

**CITY OF FORNEY AGENDA
ARCHITECTURAL REVIEW BOARD
THURSDAY, MARCH 19, 2020, 6:00 P.M.
CITY HALL (COUNCIL CHAMBERS), 101 E. MAIN STREET, FORNEY, TX 75126**

1. Call Meeting To Order
2. Consent Items
 - 2.1. Consider Approval Of The Minutes Of The February 20, 2020 Architectural Review Board Meeting.

Documents:

[FEBRUARY 20 MINUTES.PDF](#)

3. Public Hearing Items
 - 3.1. Hold A Public Hearing And Discuss And Consider Approval Of A Request For A Certificate Of Appropriateness, In Accordance With The Historic Overlay Zone District Regulations, For Exterior Changes To The Main Structure Located At 512 S. Center Street.

Documents:

[ITEM SUMMARY-512 S CENTER STREET.PDF](#)
[EXHIBITS-512 S CENTER STREET.PDF](#)

4. Adjournment

This facility is wheelchair accessible and accessible parking spaces are available. Requests for accommodations or interpretive services must be made 48 hours prior to this meeting. Please contact the Community Development office at 972-564-7386 or FAX 972-552-1538 for further information. Braille is not available.

CERTIFICATE

I, Alex Christopher Dixon, do hereby certify that this Agenda was posted at City Hall, in a place readily accessible to the general public at all times, on the 6th day of March, 2020, at 5:00 p.m. and remained so posted for at least 72 continuous hours preceding the scheduled time of said meeting.



MINUTES
ARCHITECTURAL REVIEW BOARD MEETING
Thursday, February 20, 2020 – 6:00 p.m.
Forney City Hall
101 East Main Street

I. CALL TO ORDER

Richard Cunningham called the meeting to order at 6:01 PM. Present were board members and alternates Richard Cunningham, Richard Hansen, Andy Parker, Brandon Gladney and Sandy Blair. Also, present were Senior City Planner Alex Dixon and Board Secretary Gladis Saldana. Board member Kendall Milton was absent.

II. CONSENT ITEMS

1. Consider approval of the minutes of the November 12, 2019 Architectural Review Board meeting.

Christie Conaway made a motion to approve the minutes and Andy Parker seconded. The motion passed by a vote of 4 ayes (Cunningham, Conaway, Parker and Gladney) and 0 nays.

Andy Parker made a motion to open public hearing. Christie Conaway seconded the motion. The motion passed by a vote of 4 ayes (Cunningham, Conaway, Parker and Gladney) and 0 nays.

Board member Richard Hansen entered the meeting at 6:03 p.m.

III. PUBLIC HEARING ITEMS

1. Hold a public hearing and discuss and consider a request for a certificate of appropriateness, in accordance with the Historic Overlay Zone District regulations, for changes to the property at 210 S. Bois D'Arc Street.

Director Peter Morgan introduced the item and explained that the property owner is requesting a new rear door and new paint for the rear awning and siding of the structure. Staff recommended approval of the request. There was no public comment. Andy Parker made a motion to close public hearing. Christie Conaway seconded the motion. The motion passed by a vote of 5 ayes and 0 nays. Following a brief discussion Brandon Gladney made a motion to approve the request. Andy Parker seconded the motion. The motion passed by a vote of 5 ayes (Cunningham, Hansen, Conaway, Parker and Gladney) and 0 nays. Due to Sandy Blair owning property within 200 feet of the property, Ms. Blair was unable to participate in any discussion or vote on this item.

IV. ADJOURNMENT

There being no further business to bring before the board, Richard Cunningham adjourned the meeting at 6:06 p.m.

PASSED AND APPROVED BY THE ARCHITECTURAL REVIEW BOARD OF THE CITY OF FORNEY, TEXAS, THIS 19th DAY OF MARCH, 2020.

