



Tucson Children's Museum
PV Solar Parking Canopy

Submittal for review by the Rio Nuevo District and Historic District
TC-COM-0226-00166, 130 S SCOTT AV.

Parcel ID: 117130400

Submitted By: Advanced Electric and Solar, LLC.

Date: 3/5/2026

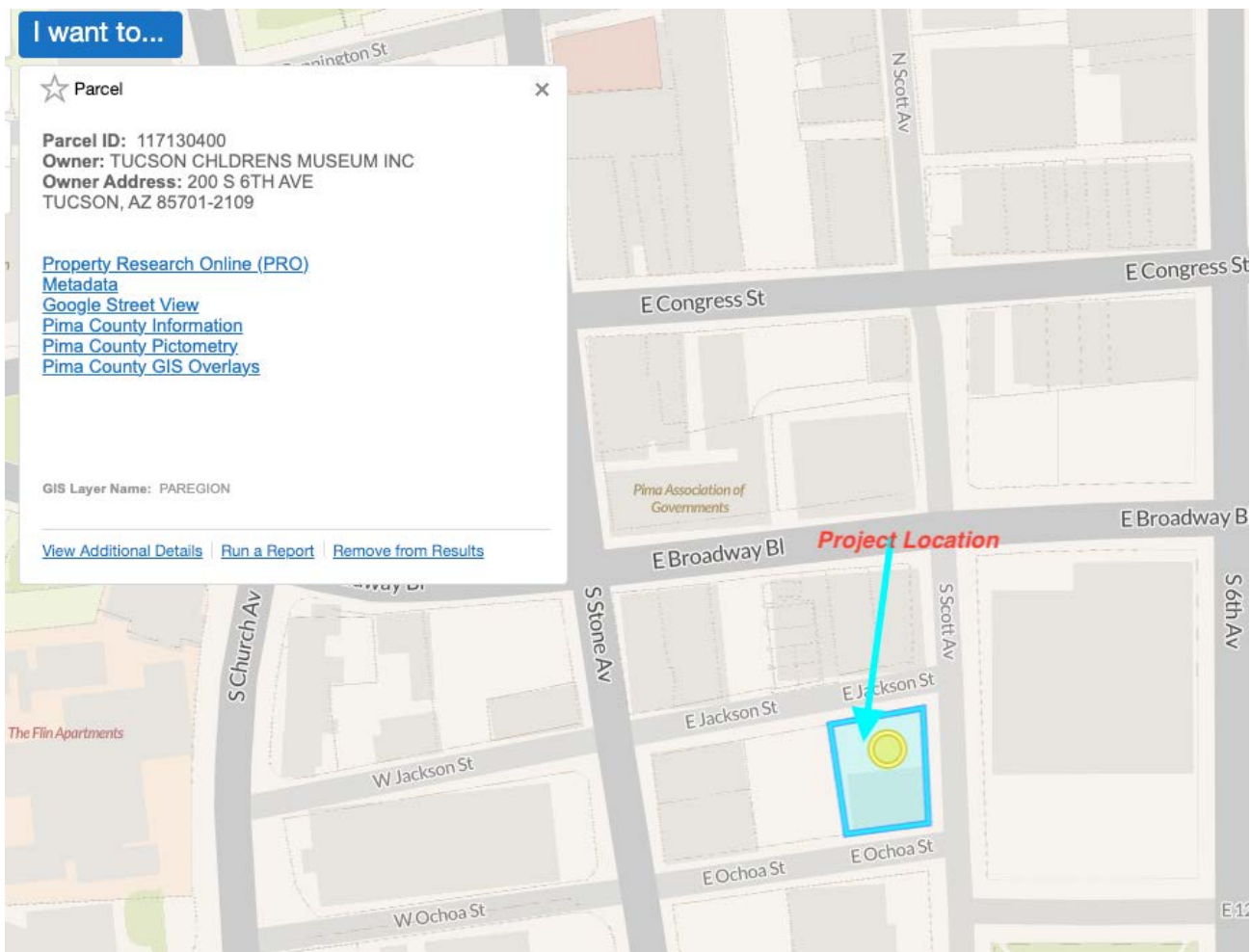




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March 6, 2026

Design Review Board (RNA Review)
City of Tucson
Planning and Development Services Department
201 North Stone Avenue
Tucson, AZ 85726-7210

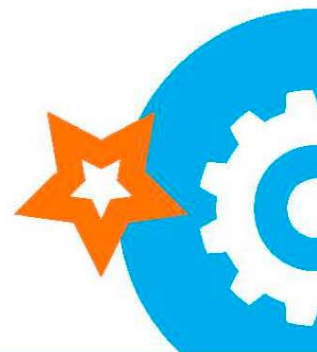
To Whom it May Concern:

I hereby authorize Advanced Electric and Solar, LLC to process the RNA application on behalf of the Children's Museum Tucson for Permit Application [TC-COM-0226-00166](#),

Sincerely,

A handwritten signature in black ink, appearing to read "HVA", is written over a white rectangular background.

