

HISTORIC AND DESIGN REVIEW COMMISSION

April 21, 2021

HDRC CASE NO: 2021-185
ADDRESS: 406 N PINE ST
LEGAL DESCRIPTION: NCB 1373 BLK 1 LOT 8
ZONING: RM-4, H
CITY COUNCIL DIST.: 2
DISTRICT: Dignowity Hill Historic District
APPLICANT: Micah Deary
OWNER: Micah Deary
TYPE OF WORK: Installation of solar panels
APPLICATION RECEIVED: March 24, 2021
60-DAY REVIEW: Not applicable due to City Council Emergency Orders
CASE MANAGER: Edward Hall

REQUEST:

The applicant is requesting a Certificate of Appropriateness for approval to install fifteen (15) solar panels on the south facing roof slope of the new construction at 406 N Pine.

APPLICABLE CITATIONS:

Historic Design Guidelines, Chapter 4, Guidelines for New Construction

7. 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 applicant is requesting a Certificate of Appropriateness for approval to install fifteen (15) solar panels on the south facing roof slope of the new construction at 406 N Pine. The new construction was approved by the Historic and Design Review Commission on December 16, 2020.
- b. SOLAR PANELS – Per the Guidelines for New Construction 7.C.i., solar panels should be located on the side or rear roof pitch of the primary structure to the maximum extent feasible to minimize visibility from the public right of way while maximizing solar access. The applicant has proposed to mount solar panels on the south roof slips; on both a gabled slope and a shed slope. Generally, staff finds the proposed locations to be appropriate and consistent with the Guidelines.
- c. SOLAR PANELS – Per the Guidelines for New Construction 7.C.ii., applicants should 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. Staff finds that all panels should comply with the Guidelines.

RECOMMENDATION:

Staff recommends approval based on findings a through c with the stipulation that the solar panels be mounted flush with each roof slope and feature colors that are similar to the roof surface.

[illegible]

