

# AASHTO Innovation Initiative

[Proposed] Nomination of Innovation Ready for Implementation

## Sponsor

Nominations must be submitted by an AASHTO member DOT willing to help promote the innovation. If selected, the sponsoring DOT will be asked to promote the innovation to other states by participating on a Lead States Team supported by the AASHTO Innovation Initiative.

1. Sponsoring DOT (State): Arizona
2. Name and Title: Michael Craig, Manager of Property Management

Organization: Right of Way Property Management

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State: Arizona

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## Innovation Description (10 points)

The term “innovation” may include processes, products, techniques, procedures, and practices.

3. Name of the innovation:

A new approach to Cost-to-Cure versus Total Taking.

4. Please describe the innovation.

Making the decision that a total take acquisition was needed on a property to ensure that the cost-to-cure of cutting, demolition, and building back the modification was completed in time. This would prevent any delay to the prime contractor of the I-10 Broadway Curve widening project.

**5. What is the existing baseline practice that the innovation intends to replace/improve?**

Paying property owners a cost-to-cure; this would involve having them perform the demolition and construction duties for the modification in the path of the new ROW. Therefore, burdening the owner with meeting the responsibility of the prime contractor's construction schedule.

**6. What problems associated with the baseline practice does the innovation propose to solve?**

This practice would solve the problem of potentially delaying the clearance of the new right of way and project construction.

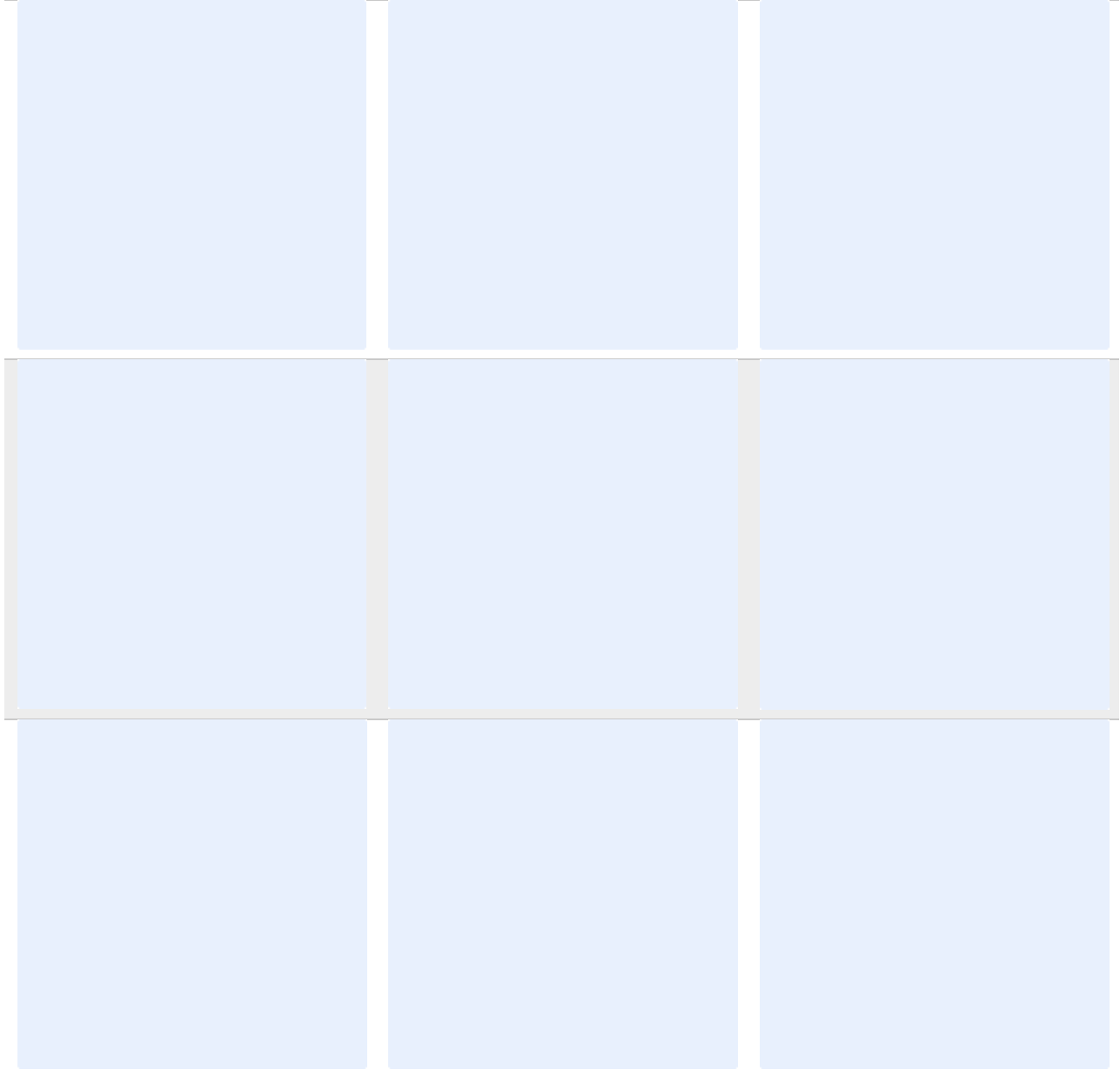
**7. Briefly describe the history of its development.**