Hilary Van Alsborg
Executive Director
Children's Museum Tucson



200 S. 6th Avenue | Tucson, Arizona 85701 | 520.792.9985 | [ChildrensMuseumTucson.org](#)



Project Description:

The proposed installation of a Photovoltaic System for Tucson Children’s Museum comprises 84 photovoltaic modules and an inverter mounted on a new steel canopy. This canopy will cover most parking spaces at the north end of the parking lot adjacent to E Jackson Street. The modules are bi-facial, and the canopy will feature four posts and beams painted weathered brown. Five galvanized steel purlins will span the beams to support the modules, and matching galvanized end caps will complete the array. The canopy footprint measures 78’-11” in length and 29’-9” in width. The minimum clearance under the beams of the canopy is 8’-0”, and the total height of the canopy (top of modules) is 17’-3”.

The east-west placement of the photovoltaic canopy on the site is constrained by the need to provide fire clearance from the building on the neighboring property to the west. Consequently, the edge of the modules is set 10’-1” from the property to the west and 2’-2” from the street-side property line, while the face of the eastern canopy column is set back 21’-3”.

Electrical equipment will be installed at the site, including an inverter installed at the most west canopy column, a transformer, meter base, and a disconnect mounted on the west side wall of the building near the existing TEP equipment.

The design of this project will adhere to a contemporary style. Its shape and design will harmonize with the site, minimizing visual impact on surrounding buildings. The shade structures will be in a parking lot situated away from any adjacent buildings, ensuring that the shade profile created by the canopies remains confined to the Tucson Children’s Museum parcel.



DESIGN NARRATIVE: Following UDC 5.8 Historic Preservation Zones checklist.

The proposed photovoltaic canopy would be an unequivocally novel addition to the existing property. The canopy will be situated in an existing parking area with mature landscaping. The minimum clearance for the canopy permits pedestrians and passenger vehicles to traverse the area freely. The canopy's location on the north side of the parking lot will not affect the sidewalk or pedestrians. Shading from the canopy will solely fall on the parking stalls. The canopy is positioned sufficiently away from the building, which mitigates any light reflection.

Development Zone Properly defined:

City staff has informed us that this property is located within the Rio Nuevo District.

Height:

The proposed parking canopy height aligns with the surrounding buildings. The maximum height is 17 feet 3 inches, which is 28 feet lower than the height of the immediately adjacent building (which is noncontributing). It is also lower than the roof of the contributing portion of the Tucson Children's Museum building (25 feet 5 inches). Typical buildings located north on E Jackson St. also feature high parapets or roofs. Consequently, the proposed canopy will be considerably lower than the height of neighboring buildings.

Setbacks:

The photovoltaic canopy is positioned 20 feet away from the building and 2 feet 2 inches from the north property line. All setbacks are adhered to as outlined in the project description section above.

Site Utilization:

As an open canopy over an existing parking area, the proposed canopy has no significant impact on inter-building spacing (which is negligible in the



development zone). Its footprint is entirely contained within the existing parking area.

Building form:

With a size and scale of 2,370 square feet, the proposed canopy is as modest as is compatible with its intended purpose. It would be a unique feature within the development zone. Size and scale will not visually interfere with surrounding properties. Mass is visually reduced by the fact that these are open-air structures.

Proportion, patterns and rhythm of openings, additions compatible with those of existing structure and those contributors within development zone:

Conforms with already approved projects within development zone. The design is contemporary and neutral, so it does not detract with any architectural style. Considerations of rhythm don't really apply here, except that the column spacing is symmetrical and follows that of the existing parking stalls.

Color:

Columns and beams will be painted a weathered brown color. The modules will be black on both sides. Given the immediate surroundings, which include gray asphalt, brown tree trunks, brown utility poles, and golden yellow-painted museum and surrounding buildings, the columns and beams should not create a high contrast with the environment.

Landscaping: N/A

Fences, walls or other physical features compatible with architectural style of subject structure and contributing properties within the development zone:

The perimeter wall is painted in the same golden yellow color as the building. The short fence atop the wall is painted black, creating a minimal contrast between the two elements.

