HISTORIC AND DESIGN REVIEW COMMISSION

October 07, 2020

HDRC CASE NO:	**2020-407**
ADDRESS:	415 W FRENCH PLACE
LEGAL DESCRIPTION:	NCB 1881 BLK 3 LOT 4
ZONING:	R-4,H
CITY COUNCIL DIST.:	1
DISTRICT:	Monte Vista Historic District
APPLICANT:	Stephanie Botello
OWNER:	JUAREZ ABELARDO A & DINA K
TYPE OF WORK:	Solar panel installation
APPLICATION RECEIVED:	September 01, 2020
60-DAY REVIEW:	Not applicable due to City Council Emergency Orders
CASE MANAGER:	Stephanie Phillips

REQUEST:

The applicant is requesting a Certificate of Appropriateness to install a solar array on the primary structure, to include 86 panels on multiple rooflines.

APPLICABLE CITATIONS:

Historic Design Guidelines, Chapter 3,Guidelines for Additions

6. Designing for Energy Efficiency
A. BUILDING DESIGN
i. *Energy efficiency*—Design additions and new construction to maximize energy efficiency.
ii. *Materials*—Utilize green building materials, such as recycled, locally-sourced, and low maintenance materials whenever possible.
iii. *Building elements*—Incorporate building features that allow for natural environmental control – such as operable windows for cross ventilation.
iv. *Roof slopes*—Orient roof slopes to maximize solar access for the installation of future solar collectors where compatible with typical roof slopes and orientations found in the surrounding historic district.
B. SITE DESIGN
i. *Building orientation*—Orient new buildings and additions with consideration for solar and wind exposure in all seasons to the extent possible within the context of the surrounding district.
ii. *Solar access*—Avoid or minimize the impact of new construction on solar access for adjoining properties.
C. SOLAR COLLECTORS
i. *Location*—Locate solar collectors on side or rear roof pitch of the primary historic structure to the maximum extent feasible to minimize visibility from the public right-of-way while maximizing solar access. Alternatively, locate solar collectors on a garage or outbuilding or consider a ground-mount system where solar access to the primary structure is limited.
ii. *Mounting (sloped roof surfaces)*—Mount solar collectors flush with the surface of a sloped roof. Select collectors that are similar in color to the roof surface to reduce visibility.
iii. *Mounting (flat roof surfaces)*—Mount solar collectors flush with the surface of a flat roof to the maximum extent feasible. Where solar access limitations preclude a flush mount, locate panels towards the rear of the roof where visibility from the public right-of-way will be minimized.

FINDINGS:

a. The primary structure located at 415 W French Pl is a 2.5-story residential structure constructed circa 1910 in the Neoclassical style. The home features a double height, wraparound front porch with Ionic columns, woodlap siding, and a standing seam metal roof with a prominent brick chimney. The structure is contributing to the Monte Vista Historic District.

