

# **ARIZONA DEPARTMENT OF TRANSPORTATION**



## **Alternative Delivery and Major Projects Division**

### **P3 Initiatives**

#### **Request for Information**

for

**P3-25-01 RFI**

### **Solar P3 Projects – ADOT Building Sites**

**November 21, 2025**



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## **1 INTRODUCTION**

### **1.01 Purpose of this Request for Information**

The Arizona Department of Transportation (ADOT) hereby invites interested parties (Respondents) to respond to this Request for Information (RFI) regarding a prospective future solicitation to:

Design, supply, install, finance, operate, and maintain a system that would provide solar photovoltaic generated electricity from locations on the roof of existing ADOT buildings and on new Developer constructed covered parking structures to power ADOT buildings (herein “ADOT Building Site”).

The purpose of this RFI is to seek the industry’s perspective and feedback on the questions presented herein and to provide an opportunity for industry input on the overall procurement process for the Project. Interested firms and parties are strongly encouraged to submit responses with detailed comments. The information provided in response to this RFI process will assist ADOT in the planning and development efforts as well as to provide ADOT viable options to consider in the procurement, financing, and delivery approach for this prospective future solicitation.

**Note that ADOT has also released an RFI to provide similar services, but for an ADOT ROW Site. Please confirm you are responding to the appropriate RFI.**

### **1.02 Effect of this Request for Information**

This RFI is an inquiry only, intended solely to assist ADOT on an administrative level, and is not a formal solicitation or initiation of a procurement process. Submissions will not be evaluated. No contract or agreement will be entered into as a result of this RFI.

This RFI does not represent a commitment to issue a Request for Qualifications (RFQ) or a Request for Proposals (RFP) in the future, or a commitment that a subsequent procurement, if any, will follow the delivery approach described herein. Therefore, those choosing to respond to this RFI will not, merely by virtue of providing any manner of response, be deemed to be “bidders” on the Project in any sense.

Submission of responses is not a prerequisite for participating in a future procurement. Such participation would be subject to demonstrating satisfaction of the criteria stipulated in potential subsequent solicitation documents. Participation in this RFI and ensuing one-on-one meetings, or an election not to participate, will not confer on any Respondent any preference, special designation, advantage or disadvantage whatsoever in any subsequent procurement process related to the Project.

### **1.03 Submission Requirements**

ADOT welcomes responses to this RFI from independent companies or corporations, or from consortia or partnerships, that have a potential interest in acting as lead developers, design-build contractors, landowners, power providers, or equity investors for a public-private partnership (P3) (Respondents). ADOT is interested in the maximum number of constructive comments. It is not necessary for Respondents to respond as the consortia or partnerships that are planning to submit future bids, although ADOT is interested in being informed as to the formation of any future bidding groups for work on the Project. Such information will not be binding on the Respondents.

Please see [Section 4.07](#) entitled “Organizational Conflicts of Interest” for limitations on entities and individuals who will not be eligible to participate in an RFI submission.

### **1.04 Submissions, Questions, and Comments**

Respondents shall submit one electronic (PDF) document via email to the email address noted below. Please enable the Commenting or User Rights Feature before submittal. Total page count for the questionnaire should

not exceed 10 pages, utilizing 11pt Calibri type font, inclusive of the one-page cover letter. Total file size should be less than 2 megabytes.

Submissions should include a one-page cover letter and the information specifically requested in Section 5, Information Requested. ADOT requests that the email body includes the firm name, reference to P3-25-01 RFI, and the name, title, and contact information of the person responsible for interfacing with ADOT. Marketing materials are not to be submitted as part of a written response.

**Respondent's submission shall be delivered to the following email address, P3Office@azdot.gov, no later than 2:00 p.m. Mountain Standard Time (MST) on January 16, 2026.**

Your "Firm/Consortium Name" and "P3-25-01 RFI" must be clearly indicated on the email subject line and on the submission cover letter.

Any questions concerning this RFI should be directed to the ADOT P3 Office. Email questions to P3Office@azdot.gov. Interpretation of this RFI or additional information will only be given by written amendment to this RFI from the email address listed above.

