



Tempe Town Lake Downstream Dam Replacement Project Update



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May 22, 2014

Timeline *

- Alternatives Evaluation – June thru November, 2011
- Phase 1 Validate Concept & Select Dam Technology – January 2012
- Project Update with Council – January 2012, September 2013
- Phase 2 Design Steel Dam / **Permitting – March 2012 - May 2014**
- Bid and Procured Steel Gate Fabricator – September 2013
- Procured Construction Contract - November 2013
- Start of Steel Gate Design – January 2014
- Start Construction/Groundbreaking Ceremony - June 2014
- Construction Complete – December 2015

* Per current agreement with Bridgestone.

Regulatory Conditions



US Army Corps
of Engineers®



FEMA



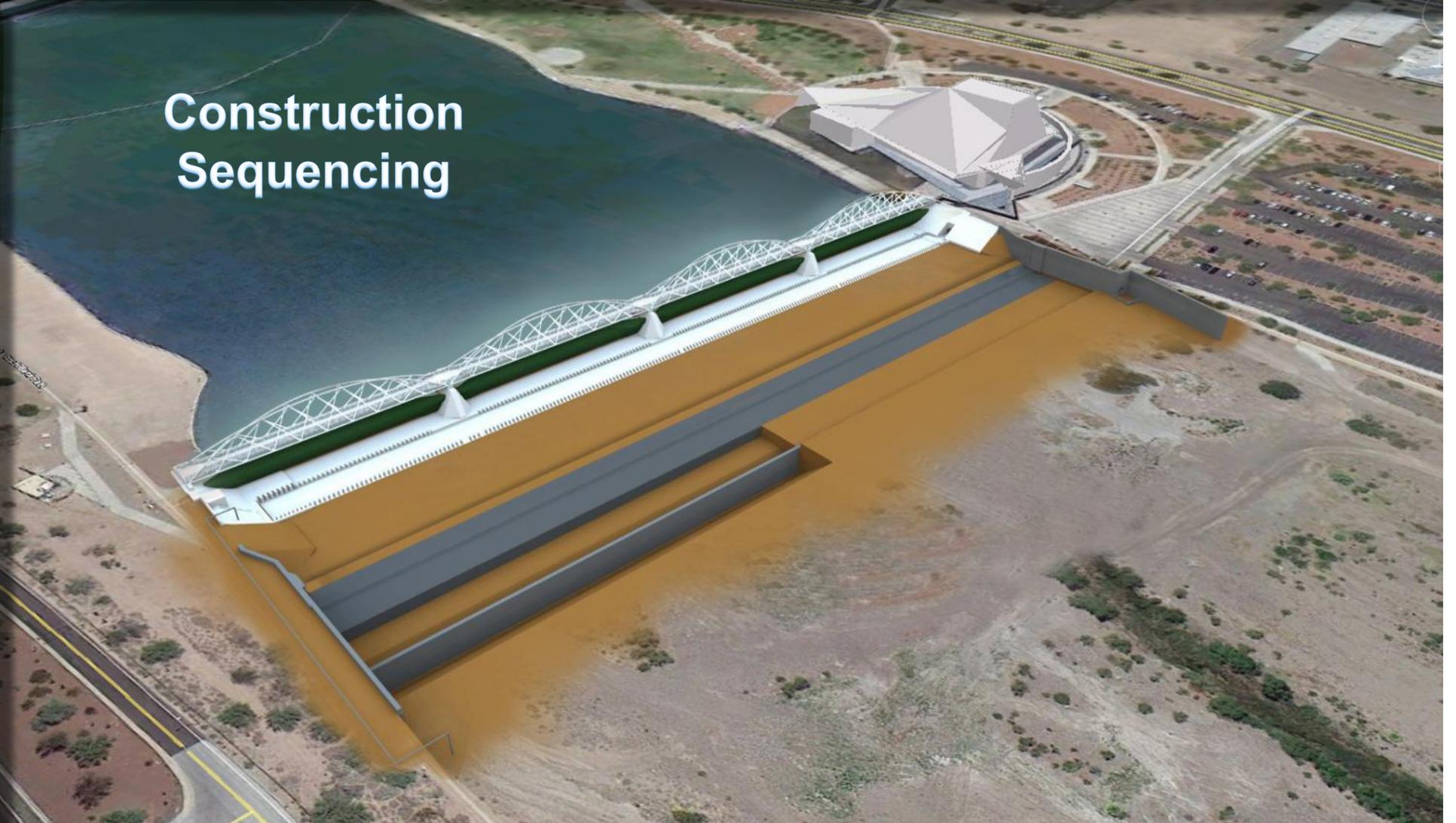
ARIZONA
DEPARTMENT
OF WATER
RESOURCES

Regulatory Agency	Responsibility	Permit Status
U. S. Army Corps of Engineers	Water quality, channel conditions, 404 permitting	Approved - January 2014
Flood Control District of Maricopa County	Flood control, levee maintenance	Approved - May 2014
Federal Emergency Management Agency (FEMA)	Flood control, levees	Approved - August 2013
Arizona Department of Water Resources	Dam Safety	Approved - Initial Phase May 2014 In Progress – Final Permit Sept. 2014