Richard Cunningham, Chair

ATTEST:

Gladis Saldana, City of Forney



Architectural Review Board Agenda Item Summary Report

Meeting Date: March 19, 2020	Submitted by: A.C. Dixon
Item Title:	
Hold a public hearing and discuss and consider approval of a request for a certificate of appropriateness, in accordance with the Historic Overlay Zone district regulations, for exterior changes to the main structure located at 512 S. Center Street.	
Consent Item [<input type="checkbox"/>] Public Hearing Item [X] Action Item [<input type="checkbox"/>]	Documentation Attached: Plan Photographs
Item Summary:	
<p>Good Faith Energy, representing the property owner, requests to add solar panels to the roof of the main structure of 512 S. Center Street.</p> <p>The Historic Overlay Zone district regulations provide guidance for the Board to make decisions regarding requests. Section 34e10.A(4) states that:</p> <p><i>“Upon review of the application and consideration of all testimony presented during the public hearing, the ARB shall determine whether the proposed work is of a nature which will adversely affect:</i></p> <ul style="list-style-type: none"> <i>(a) Any historical, architectural, archaeological, or cultural feature of the building or structure; or</i> <i>(b) The future preservation, maintenance and use of the HOZ District.”</i> <p>Certificate of approval guidelines, noted in Section 34e10.A(7), states that installing solar panels on those portions of the roof that are not visible from the street and/or sidewalks is recommended.</p> <p>Staff provided public hearing notification in the Forney Messenger Newspaper and to the owners of properties located adjacent to the request.</p> <p>Staff recommends that the panels on Array D be moved to other arrays so that they are not able to be seen from the street.</p>	

GOOD FAITH ENERGY

MASTER ELECTRICIAN MICHAEL SOLANO
TOLR 408313

P-408-209-5810

PROJECT NAME

JESS MOORE

512 South Center Street,
Forney, TX 75128 USA

Utility: Oncor - ESID:
10443720004892368

JURISDICTION
FORNEY

DRAWING NOTES

PHOTOVOLTAIC SOLAR MODULE
MFG/MODEL PANASONIC VBHN340SA17
MODULE RATED AT 340 W
MULTIPLY BY QTY. OF MODULES 42
ARRAY SYSTEM SIZE 14.3 kW
SYSTEM AZIMUTH 214°
ROOF PITCH 5°
MOUNTING HEIGHT 1 - STORY

ORIENTATION OPTIONS ARE PRELIMINARY
AND ARE SUBJECT TO REVISION FOR
OPTIMAL USE.

SOLAR ARRAY LOCATIONS ARE TO BE
REVIEWED AND APPROVED BY OWNER
AND/OR ARCHITECT OF RECORD TO VERIFY
SYSTEM LOCATION, FOR VENTILATION
OBSTRUCTION AND POSSIBLE RELOCATION
OF VENT AND/OR PIPE JACKS

FIELD VERIFICATION OF ROOF STRUCTURE
AND SOLAR ARRAY LOCATION IS REQUIRED
PRIOR TO INSTALLATION FOR ALL EXISTING
STRUCTURES WHERE NEW SOLAR ARRAYS
ARE TO BE INSTALLED.

