

# ADOT Project Management Academy

## Module 6: Construction and Maintenance

### Maintenance Considerations in Urban Districts

Presentation by Randy Everett  
June 14, 2023 in Phoenix, AZ

# Central District Overview

- Serves two counties
- 27 incorporated communities
- Resident population @ 4.5 million
- It has 9 of 10 largest cities of Arizona
- 2,016 maintenance lane miles
- 11 construction & 15 maintenance units - @ 250 people



# Central District Maintenance Concerns

- Maintaining the roadway, roadside, structures & drainage systems
- Reacting to inclement weather
- Reacting to civil disturbances
- Right of Way - Ownership, use and clarity
- Planning/Staging for large scale events such as: NCAA Final Four, Super Bowl, Football (US & Int'l)
- Permitting for encroachments or events

# Maintaining roadway - WB I-10 near Gila River



# Maintaining roadway - NB I-17 north of Jomax Rd



# Maintaining roadway - NB I-17 north of Jomax Rd



# Maintaining roadway - NB I-17 @ Dunlap



# Maintaining roadway - WB L202 at I-10





# Maintaining roadsides - EB I-10 at Warner



# Maintaining Structures @ I-10 Deck Park



# Maintaining Structures - I-10 Deck Park





# Maintaining Structures - NB 16th St on I-17



# Maintaining Structures - SB 7th Ave & I-17



# Maintaining Structures - NB 7th Ave & I-17



# Maintaining Structures - NB 7th Ave & I-17





# Maintaining Structures - NB 7th Ave & I-17





EXIT 195B  
7TH ST  
VA. RD.

STATION

STATION

US-60

# Reacting to inclement weather - SR 88



# Reacting to inclement weather - SR 88



# Reacting to inclement weather - SR 88



# Reacting to inclement weather - SR 88



Riprap (a concrete and sand mixture) was used to make repairs to SR 88.

# Reacting to inclement weather - L303



## Reacting to civil disturbances



Thousands protest in downtown Phoenix for 4th straight night, people being detained

For the fourth straight night, thousands of people hit the streets of downtown Phoenix to protest on Sunday, and some of those participating got violent.



Reacting  
to  
civil  
disturbances

# Phoenix Protest Organizer Jarrett Maupin Blames Other Groups for Thursday's Damage

RAY STERN | MAY 29, 2020 | 7:59PM



Jarrett Maupin speaks with an Arizona Department of Public Safety Officer at Thursday's protest. / [Screenshot from YouTube/Arizona Auditor](#)