Unless specified otherwise, all statements of or references to dollar amounts or money in the RFI are to the lawful currency of the United States of America.

### **1.05 One-on-one Meetings**

This RFI is intended, in part, to provide an opportunity to receive industry feedback through written responses and confidential one-on-one meetings with industry participants.

Respondents are encouraged to request a one-on-one meeting to discuss their responses and provide further input to ADOT. Respondents wishing to meet with ADOT must submit a response. Respondents must submit a request along with their submission by **2:00 p.m. MST January 16, 2026, to P3Office@azdot.gov**. Please include multiple preferred meeting times within the schedule blocks listed below. The duration of the meetings will be determined by ADOT and based on the number of requests received. The meetings will be virtual/video conferences. ADOT intends to conduct as many one-on-one meetings as possible, time permitting. However, ADOT does not guarantee a one-on-one meeting and will determine with whom to meet at its discretion. Respondents will be notified of acceptance of a one-on-one meeting by January 23, 2026.

The schedule for the one-on-one meetings is shown in the table below.

| No. | Activity                 | Date, Time              | Location |
|-----|--------------------------|-------------------------|----------|
| 1.  | One-on-one Meeting Day 1 | February 2; 8am-4pm MST | Virtual  |
| 2.  | One-on-one Meeting Day 2 | February 3; 8am-4pm MST | Virtual  |
| 3.  | One-on-one Meeting Day 3 | February 4; 8am-4pm MST | Virtual  |
| 4.  | One-on-one Meeting Day 4 | February 5; 8am-4pm MST | Virtual  |

**End Section**

## **2 PROJECT OVERVIEW**

### **2.01 Scope of Work**

ADOT currently envisions a project or projects in which the Developer will enter into a public-private partnership (P3) agreement with ADOT to design, finance and supply all labor and material to implement, operate and maintain a system that, at a minimum, would include:

- (A) Furnishing solar photovoltaic generated energy from Developer-installed solar panels located on the roofs of existing ADOT buildings and on new Developer-constructed covered parking structures to power ADOT buildings. See Exhibit 1 for the Building Sites identified by ADOT.
- (B) Operating and maintaining the facilities for a predetermined time period.
- (C) Ensuring that all environmental attributes derived from the production of renewable energy from the facilities including, but not limited to, renewable energy certificates and credits, green tags, emission credits, carbon offsets and any other environmental attribute currently available or available at any time in the future shall belong to and inure to the benefit of ADOT.
- (D) Decommissioning the solar photovoltaic locations at the end of their service life.

There is the potential that the P3 agreement with the Developer would allow for the development of additional Building Sites beyond those identified in Exhibit 1.

### **2.02 Design and Construction (D&C) Phase**

#### **(A) Environmental Clearances/Permitting Task**

During this task, the Developer would provide a list of all pertinent regulatory (local, state, and federal) agencies, permits and approvals necessary for the ownership, construction, operation, and financing of the solar photovoltaic facilities. Fulfilling all related permitting, regulatory, reporting, and environmental requirements would be the sole responsibility of Developer, including but not limited to, site plan and survey, habitat intrusion study, historical or archaeological significance study, and any other local, state and federal regulatory approvals. The list of potentially applicable state and federal agencies and laws include, but are not limited to:

- US Army Corps of Engineers (USACE), Clean Water Act Sections 404 and 401
- Federal Aviation Administration (FAA), Structure Height Clearance Form 7460
- National Pollutant Discharge Elimination System (NPDES)
- National Environmental Policy Act (NEPA)
- Bureau of Land Management (BLM), Federal Land Policy and Management Act (FLPMA) ROW grant
- US Fish & Wildlife Services (USFWS) Federal Endangered Species Act
- State Historic Preservation Office (SHPO) Archaeological Resources Protection Act and
- National Historic Preservation Act (NHPA)
- US Fish and Wildlife Services (USFWS), Migratory Bird Treaty Act (MBTA) (13186)
- Bureau of Indian Affairs (BIA), Tribal Lands Coordination (if any)
- State agency coordination with relevant agencies not named here, as required
- Local authorities having jurisdiction for grading, electrical and building permits, as required

**(B) Design/Engineering Task**

The Developer will need to hire an engineering company and/or self-perform the design of the Project. Key components of the designs include:

- Civil Design: Site grading, drainage, access roads, and soil stabilization
- Structural Design: Racking system, racking system foundations and inverter/transformer pad foundations, rooftop mounting analysis and design, and covered parking structures.
- Electrical Design (photovoltaic): Solar panel to solar panel, solar panel to combiner box, combiner box to inverter, inverter to step up transformer and medium voltage collection system wiring. Electrical calculations to verify proper system sizing (wire type/size) per local codes should be included for permitting.
- Electrical Design (Interconnection): Switchgear or other interconnection equipment meeting utility company requirements for interconnection for large solar photovoltaic facilities. ADOT Building Site electrical analysis for interconnection into existing building electrical systems and to identify existing building electrical system infrastructure limitations.
- Facility Controls: Equipment monitoring and controls infrastructure including remote monitoring platforms. Equipment capable of meeting power control requirements of utility company, if applicable.
- Site Security: Fencing, cameras/infrared remote sensor monitoring, if required.

**(C) Construction Task**

The Developer will need to hire a contractor and/or self-perform the facility installations once all designs, permits, utility interconnection agreements, and environmental clearances are complete. The Developer is responsible for all materials and equipment required for each facility. The Developer is responsible for ensuring all aspects of construction meet all applicable codes and laws.

During construction, the contractor or Developer will be expected to maintain proper construction administrative processes to meet ADOT requirements including site health and safety, site security, equipment deliveries and logistics management, labor management, and schedule and budgetary controls.

**2.03 Operations and Maintenance (O&M) Phase****(A) O&M Task**

The Developer is required to provide remote monitoring of the installations. As production of the sites decreases compared to estimated levels, periodic maintenance and/or repair will be required to be performed by the Developer to maintain energy production targets.

- Monitoring should be remote with ability for ADOT to view production information on a regular basis.
- Planned maintenance by the developer shall be completed on a regular schedule for planned activities such as panel washing, equipment testing, and scheduled equipment replacement (if any).
- Unplanned maintenance, such as equipment failure alarms, should be resolved within a pre-determined amount of time.

**(B) Decommissioning Task**

Sufficient funds shall be allocated to remove the above ground structures (piles, racks, panels, inverters, fencing, etc.) upon the completion of the service life to allow the use of the properties. Rooftop installation removal shall account for returning the building's roof to a condition meeting applicable building codes. Funds shall be also



1 included for any disposal of materials as part of the decommissioning task. Removal of facilities will be at the  
2 discretion of ADOT.

3

4

**End Section**

### 3 ANTICIPATED PROJECT PROCUREMENT PROCESS

#### 3.01 Two-step P3 Procurement

Should ADOT decide to proceed with procurement for the Project or Project(s), ADOT intends to pre-qualify potential proposers through an RFQ. The RFQ would be followed by an RFP. Only those entities shortlisted by ADOT through the RFQ process will receive and be allowed to respond to the RFP.

The objective of the RFQ phase is to shortlist proposers that best demonstrate that they have the financial resources and the qualifications and experience necessary to complete the Project.

It is anticipated that a draft RFP will be issued to all shortlisted proposers and will include a draft project agreement. Shortlisted proposers will be allowed to comment upon the draft RFP and draft project agreement. ADOT reserves the right to modify the draft RFP and/or draft project agreement prior to issuing the final RFP. In addition, as part of the RFP process, ADOT may issue further changes to the RFP documents by formal amendment to all shortlisted proposers.

The RFP will require proposers to make management, technical and financial submissions that are compliant with and demonstrate full acceptance of the final project agreement terms. The terms of the final project agreement will be negotiated by ADOT and the successful proposer, and ADOT may reserve the right to enter into negotiations with other proposers should it be unable to negotiate agreement terms acceptable to ADOT in its sole discretion. A proposal bond or letter of credit may be required.

ADOT expects to use a “best value” evaluation approach as well as other selection criteria to award the contract to the proposer. Best value evaluation factors and weightings remain to be determined but potentially will be based on such criteria as technical competency, technical approach, strength of management team, price, risk analysis, and/or schedule for project delivery and completion.

