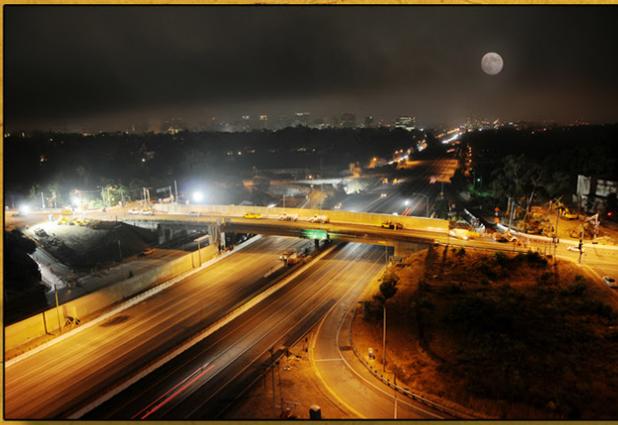


Electronic Copy

Statement of Qualifications

October 9, 2014 # 08-0J07CM



Electronic Copy
Statement of Qualifications
October 9, 2014 # 08-0J07CM

INTERSTATE 215 BARTON RD
INTERCHANGE RECONSTRUCTION CMGC

Submitted to:



District 8 Office
Division of Project/Program Management
464 West 4th Street
San Bernardino, CA 92401-1400

Submitted by:



Kiewit Infrastructure West Co.
10704 Shoemaker Ave.
Santa Fe Springs, CA 90670

& Key Subcontractor





Table of Contents

Transmittal Letter and Proposer SOQ Certification

Form A – Transmittal Letter

Form G – Proposer SOQ Certification

Section 1 – Legal Structure

Legal Structure Narrative

Form E – Proposer’s Organization Information

Form F – Proposer’s DBE Declaration Affidavit

Section 2 – Financial Capacity

Verification of Performance Bond and Payment Bond

Verification of Insurance Certifications

Section 3 – Safety Program

Safety Narrative

Section 4 – Firm Experience and Past Performance

Experience Narrative

Form B – Project Descriptions

Section 5 – Proposer Key Personnel

Personnel Narrative

Form D – Proposed Key Personnel Information

Licensing Evidence

Section 6 – Project Understanding and Approach

Project Understanding and Approach Narrative

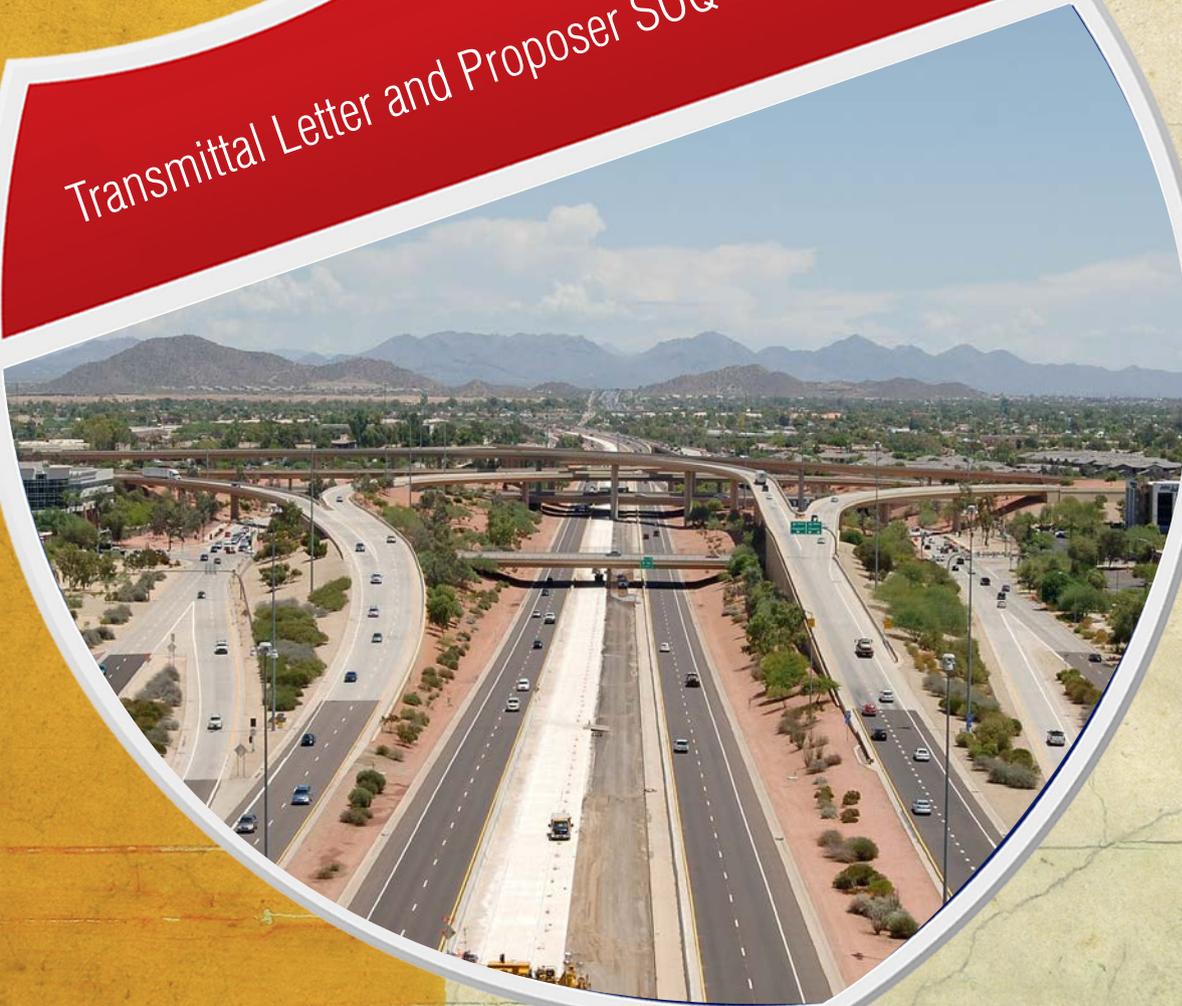
Appendix A – Resumes

Appendix B – Legal Documents

Power of Attorney

Organization Documents

Transmittal Letter and Proposer SOQ Certification



SR 101L HOV Lanes Design-Build Project
Phoenix, AZ

“Like I have said before and will say again: This is the best project team I have ever worked with. The team dynamics were amazing and project speed was perfect.”

— **Steve Mishler**, Project Manager, ADOT

Form A
TRANSMITTAL LETTER

SOQ Date: *October 9, 2014*
California Department of Transportation
District 8 Office
Division of Project/Program Management
464 West 4th Street, San Bernardino, CA 92401-1400
Attn: Joseph Meraz, Project Manager

The undersigned ("Proposer") submits this proposal and statement of qualification submittal (this "SOQ") in response to that certain Request for Qualifications dated as of *October 9, 2014* (as amended, the "RFQ"), issued by California Department of Transportation ("Department") to provide preconstruction services and construct the related facilities within the State Route *I-215*, as described in the RFQ.

Enclosed, and by this reference incorporated herein and made a part of this SOQ, are the following:

- Transmittal Letter (this Form A)
- Form G, Proposer's SOQ Certification
- Section 1: Legal Structure
- Section 2: Financial Capacity
- Section 3: Safety Program
- Section 4: Firm Experience and Past Performance
- Section 5: Proposer Organization and Key Personnel
- Section 6: Project Understanding and Approach
- Appendices A & B (Resumes and Legal Documents)

Proposer acknowledges receipt, understanding, and full consideration of all materials posted on the BidSync website (<http://www.BidSync.com>) as set forth in Section 1.3, and the following addenda and sets of questions and answers to the RFQ:

<i>Questions & Answers No. 1-7</i>	<i>September 10 - 30, 2014</i>
<i>Change (Addition of Bidder-Planholder List)</i>	<i>September 30, 2014 and October 7, 2014</i>

Proposer represents and warrants that it has read the RFQ and agrees to abide by the contents and terms of the RFQ and the SOQ. If the Proposer consists of more than one entity, all members of the Proposer entity agree to accept joint and several liability for performance under the Contract. Proposer understands that Department is not bound to award a contract and may reject each SOQ Department may receive. Proposer further understands that all costs and expenses incurred by it in preparing this SOQ and participating in the Project procurement process will be borne solely by the Proposer.

Proposer agrees that Department will not be responsible for any errors, omissions, inaccuracies, or incomplete statements in this SOQ. This SOQ shall be governed by and construed in all respects according to the laws of the State of California.

Proposer's business address:

10704 Shoemaker Ave.

(No.) (Street) (Floor or Suite)
Santa Fe Springs, CA 90670 USA
(City) (State or Province) (ZIP or Postal Code) (Country)

State or Country of Incorporation/Formation/Organization: Delaware

1. Sample signature block for corporation or limited liability company:

Kiewit Infrastructure West Co.

By: 
Print Name: Eric M. Scott
Title: Vice President

2. Sample signature block for partnership or joint venture:

[Insert Proposer's name]

By: *[Insert general partner's or equity member's name]*

By: _____
Print Name: _____
Title: _____

[Add signatures of additional general partners or equity members as appropriate]

3. Sample signature block for attorney in fact:

[Insert Proposer's name]

By: _____
Print Name: _____

Attorney in Fact

CALIFORNIA ALL PURPOSE ACKNOWLEDGMENT

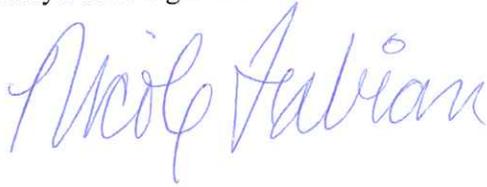
State of California

County of Los Angeles

On 10/09/2014 before me, (here insert name and title of the officer), personally appeared Eric M. Scott who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to within the instrument and acknowledged to me that he/~~she/they~~ executed the same in his/~~her/their~~ authorized capacity(~~ies~~), and that by his/~~her/their~~ signature(s) on the instrument the person(s) or the entity upon behalf of which the person(s) acted, executed the instrument.

WITNESS my hand and official seal.

Notary Public Signature



Notary Public Seal



ADA Notice: For individuals with sensory disabilities, this document may be available in alternate formats. For information call (916) 654-6410 or TDD (916) 654-3880 or write Records and Forms Management, 1120 N Street, MS-89, Sacramento, CA 95814.

Form G
PROPOSER SOQ CERTIFICATION

A COPY OF THIS CERTIFICATION MUST BE COMPLETED AND SIGNED BY PROPOSER AND, IF A PROPOSER IS A PARTNERSHIP, LIMITED PARTNERSHIP, JOINT VENTURE OR OTHER ASSOCIATION, THEN A SEPARATE CERTIFICATION MUST BE SIGNED BY AN AUTHORIZED REPRESENTATIVE OF EACH MEMBER AND SUBMITTED WITH THE STATEMENT OF QUALIFICATIONS.

DECLARATION

STATE OF California)
)SS:

COUNTY OF Los Angeles)

I, (printed name) Eric M. Scott, being first duly sworn, state that I am the (title) Vice President of the Proposer.

I certify that I have read and understood the information contained in the Request for Qualifications issued by the California Department of Transportation for the *I-215 Barton Road Interchange Reconstruction* Project and the attached Statement of Qualifications (SOQ), and that to the best of my knowledge and belief all information contained herein and submitted concurrently or in supplemental documents with this SOQ is complete, current, and true. I further acknowledge that any false, deceptive, or fraudulent statements in the SOQ will result in denial of pre-qualification status.

Eric M Scott
(Signature)

Eric M. Scott, Vice President
(Name Printed)

ACKNOWLEDGMENT

State of California
County of Los Angeles

On 10/09/2014 before me, Nicole Janine Fabian, Notary Public personally appeared, Eric M. Scott, who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.
Nicole Fabian
Notary Public Signature

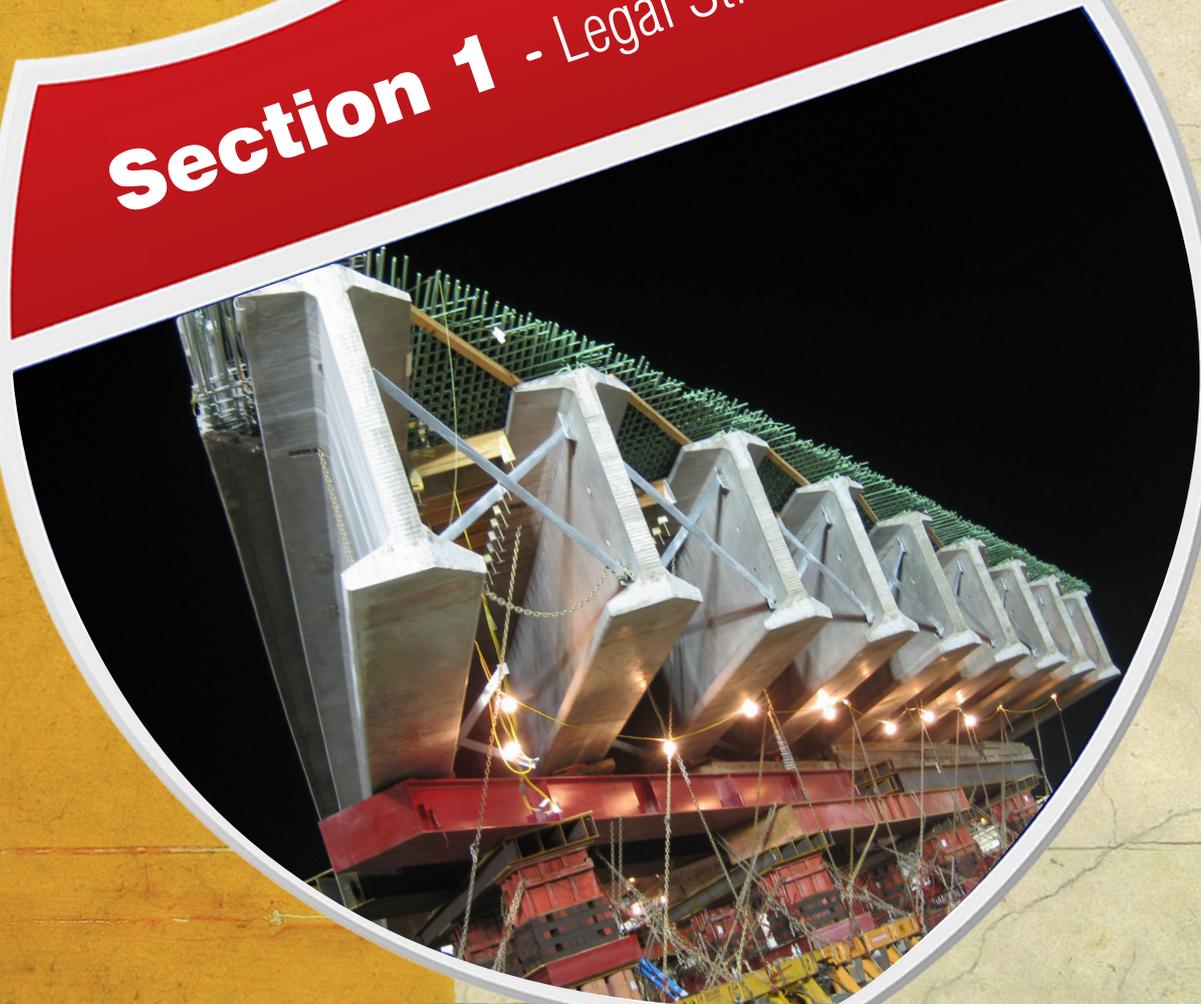


Notary Public Seal

NOTICE TO APPLICANTS:

A material false statement, omission, or fraudulent inducement made in connection with this Statement of Qualifications is sufficient cause for denial of the application. In addition, such false submission may subject the person or entity making the false statement to criminal charges. (Title 18 USC 1001, false statements; California Penal Code section 132, offering altered or antedated or forged documents or records; and section 134, preparing false documentary evidence).

