







## INTRODUCTION

ROB PADILLA
HUNTER CONTRACTING



Photo: Tim Roberts Photography

## DELIVERY METHOD SELECTION

MELODY MOSS

CITY OF PHOENIX

## WHY THE CITY OF PHOENIX CHOSE DESIGN BUILD

- ORIGINALLY BRIDGE WAS SCHEDULED FOR 2016/2017 CONSTRUCTION.
- ON I-17 AND DOVE VALLEY ROAD A HOSPITAL WAS SCHEDULED TO BE COMPLETE IN 2014 (ORIGINALLY THAT AREA WAS PLANNED TO BE A CAR DEALERSHIP).
- ALL WEATHER ACCESS WAS NEEDED FOR THE RESIDENTS OF SEVERAL SUBDIVISIONS EAST OF SKUNK CREEK TO ACCESS THE HOSPITAL.
- Design build gave us the tools needed to accelerate the schedule.
   A 2-step design build was chosen to include a price component for contractor selection.

## ADVANTAGES OF DESIGN BUILD

- ACCELERATED SCHEDULE (CONSTRUCTION CAN BEGIN BEFORE DESIGN ENDS)
- Design builder is selected based on qualifications (and price if 2-step DB)
- RISK SHIFTS FROM OWNER TO THE DESIGN BUILDER
- Design builder can provide value engineering early in the process

## DISADVANTAGES

- CONSTRUCTION COST IS A PREMIUM
- SCOPING DOCUMENT/RFP NEED TO BE VERY DETAILED (USUALLY PREPARED BY A THIRD PARTY A/E FIRM.)

