

Ina Road TI CMAR Project Overview

August 12, 2020

Dan Casmer, ADOT, Senior Resident Engineer
Kevin Thornton, Psomas, Project Manager
Ryan Cannon, Sundt Construction, Project
Manager



Project Information

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- ❑ Delivery Method – **Construction Manager at Risk (CMAR)**
- ❑ Contractor – **Sundt/Kiewit, A Joint Venture**
- ❑ Contract Amount – **\$124,248,793.59**
- ❑ Contract Time – **230 Working Days (GMP 1)**
885 Working Days (GMP 2)
- ❑ Contract Time Started – **7/13/2016 (GMP 1)**
1/17/2017 (GMP 2)
- ❑ Contract Time Ended – **6/20/2019**

Project Design Team

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- Psomas (Prime Design Firm)
- Kimley-Horn
- POINT Engineers
- SCE Engineering
- Gannett Fleming
- Premier Engineering Corporation
- Wheat Design Group

Project Location

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Project Improvements

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Project improvements include:

- ▶ Ina Road overpass over I-10 and the Union Pacific Railroad
- ▶ I-10 widened to accommodate up to 4 lanes in each direction; will be striped for 3 lanes until further corridor widening is complete:
 - ▶ Ruthrauff TI – Under Construction
 - ▶ I-10, Ina to Ruthrauff – RFQ out
- ▶ Ina Road widened to two lanes in each direction with center median and sidewalks from I-10 to Silverbell Road
- ▶ Architectural treatments and landscaping
- ▶ Drainage improvements

Existing Conditions

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Existing Conditions (Ina Rd WB)

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Existing Conditions (Ina Rd EB)

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Existing Conditions (Ina Rd EB)

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Photo Credit: Peter Kresan - 1984

Why CMAR as Delivery Method?

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- Unique Issues and Challenges
- Constructability Reviews during the Design Process (Cost Savings)
- Multiple Stakeholders on Project
 - UPRR
 - Town of Marana
 - Tucson Water
 - Pima County Regional Wastewater Reclamation Department.
 - Local Businesses

Unique Issues and Challenges

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- Not all R.O.W. acquired prior to construction
- Archaeological survey not completed prior to construction
- Utilities relocated concurrently with construction
- Unsuitable/saturated material
- Effluent discharge into Santa Cruz River

Saturated Soils



Saturated Soils

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Saturated Soils

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Saturated Soils

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- Straddle Bents at Santa Cruz River Bridge.
- Grade Control Structure.
- Elimination of Bridge at Ina Rd and Camino De Oeste.

Straddle Bents at Santa Cruz River Bridge

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Grade Control Structure

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Elimination of Bridge

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Multiple Stakeholders

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- Town of Marana
- UPRR
- Tucson Water
- Pima County Wastewater Reclamation Department
- Arizona Game and Fish
- Local Businesses
- Utility Providers

Test Hole # 306
 Date of Excavation 4/13/15
 Project # H8470.01D
 Alignment Ina CST CL
 Location Ina Rd eastbound shoulder, approximately 1000 ft east of Silverbell Rd.



SUE Crew R Directional P S O M A S
 Truck # _____
 City Marana
 County Pima

LOCATION PLAN - NOT TO SCALE



SITE BENCHMARK		CROSS SECTION - NOT TO SCALE	
BM =	<u>NN 7 1990 Pima County</u>	FACING <u>East</u>	
ELEVATION =	<u>2221.177</u>	Surface Elevation	<u>2166.272</u>
		Top Elevation	<u>2162.27</u>
		Bottom Elevation	<u>2161.61</u>
RIBBON COLOR	<u>Pink</u>		

COORDINATES	Northing	<u>487553.0646</u>	Easting	<u>956932.3031</u>	
STATIONING	Station	<u>210+50.82</u>	Offset	<u>50.2 RT</u>	
PAVING THICKNESS	<u>N/A</u>	PAVING TYPE	<u>AB</u>	SOIL CONDITION	<u>Dirt</u>
	SIZE <u>4-4"</u>	TYPE <u>PVC</u>	FACILITY OWNER	<u>Century Link</u>	

COMMENTS
 Found 4-4" conduit, 2 top and 2 bottom, located 1 foot north of survey pin.

PREPARED BY Ryan Cannon CHECKED BY _____

Mexican Free-tailed Bat

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Arizona Fish & Game (Bat Hotels)

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Business Access (Ina Rd, East of I-10)

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Business Access (Ina Rd, East of I-10)

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Business Access (Ina Rd, West of I-10)

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Construction Phasing – Phase 1B (I-10 EB)

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Construction Phasing – Phase 1B (I-10 EB)

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Construction Phasing – Phase 1B (I-10 EB)

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Construction Phasing – Phase 2 (I-10 WB)

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Construction Phasing – Phase 2 (I-10 WB)

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Aerial Solutions, Inc.