Section 1 - Legal Structure



**Pioneer Crossing Lehi/American Fork
Interchange Design-Build, American Fork, UT**

- **2010 Aon Build America Award for Best
New Transportation Project**
- **2010 Top 10 Projects - Roads and Bridges**



Section 1

3.2 Legal Structure

3.2.A. Legal Structure of Proposer

Kiewit Infrastructure West Co. possesses the capabilities, capacity, and experience necessary to successfully execute the I-215 Barton Road Interchange Reconstruction Project. Kiewit Infrastructure West Co. is the Proposer and an indirect subsidiary of Kiewit Corporation, one of North America’s largest and most respected construction and engineering organizations.

Kiewit Infrastructure West Co. is a Delaware Corporation organized on May 18, 1982. Effective June 30, 2010, Kiewit Pacific Co., changed its name to Kiewit Infrastructure West Co. There were no changes to the capitalization, ownership structure or management of the company. Articles of incorporation, a certificate of name change, and bylaws are included in Appendix B, Legal Documents.

Kiewit Infrastructure West Co. has already been formed and is licensed to do business in California. Kiewit Infrastructure West Co. has the legal capability to carry out the Project responsibilities. A copy of our State of California Contractor’s License is provided in Figure 1-1.

Figure 1-1: State of California Contractor’s License



- Established CMGC experience totaling more than \$3 billion in the last 10 years
- Local presence in Southern California for more than 68 years
- Sole accountability

3.2.B. Transmittal Letter

Kiewit Infrastructure West Co. is fully liable for the performance under I-215 Barton Road Interchange Reconstruction Project Preconstruction Services Contract, as reflected in the execution of Form A.

3.2.C Major Participants

While we intend to employ key subcontractors, Kiewit will be the sole major participant. The Kiewit organization contracts for work through its operating companies which generally operate out of various offices throughout North America. This approach promotes a competitive advantage and fosters close client relationships, while at the same time providing the backing of a financially stable international firm. Internally, Kiewit is teamed with additional indirect subsidiaries of Kiewit Corporation and Affiliates of Kiewit. To demonstrate relevant work experience, we have listed projects in Section 4 performed by both Kiewit and other entities. All of Kiewit Corporation’s operating subsidiaries share experience gained on specific projects through cooperative personnel assignments, internal publications, and one of the most comprehensive internal training programs in the construction industry. The information disclosed in our Statement of Qualifications does not materially affect our ability to carry out the Project responsibilities potentially allocated to it.

Kiewit Infrastructure West Co. is described in Section 4 of this submittal.

3.2.D. Conflict of Interest

Kiewit Infrastructure West Co., the sole major participant, only belongs to this Proposer organization.



3.2.E. Form E – Proposer’s Organization Information

Kiewit Infrastructure West Co. has completed Form E (Proposer’s Organization Information), which is included at the end of this section.

3.2.F. Form F – Proposer’s DBE Declaration Affidavit

Kiewit Infrastructure West Co. has completed Form F (Proposer’s Disadvantaged Business Enterprise Declaration Affidavit), which is included at the end of this section.

Form E
PROPOSER'S ORGANIZATION INFORMATION

Name of Proposer: Kiewit Infrastructure West Co.

Instructions for Form completion: Responses to each subject area shall be addressed within the table below. Should additional space be needed, Proposers are advised to increase space following question as appropriate. Form E shall have no SOQ page limitation.

Proposer (Individual Firm / Joint Venture / Partnership / LLC)	
Name of Entity: Kiewit Infrastructure West Co.	
Address:	10704 Shoemaker Ave. Santa Fe Springs, CA 90670
Contact Name:	Eric M. Scott Title: Vice President
Telephone No.:	562-946-1816 Fax No.: 562-946-3823 E-mail: matt.scott@kiewit.com
Local / Regional Contact	
Name:	Kiewit Infrastructure West Co.
Address:	10704 Shoemaker Ave. Santa Fe Springs, CA 90670
Telephone No.:	562-946-1816 Fax No.: 562-946-3823 E-mail: matt.scott@kiewit.com

Form F
**PROPOSER'S DISADVANTAGED BUSINESS ENTERPRISE
DECLARATION AFFIDAVIT**

Name of Proposer: Kiewit Infrastructure West Co.

It is understood and agreed by the Proposer that it has carefully examined all documents that form this Request for Qualifications (RFQ) and acknowledges that California Department of Transportation (Department) will establish a Disadvantaged Business Enterprise goal based on the total project value for this CMGC Project. This affidavit further serves to confirm that **KIEWIT INFRASTRUCTURE WEST CO.** will aggressively exercise good faith efforts to the satisfaction of Department to meet the proposed Disadvantaged Business Enterprise goal and requirements defined in the Construction Contract documents, when issued.

STATE OF California)
)
COUNTY OF Los Angeles)

Each of the undersigned, being first duly sworn, deposes and says that Eric M. Scott
(Contact Name)

is the Vice President of Kiewit Infrastructure West Co. and _____ is the _____
(Title) (Company) (Contact Name) (Title)

of _____, which entity(ies) are the _____
~~(Company)~~ ~~(Joint Venture/Partnership, Other)~~

of _____, the entity making the foregoing Statement of Qualification.
~~(Joint Venture Company)~~

The Proposer hereby affirms that it will either meet the Disadvantaged Business Enterprise goals described in this solicitation or exercise and provide demonstrable evidence to the satisfaction of the California Department of Transportation (Department) that it has aggressively exercised Good Faith Efforts to do so in accordance with defined program requirements, including contractual and regulatory provisions.

Eric M. Scott
(Signature)

~~(Signature)~~

Eric M. Scott

(Name Printed)

~~(Name Printed)~~

Vice President

(Title)

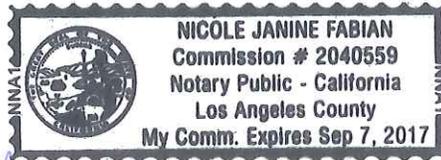
~~(Title)~~

State of California

County of Los Angeles

Subscribed and sworn to (or affirmed) before me on this 9th day of October, 2014, by Eric M. Scott, proved to me on the basis of satisfactory evidence to be the person(s) who appeared before me.

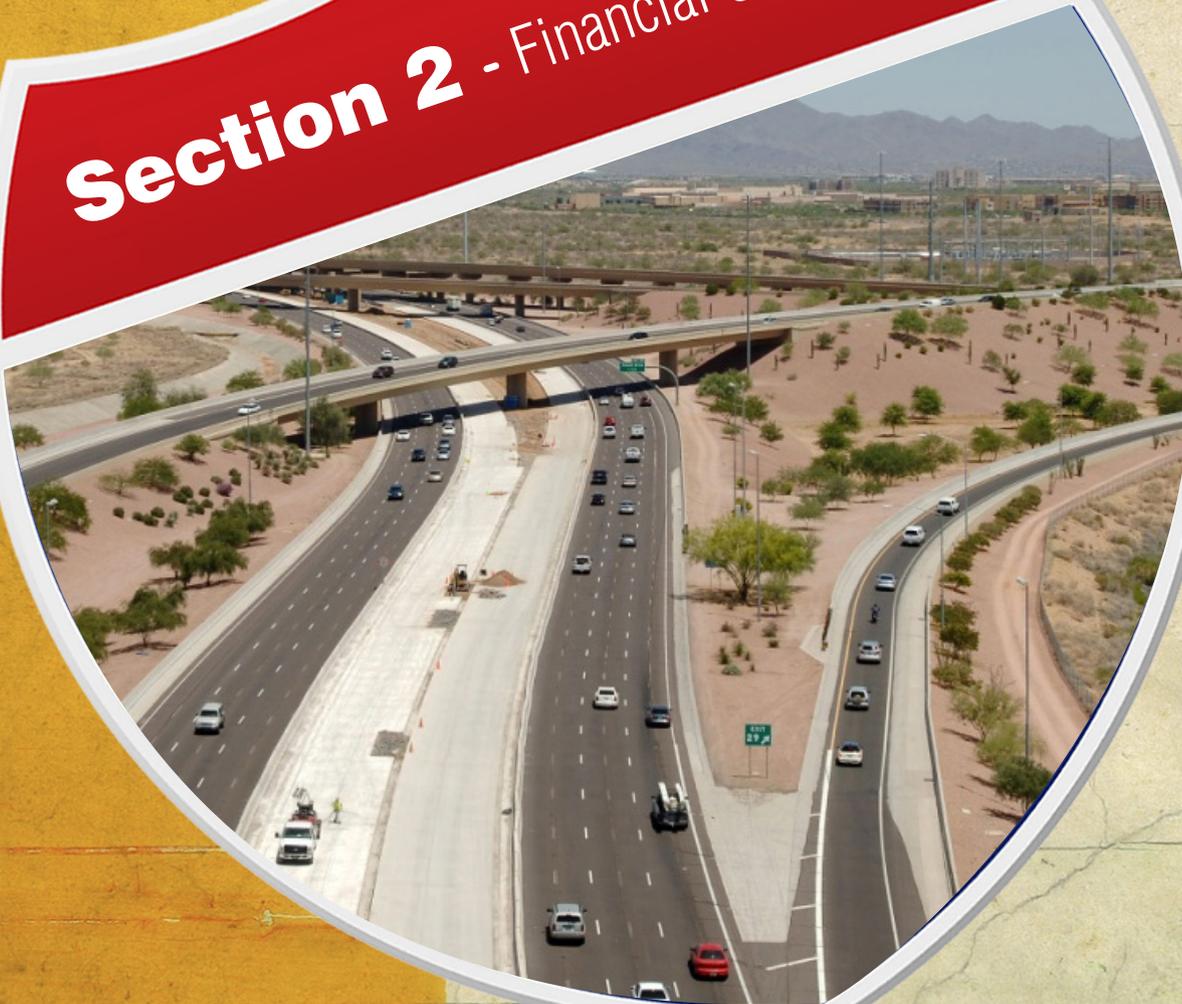
Notary Public Signature



Notary Public Seal

[Duplicate or modify this form as necessary so that it accurately describes the entity making the proposal and so that it is signed on behalf of all partners/members of the proposing firm.]

Section 2 - Financial Capacity



SR 101L HOV Lanes Design-Build Project Phoenix, AZ

“The SR 101 HOVL Design Build Project was an excellent application of the principles of partnering. From the caliber of the individuals representing each of the organizations to the commitment they exhibited to achieve success on a very complicated project they set a high standard for projects all over the country. Among the noteworthy benefits coming from the partnering process was perhaps the best executed “over the shoulder” review processes I have ever seen. Turnaround times on submissions were some of the fastest ever achieved in the industry. This was a great project.”

— **Thomas R. Warne, PE**, Tom Warne and Associates Partnering Facilitator
Former Director, UDOT



Section 2

3.3 Financial Capacity

3.3.A. Performance Bond and Payment Bond

Kiewit Infrastructure West Co. (Kiewit) has the financial capacity to enter into a contract with the California Department of Transportation and the financial resources to successfully complete the I-215 Barton Road Interchange Reconstruction Project.

Attached is written documentation from our surety, Travelers Casualty and Surety Company of America (Travelers), verifying our ability to provide Kiewit with a Payment Bond and Performance Bond to the Department for this Project.

Travelers is licensed to do business in California, and has received a “Best’s Credit Rating” of at least “A minus” and “Class VIII” or better by A.M. Best Company. This letter demonstrates our ability to comply with the Project’s bonding requirements.

- Financially strong and stable company with annual gross revenue of \$12 billion
- One of North America’s largest employee-owned corporations
- Total bonding capacity of \$8 billion, up to \$350 million per single project

3.3.B. Insurance Certifications

We have included a certificate of insurance which verifies our current policies and/or ability to obtain the required areas of insurance including Commercial General Liability, Auto Liability, Workers’ Compensation/Employers’ Liability, and Pollution Liability. This certificate provides evidence of our ability to provide insurance as required by the Preconstruction Services Contract.

These documents demonstrate our financial capability to carry out the Project responsibilities.

“Kiewit Infrastructure West Co. is one of the most outstanding and reputable construction organizations in North America. Its skill, integrity, and financial responsibility are unquestioned.”

– Lisa Buller, Risk Management & Insurance, Travelers



Travelers
Bond, Home Office
(860) 277-9355
(860) 277-3931 (fax)

One Tower Square
Hartford, CT 06183

October 07, 2014

California Department of Transportation
Division of Procurements and Contracts
1727 30th Street
Sacramento, CA 958163-7006

RE: I-215 Barton Road Interchange Reconstruction
Kiewit Infrastructure West Co.

Dear Sir or Madam:

We have had the pleasure of extending surety credit to the Kiewit companies over a number of years in connection with contracts aggregating billions of dollars. As a Kiewit operating subsidiary, it is our opinion that Kiewit Infrastructure West Co. is one of the outstanding and reputable construction organizations in North America. Its skill, integrity, and financial responsibility are unquestioned.

As part of an overall work program commitment, we have authorized Kiewit Infrastructure West Co. to bid individual contracts up to \$350 million in size. The total program capacity for all Kiewit companies is \$8 billion and the total available program capacity for all Kiewit companies is \$2.9 billion. It is our intention to furnish Kiewit Infrastructure West Co. with 100% Performance and Labor and Material Payment Bonds, if awarded the above-referenced project.

This commitment is subject to our standard underwriting at the time of the bond request, including a review of acceptable bond forms, contract financing and our standard underwriting considerations.

If you have any other questions, please feel free to contact me at (402) 271-2956.

Travelers Casualty and Surety Company of America,
A.M. Best Rating A++, XV

A handwritten signature in blue ink, appearing to read "Lisa Buller". The signature is fluid and cursive, written over a light blue horizontal line.

Lisa Buller
Attorney-in-Fact

(Seal)



POWER OF ATTORNEY

Farmington Casualty Company
Fidelity and Guaranty Insurance Company
Fidelity and Guaranty Insurance Underwriters, Inc.
St. Paul Fire and Marine Insurance Company
St. Paul Guardian Insurance Company

St. Paul Mercury Insurance Company
Travelers Casualty and Surety Company
Travelers Casualty and Surety Company of America
United States Fidelity and Guaranty Company

Attorney-In Fact No. 225764

Certificate No. 005742822

KNOW ALL MEN BY THESE PRESENTS: That Farmington Casualty Company, St. Paul Fire and Marine Insurance Company, St. Paul Guardian Insurance Company, St. Paul Mercury Insurance Company, Travelers Casualty and Surety Company, Travelers Casualty and Surety Company of America, and United States Fidelity and Guaranty Company are corporations duly organized under the laws of the State of Connecticut, that Fidelity and Guaranty Insurance Company is a corporation duly organized under the laws of the State of Iowa, and that Fidelity and Guaranty Insurance Underwriters, Inc., is a corporation duly organized under the laws of the State of Wisconsin (herein collectively called the "Companies"), and that the Companies do hereby make, constitute and appoint

Philip G. Dehn, Terry K. Bartel, Tammy Pike, Paul A. Foss, Lisa Buller, Marie Huggins, and Traci Sutton

of the City of Omaha, State of Nebraska, their true and lawful Attorney(s)-in-Fact, each in their separate capacity if more than one is named above, to sign, execute, seal and acknowledge any and all bonds, recognizances, conditional undertakings and other writings obligatory in the nature thereof on behalf of the Companies in their business of guaranteeing the fidelity of persons, guaranteeing the performance of contracts and executing or guaranteeing bonds and undertakings required or permitted in any actions or proceedings allowed by law.

IN WITNESS WHEREOF, the Companies have caused this instrument to be signed and their corporate seals to be hereto affixed, this 23rd day of December, 2013.

Farmington Casualty Company
Fidelity and Guaranty Insurance Company
Fidelity and Guaranty Insurance Underwriters, Inc.
St. Paul Fire and Marine Insurance Company
St. Paul Guardian Insurance Company

St. Paul Mercury Insurance Company
Travelers Casualty and Surety Company
Travelers Casualty and Surety Company of America
United States Fidelity and Guaranty Company



State of Connecticut
City of Hartford ss.