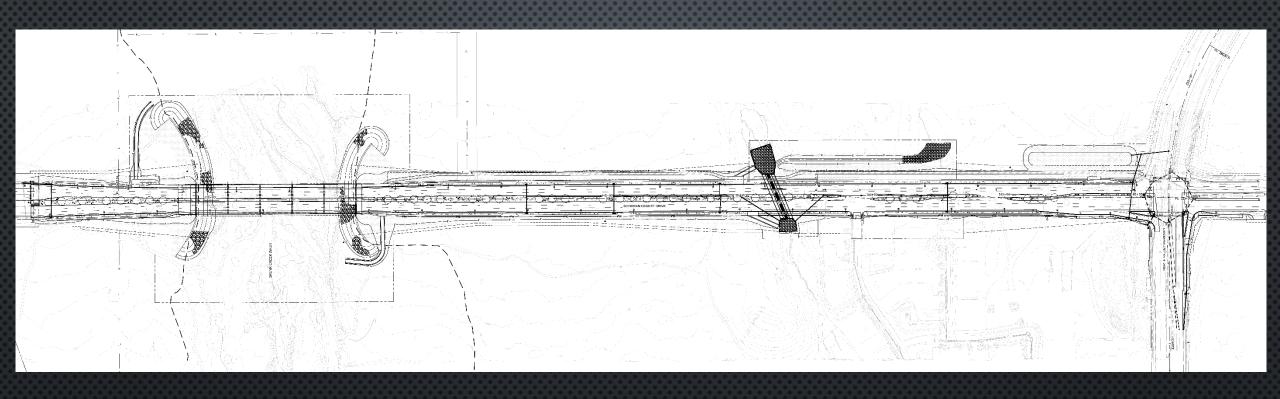
## DESIGN

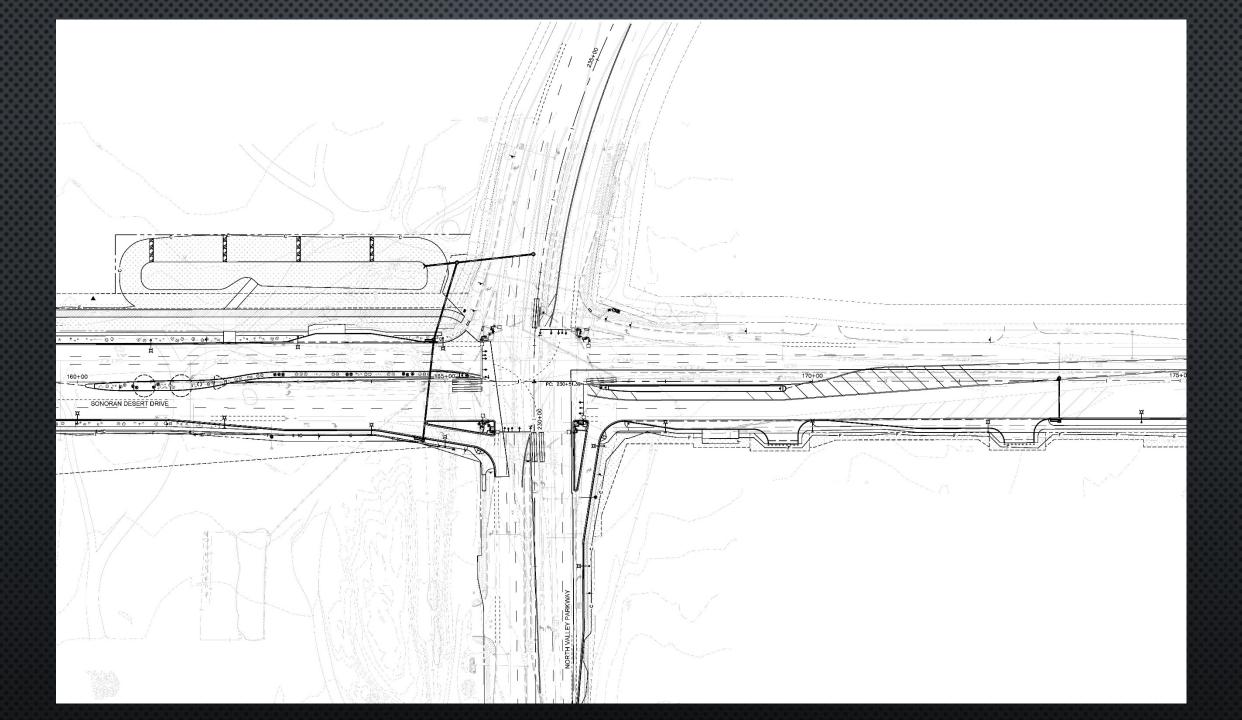
Dave Leistiko

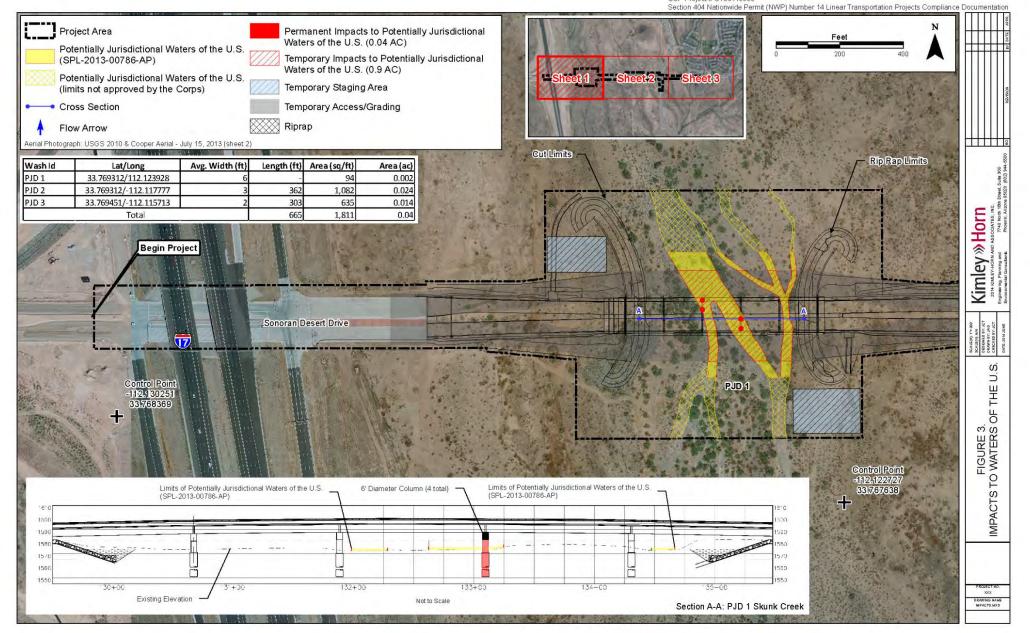
KIMLEY-HORN



- Design of a Biddable Project
- CRITICAL STEPS FROM ZERO TO FINAL PROJECT
- Major Design Features / Milestones
- PERMITTING







## ESTIMATING / AWARD

CHUCK ENGLISH
HUNTER CONTRACTING



### Sonoran Desert Drive

2-STEP DESIGN-BUILD-FINANCE SERVICE

Project No. ST85110090





#### **Organizational Chart**

PROIECT PRINCIPAL Rob Padilla (H)

**DESIGN-BUILD PROJECT MANAGER** Darin Bailey\* (H)

#### **DESIGN AND PRE-CONSTRUCTION PHASE**

LEGEND

#### DESIGN MANAGER

Dave Leistiko, P.E.\* (K)

ROADWAY / QA/QC Chris Woolery, P.E.\* (K)

STRUCTURES

Kevin Kimm, P.E.\* (K)

BRIDGE HYDRAULICS/ DRAINAGE

Alex Meñez, P.E., CFM\* (K)

404 PERMITTING

TRAFFIC/LIGHTING

LANDSCAPE

UTILITY COORDINATION/DESIGN

SURVEY/RIGHT-OF-WAY

GEOTECHNICAL

PRE-CONSTRUCTION

MANAGER Chuck English\* (H)

CONSTRUCTABILITY

Jeff O'Donnal\* (H)

**ESTIMATING MANAGER** 

ESTIMATING Chris Page (H)

CONSTRUCTABILITY AND CITY CONFORMANCE

(H) = Hunter Contracting

(K) = Kimley-Horn

(T) = Trace [DBE]

\* Key Team Members

(A) = AMEC

ADOT COORDINATOR

SAFETY MANAGER

#### CONSTRUCTION PHASE

#### CONSTRUCTION MANAGER

Jeff O'Donnal\* (H)