#### 3.02 Legal Authority

The procurement process will be implemented in accordance with ADOT’s policies and procedures and in compliance with applicable state and federal laws and regulations. ADOT may procure and deliver the Project under its authority to engage in P3s, as set forth in Arizona Revised Statutes (“A.R.S.”) §§ 28-7701 – 28-7011 (the “P3 Law”).

#### 3.03 Potential Procurement Schedule

The following is a tentative preliminary schedule if an innovative procurement is pursued.

| No. | Activity                                              | Date    |
|-----|-------------------------------------------------------|---------|
| 1.  | Publish RFQ                                           | Q2 2026 |
| 2.  | Evaluation and Shortlist                              | Q2 2026 |
| 3.  | Publish Final RFP and Distribute to Shortlisted Firms | Q3 2026 |
| 4.  | Contract Award                                        | Q4 2026 |
| 5.  | Notice to Proceed                                     | Q1 2027 |

**3.04 Additional Information**

Additional information regarding the Project will be posted at [Public Private Partnerships \(P3\) | Department of Transportation](#). Respondents are encouraged to monitor this site for any future solicitation information related to the Project.

**End Section**

## **4 CONDITIONS FOR THE SUBMISSION OF INFORMATION**

### **4.01 Changes to this RFI**

At any time, in its sole discretion, ADOT may, by written addenda to this RFI, modify, amend, cancel, and/or reissue this RFI. If an amendment is issued prior to the date information is due, it will be made available on the following website [Public Private Partnerships \(P3\) | Department of Transportation](#).

### **4.02 Information Preparation Costs**

ADOT shall not be liable for any costs incurred by any Respondent in the preparation, submission, presentation, or revision of its information and response, or in any other aspect of the Respondent's activities related to its involvement in this RFI process. All such costs shall be borne solely by the Respondent. In no event shall ADOT be bound by, or liable for, any obligations with respect to the Project until such time (if at all) as ADOT authorizes and executes a written agreement, and then only to the extent set forth in such agreement.

### **4.03 Clarification of Responses**

ADOT reserves the option, at its sole discretion, to contact a Respondent to seek clarification regarding information contained in its response but shall have no obligation to do so. The decision to contact and request clarification from a Respondent rests solely with ADOT. In submitting its response, a Respondent should not assume that it will be provided with an opportunity to subsequently clarify or otherwise discuss any feature thereof.

### **4.04 Disclosure of Information Contents**

All materials and information submitted in response to this RFI, and any materials delivered to ADOT during one-on-one meetings, are subject to the Arizona Public Records Law, ARS Title 39, and any other laws, regulations and case decisions applicable to the disclosure of materials and information submitted under this RFI (collectively, the "Public Records Laws").

Respondents are also advised that the Public Records Laws may exempt certain portions of the responses, such as certain trade secrets and commercial and financial information, from public disclosure and permit confidential treatment by ADOT. If a Respondent has special concerns about the confidentiality of materials and information that it desires to make available to ADOT, but which the Respondent believes is exempted from disclosure under the Public Records Laws, such Respondent shall specifically and conspicuously designate that material and information in writing and by placing "CONFIDENTIAL" in the header or footer of each such page affected, together with a concise written explanation as to why the information is exempt from disclosure. No oral designations of any kind will be accepted. Blanket written designations that do not identify the specific materials and information are not acceptable and may be cause for ADOT to treat the entire response as public information.

ADOT may disclose the contents of all responses to this RFI, except to the extent that a portion of the response may be exempt from disclosure in accordance with applicable Public Records Laws and the instructions provided above. By delivering a response, as well as by registering and participating in a one-on-one meeting with ADOT, each Respondent consents to such disclosure and expressly waives any right to contest such disclosure unless exempt under applicable provisions of the Public Records Laws.

ADOT will not advise a Respondent or other party as to the nature or content of documents entitled to protection from disclosure under the Public Records Laws, as to the interpretation of such laws, or as to the definition of trade secret or other proprietary information. Nothing contained in this provision shall modify or amend requirements and obligations imposed by the Public Records Laws. The provisions of the Public Records Laws shall control in the event of a conflict between the procedures described above and the Public Records Laws.