ARCHITECT/FIELD DRAWING INFORMATION

REV	DESCRIPTION	DATE

PLAN

PV-1

DRAWN BY JMF

DRAWN DATE 7/31/2020



151 W. UNIVERSITY BLVD., STE. 101 FORT WORTH, TEXAS 76102
PHONE: 817.735.1775 FAX: 817.735.1775
WWW.VECTORENGR.COM

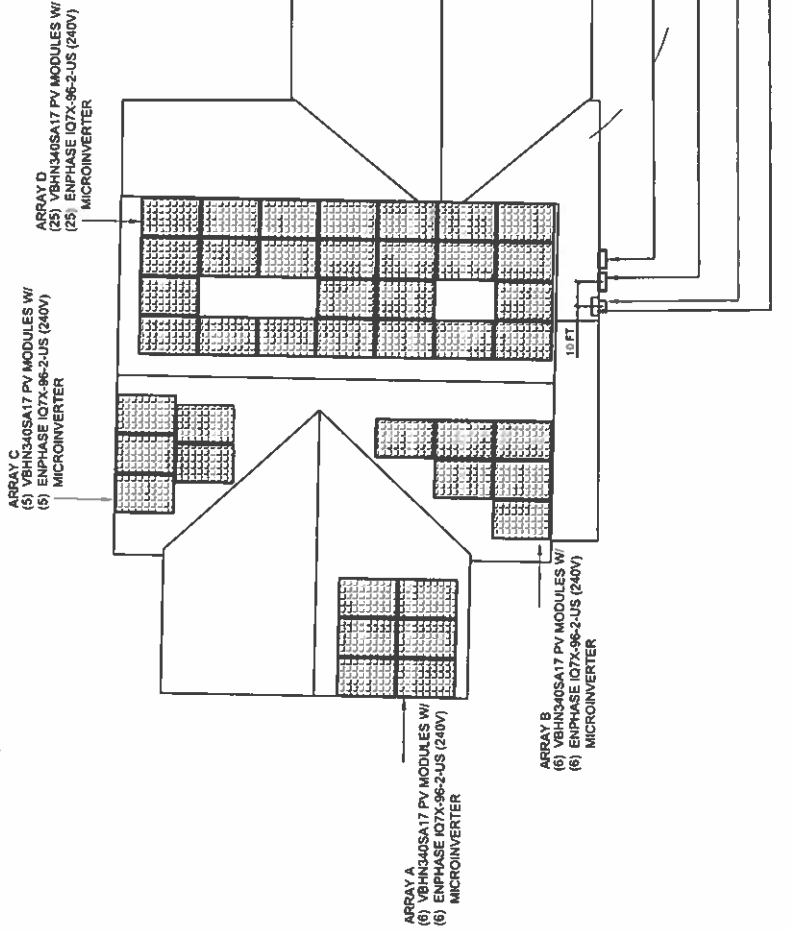


02/04/2020

Firm License Number: F11411

VSE Project Number: U3498.0039.201

Vector Structural Engineering has reviewed the existing structure with loading from the solar array and lag screw connections to the roof structure. The design of the existing system, connections, and lag screws are in accordance with the applicable code and all other nonstructural aspects of the design are by others. Electrical is by others, unless stamped by Dean Lawson.



1 PLOT PLAN
SCALE: 1/16" = 1'-0"

SHEET INDEX

- PV-1 PLOT PLAN
- PV-2 SOLAR LAYOUT
- PV-3 STRING DIAGRAM
- PV-4 ATTACHMENT DETAILS
- PV-5 ELECTRICAL LINE DIAGRAM

NOTES:

- SYSTEM FOLLOWS ANY/ALL FIRE CODE SETBACKS PER ORDINANCES OF THE CITY OF FORNEY.
- ALL PROJECTS WILL COMPLY WITH THE ORDINANCES OF THE CITY OF FORNEY.
- PRODUCT DATA SHEETS WILL BE INCLUDED.
- ALL SIGNATURE TO BE PLACED IN ACCORDANCE WITH LOCAL BUILDING CODE.
- AREA OF ARRAY A: 780 SQ. FT.