PROJECT ENGINEER/ **QUALITY CONTROL** 

STRUCTURES MANAGER

STRUCTURES SUPERINTENDENT

» North Gateway Village Planning Committee

» Phoenix Mountain Preservation Council

- » Phoenix Sonoran Preserves and Mountain Parks/Preserves Committee
- » Area residents

**STAKEHOLDERS** 

» City Departments

\* Transportation

\* Water Services

\* Floodplain Management

\* Environmental Programs

» Arizona State Land Department

\* Parks and Recreation

\* Finance

- » Arizona Department of Transportation
- » Maricopa County Flood Control District
- » Adjacent Property Owners/ Developers
- » Private Utility Companies
- » General Engineering Consultant - Gannett Fleming/ HDR

#### CONTRACTOR/PROFESSIONAL LICENSES

Hunter holds current Arizona contracting licenses (qualifying party exempt since 1993 for each license) to perform required designbuild services, including ROC 070961 A, ROC 067542 B, ROC 075851 B-01, and ROC 023057 B-04. Kimley-Horn is registered with the Arizona Board of Technical Registration (No. 10272) and our Design Manager, Dave Leistiko, is a licensed professional engineer (AZ No. 37422).

#### PRINCIPAL OFFICE LOCATION

Hunter's principal office is at 701 N. Cooper Road, Gilbert, AZ 85233 and Kimley-Horn's office is at 7740 N. 16th Street, Suite 300, Phoenix, AZ 85020. These two locations are the home offices of all key staff for Hunter and Kimley-Horn.

#### TERMINATED CONTRACTS/CLAIMS

Hunter has not had a contract or subcontract terminated, or a claim made from a contract that resulted in litigation or arbitration in the last five years. In addition, Kimley-Horn and their subconsultants have never had a contract terminated for cause and no claims have been filed in Arizona within the last five years.

#### BONDING CAPACITY

Hunter is prepared to provide a statement from our A<sup>+</sup> surety company to verify our bonding capacity.

#### **B.** Experience and Qualifications of the Team

#### COMPARABLE PROJECTS

#### ■ 19TH AVENUE BRIDGE OVER THE CAP CANAL

Role: Hunter - CMAR Percent Work Self-performed: 70% Original/Final Construction Costs: \$14M/\$12.7M Construction Dates: 9/2010 to 1/2012 Project Owner: City of Phoenix



### Sonoran Desert Drive

2-STEP DESIGN-BUILD-FINANCE SERVICE

Project No. ST85110090





References: Melody Moss, (602) 262-4055; Ed Scola, (602) 316-8419

19th Avenue Bridge

This CMAR project for the City constructed a grade-separated bridge crossing the CAP canal and its maintenance roadways, as well as paving and drainage improvements along North Valley Parkway (19th Avenue). 19th Avenue Bridge

This complex CMAR project is a relevant comparable project as it was built with the same team proposed for this Sonoran Desert Drive project. Darin Bailey, Jeff O'Donnal,

Jared Scholz, Steve

Ostwinkle, and Mick Nelson worked together to deliver a squared-end girder bridge to a skewed alignment over the CAP canal. The project contained geofoam backfill to protect existing utilities and was built between two vocal and influential neighborhoods. The project included construction of a bridge crossing, roadway embankment, artistic rustication bridge retaining walls, sidewalks, paving, curb and gutter, medians, storm drainage, improvements to CAP Operations and Maintenance roadways, landscape, street lighting, and significant public involvement.

Design Phase Services: Detailed cost estimating and knowledge of marketplace conditions; project planning and scheduling; construction phasing and scheduling; and alternate systems evaluation

and constructability studies. Hunter provided a detailed girder erection plan that was engineered with detailed phasing diagrams to accommodate a critical no-load zone over a shallow 54-inch transmission water main.

#### ■ SCOTTSDALE ROAD IMPROVEMENTS, SEGMENT 1 AND SEGMENT 2, PHASES 1 AND 2

Role: Hunter - General Contractor Percent Work Self-performed: 77%

Original/Final Construction Costs: Segment 1 - \$4.5M/\$4.8 (owner added to original scope: Segment 2 - \$20.2M/\$26.6M (contract modifications for Phase 2)

Construction Dates: Segment I - 2/2005 to 7/2005; Segment 2 -4/2007 to 5/2009

Project Owner: City of Scottsdale

References: Annette Grove. (480) 312-2399; Alan Waggerby, (480) 312-7250

This project included Scottsdale Road improvements from Union Hills to the 101 Freeway, as well as a portion of Union Hills Drive east of Scottsdale Road. Hunter maintained traffic in this high-end retail area while constructing the full road widening and numerous pipeline (water, sewer, and storm drain)

improvements to Scottsdale Road and Mayo Boulevard. Additional elements included full intersection improvements to Scottsdale Road and Mayo Boulevard; installation of conduits for APS, Qwest, and Cox relocations; traffic signals; architectural masonry walls and stone inlays; artistic signage; landscaping; and coordination with adjacent businesses/developers.