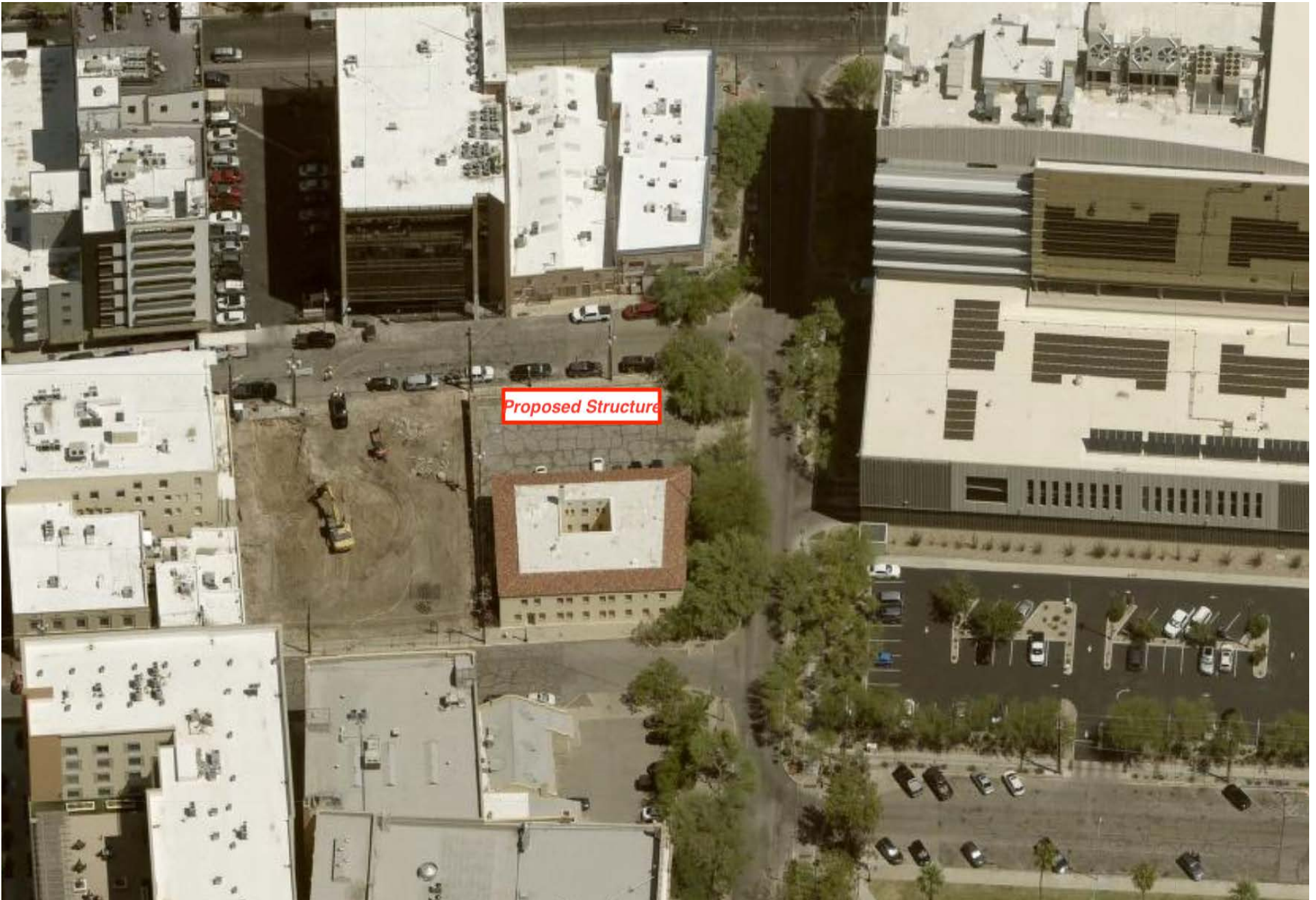


Motor Vehicle & parking areas:

The PV canopy will provide shade for the existing parking area on the Tucson Children's Museum property. This will benefit patrons and employees by providing shaded parking. Parking stall numbers will remain unchanged.