By: [Signature]
Robert L. Raney, Senior Vice President

On this the 23rd day of December, 2013, before me personally appeared Robert L. Raney, who acknowledged himself to be the Senior Vice President of Farmington Casualty Company, Fidelity and Guaranty Insurance Company, Fidelity and Guaranty Insurance Underwriters, Inc., St. Paul Fire and Marine Insurance Company, St. Paul Guardian Insurance Company, St. Paul Mercury Insurance Company, Travelers Casualty and Surety Company, Travelers Casualty and Surety Company of America, and United States Fidelity and Guaranty Company, and that he, as such, being authorized so to do, executed the foregoing instrument for the purposes therein contained by signing on behalf of the corporations by himself as a duly authorized officer.

In Witness Whereof, I hereunto set my hand and official seal. My Commission expires the 30th day of June, 2016.



[Signature]
Marie C. Tetreault, Notary Public

This Power of Attorney is granted under and by the authority of the following resolutions adopted by the Boards of Directors of Farmington Casualty Company, Fidelity and Guaranty Insurance Company, Fidelity and Guaranty Insurance Underwriters, Inc., St. Paul Fire and Marine Insurance Company, St. Paul Guardian Insurance Company, St. Paul Mercury Insurance Company, Travelers Casualty and Surety Company, Travelers Casualty and Surety Company of America, and United States Fidelity and Guaranty Company, which resolutions are now in full force and effect, reading as follows:

RESOLVED, that the Chairman, the President, any Vice Chairman, any Executive Vice President, any Senior Vice President, any Vice President, any Second Vice President, the Treasurer, any Assistant Treasurer, the Corporate Secretary or any Assistant Secretary may appoint Attorneys-in-Fact and Agents to act for and on behalf of the Company and may give such appointee such authority as his or her certificate of authority may prescribe to sign with the Company's name and seal with the Company's seal bonds, recognizances, contracts of indemnity, and other writings obligatory in the nature of a bond, recognizance, or conditional undertaking, and any of said officers or the Board of Directors at any time may remove any such appointee and revoke the power given him or her; and it is

FURTHER RESOLVED, that the Chairman, the President, any Vice Chairman, any Executive Vice President, any Senior Vice President or any Vice President may delegate all or any part of the foregoing authority to one or more officers or employees of this Company, provided that each such delegation is in writing and a copy thereof is filed in the office of the Secretary; and it is

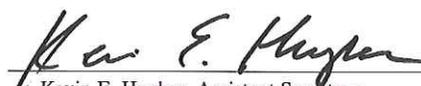
FURTHER RESOLVED, that any bond, recognizance, contract of indemnity, or writing obligatory in the nature of a bond, recognizance, or conditional undertaking shall be valid and binding upon the Company when (a) signed by the President, any Vice Chairman, any Executive Vice President, any Senior Vice President or any Vice President, any Second Vice President, the Treasurer, any Assistant Treasurer, the Corporate Secretary or any Assistant Secretary and duly attested and sealed with the Company's seal by a Secretary or Assistant Secretary; or (b) duly executed (under seal, if required) by one or more Attorneys-in-Fact and Agents pursuant to the power prescribed in his or her certificate or their certificates of authority or by one or more Company officers pursuant to a written delegation of authority; and it is

FURTHER RESOLVED, that the signature of each of the following officers: President, any Executive Vice President, any Senior Vice President, any Vice President, any Assistant Vice President, any Secretary, any Assistant Secretary, and the seal of the Company may be affixed by facsimile to any Power of Attorney or to any certificate relating thereto appointing Resident Vice Presidents, Resident Assistant Secretaries or Attorneys-in-Fact for purposes only of executing and attesting bonds and undertakings and other writings obligatory in the nature thereof, and any such Power of Attorney or certificate bearing such facsimile signature or facsimile seal shall be valid and binding upon the Company and any such power so executed and certified by such facsimile signature and facsimile seal shall be valid and binding on the Company in the future with respect to any bond or understanding to which it is attached.

I, Kevin E. Hughes, the undersigned, Assistant Secretary, of Farmington Casualty Company, Fidelity and Guaranty Insurance Company, Fidelity and Guaranty Insurance Underwriters, Inc., St. Paul Fire and Marine Insurance Company, St. Paul Guardian Insurance Company, St. Paul Mercury Insurance Company, Travelers Casualty and Surety Company, Travelers Casualty and Surety Company of America, and United States Fidelity and Guaranty Company do hereby certify that the above and foregoing is a true and correct copy of the Power of Attorney executed by said Companies, which is in full force and effect and has not been revoked.

IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed the seals of said Companies this 7th day of October, 20 14

WARNING: THIS POWER OF ATTORNEY IS INVALID WITHOUT THE RED BORDER


Kevin E. Hughes, Assistant Secretary



To verify the authenticity of this Power of Attorney, call 1-800-421-3880 or contact us at www.travelersbond.com. Please refer to the Attorney-In-Fact number, the above-named individuals and the details of the bond to which the power is attached.

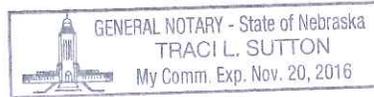
STATE OF NEBRASKA
COUNTY OF DOUGLAS

I, Traci L. Sutton a Notary Public in and for said County and State, do hereby certify that

Lisa Buller Attorney-in-Fact
of Travelers Casualty and Surety Company of America, proved to me on the basis of satisfactory evidence to be the person(s) who appeared before me, and acknowledged that she signed, sealed and delivered a said instrument, for and on behalf of Travelers Casualty and Surety Company of America for the uses and purposes therein set forth.

Given under my hand and notarial seal, the 7th day of

October A.D., 2014.



Traci L. Sutton
Traci L. Sutton, Notary Public



CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)

9/23/2014

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER Midwest Agencies, Inc. 3555 Farnam Street Omaha, NE 68131	CONTACT NAME:	Traci Sutton	
	PHONE (A/C, No, Ext):	402-271-2956	FAX (A/C, No):
	E-MAIL ADDRESS:	Traci.Sutton@Midwestagenciesinc.com	
	INSURER(S) AFFORDING COVERAGE		NAIC #
	INSURER A: Zurich American Insurance Company		
	INSURER B: American Guarantee & Liability Ins. Co.		
	INSURER C: American Zurich Insurance Company		
	INSURER D: XL Insurance America, Inc. (50%)		
	INSURER E: Lloyds Syndicate 3624 (35%)		
	INSURER F: ACE American Insurance Company (15%)		

COVERAGES CERTIFICATE NUMBER: 21708292 REVISION NUMBER:

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
A	<input checked="" type="checkbox"/> COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS-MADE <input checked="" type="checkbox"/> OCCUR GEN'L AGGREGATE LIMIT APPLIES PER: <input type="checkbox"/> POLICY <input checked="" type="checkbox"/> PRO-JECT <input type="checkbox"/> LOC OTHER:			GLO 4641069	3/1/2013	3/1/2016	EACH OCCURRENCE \$ 5,000,000 DAMAGE TO RENTED PREMISES (Ea occurrence) \$ 5,000,000 MED EXP (Any one person) \$ 5,000 PERSONAL & ADV INJURY \$ 5,000,000 GENERAL AGGREGATE \$ 10,000,000 PRODUCTS - COMP/OP AGG \$ 10,000,000
A	<input checked="" type="checkbox"/> AUTOMOBILE LIABILITY <input checked="" type="checkbox"/> ANY AUTO <input type="checkbox"/> ALL OWNED AUTOS <input type="checkbox"/> SCHEDULED AUTOS <input type="checkbox"/> HIRED AUTOS <input type="checkbox"/> NON-OWNED AUTOS			BAP 4641070	3/1/2013	3/1/2016	COMBINED SINGLE LIMIT (Ea accident) \$ 5,000,000 BODILY INJURY (Per person) \$ BODILY INJURY (Per accident) \$ PROPERTY DAMAGE (Per accident) \$
B	<input checked="" type="checkbox"/> UMBRELLA LIAB <input checked="" type="checkbox"/> OCCUR <input type="checkbox"/> EXCESS LIAB <input type="checkbox"/> CLAIMS-MADE DED <input checked="" type="checkbox"/> RETENTION \$N/A			AUC 9141395	3/1/2013	3/1/2016	EACH OCCURRENCE \$ 5,000,000 AGGREGATE \$ 5,000,000
C	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below	Y/N <input checked="" type="checkbox"/> N	N/A	WC 4641067 EWS 4641068	3/1/2013 3/1/2013	3/1/2016 3/1/2016	<input checked="" type="checkbox"/> PER STATUTE <input type="checkbox"/> OTH-ER E.L. EACH ACCIDENT \$ 2,000,000 E.L. DISEASE - EA EMPLOYEE \$ 2,000,000 E.L. DISEASE - POLICY LIMIT \$ 2,000,000
D E F	Equipment/Property			US00063521CA14A UNS2520066.14 D37400397 003	8/15/2014	8/15/2016	50,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

RE: Evidence of Insurance

CERTIFICATE HOLDER CANCELLATION

Evidence of Insurance	SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.
	AUTHORIZED REPRESENTATIVE Philip G. Dehn



CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)

9/23/2014

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER Midwest Agencies, Inc. 3555 Farnam Street Omaha, NE 68131	CONTACT NAME:	Traci Sutton	
	PHONE (A/C, No, Ext):	402-271-2956	FAX (A/C, No):
	E-MAIL ADDRESS:	Traci.Sutton@Midwestagenciesinc.com	
	INSURER(S) AFFORDING COVERAGE		NAIC #
	INSURER A : AIG Specialty Insurance Company		26883
INSURED Kiewit Infrastructure West Co. 10704 Shoemaker Avenue Santa Fe Springs CA 90670	INSURER B :		
	INSURER C :		
	INSURER D :		
	INSURER E :		
	INSURER F :		

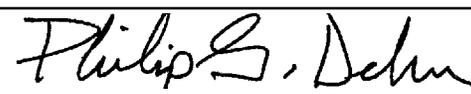
COVERAGES CERTIFICATE NUMBER: 21708298 REVISION NUMBER:

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
	COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS-MADE <input type="checkbox"/> OCCUR GEN'L AGGREGATE LIMIT APPLIES PER: <input type="checkbox"/> POLICY <input type="checkbox"/> PRO-JECT <input type="checkbox"/> LOC <input type="checkbox"/> OTHER:						EACH OCCURRENCE \$ DAMAGE TO RENTED PREMISES (Ea occurrence) \$ MED EXP (Any one person) \$ PERSONAL & ADV INJURY \$ GENERAL AGGREGATE \$ PRODUCTS - COMP/OP AGG \$ \$
	AUTOMOBILE LIABILITY <input type="checkbox"/> ANY AUTO <input type="checkbox"/> ALL OWNED AUTOS <input type="checkbox"/> HIRED AUTOS <input type="checkbox"/> SCHEDULED AUTOS <input type="checkbox"/> NON-OWNED AUTOS						COMBINED SINGLE LIMIT (Ea accident) \$ BODILY INJURY (Per person) \$ BODILY INJURY (Per accident) \$ PROPERTY DAMAGE (Per accident) \$ \$
	UMBRELLA LIAB <input type="checkbox"/> OCCUR EXCESS LIAB <input type="checkbox"/> CLAIMS-MADE DED RETENTION \$						EACH OCCURRENCE \$ AGGREGATE \$ \$
	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below	Y/N	N/A				PER STATUTE OTH-ER E.L. EACH ACCIDENT \$ E.L. DISEASE - EA EMPLOYEE \$ E.L. DISEASE - POLICY LIMIT \$
A	Contractor Pollution Liability			CPO1955909	12/1/2013	12/1/2014	\$25,000,000 Each Loss & Aggregate

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

RE: Evidence of Insurance

CERTIFICATE HOLDER Evidence of Insurance	CANCELLATION SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.
	AUTHORIZED REPRESENTATIVE Philip G. Dehn 

Section 3 - Safety Program



San Diego International Airport Green Build Landside, San Diego, CA

“ [Kiewit] executed a world-class safety program in constructing their portion of the Green Build at San Diego International Airport. This was evidenced by a incident rate that was well below industry standards and through an organizational culture that maintained safety as a primary value. I would welcome the opportunity to work with [Kiewit] again in the future. ”

— **John Townsell, CSP Manager, Safety, Health and Environment,**
San Diego International Airport



Section 3

3.4 Safety Program

Safety has been a core value and part of our culture for decades. We work collaboratively with craft, subcontractors, and clients to provide a safe environment for the public and everyone on the project site. This culture is at the core of our safety program that includes training, craft engagement, and experienced staff and craft. By establishing expectations and accountability for safety performance, our program provides the framework to meet the Project’s safety goal to maintain public and employee safety.

We are committed to providing and achieving an incident-free work environment through open communication, progressive training, and an unwavering attention to the health and well-being of Project personnel.

Our safety program is applied to every project we work on and will be an integral part of the I-215 Barton Road Interchange Reconstruction Project. This section provides our:

- ◆ Safety record for the most recent three-year period
- ◆ Information on California Occupational Safety and Health Administration (Cal-OSHA) and Federal Occupational Safety and Health Administration (FOSHA) citations and penalties
- ◆ Workers’ compensation history
- ◆ Summary of our worker safety program

Safety Record for Most Recent Three Years

Kiewit’s safety record for the past three years is provided in Figure 3-1 and Figure 3-2 EMR Letter. This data demonstrates the success of our safety program.

- EMR 3-year average is 0.56
- Kiewit has continuously won safety awards for over several decades
- Team expectation of **Nobody Gets Hurt**

Figure 3-1: Safety Record

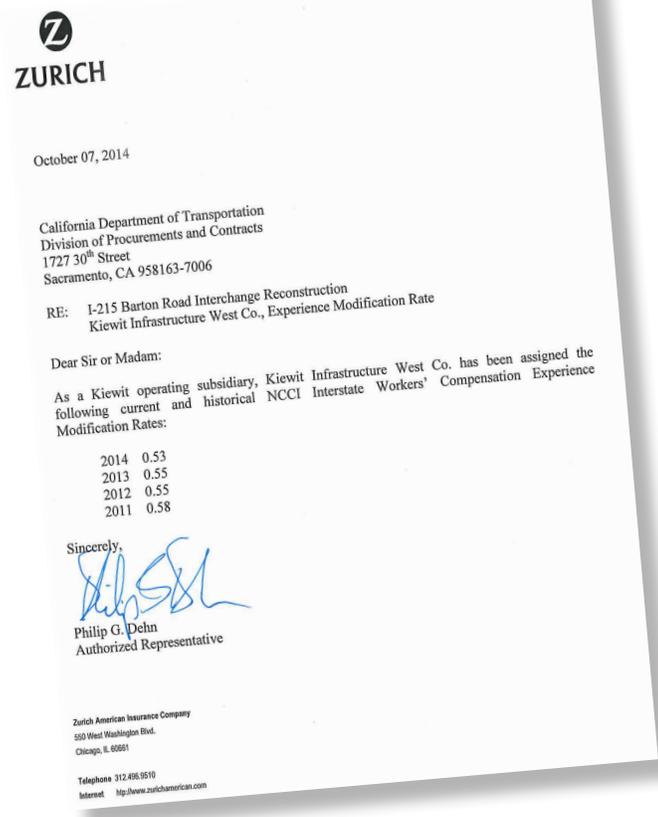
	2013	2012	2011	3 - Year Average	3 - Year Industry Average (2010-2012)
 Experience Modification Rate (EMR)	0.55	0.55	0.58	0.56	1.0
 Average Total Recordable Injury/Illness Rate	0.95	0.74	0.76	0.75	3.9
 Average Lost Work Rate	0.24	0.26	0.17	0.17	1.37
 Man-hours Worked	3,957,727	4,101,853	5,735,199	4,598,259	

Kiewit’s EMR for the past three years is 0.56, well under the industry average of 1.0. Our average total recordable injury/illness rate (0.82) and average lost work rate (0.22) are also well below the applicable statistical standards for the business category.