Along with major utility work, Darin Bailey, Project Manager, managed the construction of a pedestrian bridge over the CAP Canal just north of Frank Lloyd Wright Boulevard as part of the second segment of this project. Cast-in-place concrete box culverts were constructed in multiple phases to provide for major drainage crossings underneath Scottsdale Road. Darin and



#### Scottsdale Road Improvements

his team managed the construction of these facilities while maintaining traffic flow throughout Scottsdale's and Phoenix's high-end auto dealership areas.

Design Phase Services: Value engineering of box culverts into Con-Arch structures that provided cost savings and an aesthetically pleasing alternative. Flexible phasing and traffic planning for project constraints. Coordination of 69kV, native plant salvage, coordination and permitting with Arizona State Land Department (ASLD) and the City of Phoenix.

#### ■ CHANDLER HEIGHTS AND GREENFIELD ROAD IMPROVEMENTS

Role: Hunter - CMAR

Percent Work Self-performed: 65%

Original/Final Construction Costs: \$24.9M/\$22.7M

Construction Dates: 11/2009 to 10/2012

Project Owner: Town of Gilbert

References: Edgar Median, (480) 503-6754; Jason Kerby,

(480) 503-6198

A multi-phased CMAR project with five GMPs that included 3.5 miles of new roadway and four major intersection improvements. main irrigation canal relocations, and 1.500 linear feet of cast-inplace arch culvert, water, sewer, storm drain, reclaimed water, and landscape construction. Scope included coordination with multiple utilities including SRP Power and traffic signal relocations, and re-designed signalized "T" intersection, over-excavation, and recompaction of roadway subgrade.





### Sonoran Desert Drive

2-STEP DESIGN-BUILD-FINANCE SERVICE Project No. ST85110090



#### C. Experience of Key Personnel

Key personnel assigned to your project bring extensive experience in the design and construction of multidiscipline, major roadway and bridge projects. Our staff has extensive experience in bridge design and construction, bridge hydraulic modeling, and scour analysis and scour countermeasures. Most importantly, all members of our Team have substantial City of Phoenix experience and relationships.



#### DARIN BAILEY - DESIGN-BUILD PROJECT MANAGER

11 years with Hunter

Darin is an experienced project manager with extensive experience managing design-build and

CMAR projects. He has more than 15 years of experience building heavy construction, roadway, and underground improvement projects. He is a skilled manager with outstanding organizational skills and provides exceptional management services during design review and throughout construction. Darin proved these capabilities during construction of the 19th Avenue Bridge over the CAP Canal CMAR project for the City.

Darin is the single point of contact for this project, and will attend all pre-construction, design, and review meetings. He is responsible for overall project management, including constructability reviews, subcontractor selection, permits, and creating and updating the master schedule, and assumes responsibility for quality control, traffic, and safety. Darin ensures that appropriate personnel and resources are committed to the project, and that the overall goals and objectives for the project are met.

#### Relevant Experience

- 1) 19th Avenue Bridge over the CAP Canal Project Manager
- 2) Scottsdale Road Improvements, Segment I and Segment II. Phases 1 and 2 - Project Manager



#### CHUCK ENGLISH -PRE-CONSTRUCTION MANAGER

28 years with Hunter

Chuck ensures all constructability reviews. alternative systems, and value-added options are

explored during the design phase. His experience and attention to detail in the pre-construction phase eliminates issues that may cause delays during construction. Chuck is supported by a staff of experienced estimators and take-off engineers that are capable of providing the necessary evaluation to best support design prior to the construction phase. He works with the owner, general engineering consultant, engineer, and project stakeholders to ensure all milestones and responsibilities are met on time and within budget.

#### Relevant Experience

- 1) Greenway Parkway Bridge at Cave Creek Wash Role: Preconstruction Manager; CMAR project to replace an existing bridge structure with a cast-in-place three-cell box culvert crossing of the Cave Creek Wash and its maintenance roadways and paying and drainage improvements along Greenway Parkway.: Original/Final Construction Cost: \$6.2M/TBD; Dates: March 2014 to September 2014: Project Owner: City of Phoenix: References: Rick Evans. (602) 262-4051; Melody Moss, (602) 262-4055
- 2) Scottsdale Road Streetscape Segment 6 Pinnacle Peak to Carefree Highway - Role: Pre-construction Manager; CMAR project that includes channelization of traffic, native plant inventory and salvage, asphalt removal, trenching, installation of PVC conduit, slurry backfill, installation of concrete manhole/pull boxes, implementation of Scottsdale Streetscape Guidelines and Scenic Drive recommendations, public outreach, and restoration of asphalt trench patching, and pavement markings.; Original/Final Construction Cost: \$2.9M/\$2.9M (projected); Dates: September 2013 to January 2014; Project Owner: City of Scottsdale; References: Elaine Mercado, (480) 312-7985; Jon Hughes, (480) 312-2392



#### JEFF O'DONNAL — CONSTRUCTION MANAGER

■ 12 years with Hunter

Jeff has 24 years of industry experience, spending the last 12 years with Hunter. He has contributed

to Hunter's success with design-build and the CMAR delivery methods by providing construction management services on comparable horizontal improvement projects since 2003. Jeff has managed multiple challenging heavy civil construction projects, including the realignment of SR-87 in Sunflower, AZ that included multiple bridge structures with congested work zones. His most recent project, 19th Avenue Bridge over the CAP Canal, involved extending North Valley Parkway through an existing neighborhood. Jeff's easygoing nature provides the City with an experienced superintendent that will work well with the community, property owners/developers, and general public. He has proven experience working with residents and affected property owners, which is exemplified by his past project successes.