It was deemed a good business practice to do a total take on a property that required a significant cost-to-cure. This allows ADOT to control and manage the schedule, as well as the different building and construction aspects that come with such complicated cures.

**8. What resources—such as technical specifications, training materials, and user guides—have you developed to assist with the deployment effort? If appropriate, please attach or provide weblinks to reports, videos, photographs, diagrams, or other images illustrating the appearance or functionality of the innovation (if electronic, please provide a separate file). Please list your attachments or weblinks here.**

See attached sheet "Overall Expenses/Revenue"

Attach photographs, diagrams, or other images here. If images are of larger resolution size, please provide as separate files.



## State of Development (40 points)

Innovations must be successfully deployed in at least one State DOT. The All selection process will favor innovations that have advanced beyond the research stage, at least to the pilot deployment stage, and preferably into routine use.

9. How ready is this innovation for implementation in an operational environment? Please select from the following options. Please describe.

- Prototype is fully functional and yet to be piloted
- Prototype has been piloted successfully in an operational environment
- Technology has been deployed multiple times in an operational environment
- Technology is ready for full-scale implementation

ADOT ROW has implemented this innovation on the I-10/Broadway Curve Widening Project. The ADOT ROW Acquisition section has completed a total taking of the 1919 W. Fairmont Dr. (7-10702) property as well as others. This enabled the ROW Property Management Section to coordinate and control the demolition/construction schedule. As a portion of the acquired building had to be cut, demoed, and reconstructed to ensure the new right of way had been cleared for the prime contractor to begin work. If this was left in the hands of the property owner to do, ADOT would have no way to ensure it was completed in time for the prime contractor to begin work in this section of the I-10 widening project.

10. What additional development is necessary to enable implementation of the innovation for routine use?

Having the staff and resources to coordinate and manage a demolition and reconstruction project of this scale is very important.

11. Are other organizations using, currently developing, or have they shown interest in this innovation or of similar technology??  Yes  No

If so, please list organization names and contacts. Please identify the source of this information.

Organization	Name	Phone	Email
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## Potential Payoff (30 points)

Payoff is defined as the combination of broad applicability and significant benefit or advantage over baseline practice.

12. How does the innovation meet customer or stakeholder needs in your State DOT or other organizations that have used it?

This innovation allows ADOT the ability to control the construction and demolition schedule on the cure needed for this property. ADOT was able to ensure that the new acquired right of way was cleared for the widening project. This has a cost savings effect of ensuring our widening project is on schedule and under budget. Also, this property is ready to be sold at public auction, such as the cost of acquiring this property, performing the demolition and reconstruction, will result in the ability to sell this asset, recouping the costs to the project. (See attached sheet "Overall Expenses/Revenue)

13. Identify the top three benefit types your DOT has realized from using this innovation. Describe the type and scale of benefits of using this innovation over baseline practice. Provide additional information, if available, using quantitative metrics, to describe the benefits.

Benefit Types	Please describe:
Improved Asset Performance	Having the ability to sell the residual asset to recoup costs.
Cost Savings	ADOT ensured that no delay in clearance of the newly acquired right of way. Equity from the potential sale is still unknown but may actually result in positive figure to the project budget.
Shorter Schedule	ADOT ensured that the property was cleared of the modifications by driving the demo/construction schedule.