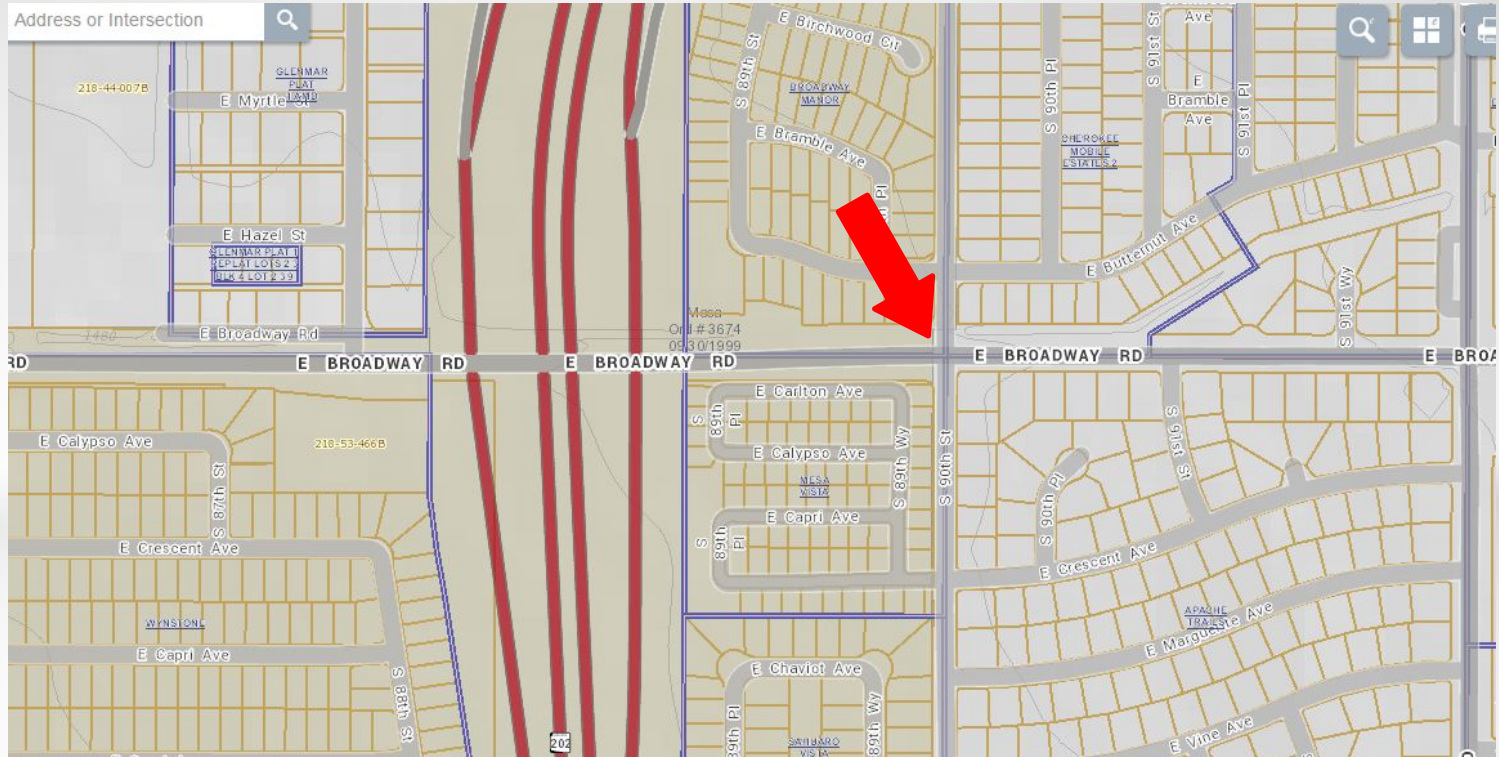
# Reacting to civil disturbances



# Reacting to civil disturbances or other events



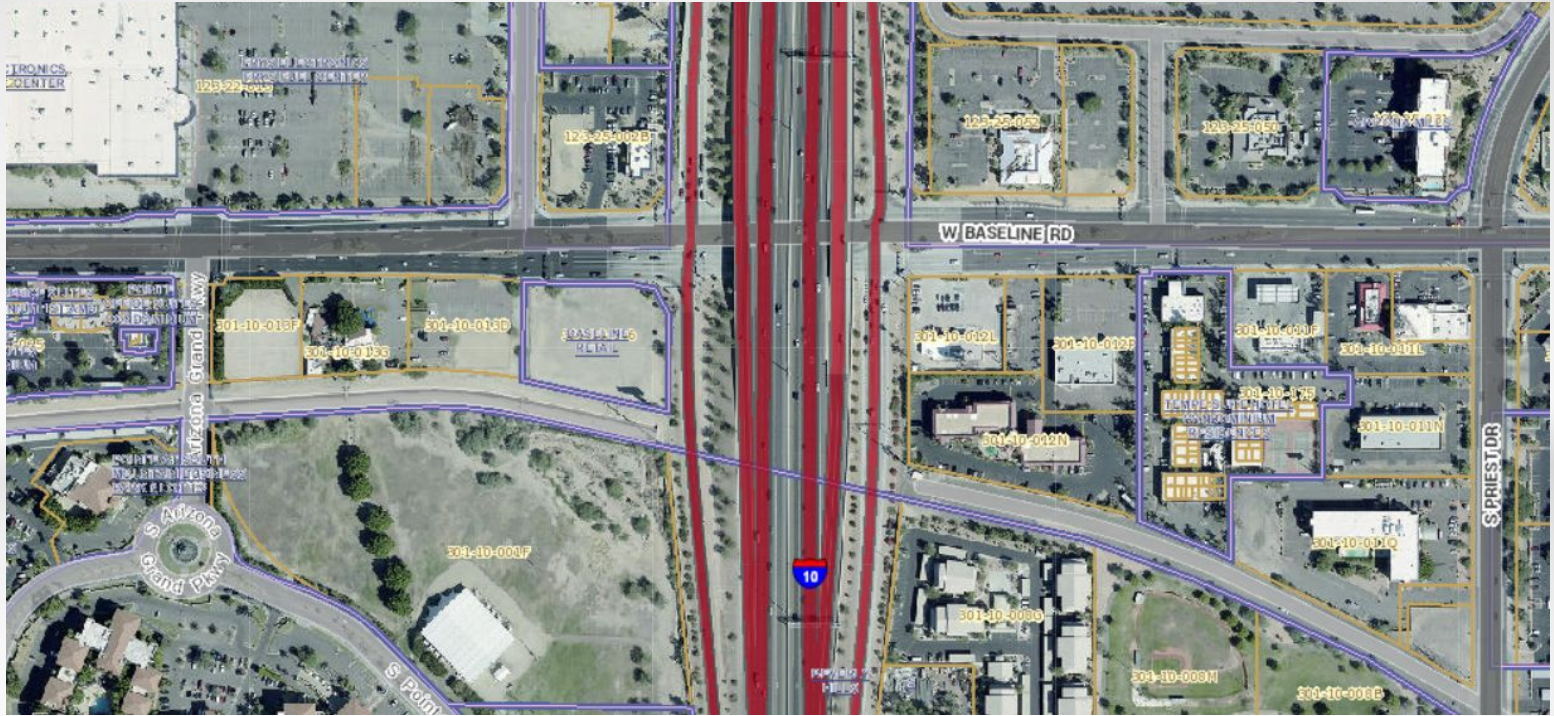
# Liability & Right of Way



# Design for the end in mind - including traffic



# Reallocate Right of Way after construction (use TCE)



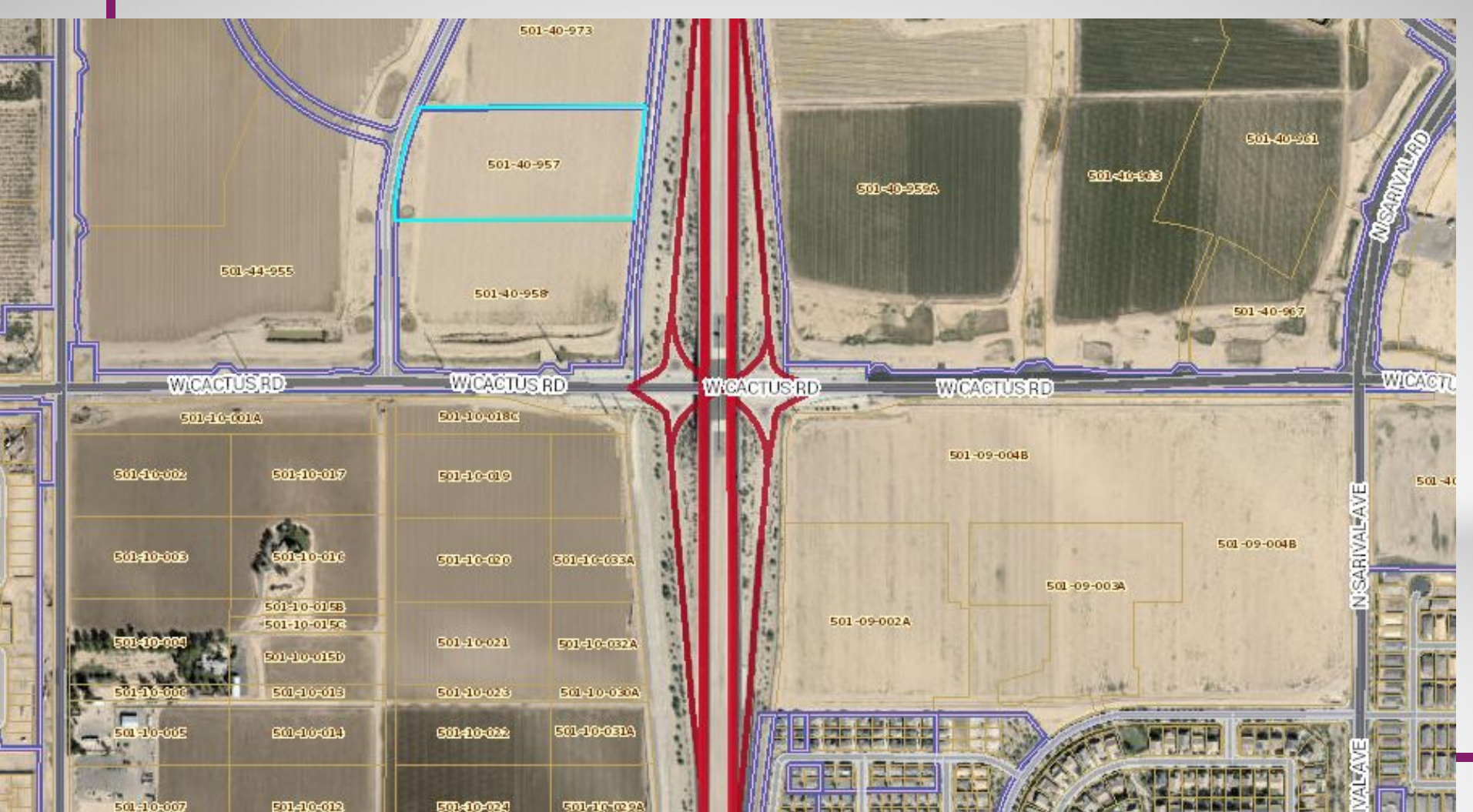