In the event of any litigation or other proceeding concerning the disclosure of a Respondent's materials or information or portion thereof submitted to ADOT, the Respondent shall be responsible for prosecuting or defending such action at its sole expense and risk; provided, however, that ADOT reserves the right, in its sole

discretion, to intervene or participate in the litigation or other proceeding in such manner as it deems necessary or desirable. All costs and fees (including attorneys' fees and costs) incurred by ADOT in connection with any litigation, other proceeding or request for disclosure shall be reimbursed and paid by the Respondent whose response is the subject thereof.

In no event shall the State, ADOT or any of their respective agents, representatives, consultant, directors, officers or employees be professionally or personally liable to a respondent, a respondent team member, or any other party for the disclosure of any materials or information submitted in response to this RFI or at the industry forum, including materials marked "Confidential", whether the disclosure is deemed required by public records laws or by an order of court of occurs through inadvertence, mistake or negligence.

#### **4.05 Ownership of Submitted Materials**

All materials and information submitted in response to or in connection with this RFI shall become the property of ADOT and will not be returned to the submitting parties. ADOT shall have the right to use such materials and information and ideas set forth therein without restriction.

#### **4.06 Rights of ADOT**

ADOT reserves to itself all rights available to it under applicable law, including but not limited to the unqualified right, at any time and in its sole discretion, to change or modify this RFI, to reject any and all information, to seek clarification of information, to request additional information, and to undertake communications with one or more Respondents or others who, at any time subsequent to the deadline for submissions to this RFI, may express an interest in the subject matter hereof.

No Respondent or any other person or entity shall have any rights against ADOT arising from the contents of this RFI, the receipt of information, or the incorporation in or rejection of information contained in any response or in any other document. ADOT makes no representations, warranties or guarantees that the information contained herein or on the Program website or in any addenda hereto or thereto, is accurate, complete, or timely or that such information accurately represents the conditions that would be encountered during the performance of any subsequent contract issued from a separate procurement. The furnishing of such information by ADOT shall not create or be deemed to create any obligation or liability upon it for any reason whatsoever; and each Respondent, by submitting its information, expressly agrees that it has not relied upon the foregoing information, and that it shall not hold ADOT liable or responsible therefore in any manner whatsoever.

#### **4.07 Organizational Conflicts of Interest**

Respondents are advised that the following entities and individuals are precluded from submitting a response to this RFI and participating on a Respondent's team in the event of a future solicitation, unless otherwise authorized by ADOT:

(A) Any consultant firm that has been contracted by ADOT to provide expert professional services in connection with the ADOT Office of P3 Initiatives, P3 Project delivery approach, or P3 Project procurement, including, but not limited to:

- (1) Nossaman LLP
- (2) Mayer Brown LLP
- (3) HDR, Inc.
- (4) KPMG LLC
- (5) CDM Smith Inc.
- (6) Sperry Capital Inc.

- 1 (B) Any entity that is a parent, affiliate, or subsidiary of any of the foregoing entities, or that is under  
2 common ownership, control, or management with any of the foregoing entities; and
- 3 (C) Any employee or former employee of any of the foregoing entities who was involved with the P3  
4 Project delivery approach or P3 Project procurement while serving as an employee of such entity.
- 5
- 6

7 **End Section**

## 5 INFORMATION REQUESTED

### 5.01 General Information

(A) Briefly provide the following descriptive information for the Respondent and its team members (if any). The purpose of this question is to aid ADOT in understanding the identity and type of business of the Respondent.

(1) Name of Respondent and its team members (if any)

(2) Describe principal business for Respondent and its team members (if any)

(3) Describe in detail any similar photovoltaic projects the respondent has implemented or completed and how lessons learned could be applied to this project.

(4) Describe any similar photovoltaic projects that included an operations and/or maintenance component for a period of years.

(5) Please describe your experience with procurement with all required equipment of similar sized systems and relationships with various equipment vendors.

(6) Please add any additional ideas, concerns or information relevant to this RFI.

### 5.02 Project-Specific Information

(A) Is there a minimum/recommended rooftop area for photovoltaic that is realistic for an operational and cost-effective project?

(B) Is there a minimum/recommended parking area for photovoltaic that is realistic for an operational and cost-effective project?