Provide any additional description, if necessary:

ADOT's approach to managing this property has resulted in significant cost savings associated with acquiring the project right of way. A public auction is set for November 02, 2023, with a minimum bid of \$10,300,000.00, with multiple interested parties. Depending on the auction's outcome, it is possible that the costs for this property will be zero or in fact create revenue for the State of Arizona.

14 How broadly might this innovation be deployed for other applications in the transportation industry (including other disciplines of a DOT, other transportation modes, and private industry)?

With the right staffing, contract structure, and budgetary resources to determine if a total take and cure is an option, this innovation is an opportunity for any DOT to utilize. Although this may seem like a large risk, if an upward commercial real estate market will support the return of your investment, once you have completed the demo/reconstruction process, you will have a valuable asset that can be marketed and sold. This will place this property back on the taxes rolls. If you are not able to recoup the costs you can hold on to the property, filling it with tenants for lease revenues.

## Market Readiness (20 points)

The All selection process will favor innovations that can be adopted with a reasonable amount of effort and cost, commensurate with the payoff potential.

15. What specific actions would another organization need to take along each of the following dimensions to adopt this innovation?

Check boxes that apply	Dimensions	Please describe:
<input checked="" type="checkbox"/>	Gaining executive leadership support	ADOT's ROW is structured such that we ensure that our leadership is fully informed and aware of these types of decisions. They then provide the support needed to move forward.
<input checked="" type="checkbox"/>	Communicating benefits	DOT's will need to communicate to the project team the pros and cons of this type of endeavor.
<input checked="" type="checkbox"/>	Overcoming funding constraints	Once it is determined that a DOT will move in this direction. They will need to ensure that the Acquisition and Property Management Budgets are funded accordingly.
<input checked="" type="checkbox"/>	Acquiring in-house capabilities	ADOT's staff is very capable in that, we have property management, construction, demolition, asbestos, leasing, and property sales experts to ensure this kind of project is doable and can be successful.
<input checked="" type="checkbox"/>	Addressing legal issues (if applicable) (e.g., liability and intellectual property)	DOTs will need to consult their local state statues to ensure they are in compliance with the laws and regulations.
<input type="checkbox"/>	Resolving conflicts with existing national/state regulations and standards	Click or tap here to enter text.

<input type="checkbox"/>	Other challenges	Click or tap here to enter text.
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16. Please provide details of cost, effort, and length of time expended to deploy the innovation in your organization.

**Cost:** See attached sheet "Overall Expenses/Revenue"

**Level of Effort:** This will require involvement from a number of DOT staff members as well as contractors to perform the demolition and build back efforts. It takes a lot of coordination, but when these efforts allow for a multi-billion dollar project to stay on track, it is worth the hard work.

**Time:** 6 months – 2 years

17. To what extent might implementation of this innovation require the involvement of third parties, including vendors, contractors, and consultants? If so, please describe. List the type of expertise required for implementation.

This innovation requires the use of multiple contractors and vendors. ADOT provides the oversight and coordinates expectations and schedules. ADOT solicited the following vendors and contractors; General Contractor to perform the demolition and reconstruction, Asbestos Testing and Mitigation Contractor, Engineering Firm, Electrical Contractor, HVAC Contractor, Plumbing Contractor, Landscape Contractor, Fire Monitoring Contractor, Fee Appraisal Contractor and an Onsite Security Firm. (*ADOT Team to determine if any other vendors where needed.*)