SCOPE OF WORK

INSTALL A 14.3kW GRID-TIED PHOTOVOLTAIC SOLAR SYSTEM TOTALING (42) PANASONIC VBHN340SA17 SOLAR MODULES WITH (42) ENPHASE I07X-96-2-US (240V) MICROINVERTER AND FLUSH MOUNTED ON A ASPHALT SINGLE ROOF AND INTERCONNECTED VIA MAIN LOAD CENTER

CODE COMPLIANCE

- ALL SUPPLIED EQUIPMENT IS UL LISTED
- 2014 NATIONAL ELECTRIC CODE
- 2015 INTERNATIONAL RESIDENTIAL CODE
- 2015 INTERNATIONAL BUILDING CODE
- 2015 INTERNATIONAL FIRE CODE

GOOD FAITH ENERGY

MASTER ELECTRICIAN MICHAEL SOLANO
TDLR #48613

P 409-209-5910

PROJECT NAME

JESS MOORE

512 South Center Street,
Fomey, TX 75128 USA

Utility/Orcor - ESID:
10443720004992368

JURISDICTION
FORNEY

DRAWING NOTES

PHOTOVOLTAIC SOLAR MODULE
MFG/MODEL PANASONIC VBHN340SA17

MODULE RATED AT 340 W

MULTIPLY BY QTY OF MODULES 42

ARRAY SYSTEM SIZE 14.3 KW

SYSTEM AZIMUTH 214°

ROOF PITCH 5°

MOUNTING HEIGHT 1 - STORY

ORIENTATION OPTIONS ARE PRELIMINARY,
AND ARE SUBJECT TO REVISION FOR
OPTIMAL USE.

SOLAR ARRAY LOCATIONS ARE TO BE
REVIEWED AND APPROVED BY OWNER
AND/OR ARCHITECT OF RECORD TO VERIFY
SYSTEM LOCATION, FOR VENTILATION
OBSTRUCTION AND POSSIBLE RELOCATION
OF VENT AND/OR PIPE JACKS.

FIELD VERIFICATION OF ROOF STRUCTURE
AND SOLAR ARRAY LOCATION IS REQUIRED
PRIOR TO INSTALLATION FOR ALL EXISTING
STRUCTURES WHERE NEW SOLAR ARRAYS
ARE TO BE INSTALLED.

ARCHITECT/FIELD DRAWING INFORMATION

REV DESCRIPTION DATE

DATE

PLAN

PV-2

DRAWN BY: JMF

DRAWN DATE: 27/07/2020

PV SOLAR MODULE SPECIFICATIONS

MODEL: PANASONIC VBHN340SA17
WEIGHT: 40.81 LBS
WIDTH: 41.5"
LENGTH: 62.6"

MAX. ROOF LOAD: 2.27 LBS/SQFT

ARRAY A
APPROX. # OF ATTACHMENTS: 87
AREA: 780 SQ. FT.

SOLAR MODULE/INVERTER MANUFACTURER AND QUANTITY:

(42) PANASONIC VBHN340SA17

(42) ENPHASE IQ7X-96-2-US 240V MICROINVERTER

ARRAY D
(25) VBHN340SA17 PV MODULES W/
(25) ENPHASE IQ7X-96-2-US (240V)
MICROINVERTER

ARRAY C
(5) VBHN340SA17 PV MODULES W/
(5) ENPHASE IQ7X-96-2-US (240V)
MICROINVERTER

(6) VBHN340SA17 PV MODULES W/
(6) ENPHASE IQ7X-96-2-US (240V)
MICROINVERTER

ARRAY B
(6) VBHN340SA17 PV MODULES W/
(6) ENPHASE IQ7X-96-2-US (240V)
MICROINVERTER

NOTE:
*VISIBLE, LOCKABLE, LABELED AC
DISCONNECT TO BE LOCATED
WITHIN 10' OF UTILITY METER

(N) AC COMBINER

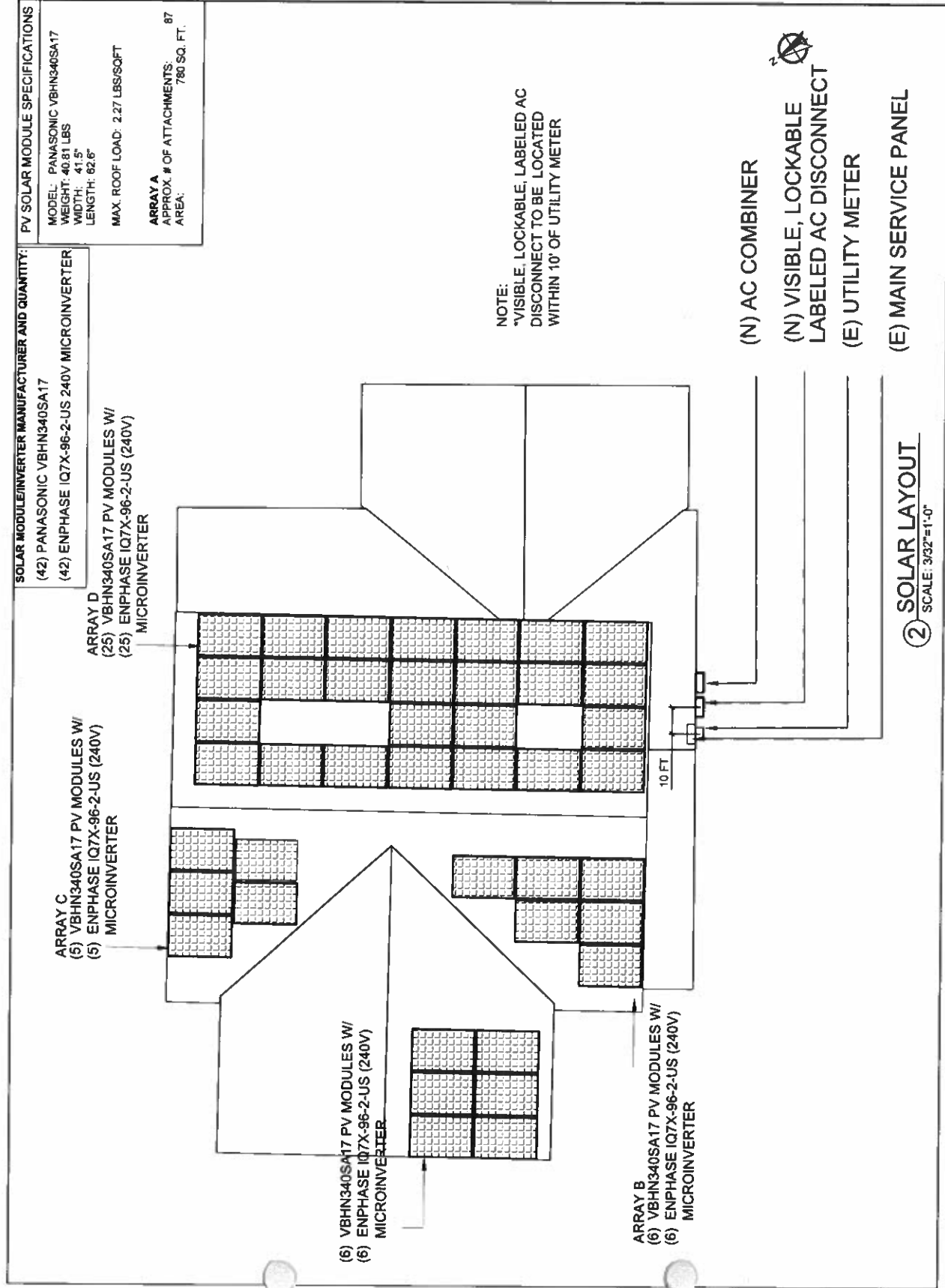
(N) VISIBLE, LOCKABLE
LABELED AC DISCONNECT

(E) UTILITY METER

(E) MAIN SERVICE PANEL

② SOLAR LAYOUT

SCALE: 3/32"=1'-0"



GOOD FAITH ENERGY
 MASTER ELECTRICIAN: MICHAEL SOLANO
 TOLR: 408313
 P: 480-206-5910

JESS MOORE
 512 South Center Street,
 Forney, TX 75126 USA
 Utility: Oncor - ESID:
 10443720004992368
 JURISDICTION
 FORNEY