Having such a low EMR has a strong impact on our business. It means that Kiewit sends people home safely from our project sites. It also means that we have lower workers’ compensation insurance premiums.



Figure 3-2: EMR Letter



California OSHA (Cal-OSHA) and Federal OSHA (FOSHA) Citations and Penalties

When confirming violation records, please search under the names Kiewit Infrastructure West Co. (KIWC) and Kiewit Pacific Co. Kiewit Pacific Co. changed its name to Kiewit Infrastructure West Co. on June 30, 2010. This was a name change only. The management, operations, manner of conducting business, general financial circumstances, business address, and obligations of the company remain the same.

Cal-OSHA and Federal OSHA have cited and assessed three “serious” and one “repeat” penalty against KIWC. KIWC has not been cited and assessed any “willful” penalties. The details of the citations are included below.

1. A citation was assessed against Kiewit Infrastructure Group, Inc. (KIG) in June of 2012 on the Willamette River Bridge project, which was being performed for Tri Metropolitan Transportation District of Oregon. KIG was cited for violating OSHA Standard 1926.1433 D08, Cranes & Derricks in Construction 283851.015. This was categorized as a serious violation by FOSHA and resulted from openings in a guard on a compressor that were too large. The penalty for this citation was \$1,500.
2. Two citations were assessed against KIWC on the I-405 Sepulevda Pass Widening Design-Build Project. Citation 1 is classified as serious and proposes a \$18,000 penalty and alleges KIWC “did not correct an unsafe work practice by allowing an employee to work within the employer identified exclusion zone between truck trailers and the concrete ‘K’ rail,” citing Title 8 CCR 3203(a)(6). Citation 2 is classified as serious, and proposes a \$18,000 penalty and alleges KIWC “did not secure the load against dangerous displacement,” citing Title 8, CCR 3704. Both citations are under appeal. Both occurred on October 11, 2012. Cal-OSHA issued KIWC two citations under Inspection No. 314863846.

Alternative Dispute Resolution System

Kiewit is not a party to an alternative dispute resolution system as provided for in Labor Code §3201.5.





Safety Recognition

- ◆ AGC, Excellence in Safety Award, 2012
- ◆ National Safety Council, Double Honor Platinum Award in recognition of superior safety performance for more than 20 consecutive years, 2011
- ◆ AGC California, Excellence in Safety Award, 2010
- ◆ AGC, Construction Safety, 2008
- ◆ AGC, Excellence in Safety Award, 2007
- ◆ USACE, Safety Performance Award, 2007
- ◆ USACE, Safety Innovation Award, 2006

Workers' Compensation History

Kiewit's workers' compensation experience history for the past three years from Zurich American Insurance Company is included in Figure 3-2 on the previous page. The total amount paid for workers' compensation claims in the past three years is provided in Figure 3-3.

Figure 3-3: Workers' Compensation History

	2013	2012	2011
 Count	3	1	8
 Paid	\$10,372	\$386	\$106,415

Worker Safety Program

Our Worker Safety Program prevents damage, injury and loss to Kiewit employees, our subcontractors, and other persons who may be affected on a project. This includes motorists and pedestrians. An effective safety program preventing damage, injury, and loss is characterized by providing:

- ◆ Consistent and uniform application of the safety program across the project
- ◆ Dedicated, committed, and accountable craft leadership
- ◆ Rigorous self-inspection procedures
- ◆ Training programs that help our employees adopt a mind-set that identifies and eliminates hazards
- ◆ Job Hazard Analysis (JHA) that will be continually updated by staff and craft employees to include all current hazards for each operation
- ◆ Effective communication of hazards to all project staff and the traveling public

Consistent and Uniform Safety Procedures Across the Project

Kiewit requires that our subcontractors and subconsultants adopt our safety program and policies if their safety policies and procedures are not equal to ours. We make safety one of the criteria we use when screening and selecting subcontractors and subconsultants during the prequalification phase. We ask them to provide an overview of their statistical performance, citation history, and program. As subcontractors and subconsultants are brought on to the project, we review their safety programs to ensure that it meets the standards of the Project Safety Program. If it does not, we work with the subcontractor to elevate their safety requirements to that of the project. As the project progresses, we review their safety performance at regular intervals along with other aspects of their performance including quality and schedule.



Dedicated, Committed, and Accountable Craft Leadership

Kiewit promotes a philosophy of craft involvement on all projects. Craftsmen on the project are in the best position to set the bar for performance and drive the safety culture. In recent years our **Nobody Gets Hurt** campaign has focused on collaboration with our craftsmen. They are not only the builders of our projects but also integral to our safety efforts. We have many safety leaders at the craft level and we value their recommendations and concerns. Our craft are involved and utilized in the following:

- ◆ Indoctrination of our new employees
- ◆ Training presentations, including our monthly mass safety meetings
- ◆ Conducting safety tours and observations
- ◆ Providing hands on safety training for their peers and our staff
- ◆ Project recognition programs
- ◆ Operation planning
- ◆ Job Hazard Analysis planning and development

A craft involvement safety program promotes buy in at the craft level and does more to stress our belief and importance on safety than any incentive program or management initiative could do. Craft involvement helps to build and promote trust, which is the key component in a good relationship between craft supervisors and our craftsmen.

Consistent and effective training programs

Our commitment to safety is demonstrated to the crews through the emphasis we place on safety training. Safety training will be provided on an ongoing basis. The first day orientation includes a thorough briefing on the site-wide Safety Plan. Trainings pertinent to general and job specific operations are provided routinely with the assistance of the Safety department staff. Our training programs are multi-dimensional and specific to the employee's level of responsibility. A brief outline of some training offered includes, but is not limited to:

- ◆ Orientation
- ◆ Daily, weekly, and monthly safety meetings
- ◆ First aid and CPR classes
- ◆ Support of excavation safety
- ◆ Confined space safety and small tool safety talks
- ◆ Fall protection demonstrations

Regular safety inspections. Inspections are led by the craftsmen. Corrections are made during these inspection and trends are reviewed at Foreman-only weekly safety meetings. The safety staff is there to support their inspections and provide insight and assistance, but it is up to the craft to identify and address safety concerns.

Effective Job Hazard Analysis (JHA) program. Before the start of any operation, a detailed JHA will be prepared and reviewed with the crew. The JHA thoroughly describes the operation, points out potential safety concerns and risks, and provides preventative measures to implement the safest approach to each and every task. The JHA is continually updated during the work and constantly communicated to the crew. Training is done on hazard recognition and Kiewit encourages an atmosphere where crew members are expected to speak up and look out for their fellow worker.



Night crew on our I-405 Sepulveda Pass Widening Design-Build Project starting their meeting with stretch and flex.



Effective prevention of hazards. Kiewit will provide information to Caltrans to communicate closures, upcoming detours, and shifts of existing detours to the public so that they know what to expect and when to expect it. Effective communication prevents hazards and maintains safety of the traveling public and all onsite personnel during construction of a project. Empowerment of employees to recognize and correct hazards. At Kiewit, safety is our number one priority and the responsibility of each employee, starting on the first day. Our empowerment of employees to work and act safely gives them a tremendous ability to recognize hazards and immediately correct them. When it comes to safety, everyone has stop work authority. Employees' hazard recognition is honed and refined as they complete more and more work with Kiewit and adopt our hazard recognition/hazard elimination mind-set.

Effective safety meetings. Kiewit makes use of different meetings to promote safety and working safely. For example:

- ◆ Each crew's shift begins with a meeting in which the stretch and flex is conducted to get ready for the day's work. During the stretch and flex exercises, they will review the JHA for a particular operation or discuss some other aspect of working safe.
- ◆ Weekly Superintendent meetings provide an opportunity for project superintendents to review specific trends or aspects of safety on the project.
- ◆ Monthly Mass Safety meetings give the project team the opportunity to take part in a regular training program and hear what management is thinking about safety for the month.

Kiewit's Commitment to Safety

Kiewit is committed to the highest standards of safety performance. We strive for a safe working environment for all people on a project site and we take the public and personnel's safety seriously. Kiewit recognizes that it takes the effort of management, staff, craft, subcontractors, consultants, and our clients to ensure **Nobody Gets Hurt.**





ZURICH

October 07, 2014

California Department of Transportation
Division of Procurements and Contracts
1727 30th Street
Sacramento, CA 958163-7006

RE: I-215 Barton Road Interchange Reconstruction
Kiewit Infrastructure West Co., Experience Modification Rate

Dear Sir or Madam:

As a Kiewit operating subsidiary, Kiewit Infrastructure West Co. has been assigned the following current and historical NCCI Interstate Workers' Compensation Experience Modification Rates:

2014	0.53
2013	0.55
2012	0.55
2011	0.58

Sincerely,

Philip G. Dehn
Authorized Representative

Zurich American Insurance Company
550 West Washington Blvd.
Chicago, IL 60661

Telephone 312.496.9510
Internet <http://www.zurichamerican.com>

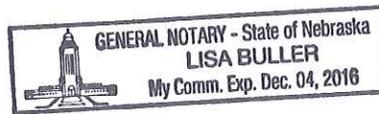
STATE OF NEBRASKA
COUNTY OF DOUGLAS

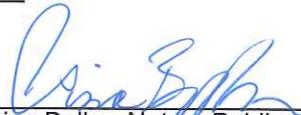
I, Lisa Buller, a Notary Public in and
for said County and State, do hereby certify that

Philip G. Dehn Authorized Representative
of Zurich American Insurance Company, proved to me on the
basis of satisfactory evidence to be the person(s) who appeared
before me, and acknowledged that she signed, sealed and
delivered a said instrument, for and on behalf of Zurich American
Insurance Company for the uses and purposes therein set forth.

Given under my hand and notarial seal, the 07th day of

October A.D., 2014.





Lisa Buller, Notary Public



ZURICH

October 7, 2014

California Department of Transportation
District 8 Office
Division of Project/Program Management
464 West 4th Street
San Bernardino, CA 92401-1400
Attn: Joseph Meraz, Project Manager

Re: I-215 Barton Road Interchange Reconstruction
Kiewit Infrastructure West Co., Workers' Compensation Insurance Verification Letter

Dear Mr. Meraz

Please accept this letter as our verification that Kiewit Infrastructure West Co. has had Worker's Compensation and Employer's Liability coverage in place over the duration of the previous three years. The Worker's Compensation and Employer's Liability coverage has been provided through American Zurich Insurance Company.

Please feel free to contact me at (402) 271-2840 if you have any questions.

Sincerely,

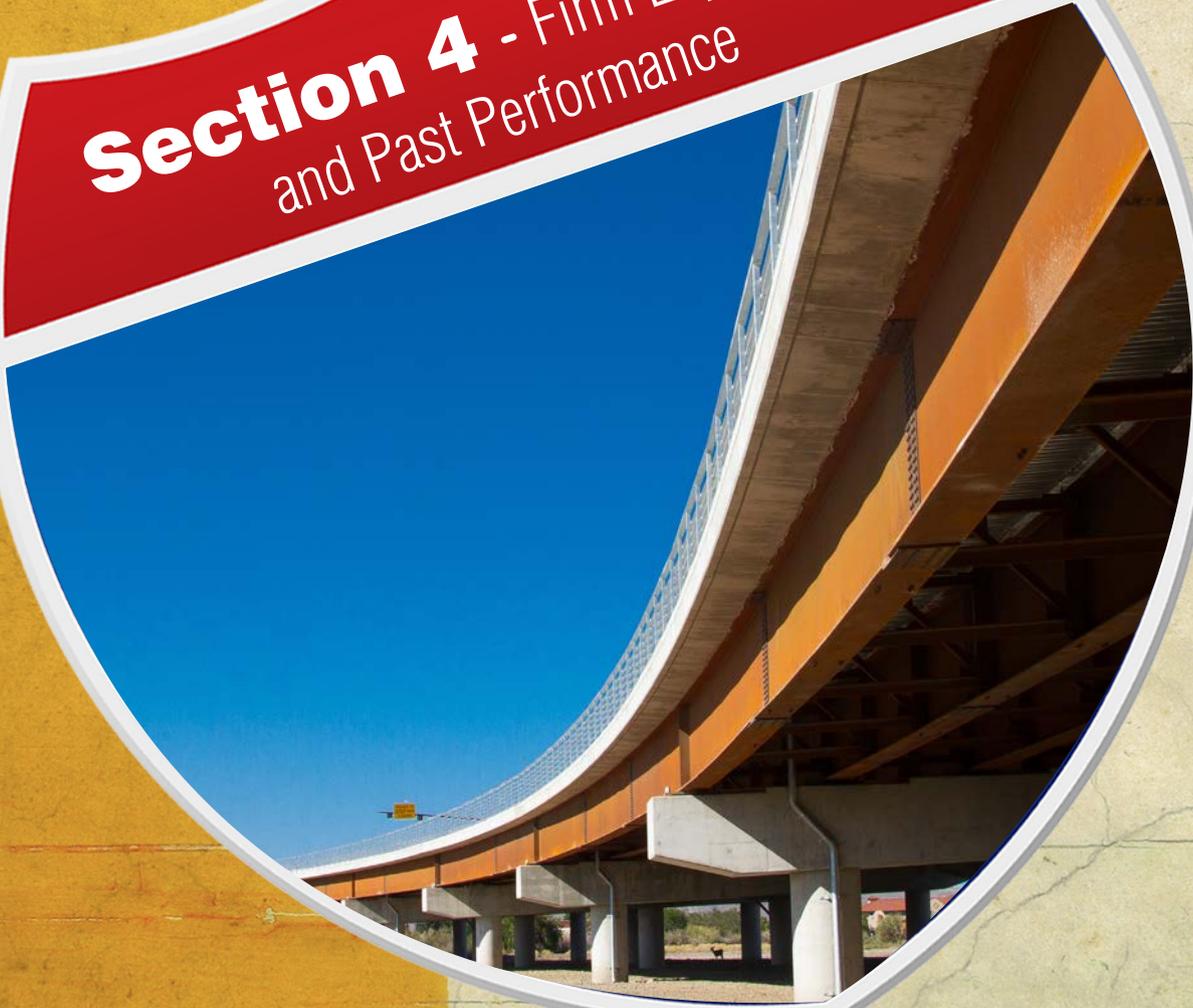
Philip G. Dehn
Authorized Representative

Zurich American Insurance Company
550 West Washington Blvd.
Chicago, IL 60661

Telephone 312.496.9510

Internet <http://www.zurichamerican.com>

Section 4 - Firm Experience and Past Performance



SouthEast Connector Reno, NV

“A lot of contractors talk the talk when it comes to safety, quality, and partnership. Kiewit not only walks the walk, they are the tour guide leading the others on the walk.”

— **Garth Oksol, PE**, Project Manager, ASCE, RTC



Section 4

3.5 Firm Experience and Past Performance

3.5.A. Capability and Capacity

Kiewit Corporation is one of North America’s largest and most respected construction and engineering organizations. With its roots dating back to 1884, the employee-owned company operates through a network of offices and projects in the United States, Canada, and Australia. Kiewit offers construction and engineering services in a variety of markets. In 2013, Kiewit had revenues of more than \$12 billion and employs more than 30,000 staff and craft personnel.

Kiewit Infrastructure West Co.

Kiewit Infrastructure West Co., a wholly-owned subsidiary of Kiewit Corporation, has the knowledge, experience, and resources to work with Caltrans, and other important stakeholders, to successfully manage and deliver the I-215 Barton Road Interchange Project. Kiewit Infrastructure West Co. has the in-house capability and capacity to perform this multi-disciplinary project. We are supported by Kiewit Corporation and regularly share resources to offer our clients the best people, experience, and resources for their projects. Like Caltrans, our top focus as an organization is making sure **Nobody Gets Hurt**. Safety is at the forefront of all of the work we do.