1:1,000

0 0.0075 0.015 0.03 mi

0 0.0125 0.025 0.05 km



NOT A CITY DOCUMENT

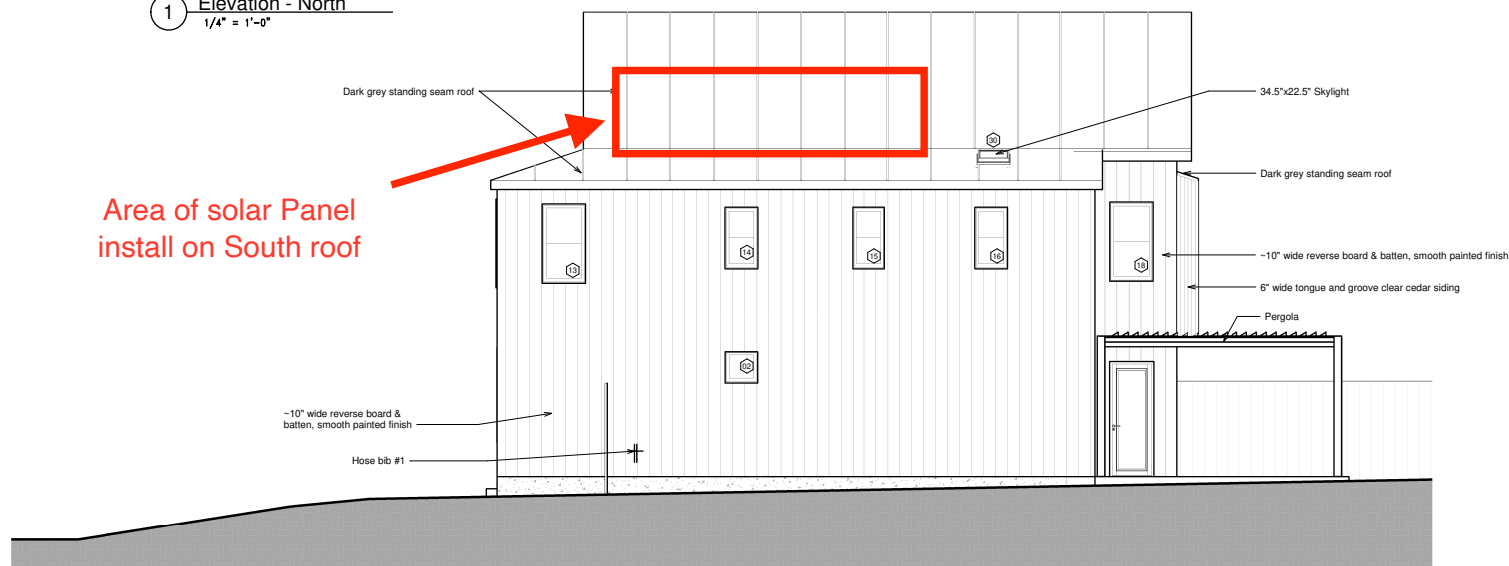
406 N Pine Street
San Antonio, TX
78202

ELEVATION
A202

1/4" = 1'-0"

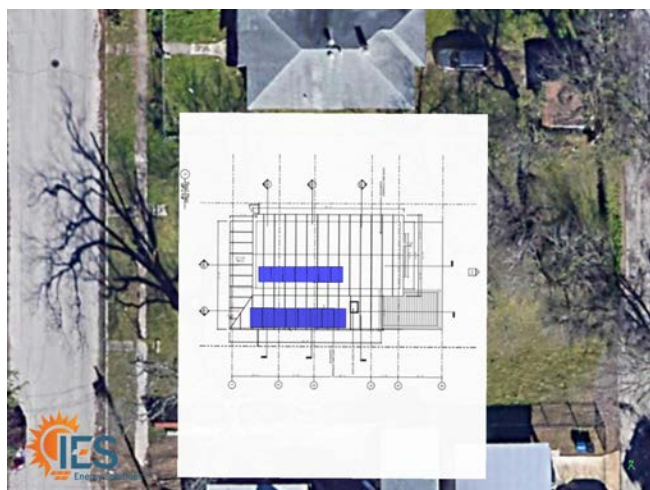


1 Elevation - North
1/4" = 1'-0"



2 Elevation - South
1/4" = 1'-0"

Your Solar Array



Solar PV System

Micah Deary

406 N Pine St.

San Antonio, Texas 78202

Size

4.80kW DC

Annual Production

7,372 kWh

Utility

CPS Energy

SYSTEM SIZE AND PRODUCTION



4.80 kW

PV System



15

Solar Modules



\$764

Saved First Year



9,435 kWh

Your Annual
Usage



7,372 kWh

First Year
Production



78.13%

Energy Offset
Usage

The Cost of Doing Nothing

Just as impactful as the cost of purchasing solar is the cost of not purchasing solar.

Every MONTH

you wait to buy solar,

you “waste” an average of \$64

paying your electric company instead of buying your Energy Independence.

Levelized Cost of Energy

The levelized cost of energy, or LCOE, is the total cost of energy divided by the total energy over a period of time. Since you only pay for the solar one time, its lifetime production divided by the net cost of the system provides the Solar LCOE. From your utility company, the cost of energy will continue to rise over time.

Buying solar now locks you in at a kWh rate of less than \$0.05 for the next 25-Years.



\$7,730

Net Cost



173,652 kWh

25-Year Estimated Production



\$0.04/kWh

25-Year Solar LCOE



\$27,781

25-Year Utility Payments



173,652 kWh

25-Year Estimated Usage



\$0.16/kWh

25-Year Utility LCOE

*Savings figures assumes an annual utility escalator rate of 3.5% and an annual decrease in PV system output of .5%. Savings figures are a conservative estimate based on historical trends and anticipated market increases according to the US Department of Energy. Additional information can be found at https://www.eia.gov/electricity/monthly/epm_table_grapher.php?t=epmt_5_6_a

You're Going Green!

Your Positive Environmental Impact over 25 Years



**Avoiding 300,176
Miles Driven**



**Carbon
Sequestered By
144 Acres of Forest**



**Avoiding 7 Tons of
Coal Burned**



**Avoiding 13,815
Gallons of
Gasoline
Consumed**



**Offsetting 123
Tonnes of
Greenhouse
Gasses**



**Equivalent to 43
Tons of Waste
Recycled**

Marketing Support



Yard Sign

Show off that you've gone green! We'll install a free yard sign which showcases how you're Solar Powered by IES Energy Solutions.