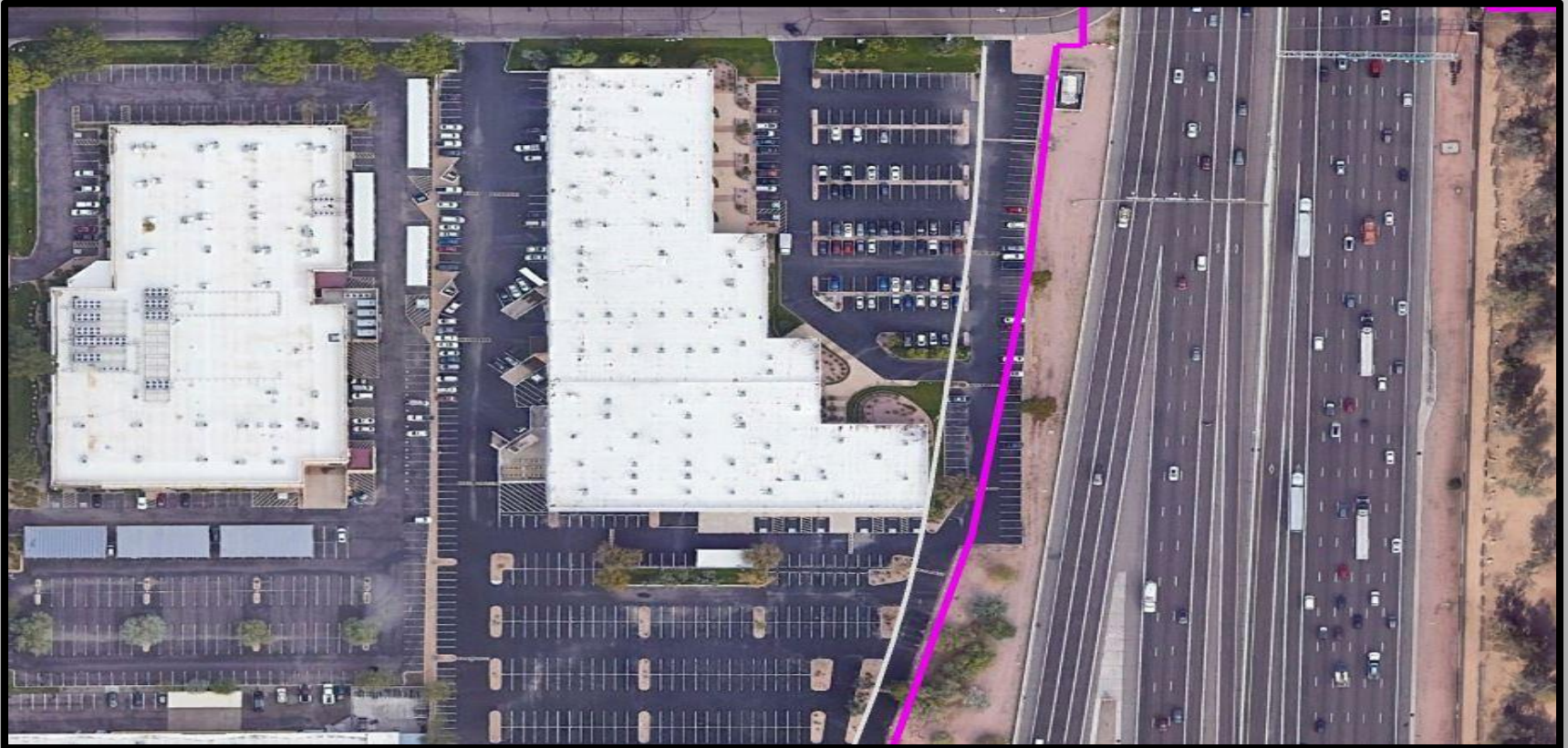


**ADOT**

**Total Acquisition of:**

**1919 W. FAIRMONT DRIVE  
TEMPE, AZ**

## Project Overview - Scope of Work (Aerial View Before Demolition Activities)



- Demo the easternmost 5500 SF (approx. 40-45 feet) of the building.
- Remove parking lot asphalt and landscaping (approx. 25 feet from old ROW line) to clear for new right of way boundary.
- Build Back new exterior wall.

## Exterior of Property Before Demolition Activities



# Asphalt Removal



**Asphalt and landscaping removal from the North to the South end of the parking lot, removing approximately 25 feet from old ROW line.**