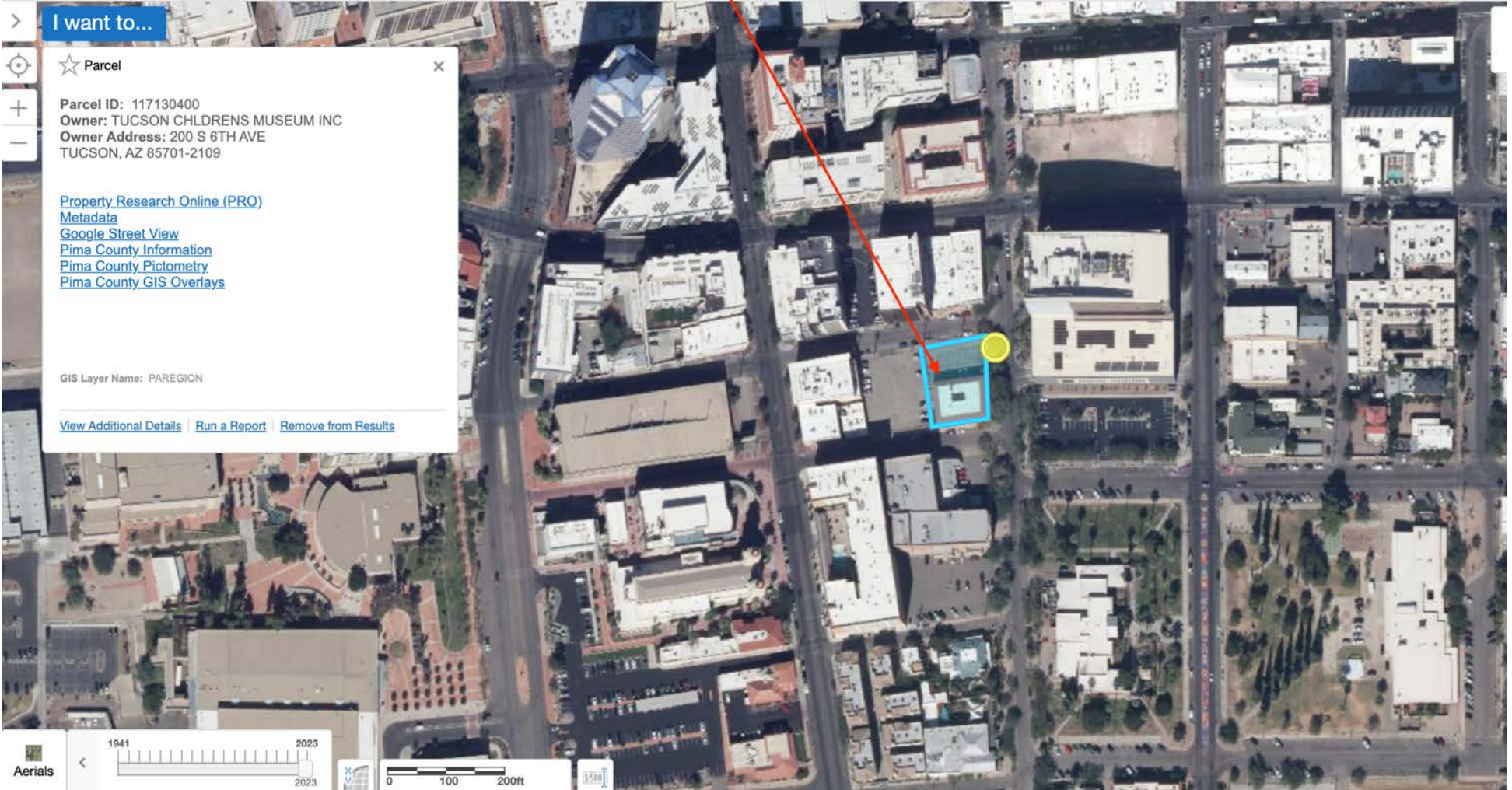
Signage: NA





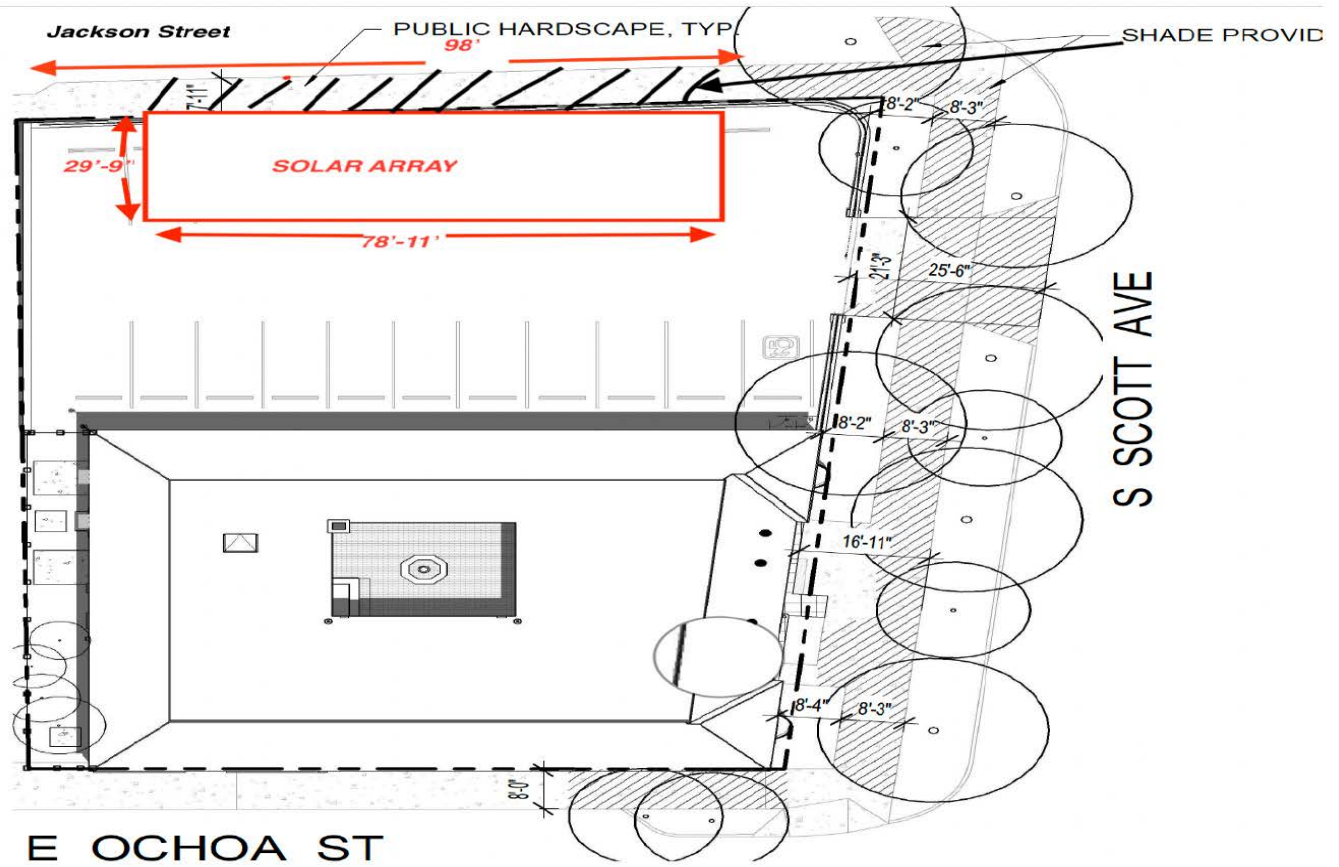
Tucson Children's Museum
Project Site Location

130 S scott Av



Children's Museum - Color Aerial

SHADE STUDY



shade study
1
x1.1
1" = 20'-0"



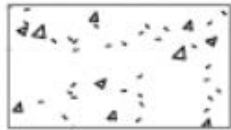


PUBLIC HARDSCAPE 4,782 SF

SHADED AREA REQUIRED (50%) 1,994 SF

SHADED AREA PROVIDED (71%) 3,415 SF

*SHADE HAS BEEN CALCULATED AT 12:00 P.M. ON JUNE 21
WHEN THE SUN IS 80° ABOVE THE HORIZON
(BASED ON 32° N LATITUDE).*



PUBLIC HARDSCAPE



SHADE PROVIDED



Children's Museum -Development Zone



Children's Museum Surrounding Area

Advanced Electric and Solar, LLC
5013 E 29th St. Tucson, AZ 85711
ROC 290398- CR11

520-303-2220
Licensed-Bonded-Insured. <https://www.advancedelectricandsolarllc.com/>

Looking South on S Scott Ave



Children's Museum Surrounding Are

Advanced Electric and Solar, LLC
5013 E 29th St. Tucson, AZ 85711
ROC 290398- CR11

520-303-2220
Licensed-Bonded-Insured. <https://www.advancedelectricandsolarllc.com/>