(C) ADOT has identified two candidate ADOT Building Sites in Exhibit 1. Would you recommend procuring these as individual projects, as a bundle of two or more projects, and/or with the option to develop additional sites beyond the two identified in Exhibit 1?

(D) What is a typical organizational structure for a project of this type? What types of additional subcontractors, equipment providers, or other types of team members would be part of a Developer's team to provide all noted services in [Section 2.02 and 2.03](#)?

(E) Should financing of the D&C Phase be included as part of the project?

(F) What is the most cost-effective duration for the D&C Phase?

(G) What is the most cost-effective duration for the O&M Phase?

(H) Describe your recommended payment structure for the project. Specifically, describe the payment structure separately for D&C Phase and for O&M Phase.

(I) Describe the top three key risks/concerns associated with implementing a photovoltaic program at ADOT Building Sites.

(J) Describe your recommended approach to maintaining equipment during the O&M Phase.

**End Section**

1 **EXHIBIT 1** **ADOT Building Site (rooftop and/or parking)**

2

3





HDR ENGINEERING, INC. | CA0443AE  
1517 S. 67TH STREET  
OMAHA, NE 68106  
(402) 398-1000

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| ISSUE | DATE | DESCRIPTION |

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|-----------------|--------------|
| PROJECT MANAGER | L. WESNITZER |
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|                 |              |
|                 |              |
| PROJECT NUMBER  | 1042622      |

PRELIMINARY  
NOT FOR CONSTRUCTION  
OR RECORDING

ADOT P3 SOLAR

ADOT Equipment Services Building  
2225 S 22nd Ave Phoenix, AZ

FILE NAME  
SCALE SOLAR STUDY  
1"=50'

SHEET  
1





## Equipment Services

### ADOT EQUIPMENT SERVICES BUILDING - 2225 S 22nd Ave Phoenix, AZ

The Equipment Services building is located in the city of Phoenix, Arizona off Highway 117. There are two main buildings and each have several tiered roof sections. The roof is flat and open with about 5-foot elevation difference between roof sections. Each of the buildings includes several ventilation fans and HVAC units which would require substantial physical offset on all sides. The building is not shaded by surrounding buildings, trees, or other structures.

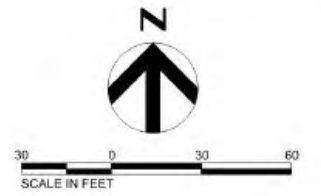
In addition to the roof space, there is potential to install a solar canopy over the adjacent parking lot. Solar canopies can be an efficient use of space while providing auxiliary benefits such as sun protection.

|                      |                                                  |
|----------------------|--------------------------------------------------|
| Energy               | • System Size: 2,078 kW                          |
|                      | • Generation: 3,683 MWh                          |
|                      | • Annual Usage: 3,289 MWh                        |
|                      | • Annual Generation: \$27,320                    |
| Roof                 | • Type: EPDM Stone-Ballasted covered with gravel |
|                      | • Age: <10 years                                 |
|                      | • Usable Area: 37,206 SF                         |
|                      | • Number of Panels: 2,067                        |
| Parking Shade Canopy | • Generation: 1,832 MWh                          |
|                      | • Usable Area: 37,584 SF                         |
|                      | • Number of Panels: 2,088                        |
| Constructability     | • Generation: 1,851 MWh                          |
|                      | • Separate roof sections                         |
| Utility              | • APS                                            |

- **Energy:** The proposed 2,078 kW solar energy system would generate approximately 3,299 MWh annually. This is enough energy to offset 100 percent of the annual building needs, resulting in an annual energy generation of \$27,320. The monthly load for the building is less than the expected monthly solar energy generation. The building would generate more energy than needed and would export power to the utility grid.
- **Electrical:** APS provides electrical service via an outdoor transformer. The main electrical equipment consists of main disconnect and several distribution board sections. The equipment appears to be vintage original construction and is approaching the end of its life expectancy. HDR recommends the replacement of this equipment to occur alongside the solar energy system installation. The new electrical equipment could include provisions to readily accept the solar energy system interconnection. The new solar inverters and disconnect could be installed in the electrical room near the main switchboard. Power cables would be routed from the separate sub-array sections to a common point before transitioning down through the ceiling and into the electrical room.
- **Structural:** A typical EPDM (rubber) membrane surface roof covered with a layer of gravel. In general, the roof is clean and in good condition with no obvious blemishes. If ADOT installs the solar energy system within the next 5 years, the durability of the roof (due to its age) may cause concern near the end of the system's lifespan (25 years). The study team recommends coordination with the roof warranty and further structural investigation to ensure protection throughout the life of the solar.