Construction Phasing – Phase 2 (I-10 WB)

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Sundt - Kiewit Ina Rd Interchange © Phantom Aerial Solutions Inc

Construction Phasing – Phase 2 (I-10 WB)

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Autonom Aerial Solutions, Inc

Construction Phasing – Phase 3

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Construction Phasing – Phase 3

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Construction Phasing – Phase 3

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Construction Phasing – Phase 1B (SCRB - EB)

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Construction Phasing – Phase 1B (SCRB)

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Phantom Aerial Solutions inc

Construction Phasing – Phase 1B (SCRB)

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Construction Phasing – Phase 2 (SCRB)

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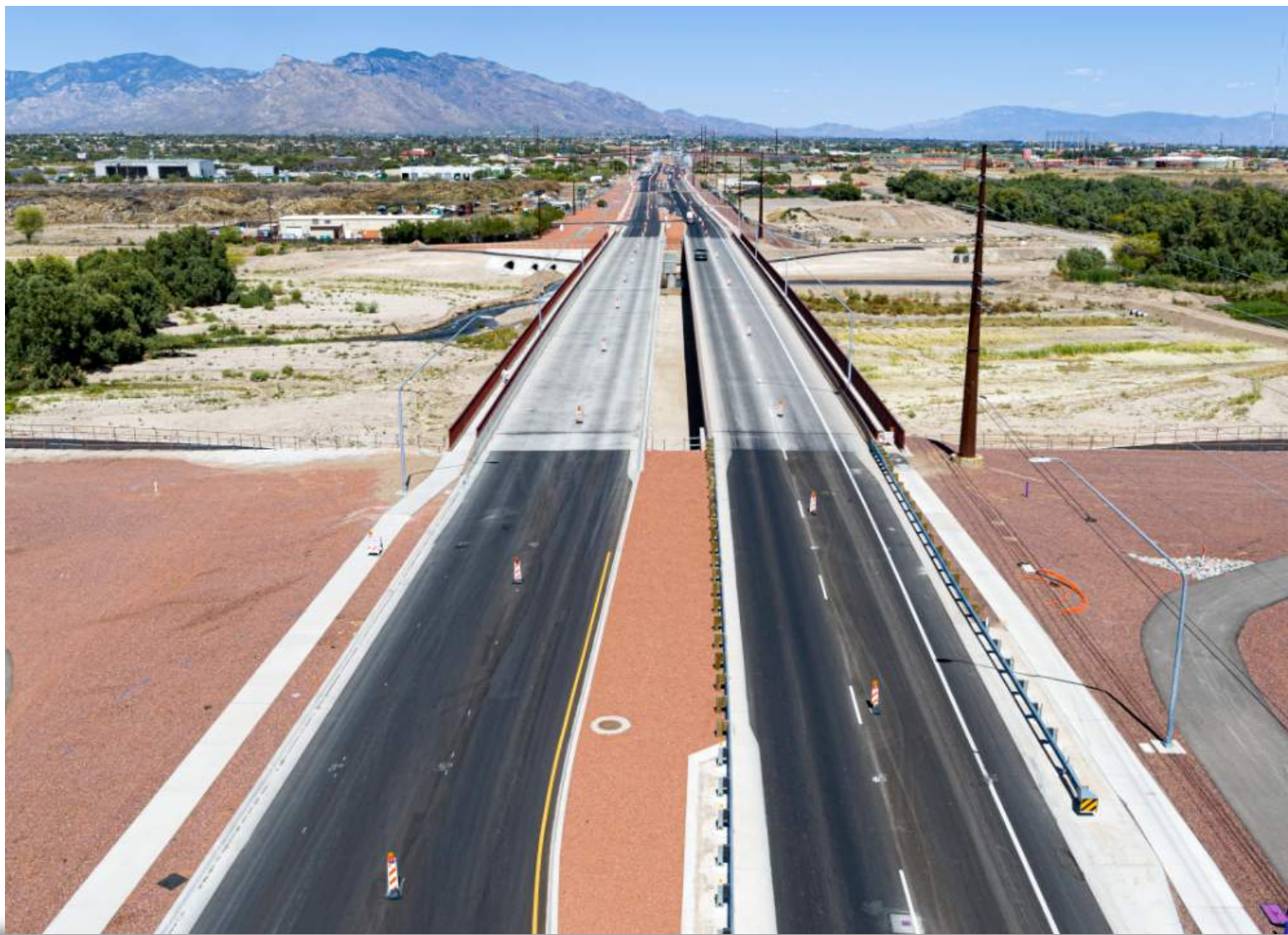
Construction Phasing – Phase 2 (SCRB)