Looking East on Ochoa St

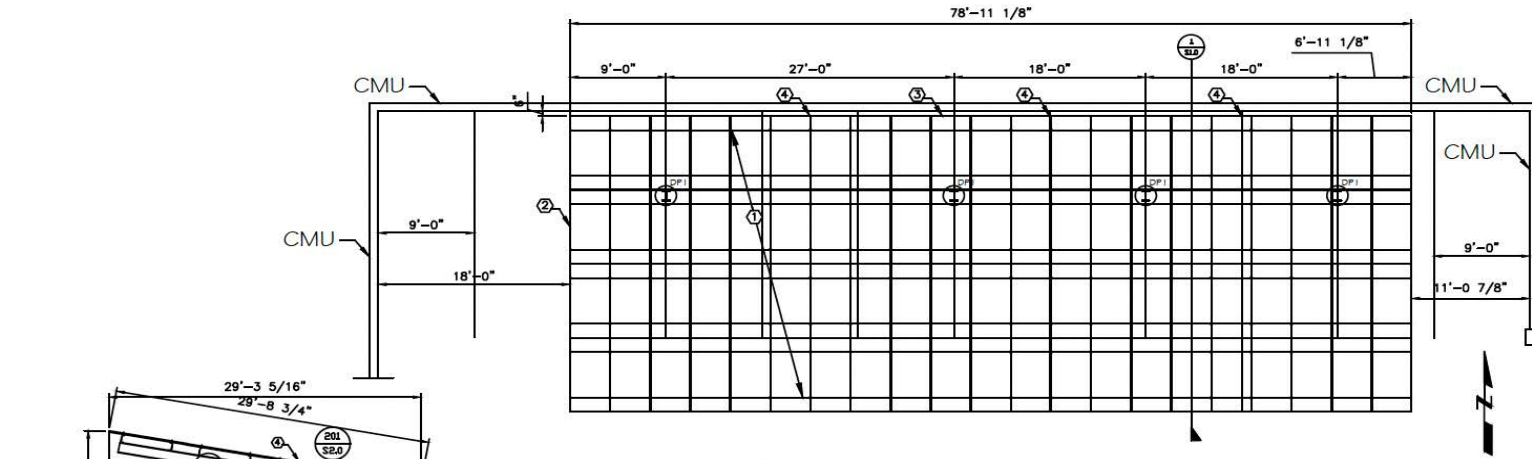


Looking West on E Ochoa Street

MISSION STEEL LLC
(ROC 181016 K-17)
P.O. Box 69427,
Tucson, AZ 85737
Ph: (520) 682-2345

CHILDREN'S MUSEUM TUCSON
130 S SCOTT AVE
TUCSON, AZ 85701

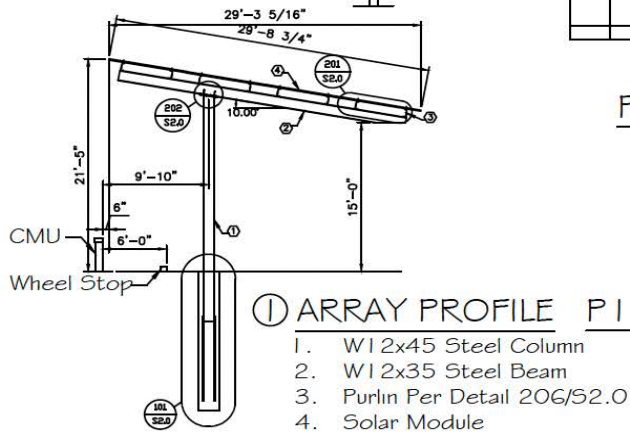
STRUCTURAL LAYOUT



PI STRUCTURAL LAYOUT

PLAN KEYNOTES:

- ① Galv. CEE Purlin Per Detail 206/S2.0
- ② Purlin End Cap Per Detail 204/S2.0
- ③ Solar Modules to be installed in Portrait Orientation by Others
- ④ Angle Bracing at Bottom of Purlins Per Detail 205/S2.0



DRILLED PIER FOOTING (DP) SCHEDULE				
MARK	SHAFT DIAMETER	REINFORCING		REMARKS
		VERTICAL	TIES	
DP1	2'-0"	NONE	NONE	DEPTH OF DRILLED PIED = 12'-0" BELOW FINISHED GRADE