# Roadway Design Guidelines

Access control is important for safety and flow of traffic

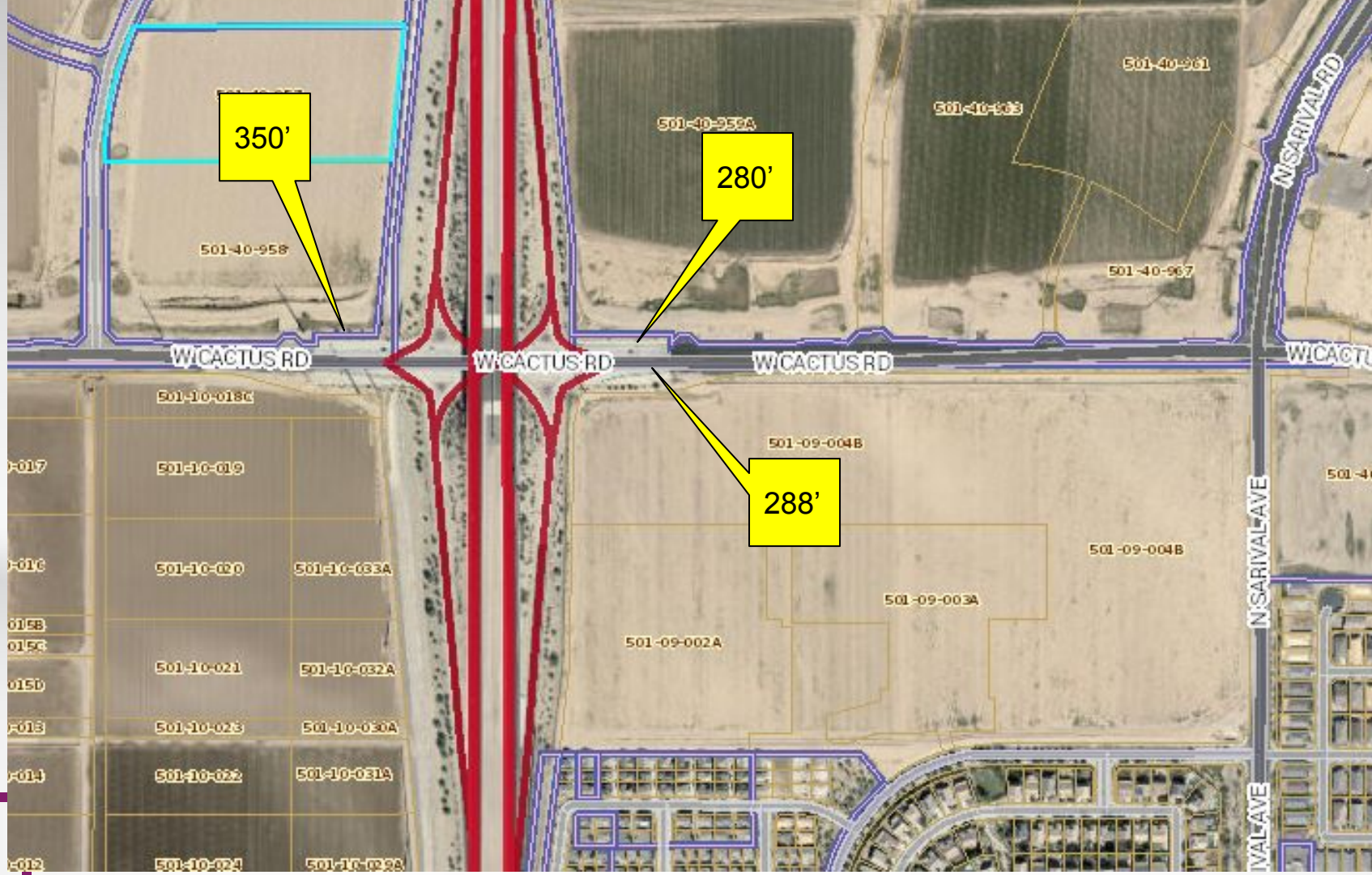
Min 330 feet from on ramp

Min 660 feet from the off ramp

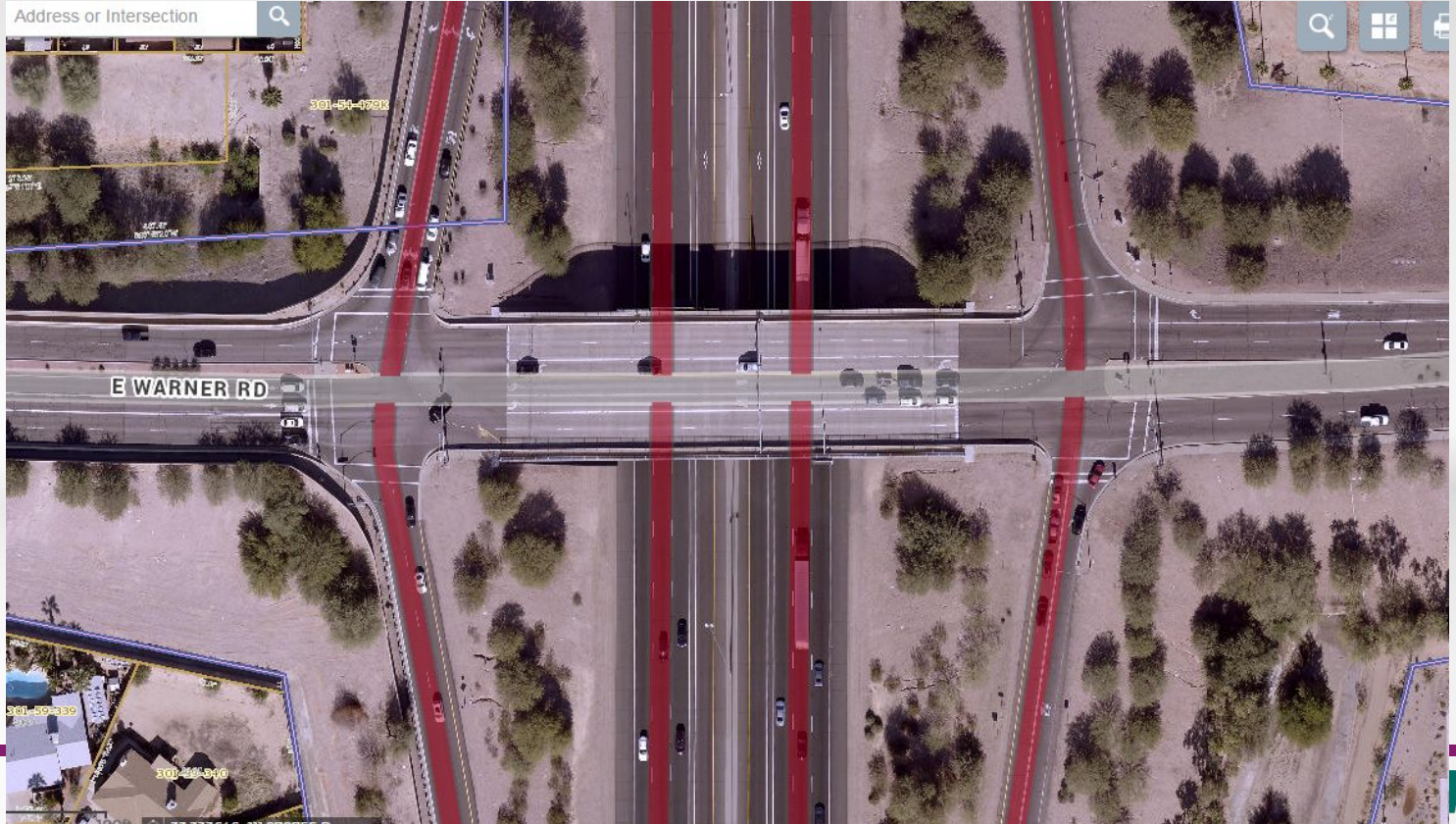
Min 2640 feet to nearest signal





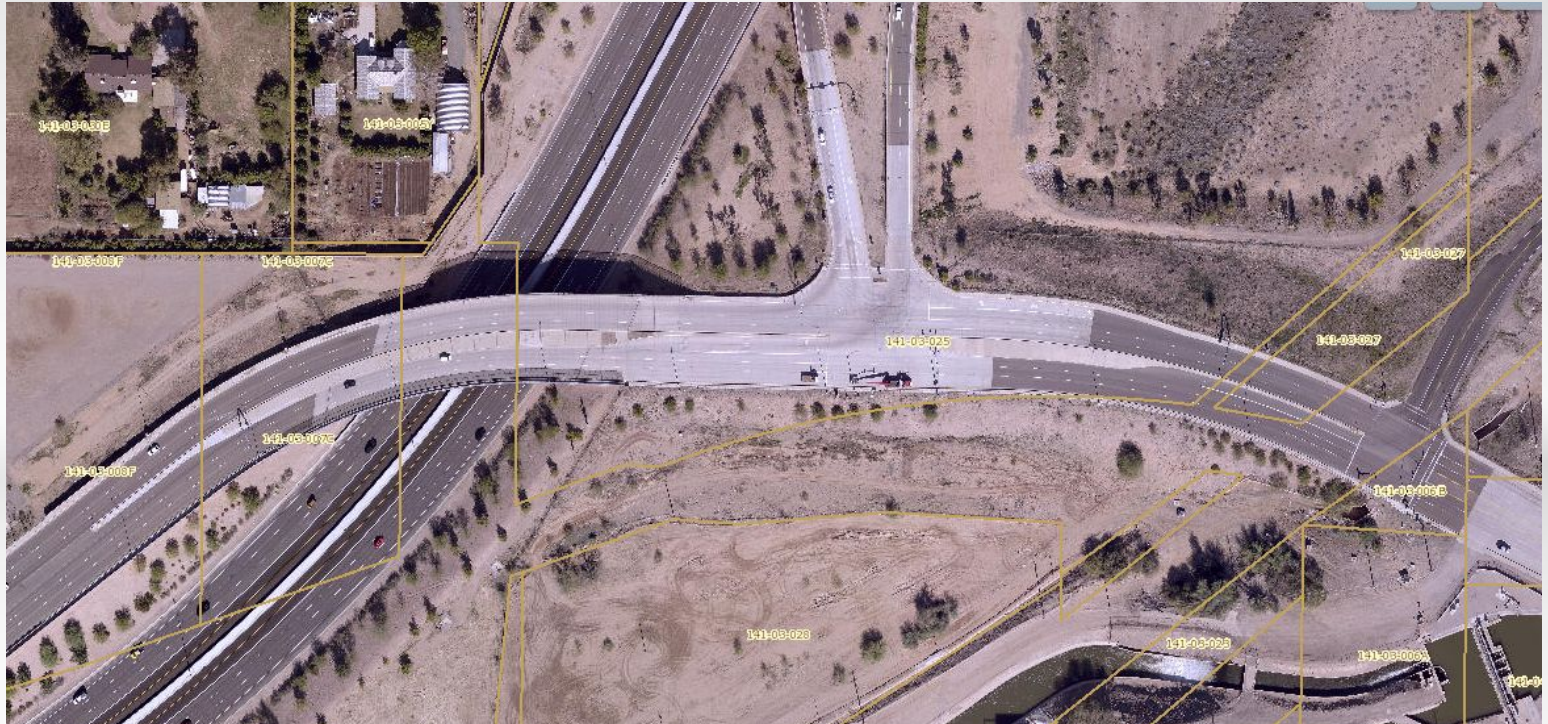