Construction Sequencing



Construction Sequencing



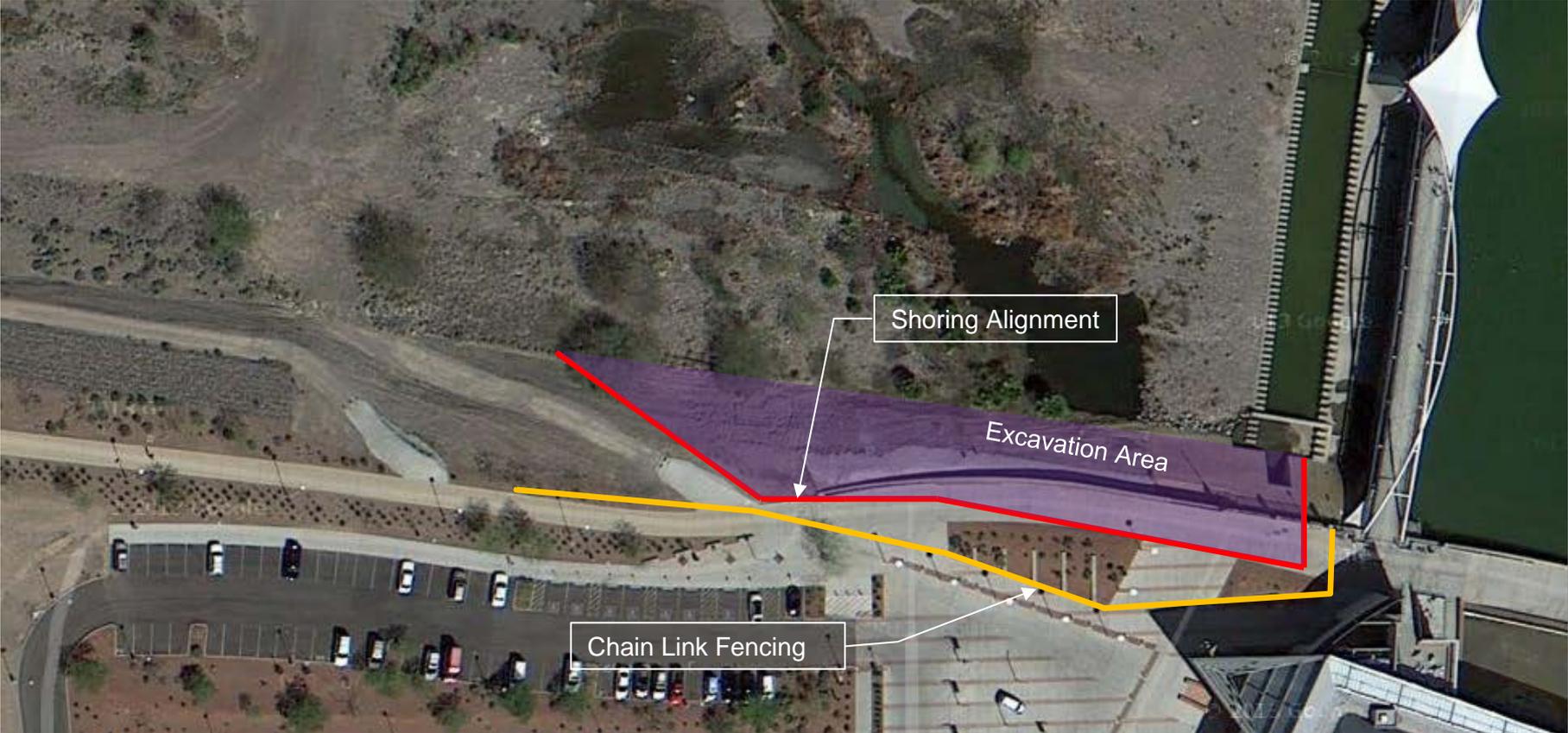
Construction Sequencing

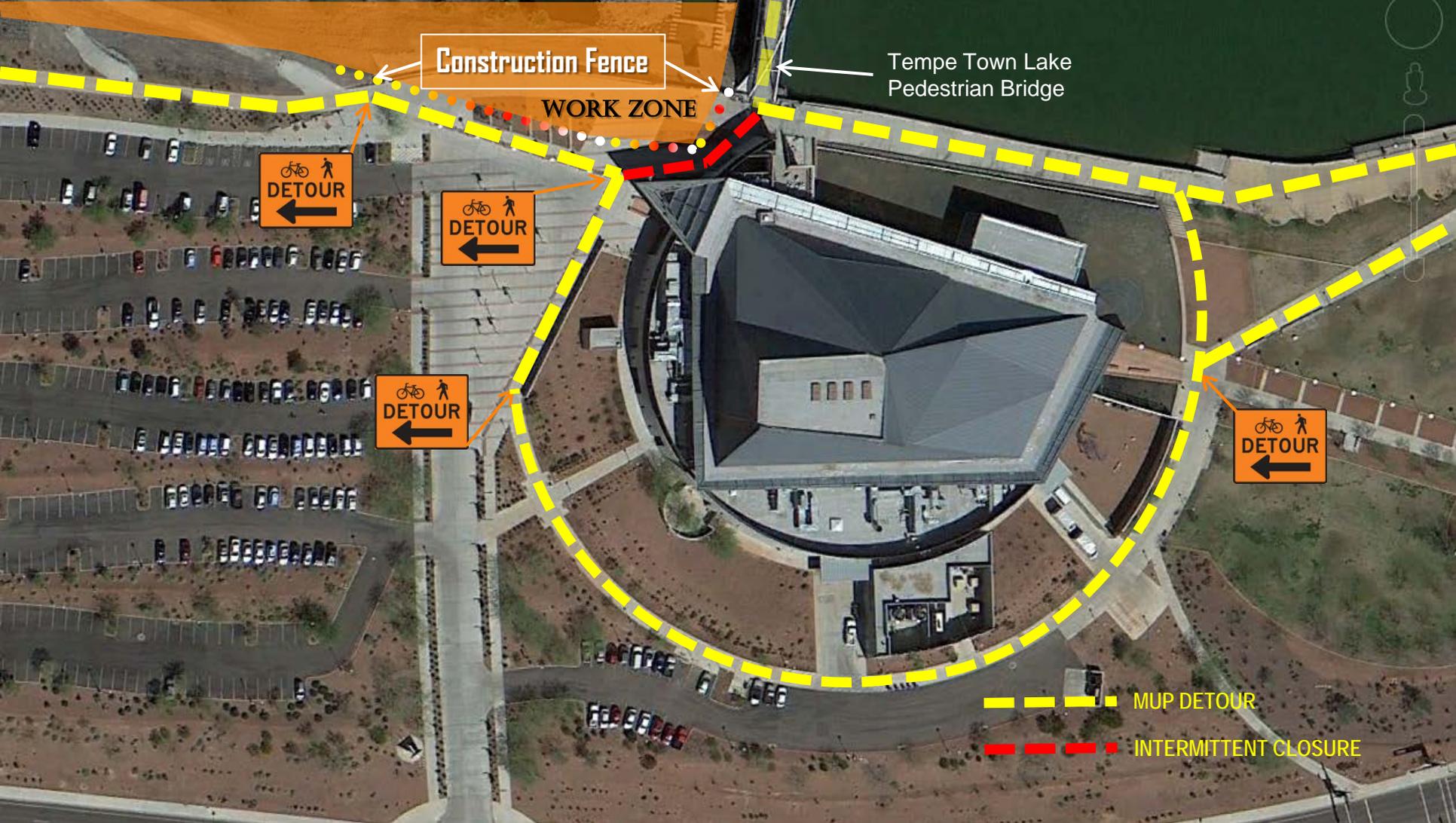


Construction Sequencing