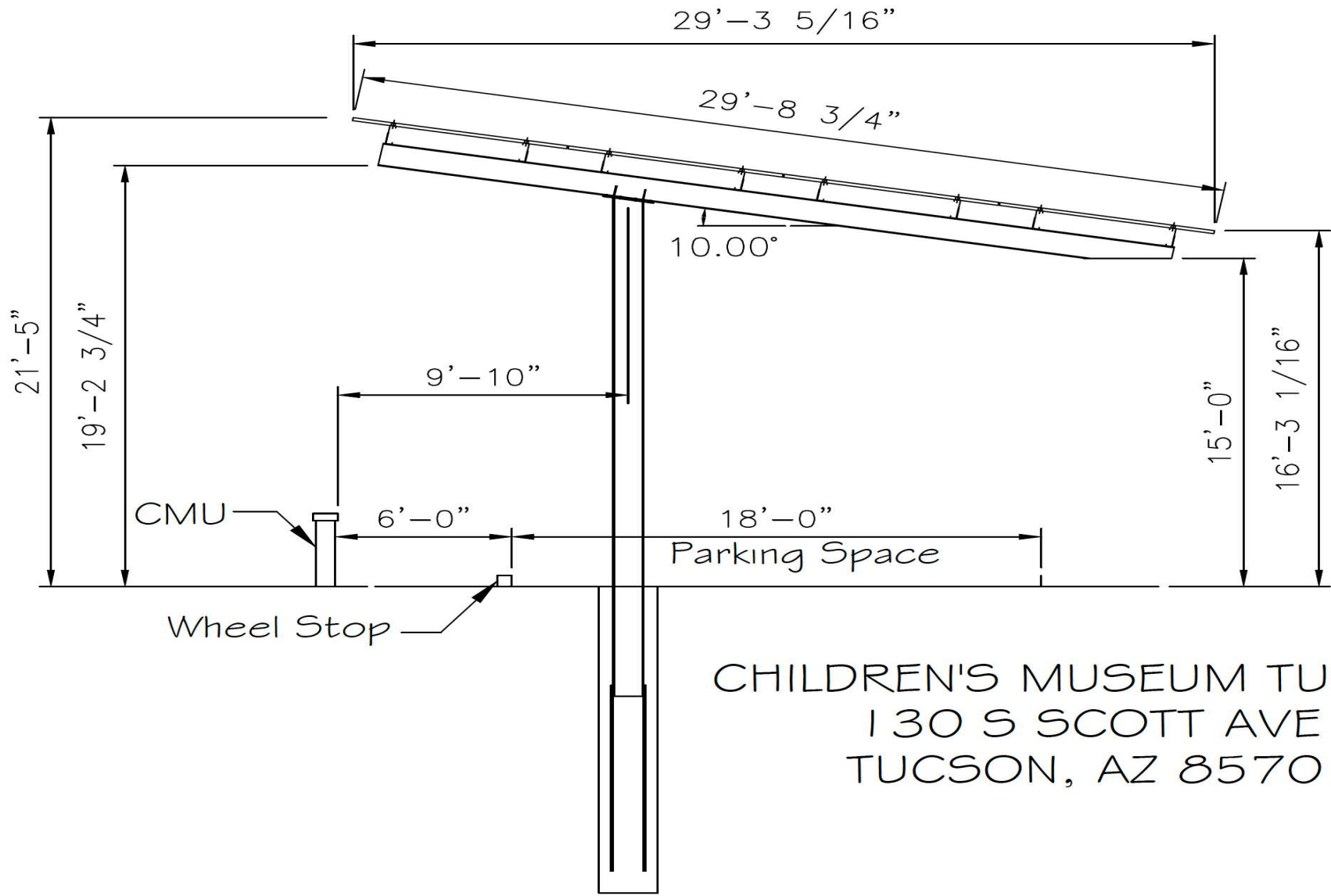
REV.	DESC.	DATE
0		1/26/26
1	10° Tilt & 15' Clearance	3/30/26

Modules: LONGI 440W
Portrait Orientation (4x21)
Dim.: 2256x1133x35mm
Wgt.: 32.3kg

