

HISTORIC AND DESIGN REVIEW COMMISSION

November 06, 2019

HDRC CASE NO: 2019-599
ADDRESS: 335 NORTH DR
LEGAL DESCRIPTION: NCB 7026 BLK 5 LOT 9
ZONING: R-6,H
CITY COUNCIL DIST.: 7
DISTRICT: Monticello Park Historic District
APPLICANT: Carlos Vazquez/Rangel Renewables LLC
OWNER: CASAREZ JOSEPH C & MICHELLE
TYPE OF WORK: Installation of solar panels
APPLICATION RECEIVED: October 18, 2019
60-DAY REVIEW: December 17, 2019
CASE MANAGER: Stephanie Phillips
REQUEST:

The applicant is requesting a Certificate of Appropriateness for approval to:

1. Install nineteen (19) solar panels on the front roofline of the primary structure.
2. Install ten (10) solar panels on the rear accessory structure.

APPLICABLE CITATIONS:

Historic Design Guidelines, Chapter 3, Guidelines for Additions

6. Designing for Energy Efficiency

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:

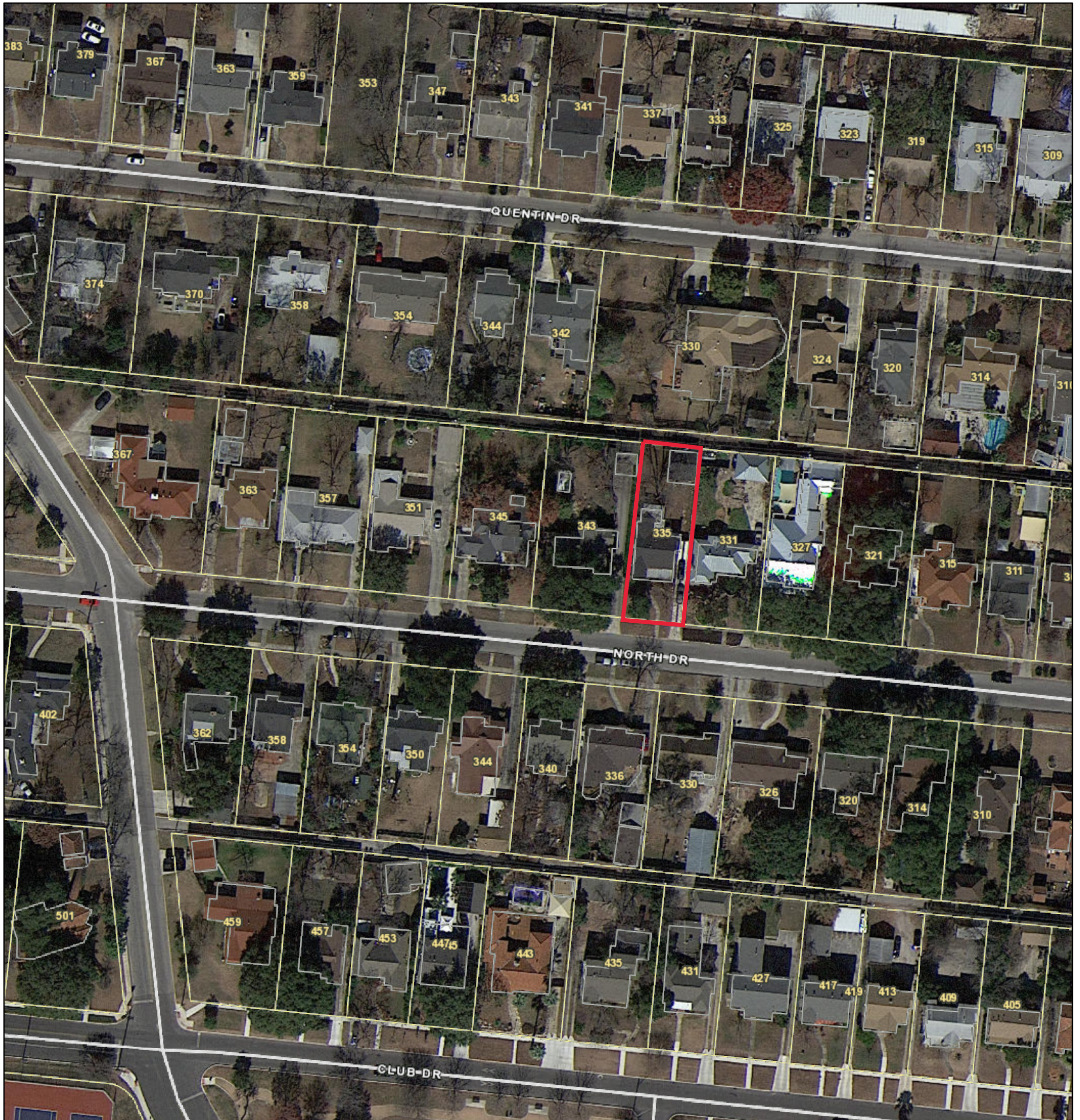
- a. The primary structure located at 335 North Dr is a 1-story single family home constructed circa 1940 in the Minimal Traditional style. The home features a primary cross gable roof form, an asymmetrical front porch, and steel casement windows. The structure is contributing to the Monticello Park Historic District.
- b. LOCATION – The applicant is requesting approval to install 19 solar panels on the south (front) façade of the primary structure and 10 solar panels on the rear accessory structure. The 19 panels on the front façade will be visible from the public right-of-way, though partially obscured by existing trees in the front yard. 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. While the panels on the primary structure will be visible from North Dr, staff finds the proposed location appropriate given their placement behind tall trees, their flush-mounted pitch, compatible color to the existing roof material, and the site-specific restrictions regarding efficient placement for maximum sun exposure.
- c. PITCH – The panels will be installed flush with the roof pitch. Staff finds the proposal consistent with the Guidelines.