#### Relevant Experience

- 1) 19th Avenue Bridge over the CAP Canal Superintendent
- 2) Scottsdale Road Improvements, Segment I and Segment II, Phases 1 and 2 - Superintendent



#### DAVE LEISTIKO, P.E. — DESIGN MANAGER/STRUCTURAL DESIGN

17 years with Kimley-Horn

Dave has more than 21 years of engineering and construction experience, including serving

as project manager and structural design engineer on multidisciplinary infrastructure projects for the City of Phoenix, Gila County, Graham County, ADOT, and other agencies. He will be responsible for overall design management and will be the primary point of contact for design efforts for the project. Dave will work closely with the design-build team throughout design and construction. He will be intimately involved in all aspects of the project - particularly the bridge design where he brings recent and relevant



## Sonoran Desert Drive

2-STEP DESIGN-BUILD-FINANCE SERVICE

Project No. ST85110090





- New Skunk Creek Bridge
- New Reinforced Concrete Box Culvert
- New Traffic Signal
- Future Roadway Connection
- Maintenance Access Ramps
- Floodplain
- Floodway

- Roadway Easement
- Drainage Easement
- --- Property Boundary
- -W- New Water Line
- State Land
- Waters of US
- -OH- Overhead Power
- -P- Underground Power

- Skunk Creek/Bridge Hydraulics
- 2 Bridge Type Selection
- 3 Section 404 Permitting
- 4 FEMA/CLOMR
- 5 ASLD Coordination
- 6 ADOT Coordination/ **Encroachment Permit**

- 7 Off-Site Drainage
- 8 Adjacent Parcel Development Coordination
- 9 Intersection Improvements at North Valley Parkway
- 10 Utility Coordination
- 11 Public Involvement
- 12 Native Plant Inventory and Salvage
- 13 Geotechnical

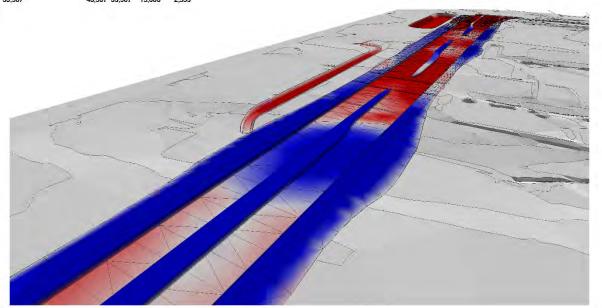


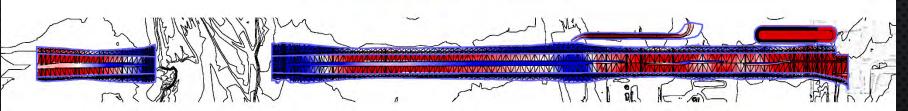
#### Job: Sonoran Subgrade With Med Units: Ft-CY Fri Feb 21, 2014 16:58:55 Page 1

#### Volume Report Subgrade vs. Existing

			Area		Volume		Comp/Ratio		Compact		Export Change	
	Total	Cut	Fill	OnGrade	Cut	Fill	Cut	Fill	Cut		-Import	Per .1 Ft
Basin	37,577	37,438	0	139	14,204	0	1.00	1.00	14,204	0	14,204	139
Channel	24,680	19,086	411	5,183	1,331	5	1.00	1.00	1,331	5	1,326	91
East of Bridge N. Shid.	119,722	18,408	97,096	4,218	537	9,642	1.00	1.00	537	9,642	-9,105	443
East of Bridge Roadway	306,357	219,929	82,663	3,765	25,248	9,578	1.00	1.00	25,248	9,578	15,670	1,135
East of Bridge S. Shld.	95,722	9,704	83,501	2,517	320	9,057	1.00	1.00	320	9,057	-8,737	355
East Sub:	521,801	248,041	263,260	10,500	26,105	28,277			26,105	28,277	-2,172	1,933
West of Bridge N. Shld	21,866	9,005	12,245	616	529	1,469	1.00	1.00	529	1,469	-940	81
West of Bridge Roadway	64,079	43,462	19,361	1,256	6,145	1,934	1.00	1.00	6,145	1,934	4,211	237
West of Bridge S. Shld.	19,362	5,356	13,283	723	193	1,822	1.00	1.00	193	1,822	-1,629	72
West Sub:	105,307	57,823	44,889	2,595	6,867	5,225			6,867	5,225	1,642	390
Regions Total	689.365	362.388	308.560	18.417	48.507	33.507			48.507	33.507	15.000	2.553

Sectional Qtys	Plane Area	Slope Area	Depth	Volume
Subgrade East	259,340	260,226	4.210	40,576
Subgrade West	50,933	51,112	4.210	7,970
Subgrade Sub:	310,273	311,338		48,546
Sectional Total	310,273	311.338		48,546