SAMA ENGINEERING
4229 E Deer Dancer Way
Tucson, AZ 85712
520-867-0720

Drawn by: M.A.B
Issued for: Permit

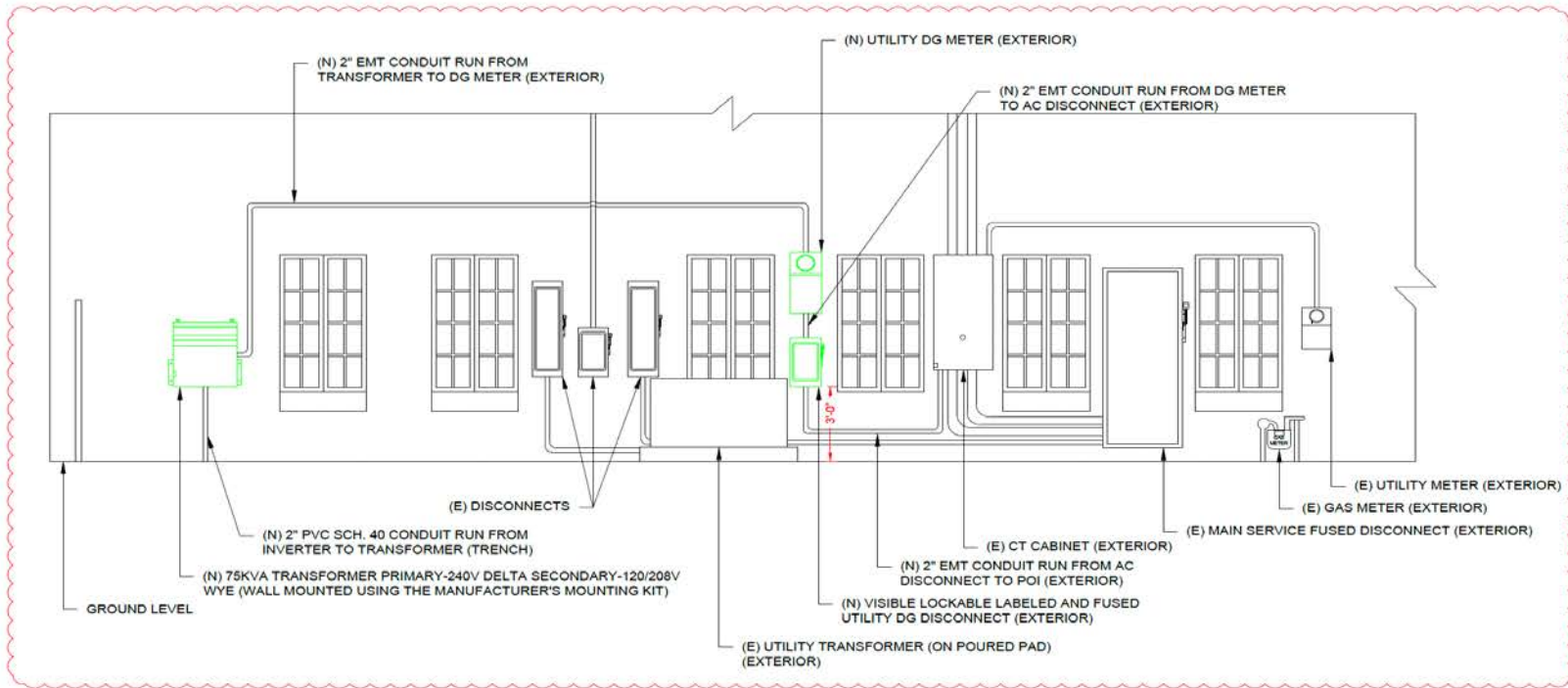
\$1.0



CHILDREN'S MUSEUM TUCSON
130 S SCOTT AVE
TUCSON, AZ 85701

NOTE: THE NEW TRANSFORMER WILL BE WALL MOUNTED USING THE MANUFACTURER'S MOUNTING KIT.

NOTE: AC DISCONNECT AND DG METER ARE WITHIN LINE OF SIGHT 18' AWAY FROM THE TEP REVENUE METER.



1 | EQUIPMENT ELEVATION PLAN

SCALE: 1/2" = 1'-0"

Legend:
(E): Existing
(N): New



ADVANCED
ELECTRIC & SOLAR
ADVANCED ELECTRIC AND SOLAR
5033 E 29TH ST. TUCSON, AZ 85711, USA
LICENSE NO. 290398
PHONE NO. (520) 303-2220

PROJECT NAME & ADDRESS
TUCSON CHILDREN'S MUSEUM INC.
130 S SCOTT AVE.
TUCSON, AZ 85701-1922, USA

SIGNATURE WITH SEAL
[Signature]
ELECTRICAL ONLY
7110 GREGORY AVENUE
TUCSON, AZ 85746
REGISTERED PROFESSIONAL ENGINEER
EXPIRES 06/30/2026

REVISIONS	DATE	DESCRIPTION
REV	01/03/2026	PERMIT PLAN
A/B	03/03/2026	MODULE CHANGE
B/B	03/03/2026	ANU REVISION
C/B		

SHEET TITLE EQUIPMENT ELEVATION PLAN	
DRAWN DATE	03/05/2026
DRAWN BY	ST
REVIEWED BY	AV
SHEET NUMBER A-103	



EXAMPLES OF PAST ADVANCED ELECTRIC AND SOLAR PROJECTS



Home Instead Senior care- 3208 N Tucson Blvd.

Advanced Electric and Solar, LLC
5013 E 29th St. Tucson, AZ 85711
<https://www.advancedelectricandsolarllc.com/>

520-303-2220 21
Licensed-Bonded-Insured.
ROC 290398- CR11



Advanced Resource Solutions- 703 N Swan Rd.

Advanced Electric and Solar, LLC
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<https://www.advancedelectricandsolarllc.com/>

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ROC 290398- CR11



13251 W Twin Peaks Rd. Marana



Residential Car Port-