RECOMMENDATION:

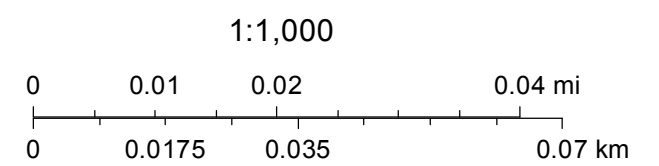
Staff recommends approval based on findings a through c with the following stipulations:

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

City of San Antonio One Stop



October 31, 2019















8,990W Solar Electric System

MISSION SOLAR MSE310SQ8T MODULES, SOLAR EDGE SE10000H-US INVERTER



- 1 Utility Meter
- 2 (N) Proposed roof-mounted photovoltaic array. 8:12 (34°) sloped roof, 12 PV modules (Black Frame, Black Backsheet), 186° azimuth
- 3 Gas Meter
- 4 Main Service Panel
- 5 (N) Proposed roof-mounted photovoltaic array. 8:12 (34°) sloped roof, 17 PV modules (Black Frame, Black Backsheet), 183° azimuth

Rangel Renewables has an A rating with the Better Business Bureau

Turnkey company that handles projects from pre-construction to commissioning.

29 - Mission Solar Panels (25 year warranty)

Est Annual Savings of \$72.81

30% Federal Tax Credit

3,000 Rebate from CPS

Project Cost: \$35,185.00 before incentives.

Project Information

Project Site	335 North Dr, San Antonio, TX 78201
Utility Company	City of San Antonio - (TX)
Electrical Service	120/240V 1Φ
ASHRAE Extreme Low	-6°C (21°F)
ASHRAE 2% High	36°C (97°F)
Climate Data Source	San Antonio International Airport (KSAT)

Electrical Properties

Electrical Code	2017 NEC (NFPA 70)
Module	Mission Solar MSE310SQ8T
Inverters	1 x Solar Edge SE10000H-US
Optimizers	Solar Edge P320 Optimizer
Array Wiring	(1) String of 19 and (1) String of 10
DC Power Rating	8,990W DC
Max. AC Output	42.0A
Est. First Year Prod.	14,270 kwh

System Components

Qty	Description
29	Mission Solar MSE310SQ8T 310W, 60 cells, 40 MM, Mono Perc
1	Solar Edge SE10000H-US 10000W Inverter
29	Solar Edge P320 Optimizer