DRAWING NOTES
 PHOTOVOLTAIC SOLAR MODULE
 MFG/MODEL: PANASONIC VBHN340SA17
 MODULE RATED AT: 340 W
 MULTIPLY BY QTY. OF MODULES: 42
 ARRAY SYSTEM SIZE: 14.3 kW
 SYSTEM AZIMUTH: 214°
 ROOF PITCH: 5°
 MOUNTING HEIGHT: 1-STORY
 ORIENTATION OPTIONS ARE PRELIMINARY
 AND ARE SUBJECT TO REVISION FOR
 OPTIMAL USE
 SOLAR ARRAY LOCATIONS ARE TO BE
 REVIEWED AND APPROVED BY OWNER
 PRIOR TO INSTALLATION. CONTACT THE
 SYSTEM LOCATION FOR ANY OBSTRUCTIONS
 OR POSSIBLE RELOCATION
 OF VENT AND/OR PIPE JACKS
 FIELD VERIFICATION OF ROOF STRUCTURE,
 AND SOLAR ARRAY LOCATION IS REQUIRED
 PRIOR TO INSTALLATION FOR ALL EXISTING
 STRUCTURES WHERE NEW SOLAR ARRAYS
 ARE TO BE INSTALLED.

REV	DESCRIPTION	DATE

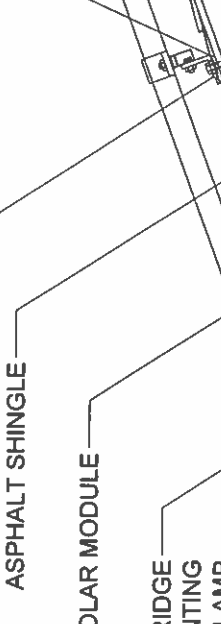
PLAN
PV-4
 DRAWN BY: JMF
 DRAWN DATE: 2/7/2020

PHOTOVOLTAIC MODULE SPECIFICATIONS
 PANASONIC VBHN340SA17
 WEIGHT: 40.81 LBS
 WIDTH: 41.5"
 LENGTH: 62.6"
 MAX. ROOF LOAD: 2.27 LBS/SQFT

SOLAR MODULE/INVERTER MANUFACTURER AND QUANTITY:
 (42) PANASONIC VBHN340SA17
 (42) ENPHASE IQ7X-96-2-US 240V MICROINVERTER

ALL PLAQUES AND SIGNAGE REQUIRED BY THE LATEST EDITION OF NATIONAL ELECTRICAL CODE, WILL BE INSTALLED AS REQUIRED
 ALTERNATE POWER SOURCE PLACARD SHALL BE METALLIC OR PLASTIC, ENGRAVED OR MACHINE PRINTED LETTERS IN A CONTRASTING COLOR TO THE PLAQUE. THIS PLAQUE WILL BE ATTACHED BY POP RIVETS OR SCREWS OR OTHER APPROVED METHOD IF EXPOSED TO SUNLIGHT, IT SHALL BE UV RESISTANT
 PHOTOVOLTAIC DC CONDUCTORS ENTERING THE BUILDING SHALL BE INSTALLED IN METAL CONDUIT AND THE CONDUIT SHALL BE LABELED, "CAUTION DC CIRCUIT" OR EQUIVALENT EVERY 5 FT.
 EXPOSED NON-CURRENT CARRYING METAL PARTS OF MODULE FRAMES, EQUIPMENTS, AND CONDUCTOR ENCLOSURES SHALL BE GROUNDED IN ACCORDANCE WITH 250.134 OR 250.138(A) REGARDLESS OF VOLTAGE.
 EACH MODULE SHALL BE GROUNDED USING THE SUPPLIED CONNECTION POINT IDENTIFIED ON THE MODULE AND THE MANUFACTURER'S INSTRUCTIONS.
 IF THE EXISTING GROUNDING ELECTRODE SYSTEM CAN NOT BE VERIFIED OR IS ONLY METALLIC WATER PIPING, IT IS THE CONTRACTOR'S RESPONSIBILITY TO INSTALL A SUPPLEMENTAL GROUNDING ELECTRODE
 ALL SOLAR MODULES, EQUIPMENT AND METALLIC COMPONENTS ARE TO BE BONDED