Capability

Our proven capability delivering projects on time and under budget is evident in the following Form B pages. Every project was delivered ahead of schedule or on time, and all projects were at or under budget and with no claims. In addition, our client’s satisfaction is always a priority and we use tools such as surveys and client interviews conducted through Gallup Polls to continually measure and improve. We are committed to not only completing this Project on time, but working with Caltrans to maximize scope given the available budget.

- Kiewit’s 2013 ENR Rankings
- #1 Domestic Heavy Contractor
- #2 Transportation Contractor
- #2 California Contractor

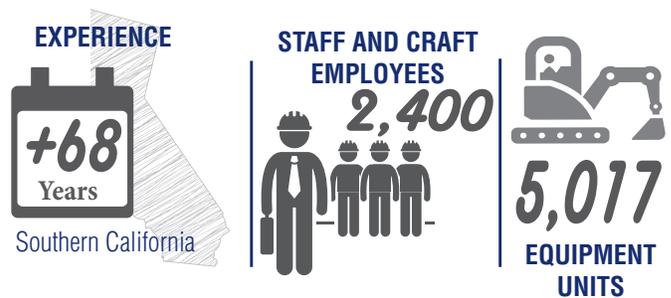
During preconstruction services on the recently completed San Diego International Airport Green Build Landside (SDIA Landside) Project, innovation, value engineering and careful cost management resulted in a Guaranteed Maximum Price \$45 million below the original estimate (described in Form B). This allowed the client to re-allocate these funds to build additional scope elsewhere.

Capacity

Our streamlined organization will facilitate our ability to partner with Caltrans, provide you a single point of contact, and be responsive to your needs. Being a sole Proposer firm with the necessary experience and resources eliminates the risk inherent in multiple firms coordinating management and delivery of work. Figure 4-1 provides an overview of our capacity.

Figure 4-1: Resources available for the project

Kiewit Infrastructure West Co. (Proposer)



Kiewit Corporation (Parent Company)





BARTON RD INTERCHANGE RECONSTRUCTION CMGC

CMGC Experience

Our history performing alternative delivery transportation projects in California spans nearly 25 years, with early projects including the \$800 million SR-73 San Joaquin Hills Transportation Corridor in Orange County, which was the largest alternative delivery transportation project in history at the time. We have incorporated lessons learned from alternative delivery projects throughout the country, including more than \$54 billion in CMGC and alternative delivery. Drawing from this experience, we will collaborate with Caltrans to offer additional ideas for innovation, strategies for risk mitigation and management, and other elements that truly deliver the best value. We will work as an extension of your team to make your new CMGC program a success, as we have done with our other clients using CMGC for the first time, including the Arizona DOT, Maricopa County (AZ) DOT, Regional Transportation Commission (NV), and the Alaska Railroad Corporation.

Kiewit CMGC Projects

36 PROJECTS



All of our projects have no claims

DOLLAR VALUE



+\$3 BILLION

Brutoco Engineering and Construction, Inc.

To enhance Kiewit’s capabilities specific to the I-215 Barton Road Interchange Reconstruction Project, and to offer Caltrans the most qualified proposer, we have included the strengths of our key major subcontractor, Brutoco Engineering and Construction, Inc. (Brutoco). We have teamed with Brutoco to strengthen our staffing plan specific to this project for working in the Inland Empire and with Caltrans District 8. Brutoco has extensive local experience building similar structures in Southern California as seen in Figure 4-2. As is evident with the included resumes and project sheets, Brutoco will add significant value to the Kiewit team.

Brutoco (Key Major Subcontractor)

EXPERIENCE



Southern California

STAFF AND CRAFT EMPLOYEES



250

EQUIPMENT UNITS

Since 2002, Kiewit and Brutoco have a history of working together on successful projects in Southern California. The first project was when, as a subcontractor to Kiewit, Brutoco built a box girder post-tension pedestrian bridge over the westbound I-210 freeway at the Sierra Madre Blue Line Station in Pasadena. Recently, on Kiewit’s I-405 Sepulveda Pass Widening Design-Build project, Brutoco worked as a subcontractor on 11 precast concrete girder and cast-in-place bridges, including bridge widening, bridge replacements, and reconstruction of the eastbound I-10 to northbound I-405 connector. Kiewit and Brutoco will utilize our local area knowledge and resources to successfully complete the I-215 Barton Road Interchange Reconstruction Project to Caltrans’ specifications, on-time, and within budget.

Combined Caltrans Experience

Kiewit and Brutoco bring an unsurpassed understanding of Caltrans’ people, processes, tools, and objectives garnered through successful completion of more than 300 projects for Caltrans totaling more than \$3 billion, including the \$1.2 billion San Francisco Bay Bridge Skyway Segment (the largest contract in Caltrans’ history at the time) built by Kiewit. Kiewit also recently contracted with Caltrans to complete the San Francisco-Oakland Bay Bridge Foundation Removal project, the third CMGC project Caltrans has awarded.

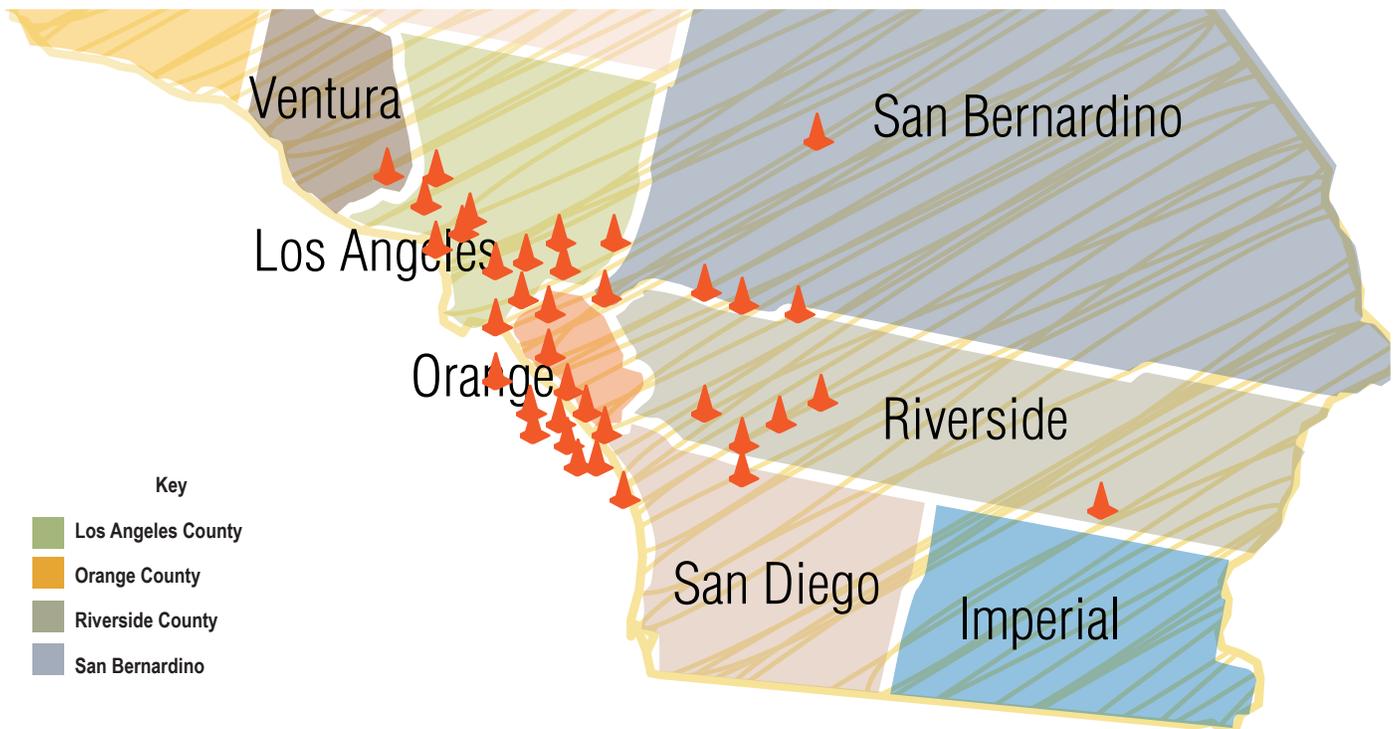
Figure 4-3 provides an overview of how our experience aligns with the evaluation criteria you have identified, and the following Form B pages further detail our successful performance in each of these areas. While our depth of experience runs deep, we have selected five projects from Kiewit and three projects from Brutoco that exemplify these criteria and demonstrate our ability to help Caltrans achieve the goals identified for this Project.



Figure 4-2: Significant Structures Brutoco Built in Southern California

Brutoco's Significant Structures

- | | | | |
|----|---|----|---|
| 1 | I-10/Citrus Avenue Interchange | 18 | Nogales St Grade Separation |
| 2 | Avenida Vista Hermosa Bridge over Marblehead Canyon | 19 | Talega & Avenida Vista Hermosa Bridges |
| 3 | Chicago Bridge Repair | 20 | Orange Line BRT Bridge |
| 4 | Passons Blvd/BNSF Grade Separation | 21 | Deer Creek Bridge |
| 5 | Metro Orange Line Extension BRT D/B | 22 | I-210 Pedestrian Bridge |
| 6 | SR-91 Eastbound Lane Addition | 23 | Jackston Street Bridge and SR-91 Widening |
| 7 | I-405 Sepulveda Pass Widening Bridges D/B | 24 | Mountain Cove Bridges |
| 8 | Jurupa Ave Grade Separation | 25 | Lankershim Bridge |
| 9 | SR-90 Imperial Hwy/Orangethorpe Grade Separation | 26 | Hermosa Bridge |
| 10 | I-5 Avenida Pico Off-Ramp Widening | 27 | Alameda Bridge & Street Improvements |
| 11 | Pomona Maintenance Station | 28 | Universal City Bus Station & Bridge |
| 12 | Pelican Hill Golf Course Bridge | 29 | Compton Creek Bridge |
| 13 | Ramona/UPRR Grade Separation | 30 | SR-55/22 Interchange Widening |
| 14 | Gold Line Eastside Extension Bridge & 101 Realignment | 31 | SR-55/PCH Newport Arches |
| 15 | I-10/215 Bridge Structures Seismic Retrofit | 32 | I-15/Hidden Valley Parkway Interchange |
| 16 | I-10 Truck Climbing Lanes | 33 | Bull Creek Bridge Earthquake Repair |
| 17 | Tujunga Bridge & Retaining Walls | 34 | Miles Avenue Bridge |





BARTON RD INTERCHANGE RECONSTRUCTION CMGC

Figure 4-3: Experience delivering projects of similar size, scope, and complexity



Project Name Location

Project Name Location	Contract Role	Year Completed	Cost (\$M)	Project Delivery		Innovation				Safety & Mobility			Quality	Environmental Compliance		
				Completed on time and within the budget	No claims, dispute proceedings, litigation, or arbitration	Caltrans/Caltrans stakeholder	Construction/reconstruction using innovative design methods and materials	Innovative structure and retaining wall design to reduce construction timeline and impacts	Accelerated construction of major elements common to this project	Staged bridge construction over existing roadway	Coordinating work and traffic control with adjacent contracts performing similar work	Complicated staging/traffic control	Coordination of complex public utility relocation as well as construction of municipal utilities	Placing large cast-in-place and/or precast structural concrete elements	Compliance with environmental regulations and restrictive permit requirements	Highly sensitive public project, including experience with coordinating with public agency
San Diego International Airport Green Build Landside, San Diego, CA	(Form B attached)	Kiewit	CMGC	Prime	2014	\$227	●	●	●	●	●	●	●	●	●	●
Pioneer Crossing, Lehi/American Fork Interchange, American Fork, UT	(Form B attached)	Kiewit	DB	Prime	2014	\$190	●	●	●	●	●	●	●	●	●	●
SR 101L HOV Lanes Design-Build Project (SR-101), Phoenix, AZ	(Form B attached)	Kiewit	DB	Prime	2011	\$90	●	●	●	●	●	●	●	●	●	●
SR 202L Red Mountain Design-Build, Phoenix, AZ	(Form B attached)	Kiewit	DB	Prime	2011	\$189	●	●	●	●	●	●	●	●	●	●
I-405 Kirkland Nickel Stage 1, Kirkland, WA	(Form B attached)	Kiewit	DB	Prime	2008	\$49	●	●	●	●	●	●	●	●	●	●
I-10/Citrus Avenue Interchange Widening, Fontana, CA	(Form B attached)	Brutoco	DBB	Prime	2014	\$33	●	●	●	●	●	●	●	●	●	●
Metro Orange Line Extension BRT, Chatsworth, CA	(Form B attached)	Brutoco	DB	Prime	2012	\$93	●	●	●	●	●	●	●	●	●	●
SR-91 Eastbound Lane Addition, Corona, CA	(Form B attached)	Brutoco	DBB	Prime	2010	\$38	●	●	●	●	●	●	●	●	●	●
Cypress E, Oakland, CA		Kiewit	BB	Prime	1998	\$120	●	●	●	●	●	●	●	●	●	●
Glenn Parks Interchange, Wasilla, AK		Kiewit	DB	Prime	2005	\$47	●	●	●	●	●	●	●	●	●	●
I-405, NE 195th to SR 527 Northbound Auxiliary Lanes, Bothell, WA		Kiewit	DB	Prime	2010	\$19	●	●	●	●	●	●	●	●	●	●
Deweyville Trail to Neck Lake Rd., Prince of Whales Island, AK		Kiewit	DB	Prime	2014	\$41	●	●	●	●	●	●	●	●	●	●
Southeast Connector, Washoe County, NV		Kiewit	CMAR	Prime	2014	\$65	●	●	●	●	●	●	●	●	●	●
Anaheim Street Viaduct Reconstruction, Wilmington, CA		Brutoco	DBB	Prime	1999	\$19	●	●	●	●	●	●	●	●	●	●
Avenida Talega, Calle Saluda and Avenida Vista Hermosa Bridges, San Clemente, CA		Brutoco	DBB	Prime	2004	\$13	●	●	●	●	●	●	●	●	●	●
Gold Line Extension Bridge and US-101 Realignment, Los Angeles, CA		Brutoco	DBB	Prime	2006	\$19	●	●	●	●	●	●	●	●	●	●
SR-90 Imperial Highway/Orangethorpe Grade Separation, Anaheim, CA		Brutoco	DBB	Prime	2009	\$32	●	●	●	●	●	●	●	●	●	●
Ramona Avenue Grade Separation, El Monte, CA		Brutoco	DBB	Prime	2008	\$23	●	●	●	●	●	●	●	●	●	●



BARTON RD INTERCHANGE RECONSTRUCTION CMGC



Kiewit

Form B
PROJECT DESCRIPTION

San Diego International Airport Green Build Landside, San Diego, CA



Name of Proposer Kiewit Infrastructure West Co.
Name of Firm Kiewit Sundt Joint Venture
Project Role Joint Venture Lead, Prime Contractor
Principal Participant Kiewit Infrastructure West Co.
Designer URS Corporation
Other (Describe) None
Years of Experience
Roads/Streets 2 years
Bridges/Structures 2 years
Utility Relocations 2 years

Benefits to I-215 Barton Road

- 7 bridges constructed to Caltrans standards
- Complex construction staging to maintain traffic for 13 million passengers/year
- \$45 million under original owner budget

Nature of Work for Which Company Was Responsible On the San Diego International Airport Green Build Landside (SDIA Landside), Kiewit was the prime contractor and managing partner on this project that included a negotiated Guaranteed Maximum Price (GMP).

Provide Project Description and Describe Site Conditions The \$227 million project included a circulation roadway including six overpass bridges, a 1,300-ft four-lane second-level elevated departure roadway (EDR), two 220-ft by 40-ft smart curb check-in pavilions, two pedestrian bridges, a transit center, and a two-story United Service Organization (USO)/Parking Management facility.

Experience of Major Participants/Team Members Working Together as an Integrated Team Kiewit was the major participant on this project.