## Preparation for New Exterior Wall Panels (Tilt Ups)



**Concrete waste slab to prepare for construction of tilt up panels.**

# Preparations for New Exterior Wall Panels (Tilt Ups)

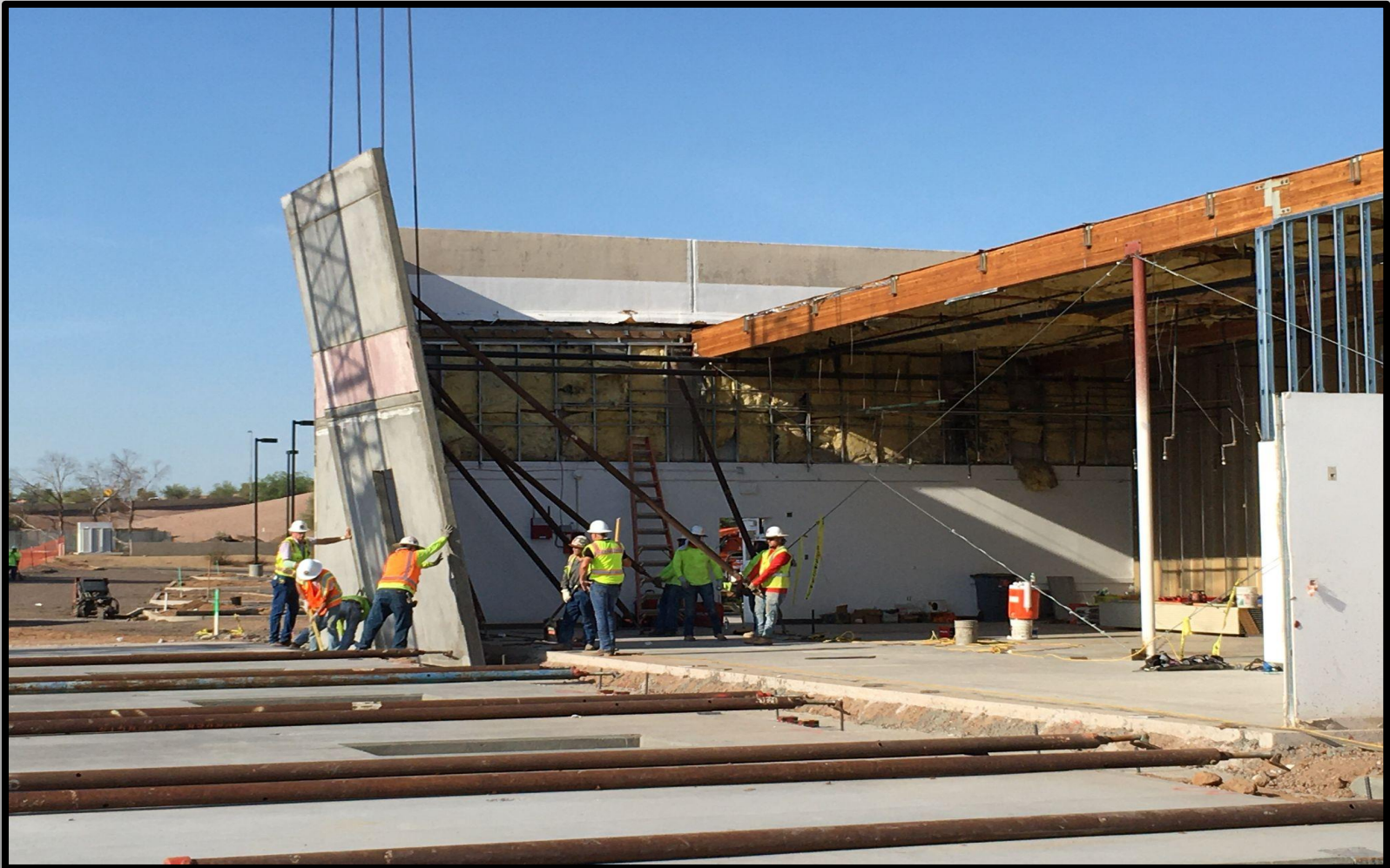


Rebar for tilt ups.