# Design for the end in mind

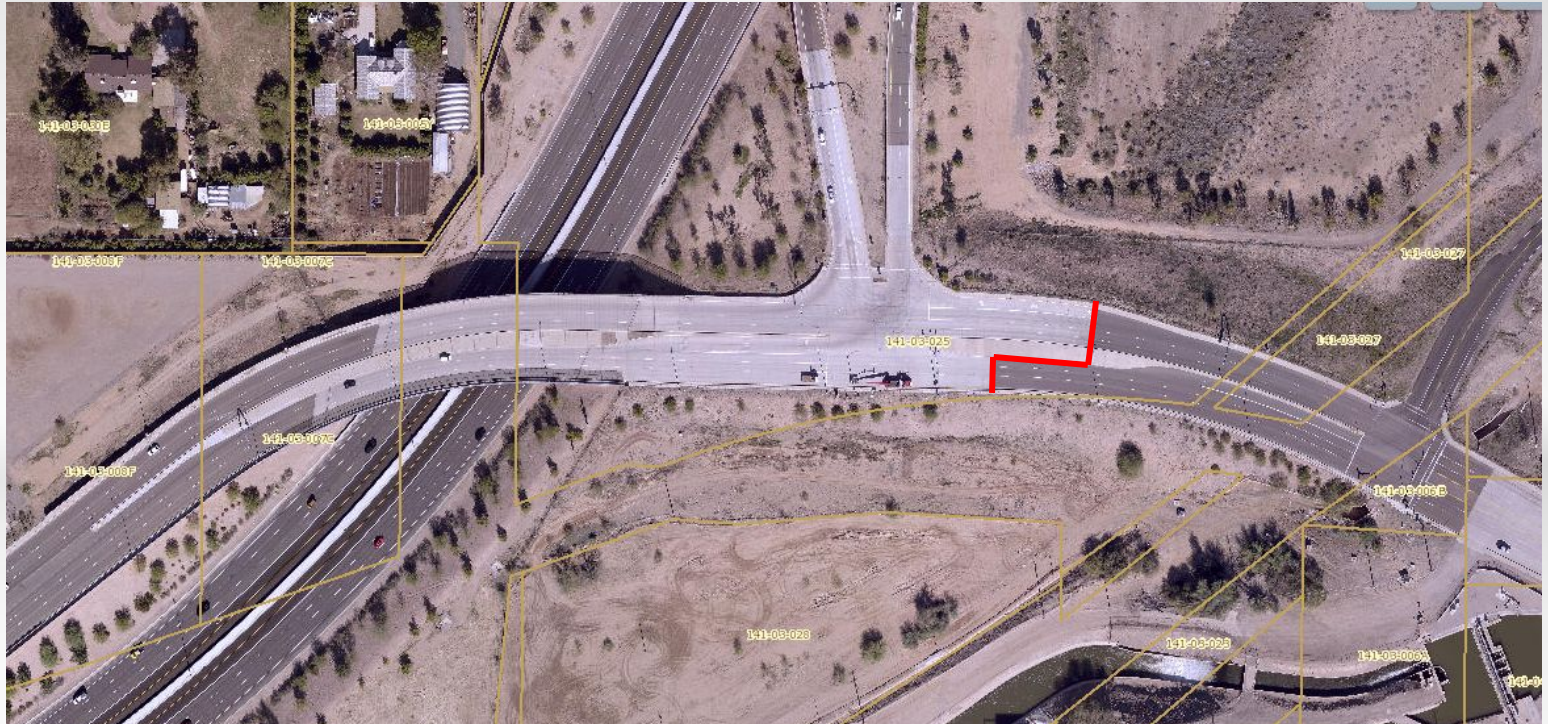




# Where do you draw the line?



# Where do you draw the line?



# Design for the end in mind



## CP0105 - Val Vista Drive Baseline to US60 R/W Take back Options & Construction Sequencing



R/W Area proposed for current ADOT/COM take back - Construction Fall 2017

R/W Area for ADOT to retain and possible PCC pavement. COM to provide 2nd cost option for PCC pavement - Construction Fall 2017

R/W Area for ADOT to retain at time of future take back project and possible PCC pavement. Propose PCC pavement here - Estimated Construction 2020

Future R/W Area proposed for ADOT/COM take back - Estimated Construction 2020

DESIGN	NAME	DATE	ARIZONA DEPARTMENT OF TRANSPORTATION INTERMODAL TRANSPORTATION DIVISION	PRELIMINARY NOT FOR CONSTRUCTION
DRAWN	DLO		CITY OF MESA	OR
CHECKED			MASTER ROADWAY MAINTENANCE EXHIBIT A	RECORDING
TEAM LEADER				SHEET OF
ROUTE:	US 60	LOCATION:	VAL VISTA DR / SUPERSTITION FWY	42 OF
JPA No:				