VECTOR ENGINEERS
 6817 W. PARKWAY, SUITE 101, FORT WORTH, TEXAS 76116
 PHONE: (817) 990-1775
 WWW.VECTORENGR.COM



IRONRIDGE L-FOOT
ASPHALT SHINGLE
SOLAR MODULE
IRONRIDGE MOUNTING CLAMP
IRONRIDGE FLASHFOOT
IRONRIDGE XR 100 RAIL, TYP.
5°
5/16" x 3 1/2" SS LAG BOLT INTO RAFTER(S) 2 1/2" MIN. EMBEDMENT SEALED W/GEOCEEL.

IRONRIDGE L-FOOT W/ FLASHFOOT MOUNTING SYSTEM
 SCALE: 1-1/2"=1'-0"

Firm License Number: F11411
 VSE Project Number: U3498.0039.201
 Vector Structural Engineering has reviewed the existing structure with bearing from the solar array and lag screw connections to the rafters. The design of the mounting system, connections, and all other non-structural aspects of the design are by others. Electrical is by others, unless stamped by Dean Leveson

LABELS
 NEC 690.31(H) - AT THE INVERTER
WARNING
 THE DISCONNECT OF THE GROUNDED CONDUCTOR(S) MAY RESULT IN OVERVOLTAGE ON THE EQUIPMENT
 NEC 690.13(B) - ON AC DISCONNECT/BREAKER/POINTS OF CONNECTION
 AC PHOTOVOLTAIC DISCONNECT
 NEC 690.13(B) - AT JUNCTION BOX/COMBINER BOXES/BREAKER PANEL/POLE BOX/AC DISCONNECT/MAIN SERVICE DISCONNECT
WARNING
 ELECTRICAL SHOCK HAZARD DO NOT TOUCH THE LINE AND LOAD BOLD MAY BE ENERGIZED IN THE OPEN POSITION
 NEC 690.13(C) - AT JUNCTION BOX/COMBINER BOXES/BREAKER PANEL/POLE BOX/AC DISCONNECT/MAIN SERVICE DISCONNECT
 TURN OFF PHOTOVOLTAIC DISCONNECT PRIOR TO WORKING INSIDE PANEL
 PHOTOVOLTAIC SYSTEM AC
 SYSTEM IDENTIFICATION TAG
 MAX. AC OUTPUT CURRENT: 70A
 OPERATING AC VOLTAGE: 240V
 NEC 690.54 - ON AC DISCONNECT/BREAKER/ POINT OF INTERCONNECTION/BREAKER PANEL/UL LISTED BOXES
 OPERATING AC VOLTAGE: 240 V
 OPERATING AC FREQUENCY: 60 HZ
 MAXIMUM AC POWER: 13.2kW
 MAXIMUM AC CURRENT: 88.76A
 MAXIMUM COPD RATING: 70A
 NEC 705.12(B)(2)(G) - BY BREAKER AT DISTRIBUTION EQUIPMENT:
WARNING
 POWER SOURCE IS PHOTOVOLTAIC SYSTEM DO NOT RELOCATE THIS OVERCURRENT DEVICE
 NEC 690.13(F) - AT MAIN SERVICE DISCONNECT
CAUTION
 PHOTOVOLTAIC SYSTEM IS ENERGIZED
 NEC 690.31(G)(3)(4) - ON CONDUIT
WARNING PHOTOVOLTAIC POWER SOURCE
 NEC 705.12(D)(3), NEC 690.59 - PRODUCTION/METER (BI-DIRECTIONAL)/MAIN SERVICE DISCONNECT
WARNING DUAL POWER SOURCE
 SECOND SOURCE IS PHOTOVOLTAIC SYSTEM
 NEC 690.31(B) - AT MAIN SERVICE DISCONNECT/AUTILITY METER
MAIN PHOTOVOLTAIC SYSTEM DISCONNECT
 NEC 690.15(C) & 690.30(E)(2) - AT MAIN SERVICE DISCONNECT
DO NOT DISCONNECT UNDER LOAD