# New Exterior Wall Installations



# New Exterior Wall Installations





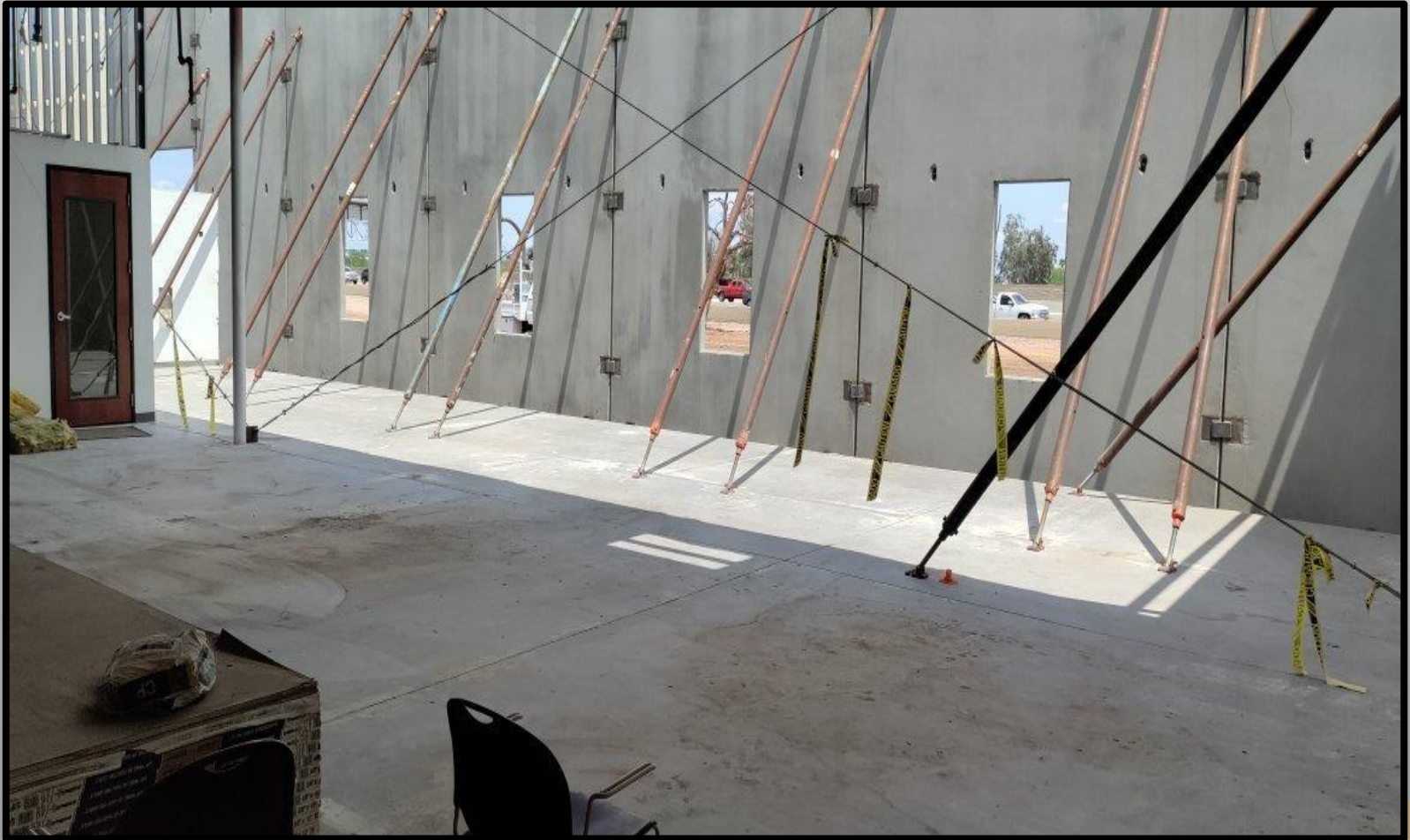
# New Exterior Wall



# New Exterior Wall



# Interior Tilt Up Braces



# New Roof Framing



# Grading and Relocation of R/W Line



## Project Overview- Scope of Work (Aerial View After Completion of Demolition Activities)



- Demo the easternmost 5500 SF (approx. 40-45 feet) of the building.
- Remove parking lot asphalt and landscaping (approx. 25 feet from old ROW line) to clear for new right of way boundary.
- Build Back new exterior wall.

## Interior After Rebuild



## Exterior of Property After Demolition & Rebuild






## Exterior of Property After Demolition & Rebuild



# **Third Party Involvement in Innovation**

- ◆ **General Contractor**
  - ◆ **Engineering- Structural, Mechanical, Plumbing, Electrical, Civil**
  - ◆ **Environmental Firm- Asbestos & Lead Paint Testing/Abatement**
  - ◆ **HVAC Subcontractor**
  - ◆ **Electrical Subcontractor**
  - ◆ **Plumbing Subcontractor**
  - ◆ **On-Site Security**
  - ◆ **Landscape Architect**
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# Required Permits & Reports

- ❖ **Building Demolition**
- ❖ **Ground Demolition**
- ❖ **Architectural**
- ❖ **Engineering**
- ❖ **Grading/Drainage**
- ❖ **Structural for Build Back**
- ❖ **Underground Utilities**
- ❖ **Water/Sewer**
- ❖ **Fire**
- ❖ **Streetlight**
- ❖ **Environmental and/or archaeological report**
- ❖ **Geotechnical for new structural wall and revised parking areas**