KHA Job No: 0

Project No: ST85110090

Proj Manager:

Prepared By: JCV

Project Location: Sonoran Desert Drive

Project Termini: I-17 to North Valley Parkway

Project Description: Road & Bridge Construction

Bid Advertisement Date: 2014

Prepared By:	JCA	Bid Advertisement Date: 2014						
ITEM NO.	ITEM	UNIT	TECHNICAL PROPOSAL DATE: 02/25/14					
			QUANTITY	UNIT PRICE	AMOUNT			
M2001005	Earthwork for Basin,includes clearing and grubbing of the site, excavation, grading and shaping	Cu. Yd.	7,100					
M2051000	Structural Excavation	Cu. Yd.	174					
M2060140	Drilled Shafts 4'-0"	Lin. Ft.	840					
M2060160	Drilled Shafts 6'-0"	Lin. Ft.	1,408					
M2111000	Borrow Fill	Cu. Yd.	4,663					
M2113000	Structural Backfill	Cu. Yd.	382					
M2152001	Channel Excavation	Cu. Yd.	1,314					
M2200007	Rip-Rap, D50=6"	Cu. Yd.	304					
M2200016	Rip Rap, D50=16"	Cu. Yd.	7,600					
M2205065	Gabions	Cu. Yd.	161					
M2205067	Gabion Mattress	Sq. Yd.	957					
M3002000	Relocate Light Pole	Each	2					
M3010001	Subgrade Preparation	Sq. Yd.	34,264					
M3100000	Aggregate Base Course (4" Thick)	Cu. Yd.	605					
M3100001	Aggregate Base Course (9" Thick)	Cu. Yd.	3,807					
M3210120	Asphalt Concrete Surface Course, Type D 1/2, 2" Thick	Ton	3,855					
M3210330	Asphalt Concrete Base Course, Type A 1-1/2, 3" Thick	Ton	5,782					
M3240090	Portland Cement Concrete Pavement, Class A, 9" Thick	Sq. Yd.	553					
M3240100	Portland Cement Concrete Pavement, Class A, 10" Thick	Sq. Yd.	5,449					
M3241100	Concrete Approach Slab	Sq. Ft.	4,457					

#### APPENDIX D - SCHEDULE OF VALUES

MAJ	OR ITEMS OF CONSTRUCTION	QUANTITY	UNIT	COST
1	Roadway Excavation	33,000	CY	\$208,230.00
2	Pavement	39,713	SY	\$1,025,389.66
3	Fill Construction	68,480	CY	\$215,560.00
4	Subgrade Preparation	39,713	SY	\$308,570.01
5	Enhanced Pedestrian Crosswalks	1	LS	\$8,000.00
6	Street and Pedestrian Lighting	36	EA	\$273,600.00
7	Channel and Basin Excavation	8,300	CY	\$61,503.00
8	Curb & Gutter and Valley Gutter	14,950	LF	\$149,500.00
9	Signing & Striping	1	LS	\$44,000.00
10	ADOT Overhead Sign Structure	1	EA	\$99,300.00
11	Sidewalks, Sidewalk Ramps & Driveways	40,510	SF	\$133,683.00
12	Concrete Median	1,340	SF	\$16,080.00
13	Multi-Use Trail	28,950	SF	\$26,923.50
14	Catch Basins, Culverts, & Headwalls	1	LS	\$671,800.00
15	Landscaping & Irrigation	28,650	SF	\$378,180.00
16	Erosion & Sediment Control	1	LS	\$21,200.00
17	Bridge (Inc. Channel/Bank work)	67,690	SF	\$5,410,900.00
18	Landscape Establishment & Maintenance	1	LS	\$10,000.00
19	Traffic Signals	4	EA	\$314,000.00
20	DB Team Contingency	1	LS	\$320,000.00
		•	TOTAL	\$9,696,419.17

#### DIRECTIONS:

- Enter cost information in the table above for each major item of construction. Include all
  markups, incidentals and other work required to complete the item, such as mobilization,
  construction surveying, public involvement, quality management, removals, manhole and
  valve cover adjustments, record drawings, etc.
- The TOTAL shall be equal to the total cost of CONSTRUCTION as indicated on the price proposal, including markups; but not including the cost of DESIGN.
- 3. The Proposer is encouraged to provide additional information.
- 4. Complete this sheet by filling in the information below.

#### Prepared By:

	Robert S Carlson	
Signature	Name	
Estimating Director / Vice President	02/27/2014	
Position/Title	Date Prepared	

## CONSTRUCTION

JARED SCHOLZ
HUNTER CONTRACTING

### PROJECT OVERVIEW

- 605' Precast concrete girder bridge structure
- 180' 4 CELL CONCRETE BOX CULVERT STRUCTURE
- 53,000 CY ON-SITE MATERIALS HAUL
- APPROX. 1 MILE OF NEW ROAD
  - CURB & GUTTER SIDEWALK AND MULTIUSE PATH
  - STREET LIGHTING
  - DRAINAGE
  - LANDSCAPING
  - Native Plant Salvage



