Site Preparation Work





Construction Fence

Tempe Town Lake
Pedestrian Bridge

WORK ZONE

DETOUR
←

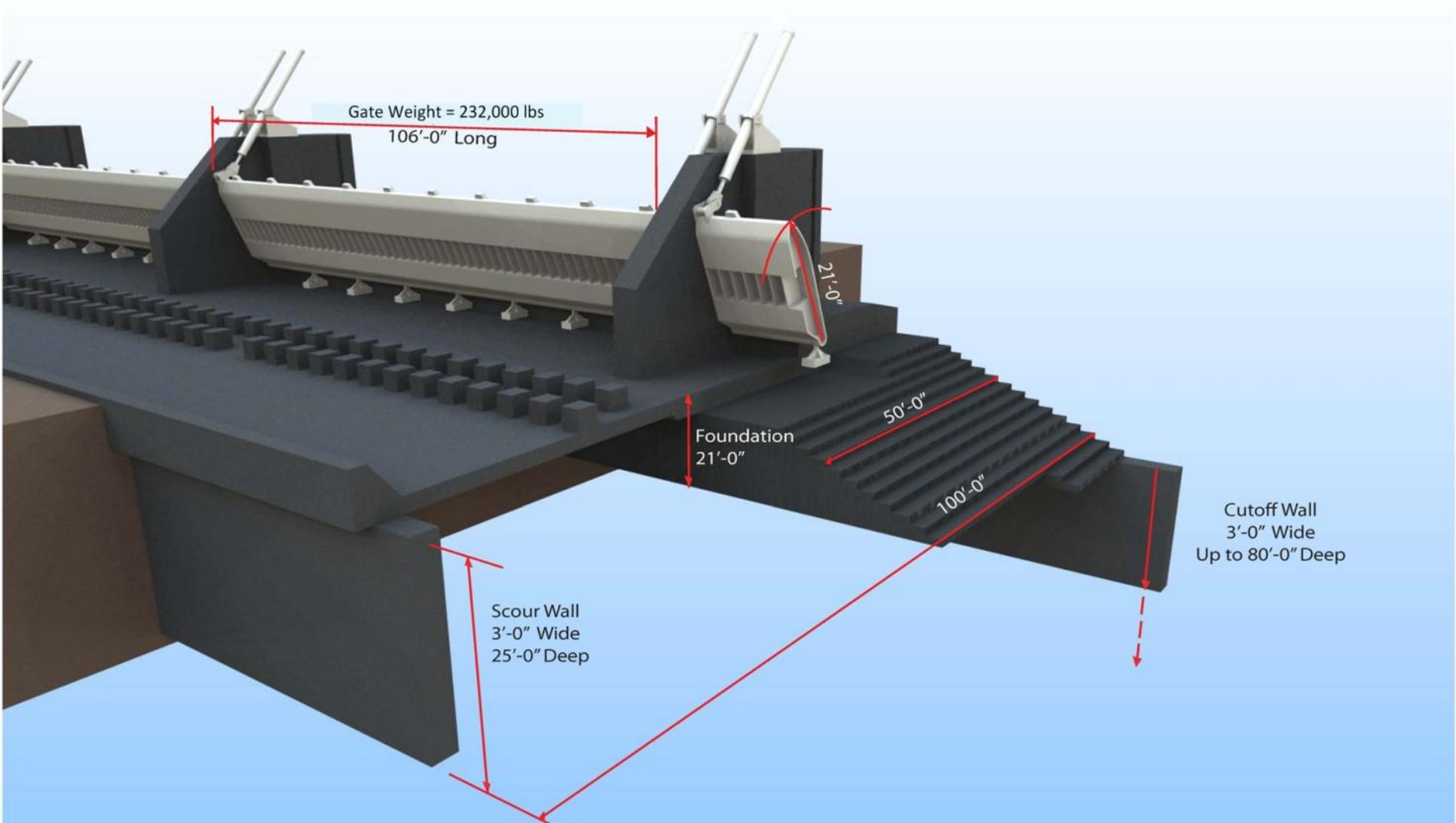
DETOUR
←

DETOUR
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DETOUR
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MUP DETOUR

INTERMITTENT CLOSURE



Gate Weight = 232,000 lbs

106'-0" Long

21'-0"

Foundation

21'-0"

50'-0"

100'-0"