# I-17 Ped Bridge at Maryland





# Please

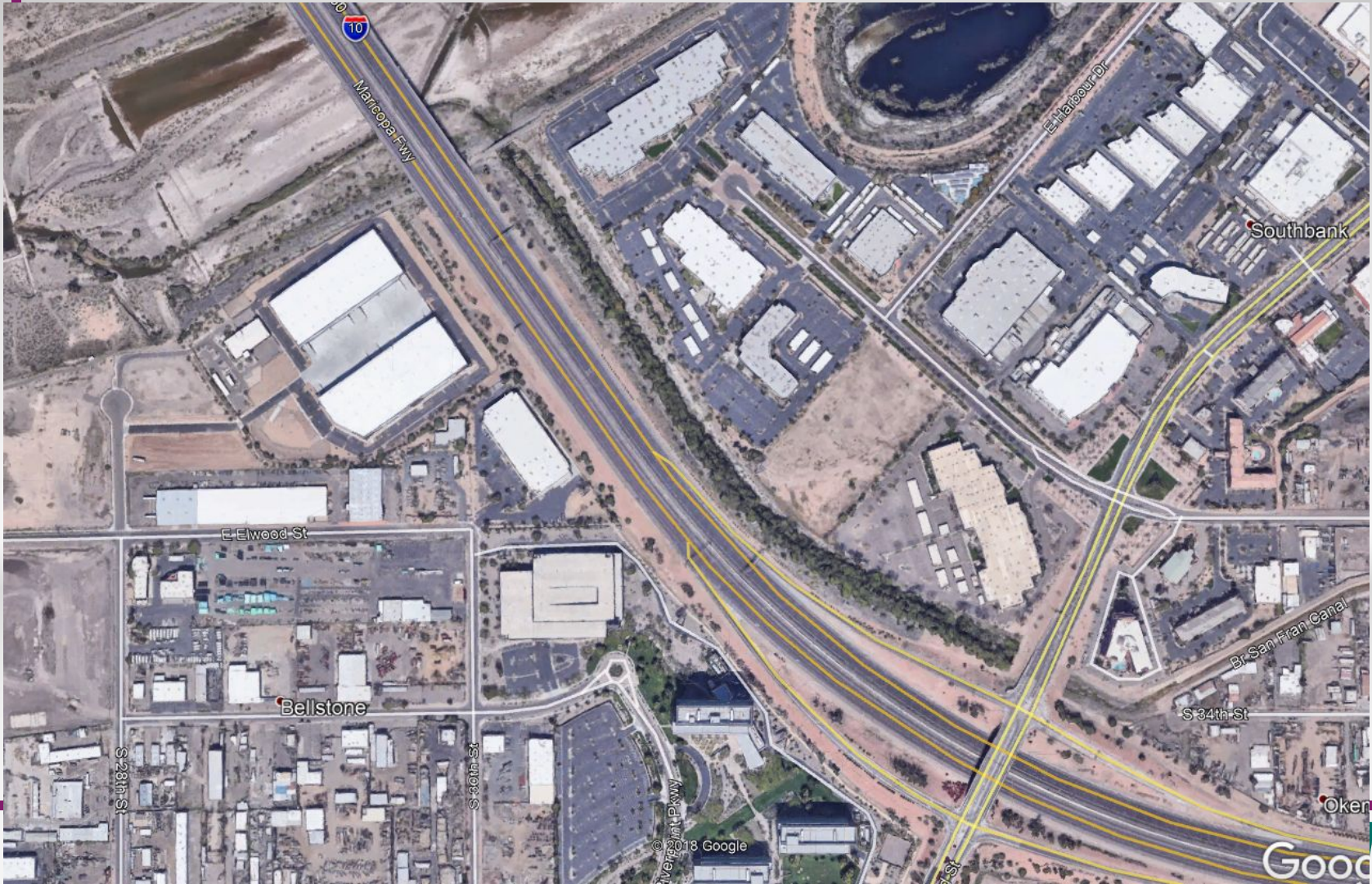
- If you can, extend the PCCP to the final Right of Way line at new or redesigned intersections so it's clear.
  - If not, go straight across on the concrete on either side of the roadway.
- Or USE angle irons to define R/W.

# Please

- Ensure the IGA clearly indicates where the final Right of Way will be after project completion.
- Ensure it is clear who maintains what.
- Invite Central District Development Engineer to initial meetings.

# Please

- Ensure that drainage can be accessed to maintain it.



