FOLLOWING INFORMATION

A VARIATION is requested in conformity with the powers vested in the Zoning Board of Appeals to permit the following variation (*Describe the extent of the Variation Requested*)
Variation to build a solar pergola immediately behind, and in line with, existing garage on the property described below, and in conformity with the plans described on this variance request.

1. APPLICANT CONTACT INFORMATION

Name of Applicant(s): **Paul and Jennifer Hixson** Phone: **217 367-9852**
Address (street/city/state/zip code): **209 W. Indiana Ave., Urbana, IL 61801**
Email Address: **paulhixson@me.com jennifer.hixson@me.com**
Property interest of Applicant(s) (Owner, Contract Buyer, etc.): **Owner**

2. OWNER INFORMATION

Name of Owner(s): **Paul and Jennifer Hixson** Phone: **217 367-9852**
Address (street/city/state/zip code): **209 W. Indiana Ave., Urbana, IL 61801**
Email Address: **paulhixson@me.com jennifer.hixson@me.com**
Is this property owned by a Land Trust? ☐ Yes ☒ No
If yes, please attach a list of all individuals holding an interest in said Trust.

3. PROPERTY INFORMATION

Location of Subject Site: **209 W. Indiana Ave., Urbana, IL 61801**
PIN # of Location:
Lot Size: **60 X 135**

Current Zoning Designation: **R-2**

Current Land Use (*vacant, residence, grocery, factory, etc.*): **residence**

Proposed Land Use: **residence**

Legal Description (*If additional space is needed, please submit on separate sheet of paper*):

4. CONSULTANT INFORMATION

Name of Architect(s): **New Prairie Construction**

Phone: **217 344-5131**

Address (*street/city/state/zip code*): **605 E. Main St., Urbana, IL 61802-2817**

Email Address: **office@newprairieconstruction.com**

Name of Engineers(s):

Phone:

Address (*street/city/state/zip code*):

Email Address:

Name of Surveyor(s):

Phone:

Address (*street/city/state/zip code*):

Email Address:

Name of Professional Site Planner(s):

Phone:

Address (*street/city/state/zip code*):

Email Address:

Name of Attorney(s):

Phone:

Address (*street/city/state/zip code*):

Email Address:

5. REASONS FOR VARIATION

Identify and explain any special circumstances or practical difficulties in carrying out the strict application of the Zoning Ordinance with respect to the subject parcel.

We would like to build a solar pergola to increase the photo voltaic generation capacity on our property beyond what was recently installed on our roof. Our second goal in this project is to provide increased shade over a backyard fountain to reduce algae growth. The only location which can be used to achieve these goals is immediately behind the existing garage (the garage eave is 9" inside the property line). The width of the pergola must equal the width of the existing garage to support the desired number of panels.

Explain how the variance is necessary due to special conditions relating to the land or structure involved which are not generally applicable to other property in the same district. **Due to the shading pattern of adjacent trees (many of which are in neighbor's yards) the only location where this solar pergola can be located is immediately behind the garage (which is also where the inverter and other electronics for the rooftop solar installation are housed).**

Explain how the variance is not the result of a situation or condition that was knowingly or deliberately created by you (the Petitioner).

The garage is an existing structure. Our new pergola posts will line up with the exterior of the garage, resulting in 2 beams (one at 7'-10" to 8'-9" and one at 11'-2" to 12'-1" iheight) extending past the plane of the garage about 10" putting the farthest part of the structure within 6" of the property line. This is the only location that (a) accomodates solar shading patterns, (b) is near needed electronics, (c) retains the symmetry of our yard.

Explain why the variance will not alter the essential character of the neighborhood.

The solar pergola will be located entirely inside an existing 6' cedar privacy fence that runs along the east property line. The panels on the roof of the pergola will match the panels that were recently installed on the roof of our house and the east roof of our garage. From the east and the south, the pergola will blend in with the rooftop solar. Very little of the pergola will be visible from the front of our house (north - Indiana Ave).

Explain why the variance will not cause a nuisance to adjacent property.

Because this neighborhood was mainly built in the 1920'-30's, all of the nearby garages (including the neighbor to the east and both houses behind on Michigan were built very near the property line (see enclosed aerial image from Google maps). Since both the garages and existing fences define current property boundaries, this solar pergola will not interrupt or conflict with existing usage or appearance.

Does the variance represent the minimum deviation necessary from the requirements of the Zoning Ordinance? Explain.

As explained, the location and size were our only option for building this solar pergola. As designed, the beams of the pergola will only extend 3" further to the east than the eaves of our existing garage, and that difference will be barely noticable since they will be far above head height. Both side neighbors are in support of our request, and we see no disadvantage to any neighbor (or the neighborhood) in granting this variance.

NOTE: If additional space is needed to accurately answer any question, please attach extra pages to the application.

By submitting this application, you are granting permission for City staff to post on the property a temporary yard sign announcing the public hearing to be held for your request.

CERTIFICATION BY THE APPLICANT

I certify all the information contained in this application form or any attachment(s), document(s) or plan(s) submitted herewith are true to the best of my knowledge and belief, and that I am either the property owner or authorized to make this application on the owner's behalf.

Applicant's Signature

Date

PLEASE RETURN THIS FORM ONCE COMPLETED TO:

City of Urbana
Community Development Department Services
Planning Division
400 South Vine Street, Urbana, IL 61801
Phone: (217) 384-2440
Fax: (217) 384-2367