KIOSK

We can also install a kiosk display to show off your solar production and environmental offset as people walk into your facility.



QR CODE

We will create customer QR codes for you so that when people scan your system you are tracked and get referral rewards for your customers.

The IES Energy Solutions Difference

NABCEP®

Raising Standards. Promoting Confidence.



Professionally Certified PV Engineering

Our extensive staff of skilled and certified PV Engineers are here to meet your exact needs. NABCEP (North American Board of Certified Energy Practitioners) is the most recognized and esteemed certification the solar industry has to offer.

The IES Energy Solutions Promise

We understand that this is a major investment for you. We assure you that IES will be there to provide you the level of service from planning through commissioning to long term support that you need to enjoy the benefits of solar for years to come. We provide production monitoring so you can view your past or present energy production from the convenience of your mobile device or computer.

The IES Longevity

Most solar companies that you are dealing with have not been around even ½ the lifespan of the warranty they are promising you, many come and go in a span of a few years. IES has been in continuous operation for 47-Years and is a publicly traded company. We will be here to service your system long after the competition has come and gone.



Consultative Design Process

You are our first priority every step of the way. Through our consultative process, we work with you to design the perfect solar array for your needs.



Turnkey Process

It's our responsibility to take care of the entire process. We'll keep you up-to-date on our progress and answer any questions you may have along the way.



Simply the Best

Everything, from our team of experts to the materials we use, are the absolute highest quality. The entire process is streamlined so you have a fantastic experience, minimal time commitment, and a high-caliber array that will generate power for decades to come.

System Summary

Quote #:101968R1

March 11, 2021 | QUOTATION VALID FOR 30 DAYS Pricing
Subject to Change Upon Expiration

Micah Deary

406 N Pine St.
San Antonio, Texas 78202

Size

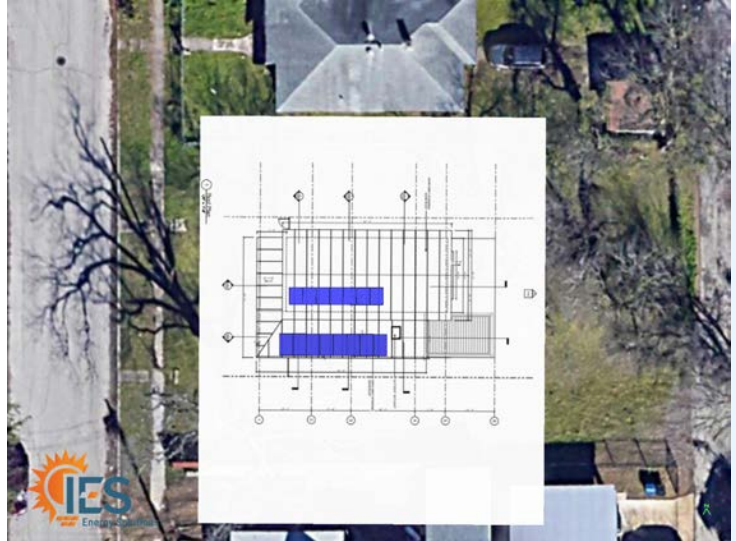
4.80kW DC

Annual Production

7,372 kWh

Utility

CPS Energy



Qty	Description
1	<ul style="list-style-type: none">➤ System To Be No Less Than 4.80 kW DC Installed Capacity with Mission Modules (Black Frame and Black Back sheet)➤ Enphase IQ7+ Microinverters with 25-Year Warranties & Rapid Shutdown Compliance➤ Enphase Online Monitoring<ul style="list-style-type: none">◆ Broadband Internet Connection Required for Remote Monitoring➤ Non-Penetrating Racking System for Standing Seam Metal Roof➤ All Associated Internal Electrical Components and Connections for PV System Interconnection➤ Interconnection Agreement Application Preparation and Submission➤ Wiring Diagram/Construction Plans➤ All Associated Building Permits Applications➤ IES Electrical Contractor Discount