Construction/Reconstruction using Innovative Designs, Methods, and Materials The Smart Curb columns were a significant architectural feature. To ensure the highest quality concrete finish, we developed a unique bottom-up concrete casting procedure that did not require access to the top of the column to tremie concrete. Experimentation included the analysis of design options for reinforcing steel placement, as well as multiple mock-up trials, to develop the concrete mix design, admixtures, water ratio, air entrainment, and oil treatment on the forms. A primary concern was that the initial concrete pumped into the form would set before the entire column could be completed. Based on the trial mock-ups, additional improvements were made, such as improving the formwork structural supports and changing the air content to eliminate voids and air pockets, resulting in a high quality finish.

Implementation of Complicated Staging and Traffic Handling Detailed staging and phasing of construction allowed the San Diego International Airport to remain fully operational to serve approximately 13 million passengers passing through each year. The team's meticulous planning and communication with airport operations was instrumental in maintaining vehicular circulation and pedestrian access. The staging and phasing included five overlapping phases and was prepared to minimize public disruption and maximize available parking spaces while allowing for efficient construction. Successful staging and traffic handling also included close coordination with the adjacent airside contractor; and the airport's maintenance, parking and traffic operators.

Accelerated Construction of Major Elements Common to I-215 Barton Rd. Interchange Reconstruction The integrated design and construction schedule included long-lead procurement items and permit management. The schedule included early release work packages advanced to 100% design for accurate, fast-track construction.

I-215 BARTON RD INTERCHANGE RECONSTRUCTION CMGC

Staged Bridge Construction over Existing Freeway The critical path ran through the elevated departure roadway (EDR), which was constructed in two separate traffic phases. Seven roadway bridges varying in length from 500 ft to 1,500 ft were constructed. Much of the structured bridge work was staged to accommodate airport operations and terminal traffic where 13 million passengers a year travel through the San Diego Airport. All bridges were constructed to Caltrans standards and included a variety of foundation types (concrete pile, CISS pile, and CIDH pile). This variety was necessary to accommodate the soft bay mud soils.

Innovative Structure and Retaining Wall Design to Reduce Construction Timeline and Impacts The schedule required the Smart Curb pavilions and EDR to be built simultaneously, with the decks matching. Finish elevations on the second level were constrained by the elevation of the existing terminal and the connecting pedestrian bridges, as well as the ADA requirements. In addition, the EDR required a minimum of 15 ft of clearance over the Transit Center below. Lowering the grade at the Transit Center to get the minimum clearance would have resulted in drainage problems. As a result, bent caps approximately 60 ft wide could be no deeper than 4.5 ft. Initially, the design solution was for transverse post tensioned bent caps. This required an innovative solution since the Smart Curb and the EDR would not be built simultaneously. The Kiewit solution, with expertise from post tensioning subcontractor Schwager Davis (formerly Avar), was to loop the post tensioning in the EDR bent caps so that all post tensioning activity for stressing would take place on only one side of the EDR. Stressing occurred inside a 6-ft wide bent cap so the radius was very tight, and it required extensive coordination with the rebar subcontractor, but it achieved all the necessary design requirements and met the schedule.

List Experience with Techniques to avoid Delays and Minimize Claims Because any scheduling slips would potentially affect travelers, airport stakeholders, and the team constructing the Terminal 2 Airside Project, Kiewit employed four levels of schedules: Play of the Day, a detailed four-week schedule, a 120-day expanded schedule, and a Project Master Schedule that integrated all design and construction activities. Disciplined schedule management allowed the team to open the Terminal 2 main parking lot 70 days earlier than scheduled, which allowed the Airport Authority to begin early revenue generation. Claims were eliminated by assigning appropriate risks, contractor involvement, and advancing the design to a high level before executing the GMP.

Implemented Cost Reduction Incentive Proposals to Minimize Cost and Schedule Growth Through preconstruction and construction value engineering, careful cost management, risk mitigation, and attention to cost vs. budget, Kiewit was able to bring the project in with a final cost of \$227 million, approximately 20% under the original estimate of \$272 million.

Coordination of Work and Traffic Control with Adjacent Contracts Performing similar Highway

Work Continuous communication was required between Kiewit and the airside contractor during the preconstruction effort to determine utility interface points; coordinate design solutions for mechanical, electrical, and special systems; coordinate interior finishes; develop a cohesive wayfinding program from the parking lots to the Terminal; and to coordinate City of San Diego permitting. Coordination during construction included crane placement, road closures and fencing. Coordination was achieved through weekly meetings and weekly integration of BIM for the airside and landside work to ensure compatibility.

Coordination of Complex Public Utility Relocation as well as Construction of Municipal Utilities (i.e., Water and Sewer) Coordination of utility installation in an active airport environment creates substantial cost and schedule risk if not correctly understood, and disrupting airport operations would be a catastrophic failure. A model of existing airport utilities had not previously been created, and as a result, Kiewit's utilities investigation included 1,500 potholes to accurately map the existing utilities. This model was used for visualization, engineering, and planning for installation of the new utilities. Airport operations were never impacted or disrupted by utility construction.

Experience in placing Large and Deep Cast-in-Place and Precast Structural Concrete Elements The SDIA has six cast-in-place bridges, spanning a total distance of approximately 2,900 ft. The deck depths are over 5-ft deep and consisted of more than 11,000 cubic yards of concrete. There were multiple foundation types including two foot diameter cast-in-steel-sheal (CISS) piles, 18 in. square precast driven piles, and seven foot

I-215 BARTON RD INTERCHANGE RECONSTRUCTION CMGC

diameter cast-in-drilled-hole (CIDH) piles. This project also contained approximately 16,000 sq ft of precast retaining wall panels.

Compliance with Environmental Regulations and Restrictive Permit Requirements Maintaining environmental compliance during the construction of the San Diego Airport was vital to its success. The project location was in close proximity to both sensitive water bodies and protected wildlife. Kiewit obtained and implemented all the state and local environmental regulations and permits without a notice of violation or compliance order being issued.

The project also came with pre-existing conditions, which included soil contamination from previous rental car facilities and a naval landfill. Kiewit managed the removal and disposal of this material. Kiewit developed and implemented an air quality plan that adhered to requirements stated in the Coastal Commission Permit and the Memorandum of Understanding between the Attorney General and the Airport Authority. Equipment emissions were forecasted and tracked, and biodiesel was used as a fuel source when possible. Kiewit was able to meet project emission limitations during the entire duration.

Constructing Controversial or Highly Sensitive Public Projects; including Experience in Coordination with Local and Regional Agencies on Similar Sized Projects The addition of a parking garage at SDIA was controversial due to opposition from private parking facilities and subsequent attention from local politicians. This required a highly iterative process as concepts were developed with and without the garage to provide the Airport Authority with different options. Skilled estimators continually provided accurate information to allow the client to make informed decisions on the various alternatives.

Kiewit secured all permits required for construction on this complex facility. This required a high level of communication and coordination with local and regional agencies such as the City of San Diego, the Coastal Commission, San Diego County Air Pollution, San Diego Metropolitan Water District and the State Water Resources Control Board. The San Diego Airport construction occurred during a major downturn in the San Diego economy, and the local contracting community was highly vocal. We reinvested in the San Diego contracting community by achieving 34% participation by small and disadvantaged businesses. That equates to an infusion of \$45 million into the contracting community.

List Any Awards, Citations, and/or Commendations Received for the Project Design-Build Institute of America (DBIA) 2013 Transportation Award; DBIA Western Pacific Region 2013 Design-Build Award; Construction Management Association of America San Diego Chapter 2013 Project of the Year; ASCE San Diego Section 2013 Project of the Year; AGC San Diego Chapter 2013 Build San Diego Award for Excellence in Heavy/Highway Construction; Airport Architectural, Engineering, Construction Award for exceeding Disadvantaged Business Enterprises (DBE) participation goals over two or more years; Airports Council International -North America Inclusion Champion Award recognizing exceptional achievement in promoting and sustaining diversity throughout the airport industry's workforce.

Name of Client (Owner/Agency, Contractor, etc.) San Diego County Regional Airport Authority

Address 3225 North Harbor Drive, Third Floor, Commuter Terminal, San Diego, CA 92101

Contact Name Thella Bowens **Telephone** (619) 400-2404 **Fax No.** Not Applicable **Email** tbowens@san.org

Owner's Project or Contract No. 201400

Contract Value (US\$) \$272 million **Modification Value (US\$)** <\$45 million> **Final Value (US\$)** \$227 million

Description of any Difference in Values The cost management process allowed the Airport Authority to review, revise and approve any potential changes that would benefit the Project. By keeping the team apprised of project costs in real-time, Kiewit avoided surprises and overruns

Percent of Total Work Performed by Major Participant 40%

Commencement Date April 2011 **Planned Completion** April 2013 **Actual Completion** April 2013

Description of any Difference in Completion Dates Completed project on time.

Warranty Period The warranty was for one year after substantial completion.

Amount of Claims There were no claims on this project.

Any Litigation? No litigation

Dispute Review Board history Kiewit did not participate in a DRB or alternative dispute resolution process on this project. We had no disputes with the owner that could not be resolved through our direct relationship.



Kiewit

Form B
PROJECT DESCRIPTION

Pioneer Crossing Lehi/American Fork Interchange Design-Build, American Fork, UT



Name of Proposer Kiewit Infrastructure West Co.
Name of Firm Kiewit-Clyde Joint Venture (KCJV)
Project Role Design-Build General Contractor
Principal Participant Kiewit Infrastructure West Co. (55%) and W.W. Clyde (45%)
Designer Parsons Transportation Group
Other (Describe) None
Years of Experience
Roads/Streets 2 years
Bridges/Structures 2 years
Utility Relocations 2 years

Benefits to I-215 Barton Road

- Significant traffic control
- Coordinated complicated utility relocation
- Third party/stakeholder involvement
- Key personnel Nick Wiatrowski

Nature of Work for Which Company Was Responsible A Kiewit Infrastructure West Co. led joint venture, Kiewit-Clyde Joint Venture (KCJV) completed the Pioneer Crossing project, which included six miles of a new east/west connector and the first Diverging Diamond Interchange (DDI) in Utah, at the I-15/Main Street interchange in American Fork; a new 60-in. fresh waterline; bridges over the Jordan River and UTA/Union Pacific Railroad; concrete box culverts, noise and retaining walls; utility relocations, and ancillary traffic signal improvements. KCJV served as the design-build general contractor performing bridge design analysis/modeling, project planning, scheduling and phasing, coordination with third parties, value engineering and constructability analysis, and completed 55% of the construction on a direct hire, self-perform basis.

Provide Project Description and Describe Site Conditions The project passed through environmentally sensitive wetlands, which contained endangered species. KCJV took care to delineate these areas and avoid encroachment into them. Given the site’s proximity to the Great Salt Lake, geotechnical settlement was a concern. KCJV’s geotechnical mitigation efforts included the application of wick drains with surcharges, stone trenches, use of lightweight fill in select fill areas, deep soil mixing, and incorporated tip grouting of the drilled shafts to support the bridge abutments.

Experience of Major Participants/Team Members Working Together as an Integrated Team Proposed Project Manager Nick Wiatrowski served in a similar role as Construction Manager on this project, which will benefit the I-215 Barton Road project team.

Construction/Reconstruction using Innovative Designs, Methods, and Materials The DDI is an excellent example of using innovative design and construction methods. KCJV employed a DDI on this project because it increases capacity and enhances safety within an interchange on a smaller footprint. The DDI eliminates signalized left turns at the interchange ramp access points. It is governed by two signal phases as opposed to three or more that govern a more “traditional” interchange. KCJV worked with UDOT to develop guidelines and standards as well as the criteria to assure the FHWA would approve the DDI through a series of workshops that considered safety, geometrics, modeling, signalization and a host of other factors. The DDI was built using two two-span prestressed concrete girder superstructures. KCJV employed Accelerated Bridge Construction (ABC) techniques where each span was built off-location in a “bridge farm” and then moved into place, span by span, using short-term weekend roadway closures rather than long-term intermittent closures normally used in conventional bridge construction. This was the longest and heaviest bridge moved using this process, and the first DDI built using ABC methods.

I-215 BARTON RD INTERCHANGE RECONSTRUCTION CMGC

In addition, the bridge over the UPRR freight and UTA commuter tracks was built using an innovative four-ramp design with the intersection of Pioneer Crossing and Mill Pond Road, which made use of the natural skew to accommodate the rail lines.

Implementation of Complicated Staging and Traffic Handling Traffic control coordination on the project was critical during the construction activities on I-15, American Fork Main Street and the existing Main Street Interchange. Over 110,000 vehicles travel on I-15 and Main Street daily. KCJV completed this section of work in 3 phases over a 14-month period. Other techniques included the use of self-propelled modular transporters to transport the DDI superstructures into place over one-night detours, which nearly eliminated restrictions on I-15 during construction, drastically reducing construction related delays.

Accelerated Construction of Major Elements Common to I-215 Barton Rd. Interchange Reconstruction

Our innovative application of the DDI and use of ABC techniques accelerated the construction of the I-15/ Main Street interchange, enabling the project to be completed two months ahead of schedule.

Staged Bridge Construction over Existing Freeway Using ABC and staged bridge construction methods, KCJV completed the DDI in only four one night closures. The project required a precise elevation control system to make sure the bridges were constructed precisely. Rolling bridges in place required we develop and implement an active monitoring program to monitor the twist of the bridges. We developed a system that monitored this during transport and provided for active adjustment to accommodate twisting. The project made extensive use of early work packages to accelerate the schedule. Examples of work that were completed using early work package include demolition, rough grading, and soil stabilization.

Innovative Structure and Retaining Wall Design to Reduce Construction Timeline and Impacts

KCJV paved six miles of five- and seven-lane PCCP pavement and widened portions of I-15 and on- and off-ramps. Asphalt paving accommodated tie-ins with city streets. The project required placement of over 350,000 sy of PCCP.

KCJV employed two-stage MSE walls with stone trenches and deep soil mixed foundations to accelerate the schedule and meet settlement and seismic requirements.

List Experience with Techniques to Avoid Delays and Minimize Claims This project did not have claims.

Implemented Cost Reduction Incentive Proposals to Minimize Cost and Schedule Growth KCJV reduced the contract duration by 90 days using the DDI, ABC bridge methods and innovative geotechnical methods. KCJV reduced project costs by \$20 million through the application of the DDI, which reduced right-of-way acquisition.

Coordination of Work and Traffic Control with Adjacent Contracts Performing similar Highway Work

Traffic control coordination on the project was critical during the construction activities on I-15, Main Street, and the existing Main Street Interchange. Daily and weekly coordination meetings between our team, local businesses along Main Street, and the I-15 CORE project team were critical to ensuring the project's success. The team was able to reduce delays to the traveling public, including pedestrians and bicyclists, while providing them safe passage through the work zones.

Coordination of Complex Public Utility Relocation as well as Construction of Municipal Utilities (i.e., Water and Sewer)

The project required extensive coordination including: UPRR for the new bridge over the railroad, Rocky Mountain Power for relocation of transmission lines, local governments and public utility agencies, and numerous private gas, electric, fiber optic, irrigation, sewer, and water companies. ROW acquisition required coordination with both businesses and residents. Weekly meetings were held with many of these stakeholders to track progress and coordinate on-going work activities. Our team began coordination efforts early. Project features included a new four-mile 60-in. waterline for the Central Utah Water Conservancy District.

Experience in Placing Large and Deep Cast-in-Place and Precast Structural Concrete Elements

Components included a five- to seven-lane urban arterial with PCC pavement, new bridges over I-15, Jordan River and UPRR, new concrete box culverts, noise walls, retaining walls, aesthetics/landscaping, drainage, utility relocations, ATMS, and signal work.