Maricopa Fwy

E Harbour Dr

Southbank

E Elwood St

Bellstone

Br San Fran Canal

S 34th St

S 28th St

S 30th St

Average Pl Pkwy

© 2018 Google

1st St

Oker

Good



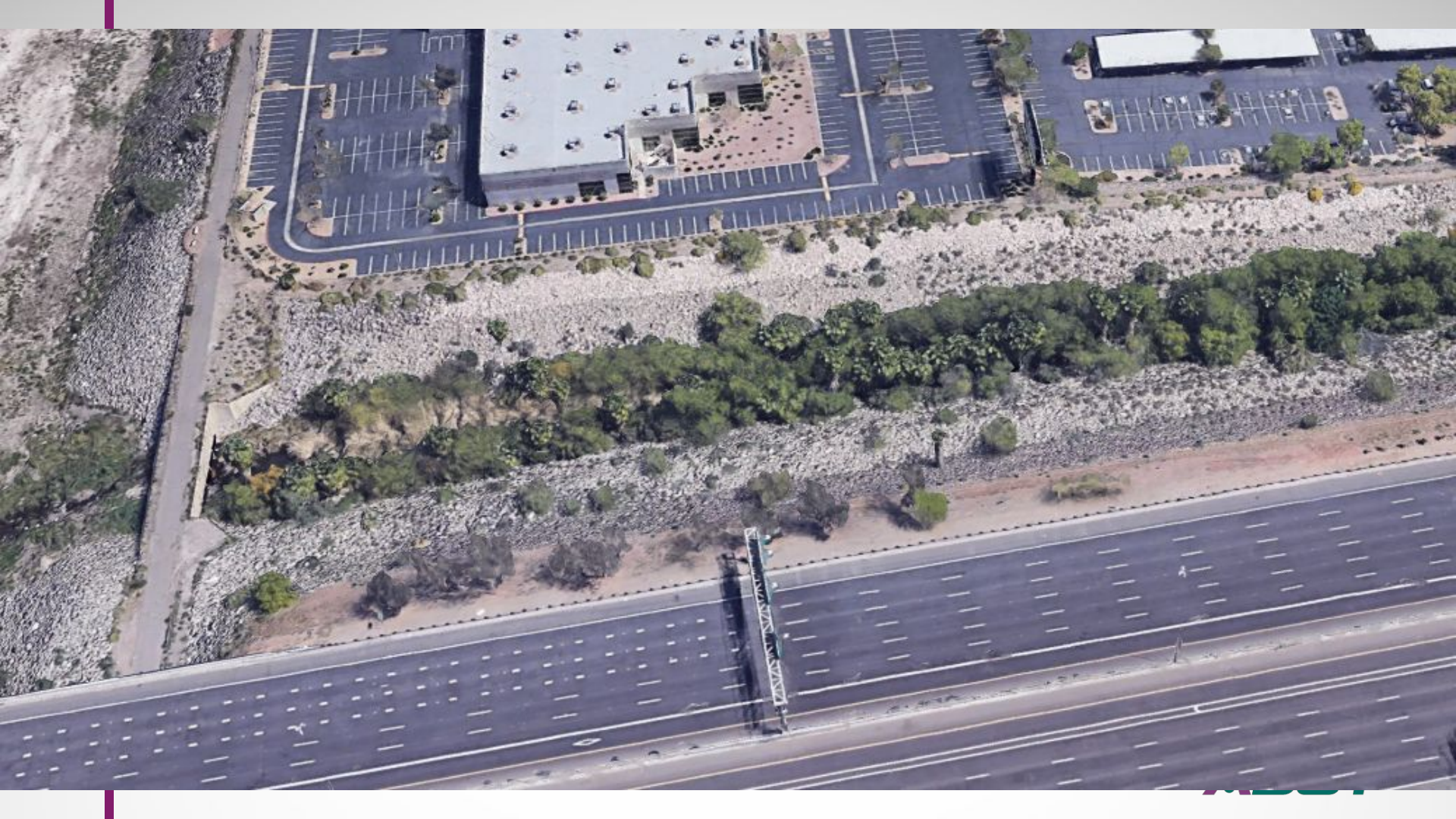
UNIT 2

122-14-0102

122-14-0101

122-14-0103

UNIVERSITY DR











N 85th Ave

Pinnacle Womens Center

Agua Fria Fwy

New River

New River Tr

N 85th Ave

Arizona State Route 101

101

N 83rd Ave

Skunk Creek Trailhead

Arizona R

Ekklesia

N 83rd

Arrowhead Montessori

101



# Just outside my wheelhouse

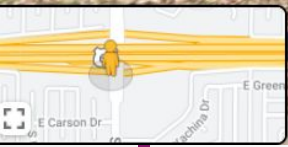
- Build TI's where off ramps can turn right on red.
- One example where it doesn't happen

Most TI's on US 60 Superstition Freeway





© 2021 Google





# Please

- At overcrossings, don't put in potential temporary shelters.
- Make it easy to safely maintain the TI's.





Black Canyon Fwy





East Street Hwy

W Glendale Ave

E 135th St

ONLY ONE ONLY







# Please

- Engage the District when Right of Way will be exchanged after the project.
- Give MicroStation plans to Patrick Whiteford of MPD and Michael Mayes of R/W when the project is finalized.

# Permits

- Central Districts average over 900 permits a year, but are well over this year.
- New freeways = new developments and resulting new utilities - each with permitting needs.
- Events can be challenges - even annual ones like the various Ironman's, golf, auctions & the like in Scottsdale, Renn Fest, LPGA, etc



Ben Avery Clay Target Center

Ben Avery Shooting Facility

Arizona Game and Fish Department Headquarters

W Carefree Hwy

W Carefree Hwy

W Carefree Hwy

W Dove Valley Rd

W Dove Valley Rd

Sonoran Desert Dr

74

74

74

303

303

17

Arizona State Rte 303

N 21st Dr

N Warm Valley Pkwy

Sc



# Permits

- Standard Work
- Weekly Huddle
- [Google Sheets Tracker](#) & [Virtual Dashboard](#)
- RUSH HOURS
- Regular meetings with utilities & pre-permit meetings

**Questions?**