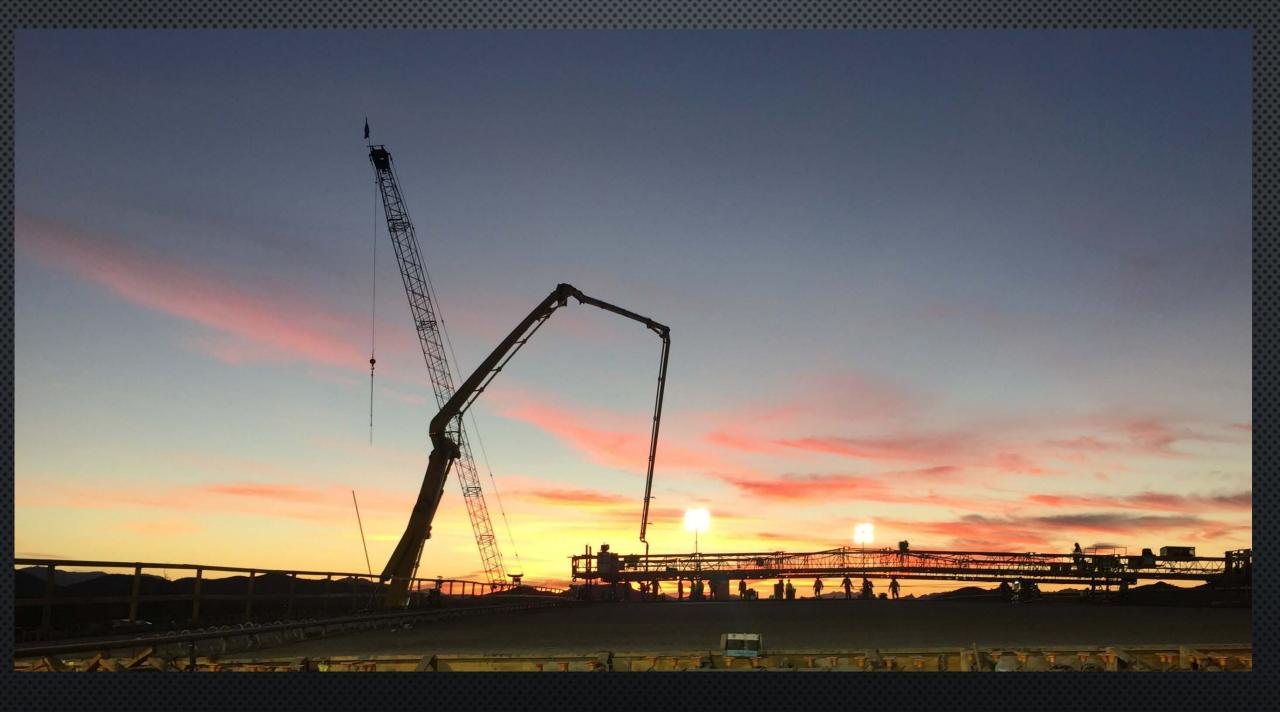




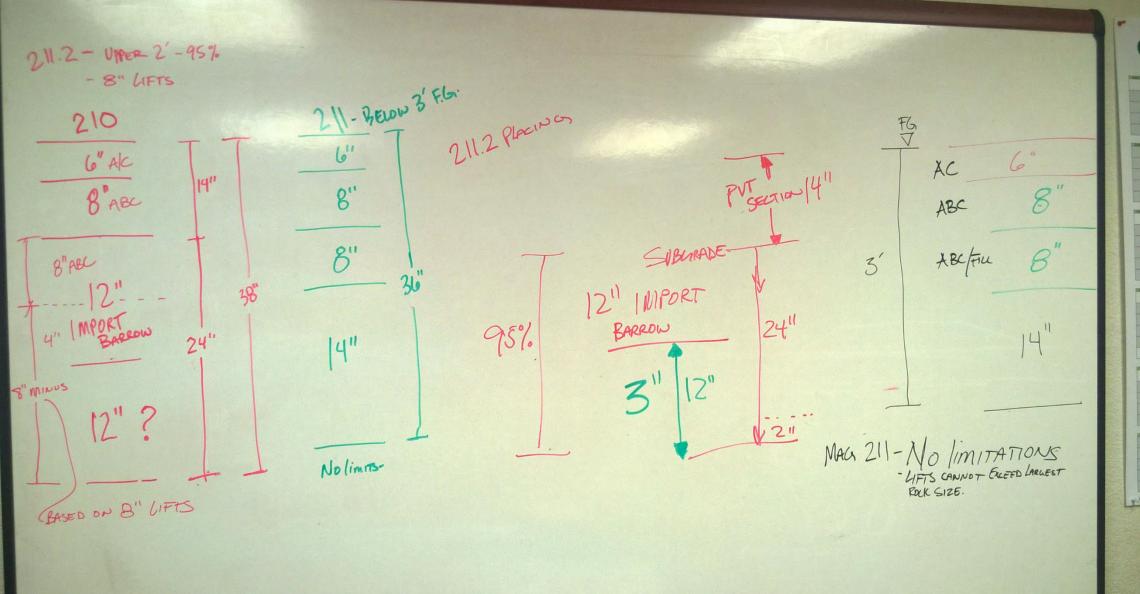




Photo: Tim Roberts Photography

### EARTH WORK

- 53000 CY of onsite haul
- ROCK CRUSHING OPERATION
- 3 different structural sections based on R-value
  - R VALUE >8 = 3' OVER EX, GEO GRID, AND 16" OF ABC
  - R VALUE OF 9-24= GEO GRID, AND 16" OF ABC
  - R VALUE OF <25= 8" ABC