1 2 3 4 5 6 7 8



LEGEND:  
SOLAR PANEL  
EQUIPMENT SET BACK



HDR ENGINEERING, INC. | CA0443AE  
1917 S. 67TH STREET  
OMAHA, NE 68106  
(402) 399-1000

| ISSUE | DATE | DESCRIPTION |
|-------|------|-------------|
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|-----------------|--------------|
| PROJECT MANAGER | L. WESNITZER |
|                 |              |
|                 |              |
|                 |              |
|                 |              |
| PROJECT NUMBER  | 10426322     |

PRELIMINARY  
NOT FOR CONSTRUCTION  
OR RECORDING

ADOT P3 SOLAR

ADOT Engineering Building  
205 S 17th Ave Phoenix, AZ

FILE NAME  
SCALE  
SOLAR STUDY  
1"=30'

SHEET

3





# ADOT Engineering Building

ADOT Engineering Building - 205 S 17th Ave Phoenix, AZ

The Equipment Services building is located in the city of Phoenix, Arizona off W. Madison Street and S 17th Ave. The roof is flat and open and includes several ventilation fans and HVAC units which would require substantial physical offset on all sides. The building is not shaded by surrounding buildings, trees, or other structures.

In addition to the roof space, there is potential to install a solar canopy over the adjacent parking lot. Solar canopies can be an efficient use of space while providing auxiliary benefits such as sun protection.

|                      |                               |
|----------------------|-------------------------------|
| Energy               | • System Size: 1,850 kW       |
|                      | • Generation: 3,279 MWh       |
|                      | • Annual Usage: 2,781 MWh     |
|                      | • Annual Generation: \$39,574 |
| Roof                 | • Type: EPDM Stone-Ballasted  |
|                      | • Age: <10 years              |
|                      | • Usable Area: 15,120 SF      |
|                      | • Number of Panels: 840       |
| Parking Shade Canopy | • Generation: 745 MWh         |
|                      | • Usable Area: 51,462 SF      |
|                      | • Number of Panels: 2,859     |
|                      | • Generation: 2,534 MWh       |
| Constructability     | • Separate roof sections      |
| Utility              | • APS                         |



- **Energy:** The proposed 1,850 kW solar energy system would generate approximately 3,279 MWh annually. This is enough energy to offset 100 percent of the annual building needs, resulting in an annual energy generation of \$39,574. The monthly load for the building is less than the expected monthly solar energy generation. The building would generate more energy than needed and would export of power to the utility grid.
- **Electrical:** APS provides electrical service via an outdoor transformer. The outdoor transformer is original construction and should be evaluated as it could be approaching the end of its life expectancy. The main electrical equipment consists of main disconnect and several distribution board sections. The equipment size and ratings are sufficient to accommodate the proposed solar energy system interconnection. The new solar inverters and disconnect could be installed in the electrical room near the main switchboard. Power cables would be routed from the separate sub-array sections to a common point before transitioning down through the ceiling and into the electrical room.
- **Structural:** A typical EPDM (rubber) membrane surface roof. In general, the roof is clean and in good condition with no obvious issues. HDR recommends further structural investigation to ensure adequate protection throughout the life of the solar.



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| ISSUE | DATE | DESCRIPTION |
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| PROJECT MANAGER | L. WESNTZER |
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| PROJECT NUMBER  | 10426222    |

PRELIMINARY  
NOT FOR CONSTRUCTION  
OR RECORDING

ADOT P3 SOLAR

ADOT Engineering Building  
205 S 17th Ave Phoenix, AZ

FILE NAME  
SCALE  
SOLAR STUDY  
N/A

SHEET

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