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Construction Phasing – Phase 2 (SCRB)

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May 2019 (Ina Rd WB)

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May 2019 (Ina Rd WB)

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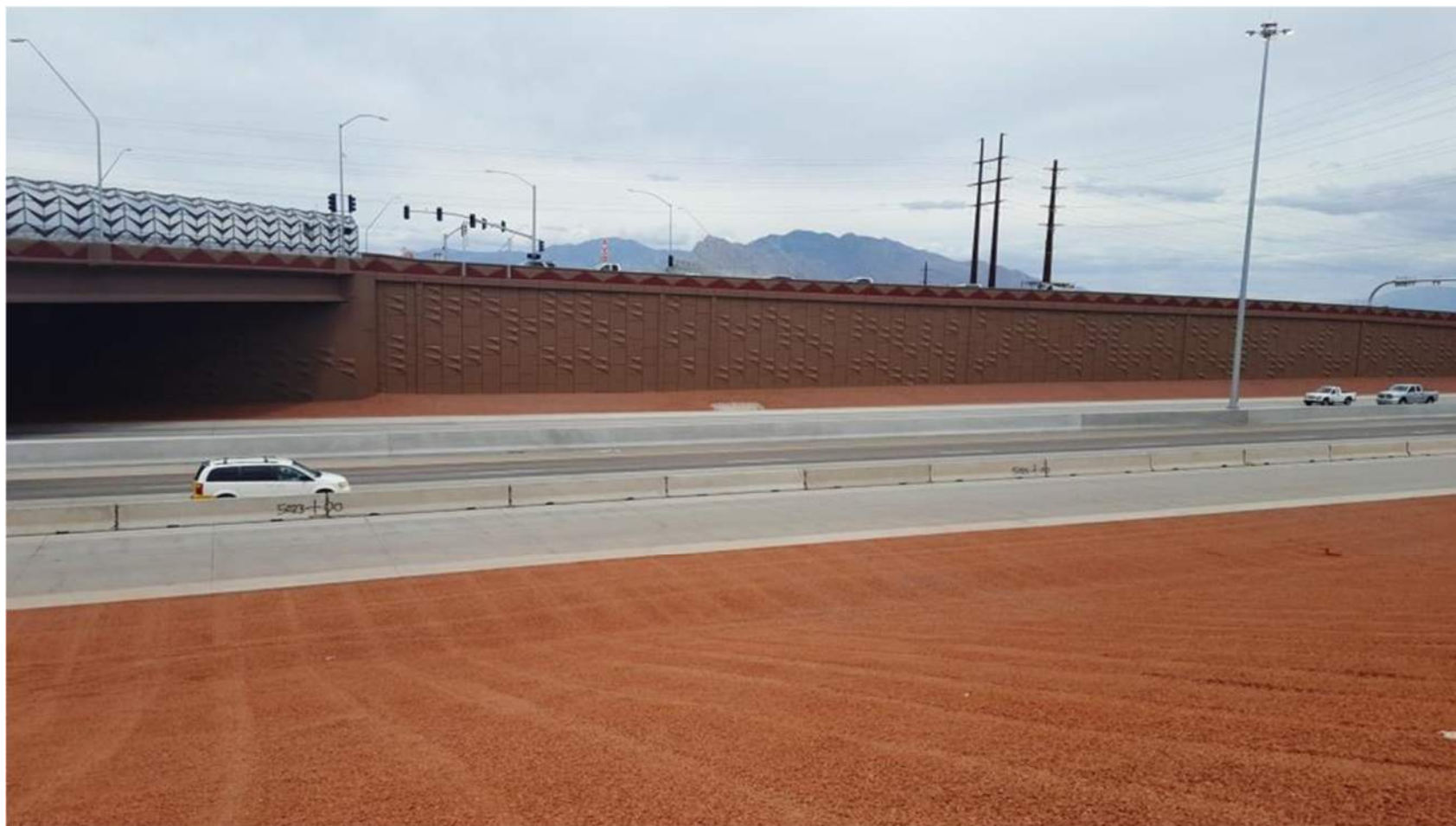
May 2019 (Ina Rd EB)

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Aesthetics

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Questions?

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