Scour Wall

3'-0" Wide

25'-0" Deep

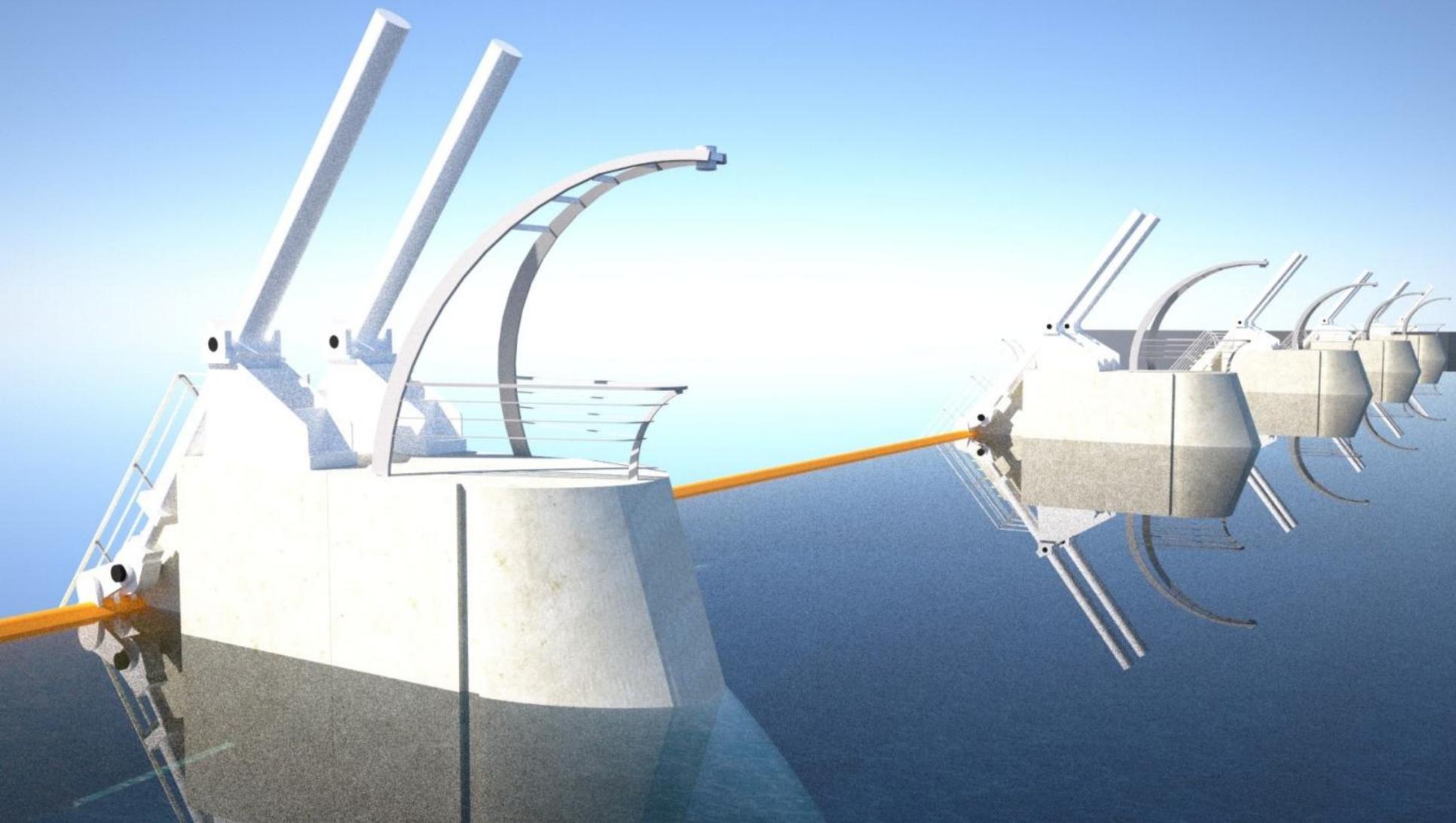
Cutoff Wall

3'-0" Wide

Up to 80'-0" Deep

Tempe Town Lake Downstream Dam Factoids

- ❑ **47,000 cubic yards of concrete** (Volume of over 6 City Hall Pyramids)
- ❑ **7 - reinforced concrete piers** (9 ft wide, 45 ft long and 30 ft tall)
- ❑ **8 - 106 ft long steel gates** (232,000 lb. each)
- ❑ **16 - hydraulic cylinders** (27 ft long)
- ❑ **Total project cost \$40.8 M**



Warranty

- Construction Warranty (2 –years)
- Extended Warranty (not offered)
- Insurance (offered from 3rd party)
- City Insurance Policy (\$30M dam coverage)
- Future Policy (\$40.8M full replacement value)

Questions?