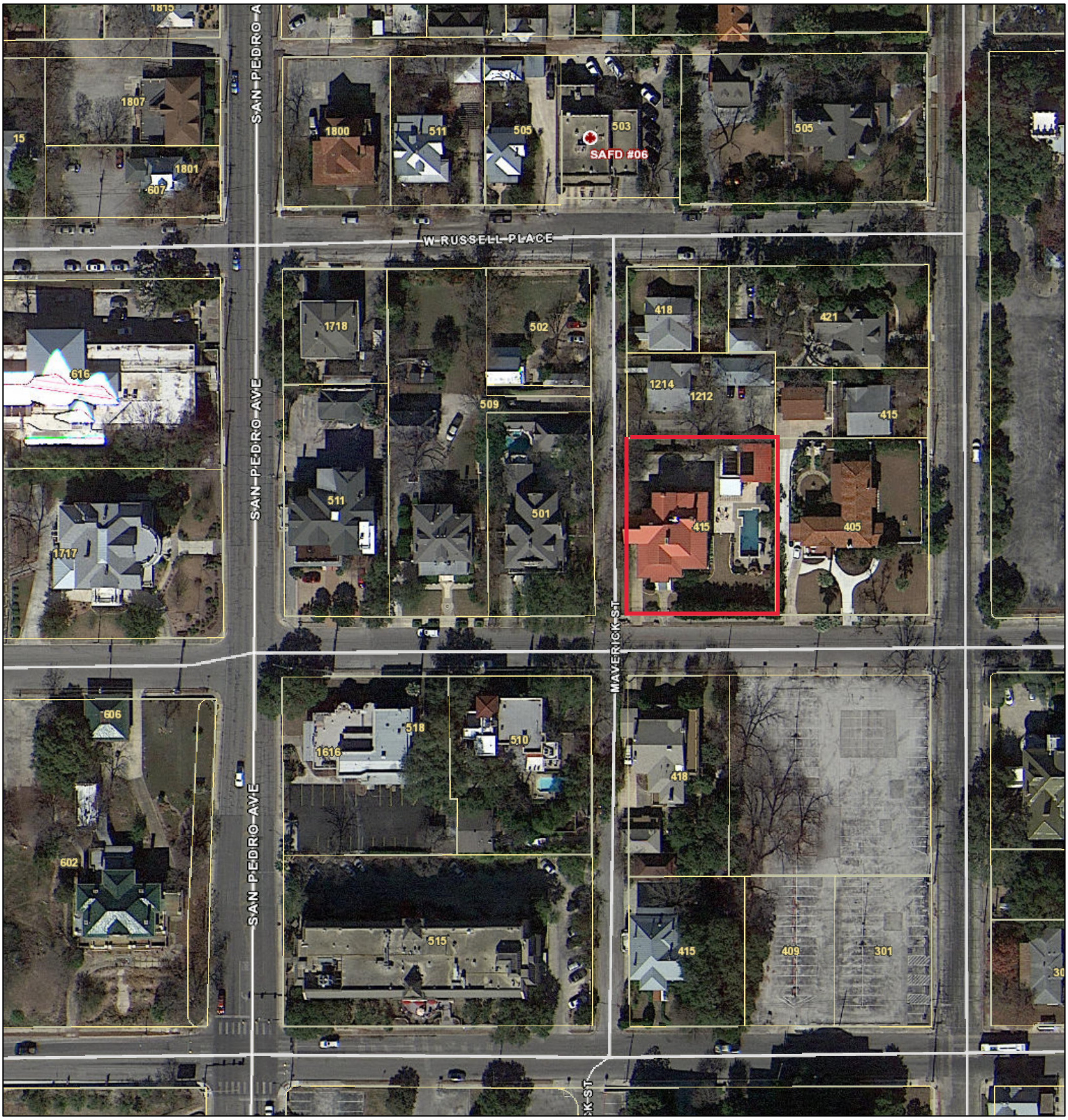
b. LOCATION – The applicant is requesting approval to install 86 solar panels on the primary structure, including the south, west, and east rooflines. According to the Historic Design Guidelines for Additions 6.C.i, solar collectors should be located on a side or rear roof pitch to the maximum extent possible to minimize the visibility from the public right-of-way. The panels on the lower roofline, which features a nearly flat pitch, will not be visible from the public right-of-way. While the panels proposed on the steeper rooflines will be partially visible, the applicant has provided photographs that illustrate how existing vegetation, including a mature hedge line along W French that is nearly the height of the primary structure, and site features will minimize additional visibility. Overall, solar panels are a reversible condition that does not adversely affect the primary structure. Staff finds the proposal appropriate.
c. PITCH – The panels will be installed flush with the roof pitch. Staff finds the proposal consistent with the Guidelines.

RECOMMENDATION:

Staff recommends approval based on findings a through c with the following stipulation:

i. That the solar panels maintain at least 18” of separation from the roof eaves and ridges.

City of San Antonio One Stop



October 2, 2020

1:1,000

0 0.01 0.02 0.04 mi

0 0.0175 0.035 0.07 km

Front of home - no solar seen from this angle

EQUIPMENT SUMMARY

(86) MODULES : QCELLS Q.PEAK DUO-G5 320 (32mm)