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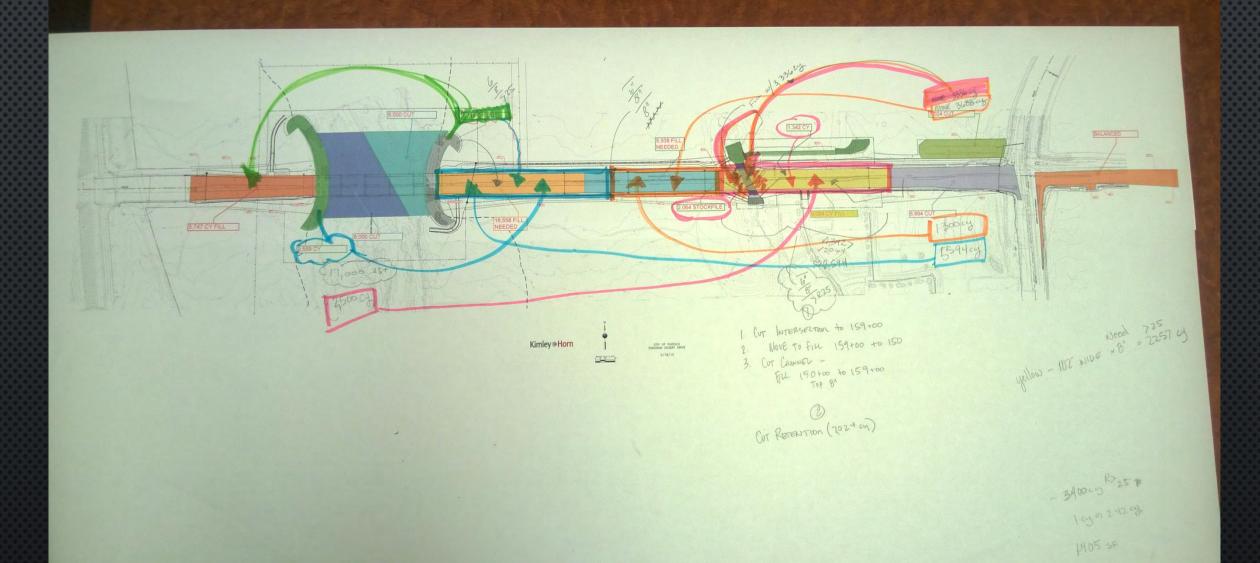
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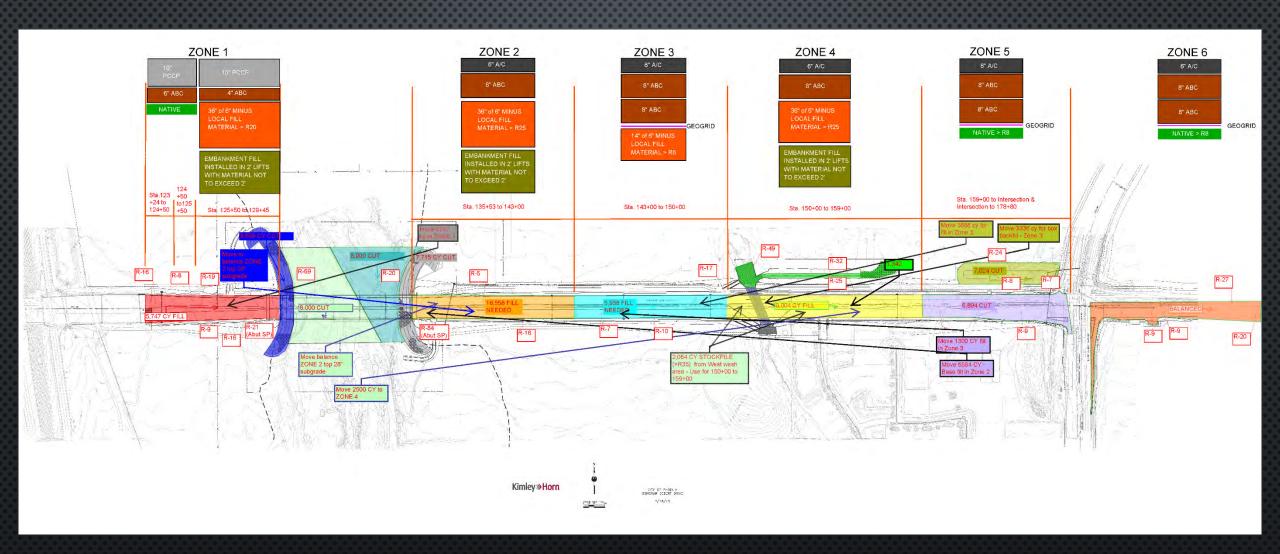








Photo: Tim Roberts Photography









# QUESTIONS?