PLAQUES SHALL BE PLASTIC ENGRAVED IN A CONTRASTING COLOR TO THE PLAQUE. PLAQUE SHALL BE ATTACHED TO THE SERVICE EQUIPMENT WITH POP-RIVETS OR ADHESIVE

CALCULATIONS FOR CURRENT CARRYING CONDUCTORS

Max Branch AC required conductor ampacity
 Branch 1, (10) Solar Panels: $(1.31)(10)(1.25) = 16.8A$
 Branch 2, (10) Solar Panels: $(1.31)(10)(1.25) = 16.8A$
 Branch 3, (11) Solar Panels: $(1.31)(11)(1.25) = 18.8A$
 Branch 4, (11) Solar Panels: $(1.31)(11)(1.25) = 17.3A$

AWG# 10, derated ampacity: $(40)(0.80)(0.65) = 20.8 A$
 $20.8 A > 17.3A$, therefore AC wire size is valid

Combined System AC required conductor ampacity
 (42 Solar Panels): $(1.31)(42)(1.25) = 68.78A$

AWG # 4, derated ampacity: $(95)(0.87)(1) = 82.656 A$
 $82.65 A > 68.78 A$, therefore AC wire size is valid

AC DISCONNECT
UL 1741, NEMA 3R
100A, 240V, 70A FUSE
JUNCTION BOX
600V, UL E42728
NEMA 3, 4, 4X, 6, 12, 13

SOLAR MODULE/INVERTER MANUFACTURER AND QUANTITY:

(42) PANASONIC VBHN340SA17
 (42) ENPHASE IQ7X-96-2-US 240V MICROINVERTER

GOOD FAITH ENERGY

MASTER ELECTRICIAN MICHAEL SOLANO
 TDLR: 408313

P: 409-265-5910

PROJECT NAME
JESS MOORE

512 South Center Street,
 Forney, TX 75126 USA

Utility: Oncor - ESID:
 10443720004992368

JURISDICTION
 FORNEY

DRAWING NOTES

PHOTOVOLTAC SOLAR MODULE
 MP60MODEL PANASONIC VBHN340SA17

MODULE RATED AT: 340 W

MULTIPLY BY QTY. OF MODULES: 42

ARRAY SYSTEM SIZE: 14.3 kW

SYSTEM AZIMUTH: 214°

ROOF PITCH: 5°

MOUNTING HEIGHT: 1. STORY

ORIENTATION OPTIONS ARE PRELIMINARY, AND ARE SUBJECT TO REVISION FOR OPTIMAL USE

SOLAR ARRAY LOCATIONS ARE TO BE REVIEWED AND APPROVED BY OWNER

OWNER ARCHITECT OF RECORD TO VERIFY SYSTEM LOCATION AND POSSIBLE RELOCATION OF VENT AND/OR PIPE JACKS.

FIELD VERIFICATION OF ROOF STRUCTURE, AND SOLAR ARRAY LOCATION IS REQUIRED PRIOR TO INSTALLATION FOR ALL EXISTING STRUCTURES WHERE NEW SOLAR ARRAYS ARE TO BE INSTALLED

REV	DESCRIPTION	DATE

PLAN

PV-5

DRAWN BY: JMF
 DRAWN DATE: 2/7/2020