(86) MICRO-INVERTERS : ENPHASE IQ 7

SYSTEM RATING

27.52 kW DC STC

21.50 kW AC

ROOF DETAILS

STANDING SEAM METAL

TWO-STORY

Aggregation Panel

Solar AC Disconnect

PV Meter

Billing Meter

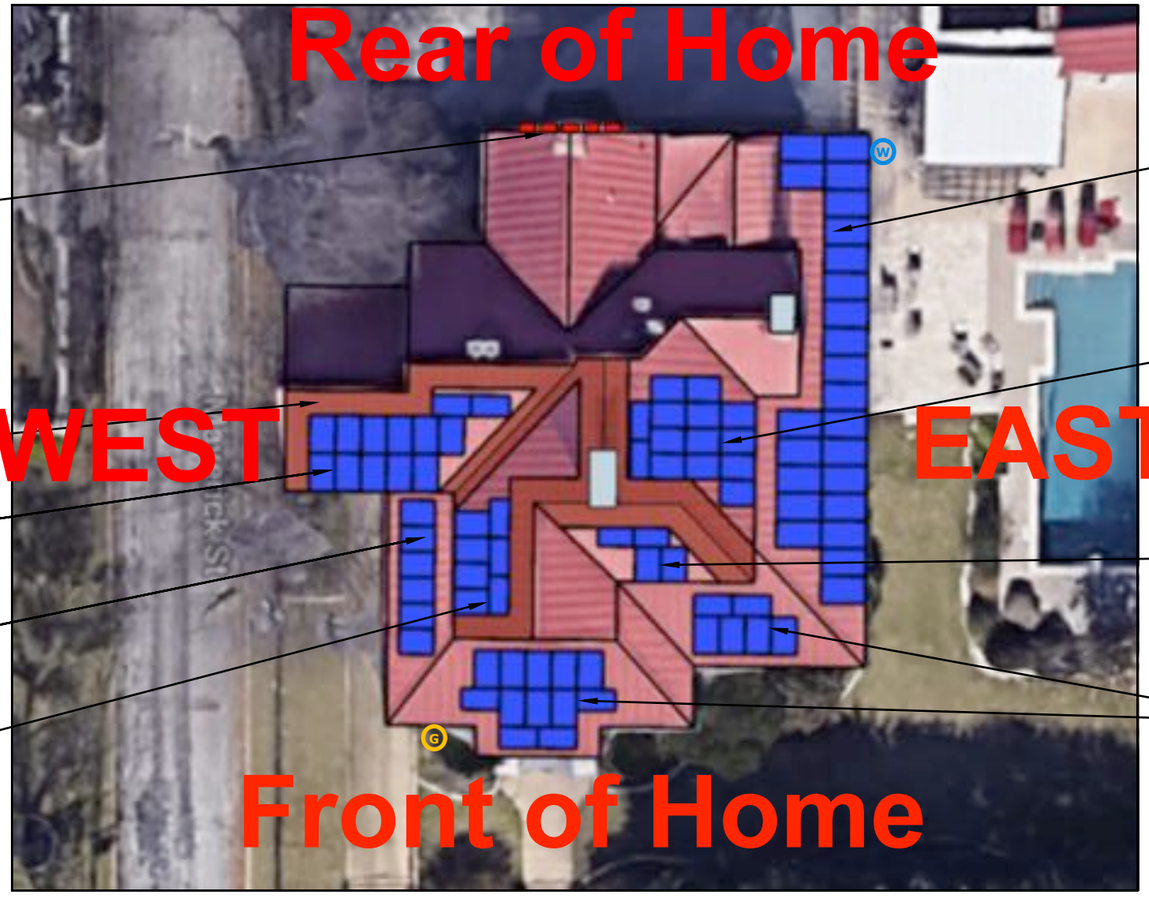
Main Service Panel

3 ft Access Paths from eaves to ridges

13 - QCELLS 320W Modules
Azimuth: 180°
Tilt: 34°

6 - QCELLS 320W Modules
Azimuth: 270°
Tilt: 5°

7 - QCELLS 320W Modules
Azimuth: 270°
Tilt: 34°



24 - QCELLS 320W Modules
Azimuth: 90°
Tilt: 5°

14 - QCELLS 320W Modules
Azimuth: 90°
Tilt: 34°

4 - QCELLS 320W Modules
Azimuth: 180°
Tilt: 34°

18 - QCELLS 320W Modules
Azimuth: 180°
Tilt: 5°

CONSTRUCTION NOTES

1.) ALL EQUIPMENT SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S INSTALLATION INSTRUCTIONS.

2.) ALL OUTDOOR EQUIPMENT SHALL BE RAIN-TIGHT WITH MINIMUM NEMA 3R RATING.

All rooftop clearances comply with 2018 IRC R324 and R806.
All rooftop installations comply with IBC 2018 articles 1503.2, 1507.2.9, 1509.7.2, and section 3403.
All working clearances comply with 2017 NEC 110.26.
The grounding system comply with 2012 CPS 1700, 2017 NEC 250, 690.4 - 690.47

NABCEP CERTIFIED
PV Installation Professional
Jay Richardson
Certification #
PV-102018-021867

N

REVISIONS		
	MM/ DD/YY	REMARKS
1	__/__/__	
2	__/__/__	
3	__/__/__	
4	__/__/__	
5	__/__/__	

SPEIR INNOVATIONS LLC

1317 FALL CREEK LOOP
CEDAR PARK, TX 78613
(512) 923-5565
TECL # 31572

PROJECT NAME:

Abe Juarez
415 W French Pl, San Antonio, TX 78212
(210) 885-1300

SHEET NAME:
SITE MAP & PV LAYOUT

SHEET SIZE:
11", 17"

DESIGNED BY:
Lucas Tenbrook

SHEET NUMBER:
PV1.1

Front/East side of home - no solar seen from this angle


East side of home - trees will make it near impossible to see any modules. If any you would see 2-3 panels in the circled area


West side of home - trees will make it near impossible to see any modules. If any you would see 2-3 panels in the circled area

Rear of home - not visible from street - only visible to homeowner as this is their parking area