Compliance with Environmental Regulations and Restrictive Permit Requirements Since this was a new east/west project corridor that ran through the Jordan River floodplain, wetlands, water quality, and wildlife

I-215 BARTON RD INTERCHANGE RECONSTRUCTION CMGC

presented several challenges on the western segment of the project. While on the eastern segment of the project a salvage yard, concrete batch plant and gasoline service station provided a set of unique hazardous materials mitigation efforts.

Constructing Controversial or Highly Sensitive Public Projects; including Experience in Coordination with Local and Regional Agencies on similar Sized Projects KCJV coordinated extensively with four municipalities along with the public to alert them to traffic and changing phases of traffic control; with emergency service providers and schools so they knew clear routes through and around the construction zone; and with businesses to make sure they had consistent and well-marked access.

List Any Awards, Citations, and/or Commendations Received for the Project

- ◆ 2010 Aon Build America Award for Best New Transportation Project 2010 of Top 10 Projects - Roads and Bridges
- ◆ 2010 1st Place - Top Project Mountain States Construction
- ◆ 2010 Silver - Transportation - Mountain States Construction
- ◆ 2010 UDOT Region 3 Nominee - Urban Project
- ◆ 2010 AGC of Utah Transportation Project of the Year
- ◆ 2010 Build America Award - New Transportation

Name of Client (Owner/Agency, Contractor, etc.) Utah Dept. of Transportation (UDOT)

Address 4501 South 2700 West, Salt Lake City, UT 84114

Contact Name Bryan Adams **Telephone** (801) 965-4111 **Fax No.** (801) 341-6341 **Email** bryanadams@utah.gov

Owner's Project or Contract No. S-R39(42) and S-R399(59)

Contract Value (US\$) \$172.1 million **Modification Value (US\$)** \$21.7 million **Final Value (US\$)** \$193.8 million

Description of any difference in values KCJV experienced 50 contract modifications that equaled \$21.7 million. These contract modifications were the result of owner-directed changes and inclusion of municipal/utility betterments into the contract.

Percent of Total Work Performed by Major Participant 55%

Commencement Date November 2008 **Planned Completion Date** November 2010

Actual Completion Date August 2010

Description of any difference in completion dates Completed project ahead of schedule.

Warranty Period Started August 2010 and will be completed August 2015.

Amount of Claims No claims

Any Litigation? No litigation

Dispute Review Board History KCJV had a DRB committee, but they were never utilized other than for job visits.



Kiewit

Form B PROJECT DESCRIPTION

SR 101L HOV Lanes Design-Build Project (SR 101L), Phoenix, AZ



Name of Proposer Kiewit Infrastructure West Co.
Name of Firm Kiewit Sundt Joint Venture (KSJV)
Project Role Joint Venture Lead, Design-Build General Contractor
Principal Participant Kiewit Infrastructure West Co.
Designer Parsons Transportation Group
Other (Describe) None
Years of Experience
Roads/Streets 0.7 year
Bridges/Structures 0.5 year
Utility Relocations 0.3 year

Benefits to I-215 Barton Road

- Expedited schedule through innovative design solution
- Third party/stakeholder involvement
- Significant maintenance of traffic plan under live traffic

Nature of Work for Which Company Was Responsible Kiewit led the joint venture performing demolition, grading, drainage, concrete paving, and structures.

Provide Project Description and Describe Site Conditions A Kiewit led joint venture, Kiewit Sundt Joint Venture (KSJV) completed the SR 101 HOV Lanes Design-Build project, which required the construction of 30 miles of HOV lanes for the Arizona Department of Transportation (ADOT). The project required a combination of inside and outside widening along the heavily-congested SR 101L freeway through Glendale, Peoria, and Phoenix. The project was characterized by tight ingress and egress to the work areas, inside the median and on the shoulder, of an extremely busy freeway. The project encountered substantial quantities of unsuitable subgrade which required remediation by over excavation and importing suitable material. The project coordinated with five different projects under simultaneous construction.

Experience of Major Participants/Team Members working Together as an Integrated Team Kiewit was the major participant on this project.

Construction/Reconstruction using Innovative Designs, Methods, and Materials To meet the aggressive design schedule, KSJV applied a “triage” system to the review of design submittals to make the review process more efficient. KSJV packaged submittals based on sub segment and discipline basis. This allowed ADOT to separate them based on complexity, size, and urgency and assign realistic review times to each. This “triage” system enabled the project team to process 472 design submittals with an average review time of only 3.2 calendar days. KSJV reduced the number of plan sheets required by providing key data on spreadsheets along with simple geometries when needed. This step eliminated the 15 to 20 man-hours typically involved in generating plan sheets for roadway profile grades.

KSJV and ADOT optimized ADOT’s lighting design standards from eight conductors to four conductors per light reducing the cost of the lights. ADOT will use the new conductor configuration on future projects. KSJV introduced wireless paving and intelligent compaction to ADOT on the SR 101L DB. Wireless paving was applied on approximately half of the 30-mile-long alignment, allowing ADOT to develop specifications for its use in the future.

Implementation of Complicated Staging and Traffic Handling Kiewit sequenced construction for both segments so all through lanes remain open to traffic during peak hours and performed the majority of the work protected by temporary concrete barriers in the roadway median. Freeway closures were scheduled to avoid weekend event traffic. For example, we performed outside

I-215 BARTON RD INTERCHANGE RECONSTRUCTION CMGC

widening over a section of the project between two important roads that crossed the project providing space for a future HOV interchange. Embankment stabilization at an important intersection was performed at night. After the embankment had been stabilized, we removed the existing concrete pavement and replaced it with precast reinforced concrete panels. The pavement replacement was completed for one direction of traffic over a weekend, with the opposite side being completed the following weekend. Both off-ramps at another road were widened to provide additional capacity. The public was only affected when we installed and removed the temporary concrete barriers along the existing shoulder. We added an additional turn lane along an intersecting road on the southeast side of a traffic interchange. It required the existing right lane to be temporarily closed. We coordinated this operation with ADOT and the local cities so it could be scheduled after the Major League Baseball Spring Training season had passed. We widened existing bridges in three locations. KSJV performed this work at nights or over weekends. Left lanes were closed for deck and closure pour on SR 101L at night. Our approach to traffic handling allowed the majority of the ramps to remain open during construction. This maintained access to residents and businesses as well as hospitals, fire departments, and other civil services. We analyzed anticipated 2011 weekend traffic volumes in order to plan detours, and projected Saturday peak hour volumes to provide adequate MOT. We worked with ADOT to proactively inform the public of closures while they could still divert to alternate routes, reducing impacts. We recognized the potential hazards to construction crews and the traveling public associated with entering and exiting the project median areas. As part of our planning efforts, we developed a Median Ingress/Egress Plan to construct a series of acceleration/deceleration zones where construction vehicles could enter and exit the construction work areas safely.

Accelerated construction of major elements common to I-215 Barton Rd. Interchange Reconstruction Project

KSJV accelerated the entire project, designing and building 30 miles of freeway in just 10 months plus bridge and ramp widening.

Staged Bridge Construction over Existing Freeway Sequenced construction for both segments so all through lanes remain open to traffic during peak hours and performed the majority of the work protected by temporary concrete barriers in the roadway median.

Innovative Structure and Retaining Wall Design to Reduce Construction Timeline and Impacts KSJV paved 12-in. PCCP on either subgrade or AC. KSJV placed 9-in. of reinforced PCCP on AC.

List Experience with Techniques to Avoid Delays and Minimize Claims KSJV incurred 20 contract modifications that equaled \$9 million. These contract modifications were related to owner directed change orders and the unsuitable subgrade. The project was completed without any claims being filed.

Implemented Cost Reduction Incentive Proposals to Minimize Cost and Schedule Growth The DB team worked closely with third party stakeholders such as BNSF Railway Company, utilities, municipalities, and entertainment venues to maintain the schedule, which sometimes involved accommodating last-minute special events. The significant cost savings resulting from KSJV's low bid allowed ADOT to add auxiliary lanes, widen several ramps, and replace rubberized asphalt, while still giving the traveling public access to the roadway 13 months early. Although five additional weekends were needed to complete the additional AR-ACFC paving, the schedule absorbed most of that potential 35-day increase. These owner-initiated changes extended the proposed project schedule by 17 days and increased the budget by \$3 million-still well under ADOT's original schedule and initial \$15.5 million.

Coordination of Work and Traffic Control with Adjacent Contracts Performing similar Highway Work There were no other adjacent contracts performing similar highway work during this project.

Coordination of Complex Public Utility Relocation as well as Construction of Municipal Utilities (i.e., Water and Sewer) KSJV implemented many strategies to coordinate with utilities including using a utility conflict log that provided a continuously updated snapshot of all of issues and relocations. The log included locations, owner of the utility in conflict, nature of the conflict, and the status of relocation plans.

We coordinated directly with utility owners to make sure they had ample time within the schedule to review relocation plans, design in-house relocations, construct relocations where appropriate, review relocation plans prepared by our team, and inspect relocations done by our team. We conducted regularly scheduled meetings to provide the utility companies with current project status. KSJV delivered the entire project 406

I-215 BARTON RD INTERCHANGE RECONSTRUCTION CMGC

days faster than ADOT's original schedule. Unsuitable subgrade, which extended the full length of the project corridor, required case-by-case consultation between KSJV and ADOT to determine the most appropriate of three possible remediation methods.

Experience in placing Large and Deep Cast-in-Place and Precast Structural Concrete Elements The project incorporated ADOT'S standard cast-in-place walls to accommodate the tight working areas.

Compliance with Environmental Regulations and Restrictive Permit Requirements Wherever possible we worked with ADOT to leave in place or reuse components. This included keeping some of the sign bridge structures in place. There was also 30 miles of median cable barrier that we were able to recycle.

With this project being 30 miles long it was very visible to the traveling public and thus our environmental compliance was much more scrutinized. Throughout the project we did not receive any Notice of Violations.

Constructing Controversial or Highly Sensitive Public Projects; including Experience in Coordination with Local and Regional Agencies on Similar sized Projects The 30-mile project passed through the cities of Phoenix, Peoria and Glendale, touching multiple communities and interacting with major events and entertainment districts. The University of Phoenix Stadium, Jobing.com Arena, Luke Air Force Base, multiple spring training complexes and the Phoenix International Raceway lined the route. Making sure impacts to the traveling public were minimized not just during major events, but on an everyday commuter basis, required intensive coordination. The Kiewit-led team worked closely with these stakeholders and regional transportation officials to coordinate freeway restrictions around all events.

List Any Awards, Citations, and/or Commendations Received for the Project

- ◆ 2012AGC (National) Build America Merit Award 2012 Arizona Transportation Partnering Excellence Award
- ◆ 2012 DBIA National - a Design-Build Honor
- ◆ 2012 Regional Excellence Award, Design Build Institute of America, Western Pacific Region
- ◆ 2012 ENR Southwest States 2012 Best Projects
- ◆ 2011 AGC Build Arizona Award (Highway Construction over \$10 Million), Arizona Chapter

Name of Client (Owner/Agency, Contractor, etc.) Arizona Dept. of Transportation

Address 1221 S. 2nd Ave, MD T100, Tucson, AZ 85713

Contact Name Steve Mishler **Telephone** (520) 429-4993 **Fax No.** Not Applicable **Email** hodgsol@wsdot.wa.gov

Owner's Project or Contract No. 101MA001H745601C S-R399(59)

Contract Value (US\$) \$89.9 million **Modification Value (US\$)** \$9.0 million **Final Value (US\$)** \$98.9 million

Description of any Difference in Values Additional owner requested scope included new ACFC (rubberized asphalt), auxiliary lanes for SR 51, widening Glendale Avenue off-ramp, down drains to I-17 to reduce erosion, extended the soil stabilization and pavement replacement at Camelback, extended the project limits to the south and re-stripped ramps throughout the project.

Percent of Total Work Performed by Major Participant 55%

Commencement Date January 2011 **Planned Completion** December 2011 **Actual Completion** November 2011

Description of any Difference in Completion Dates Completed project ahead of extended contract schedule.

Warranty Period There was no warranty period on the project.

Amount of Claims No claims **Any Litigation?** No litigation

Dispute Review Board History KSJV did not participate in a DRB or alternative dispute resolution process on this project. We had no disputes with the owner that could not be resolved through our direct relationship.



Kiewit

Form B PROJECT DESCRIPTION

SR 202L Red Mountain Design-Build (SR 202L), Phoenix, AZ



Name of Proposer Kiewit Infrastructure West Co.
Name of Firm Kiewit Sundt Joint Venture (KSJV)
Project Role Joint Venture Lead, Design-Build General Contractor
Principal Participant Kiewit Infrastructure West Co.
Designer URS Corporation
Other (Describe) Design Subconsultants : HDR Engineering, Inc, T.Y. Lin International, Lee Engineering, Corral-Dybas Group, AMEC, J2 Engineering, Michael Baker, Terracon
Years of Experience
Roads/Streets 1.2 years
Bridges/Structures 0.8 year
Utility Relocations 0.9 year

Benefits to I-215 Barton Road

- Expedited schedule through innovative design solutions
- Staged bridge construction over freeway
- Significant maintenance of traffic plan under live traffic

Nature of Work for Which Company Was Responsible Kiewit led the joint venture performing demolition, grading, concrete paving, and structures.

Provide Project Description and Describe Site Conditions A Kiewit led joint venture, Kiewit Sundt Joint Venture (KSJV), completed this design-build project to widen 10 miles of the SR 202L freeway through Phoenix and Tempe. The scope of this project included adding general purpose and auxiliary lanes, 22 bridge widenings and 18 on- and off-ramps. Other scope elements included: outside pavement widening; retaining and noise wall construction; intersection, ramp, drainage and landscaping improvements; utility relocations; signing and marking rehabilitation; and Freeway Management System (FMS) upgrades.

Portions of the project spanned over protected wetlands and Tempe Town Lake, a popular recreational area within the Phoenix Metropolitan Area. The protected wetlands have been habitat to several protected bird species including the Bald Eagle, California Brown Pelican, Southwestern Willow Flycatcher, and Yuma Clapper Rail. Many migratory bird species, particularly cliff swallows, nest on the bridge structures around the wetlands.

Experience of Major Participants/Team Members working Together as an Integrated Team Kiewit was the major participant on this project.

Construction/Reconstruction using Innovative Designs, Methods, and Materials The project used “hybrid” bridges, that consisted of “drop-in” precast concrete members on the sections spanning live traffic and cast-in-place (CIP) end sections that were not over traffic. At other bridge locations with restricted vertical clearance over traffic, KSJV employed a “cast high and lower” construction method. This method allowed KSJV to build these CIP bridges using cost effective falsework techniques while providing the necessary overhead clearances for the traveling public. Two of the project’s bridge widenings spanned Tempe Town Lake and the Indian Bend Wash. The original plan created access and staging areas by placing temporary fill under the bridge and in the lake, removing the fill when construction was completed. This created a substantial risk if the Indian Bend Wash flowed during a storm event and caused the fill material to be washed into the lake. To eliminate the environmental and financial risk, KSJV used a portable cofferdam system that eliminated the need to place temporary fill material in Tempe Town Lake. The

I-215 BARTON RD INTERCHANGE RECONSTRUCTION CMGC

portable cofferdam was installed and the bridge widenings were completed over a seven-month period. During construction, the Indian Bend Wash had two large flows that discharged into Tempe Town Lake. Because of KSJV's innovative use of the portable cofferdam over conventional temporary fill, environmental and financial impact was avoided.

Implementation of Complicated Staging and Traffic Handling The SR 202L freeway connects downtown Phoenix with the East Valley. The project ran through the center of Tempe and adjacent to Arizona State University (ASU) and Tempe Town Lake, Tempe's main venue for special events. KSJV made our Incident Management Team (IMT) available around the clock to respond to any issue. IMT contact information was conveyed to emergency service providers and the traveling public via specialty signs along the corridor. KSJV installed clearly marked safety pullouts along the project corridor at regularly-spaced intervals for disabled vehicles. To relieve congestion we allowed traffic to run on surfaces of varying skid resistance by opening newly constructed lanes of eastbound and westbound SR 202L with traffic running on PCCP until we could construct the final Asphaltic Rubber Asphalt Concrete Friction Course (AR ACFC). Impact on vehicular traffic on SR 202 was minimized by breaking the corridor into smaller segments and areas and phasing each segment/area in order to maintain traffic flow. We maintained business access by using design software to verify turning radius ensuring trucks could negotiate detours. Since the project was close to Sky Harbor Airport, we coordinated with a representative from the airport to ensure that the rental car companies notified customers of construction related restrictions on SR 202L.

Accelerated construction of major elements common to I-215 Barton Rd. Interchange The ADOT original schedule was 845 calendar days to design and construct the project. Kiewit proposed completing the project within 600 calendar days. Client changes extended the project duration, but KSJV finished ahead of schedule.

Staged Bridge Construction over Existing Freeway Our innovative use of "hybrid " and "drop-in" bridges made use of staged bridge construction techniques.

Innovative Structure and Retaining Wall Design to Reduce Construction Timeline and Impacts The new pavement consisted primarily of 11-in. thick Portland Cement Concrete Pavement (PCCP). The PCCP then overlaid with a 1-in. thick AR-ACFC or "quiet pavement" that substantially reduces the noise generated by vehicles. Due to the proximity of the new retaining walls and the inability to construct traditional cantilever wall footings, KSJV designed and constructed modified cast-in-place retaining walls that connected the footing of the new wall to the base to the existing retaining wall footings. We employed a lightweight structure-mounted noise barrier that was designed and constructed at the outside edge of many of the overpass bridge widenings. This system consisted of patterned foam panels faced with an epoxy stucco and supported with an internal steel core. This system weighed less than 15 pounds per square foot and provided the architectural appearance specified for this project.

List Experience with Techniques to Avoid Delays and Minimize Claims There were no claims on this project.

Implemented Cost Reduction Incentive Proposals to Minimize Cost and Schedule Growth Substantial completion of the original contract work was achieved on July 28, 2010, nine days ahead of the required contract completion date. The final completion of the project was delayed until June 2011 due to an owner enhancement change order that required approval of the design from several outside agencies before construction of this item could begin. The final approval of the design by the outside agencies was received in May 2011 and construction began immediately.

Coordination of Work and Traffic Control with Adjacent Contracts Performing similar Highway Work There were no adjacent contracts performing similar highway work on this job.

Coordination of Complex Public Utility Relocation as well as Construction of Municipal Utilities (i.e., Water and Sewer) KSJV implemented a comprehensive underground locating program that physically located all buried facilities and incorporated their location into the design well ahead of construction. In addition, KSJV and ADOT took a proactive approach in notifying the other party of any potential impact immediately, and then worked together to develop a solution that either eliminated the issue or greatly reduced its impact. To minimize the potential of project delays resulting from agency reviews and approvals, KSJV completed those design elements requiring outside agency approval early in the design phase, which maximized the agency review time. The team interacted with these agencies throughout design and

I-215 BARTON RD INTERCHANGE RECONSTRUCTION CMGC

incorporated their comments as design progressed, giving the agencies greater familiarity with the design and resulting in faster design reviews and approvals.

Experience in placing Large and Deep Cast-in-Place and Precast Structural Concrete Elements One of the innovative ideas was the use of “hybrid” bridges that consisted of two different bridge types within a single structure. These hybrid bridges used “drop-in” precast concrete members on the sections that spanned over live traffic, and cast-in-place (CIP) end sections that were not over traffic. At several other bridge locations where there was restricted vertical clearances over existing traffic, the Kiewit-led JV used a “cast high and lower” construction method to build those bridges. This method allowed KSJV to build these CIP bridges using cost effective falsework techniques while providing the necessary overhead clearances for the traveling public.

Compliance with Environmental Regulations and Restrictive Permit Requirements The team coordinated with and obtained various approvals from multiple outside agencies and utility companies including the United States Army Corp of Engineers and Union Pacific Railroad. During January and February 2010, historic levels of precipitation fell in the Phoenix area that the team needed to overcome in order to complete construction and open traffic that spring. In addition to being built adjacent to live freeway traffic, a substantial portion of the project had to be constructed over live traffic, water, and protected wetlands.

Constructing Controversial or Highly Sensitive Public Projects; including Experience in Coordination with Local and Regional Agencies on Similar sized Projects The SR 202L freeway is the main transportation link connecting downtown Phoenix with the East Valley. The project also ran through the center of Tempe and was adjacent to Arizona State University (ASU) and Tempe Town Lake, Tempe’s main venue for special events. ADOT and its major stakeholders-the Cities of Phoenix and Tempe, ASU and the traveling public-relied on the Kiewit-led JV team to keep traffic restrictions and closures to a minimum. Due to the high-profile nature of the project, the Kiewit-led team and ADOT made meeting the stakeholders’ needs and concerns one of the top project goals.

List Any Awards, Citations, and/or Commendations Received for the Project

- ◆ 2011 Marvin M. Black Award for Excellence in Partnering, AGC Public -Renovation Highway Construction
- ◆ 2011AGC Build Arizona Award
- ◆ 2011 APWA Project of the Year
- ◆ 2011 Arizona Transportation Award for Partnering Excellence

Name of Client (Owner/Agency, Contractor, etc.) Arizona Department of Transportation (ADOT)

Address 3205 S. 17th Avenue, MD 611E, Room 133, Phoenix, AZ 85007

Contact Name Annette Riley **Telephone** (602) 712-7360 **Fax No.** Not Applicable **Email** ariley@azdot.gov

Owner’s Project or Contract No. I01MA001H745601C S-R399(59)

Contract Value (US\$) \$188.9 million **Modification Value (US\$)** \$2.1 million **Final Value (US\$)** \$190.8 million

Description of any Difference in Values Additional owner requested scope included installation of new bridge deck joints, replacement of existing signs on west bound 202, added noise walls, installation of pedestrian push buttons, FMS system enhancements and other miscellaneous enhancements.

Percent of Total Work Performed by Major Participant 55%

Commencement Date December 2008 **Planned Completion** June 2011 **Actual Completion** June 2011

Description of any Difference in Completion Dates Completed project ahead of extended contract schedule.

Warranty Period The warranty period for this project was from August, 2010 to August, 2011.

Amount of Claims No claims **Any Litigation?** No litigation

Dispute Review Board History KSJV did not participate in a DRB or alternative dispute resolution process on this project. We had no disputes with the owner that could not be resolved through our direct relationship.



Kiewit

Form B
PROJECT DESCRIPTION

I-405 Kirkland Nickel Stage 1, Kirkland, WA



Name of Proposer Kiewit Infrastructure West Co.
Name of Firm Kiewit Infrastructure West Co.
Project Role Design-Build General Contractor
Principal Participant Kiewit Infrastructure West Co.
Designer AECOM
Other (Describe) None
Years of Experience
Roads/Streets 1 year
Bridges/Structures 1 year
Utility Relocations 1 year

Benefits to I-215 Barton Road

- Expedited schedule through innovative design solutions
- Staged bridge construction over freeway
- Significant maintenance of traffic plan under live traffic

Nature of Work for Which Company Was Responsible The WSDOT and Kiewit/AECOM team led the way utilizing design-build delivery for the first time through the I-405 corridor on this \$49.2 million freeway widening project.

Provide Project Description and Describe Site Conditions This freeway project widened the existing roadway to five (four general purpose and one HOV) lanes and full shoulders. The project required re-striping for construction phasing throughout the alignment and a final re-striping after the crown shift of the final HMA overlay. It also called for two new noise walls, one replacement wall and repair of the other wall. Pedestrian and ADA improvements included new access through the alignment on 116th St. Kiewit/AECOM designed and installed new storm drainage to handle increased impervious flow throughout the project limits, and installed a biofilter drain (ecology ditch) to pre-treat roadway drainage, enhance infiltration and limit containment pond sizing. The team also designed and constructed two new detention/treatment ponds and one detention vault. The team was awarded a project bonus for going above and beyond contract requirements regarding environmental, quality, and traffic control.

Experience of Major Participants/Team Members working Together as an Integrated Team Kiewit was the major participant on this project.

Construction/Reconstruction using Innovative Designs, Methods, and Materials An innovative design submittal schedule was used, which allowed construction to begin prior to completion of final drawings; this contributed greatly to project completion nearly eight months ahead of WSDOT's original timetable. The team successfully implemented an Alternative Technical Concept to enhance a stream passage reconstruction and re-establish Forbes Creek through the project site. This reconstruction included building a natural fish passage stream with weirs spaced along its length and a bored large diameter culvert under I-405.

Implementation of Complicated Staging and Traffic Handling Maintenance of traffic played a key role in the successful execution of this urban project. The project required extensive traffic control with re-striping for construction phasing throughout the alignment and a final re-striping after the crown shift of the final hot mix asphalt (HMA) overlay. Kiewit maintained all existing I-405 lanes of traffic throughout construction, with a dedicated Traffic Management Engineer who prepared traffic control plans and monitored field performance. Due to successful traffic control planning, portions of auxiliary lanes were opened early to benefit the traveling public.

I-215 BARTON RD INTERCHANGE RECONSTRUCTION CMGC

Accelerated construction of major elements common to I-215 Barton Rd. Interchange We proposed and built 1,000 lf of combination MSE, moment slab/traffic barrier and sound wall. This unique design accelerated construction of the NB roadway by minimizing excess excavation and support that would have been required for a high retaining wall. Using a Structural Earth Wall (SEW) for the bottom portion eliminated over excavation for a retaining wall footing. The retaining wall footing would have required either a temporary easement or support of excavation to construct. The SEW only required clearing and minimal grading before actual wall construction could begin. Kiewit was also able to eliminate two MSE walls by adjusting graded slopes and extending guardrail further expediting embankment construction. At the Forbes Creek Fish passage, we constructed a soil nail wall with allowance made for additional surcharges and loads for future construction. We also accelerated construction by installing a biofilter drain (ecology ditch) to pre-treat roadway drainage, which enhanced infiltration and limited containment pond sizing. Bridge replacement construction for the 116th st bridge was built in phases. Phases were scheduled to ensure the bridge was built efficiently and without interruption to I-405 traffic.

Staged Bridge Construction over Existing Freeway The I-405 NB and SB 116th St overpass bridges were built in three phases. The bridges are constructed on drilled shafts to meet seismic design criteria and were built adjacent to existing bridges carrying live I-405 traffic.

During the first stage, traffic was maintained on the existing bridges and portions of the existing NB bridge were

selectively demolished. Portions of the new NB bridge were constructed and NB traffic was rerouted onto the new NB Bridge.

The second stage included demolition of the remaining NB bridge and a portion of the SB bridge to allow for construction of portions of the new NB and SB bridges. Once construction was completed on this part of the overpass, traffic was routed onto the newly constructed SB overpass bridge and additional lanes were provided for NB traffic. Stage three included demolition of the old SB bridge and remaining construction of the new SB bridge. SB traffic was rerouted onto the full configuration of the SB I-405 with three general purpose lanes, one

HOV lane and the new auxiliary lane completing the project. Once SB traffic was rerouted, NB traffic received the benefit of the full five-lane configuration.

Innovative Structure and Retaining Wall Design to Reduce Construction Timeline and Impacts Kiewit/AECOM designed MSE walls to control grading limits and reduce property acquisition across the entire alignment, saving schedule impacts.

List Experience with Techniques to Avoid Delays and Minimize Claims Kiewit worked closely with WSDOT, project consultants, the City of Kirkland and other stakeholders to resequence traffic operations when other major traffic control items took priority over planned operations. During the summer of 2007, another major WSDOT bridge overlay project on I-5 required traffic diversions to I-405 and WSDOT rescinded planned closures on NB I-405. After reviewing all the options, we requested WSDOT extend the weekend closure to allow us to complete our work without further delay. By working together to mitigate the damages and delays we were able to minimize the impact and amicably settled the issue without the need for escalation.

Implemented Cost Reduction Incentive Proposals to Minimize Cost and Schedule Growth During the Kirkland proposal phase we suggested several alternative technical concepts (ATCs) that were accepted and implemented to reduce costs and allow the project to be completed earlier than the allowed schedule. The original concept required a fish ladder be constructed. Kiewit proposed and got pre-proposal acceptance from resource agencies to construct a more natural fish stream with control weirs. The proposed fish stream relocated the channel further south on the highway and shortened the crossing. The relocated stream also provided a naturally landscaped environment along the length of the stream, which was not originally required. In addition, our proposed schedule implemented early completion of a portion of the auxiliary lanes from 85th St to 116th St providing the traveling public beneficial traffic relief while the remainder of the project was completed and extending the auxiliary lane to 124th St.

Coordination of Work and Traffic Control with Adjacent Contracts Performing similar Highway Work During construction Kiewit coordinated with an adjacent contractor for the Sound Transit project to facilitate smooth

I-215 BARTON RD INTERCHANGE RECONSTRUCTION CMGC

traffic flows and minimize impacts to that contractors projects and the traveling public. The other contractor was constructing an HOV off-ramp and transit center. Kiewit coordinated with the City of Kirkland for localized traffic configurations and detours during construction of the NE 116th St bridge overcrossing.

Coordination of Complex Public Utility Relocation as well as Construction of Municipal Utilities (i.e., Water and Sewer) There were two significant complex public utility relocations on this project. Kiewit re-routed mainline Intelligent Transportation System (ITS) to complement the new highway design. In addition, significant coordination with Puget Sound Energy was required because all above-ground power was relocated underground.

Experience in placing Large and Deep Cast-in-Place and Precast Structural Concrete Elements At Kirkland we placed 150-ft long precast girders on the 116th St Bridge in three separate phases, while maintaining traffic on I-405 north and south bound lanes. The design of the precast girder bridge also required installation of drilled shafts in three phases. This work was performed along side and between the existing and new portions of the 116th St bridge without incident. In addition, the contract included numerous precast sound walls, structural earth walls (precast MSE walls), soil nail walls, and temporary soldier pile walls built in close proximity to active traffic, and environmentally sensitive areas. A large diameter fish culvert/tunnel was also installed under the existing active highway.

Compliance with Environmental Regulations and Restrictive Permit Requirements Working in cooperation with the Department of Ecology and the Washington Department of Fish and Wildlife, the Kiewit team optimized the design of the Forbes Creek fish passage under the freeway to reduce costs and environmental impacts. This alignment adjustment required the team to obtain additional permitting for the project, which was secured without impact to the schedule.

The Kiewit team developed environmental compliance checklists, in addition to an extensive indoctrination and training program, which all employees were required to participate in prior to working on the site. The team was awarded a project bonus for going above and beyond environmental contract requirements.

Constructing Controversial or Highly Sensitive Public Projects; including Experience in Coordination with Local and Regional Agencies on Similar sized Projects Since the project was in a highly traveled area, it was important to keep motorists and area residents informed of upcoming construction activities. Kiewit and WSDOT implemented a comprehensive public information program using variable message signs, press releases and mailed flyers. We also coordinated with Bothell and Kirkland to review landscape and planting plans for wetland preservation.

List Any Awards, Citations, and/or Commendations Received for the Project The team was awarded a project bonus for going above and beyond contract requirements regarding environmental, quality, and traffic control.

Name of Client (Owner/Agency, Contractor, etc.) Washington Dept. of Transportation (WSDOT)

Address 310 Maple Park Avenue SE, P.O. Box 47300, Olympia, WA 98504-730

Contact Name Brian Nielsen **Telephone** (206) 805-5426 **Fax No.** Not Applicable **Email** nielsenb@wsdot.wa.gov

Owner's Project or Contract No. 0070402

Contract Value (US\$) \$47.5 million **Modification Value (US\$)** \$1.7 million **Final Value (US\$)** \$49.2 million

Description of any Difference in Values Client-directed design modifications

Percent of Total Work Performed by Major Participant 52%

Commencement Date October 2005 **Planned Completion** April 2008 **Actual Completion** January 2008

Description of any Difference in Completion Dates Completed project ahead of schedule.

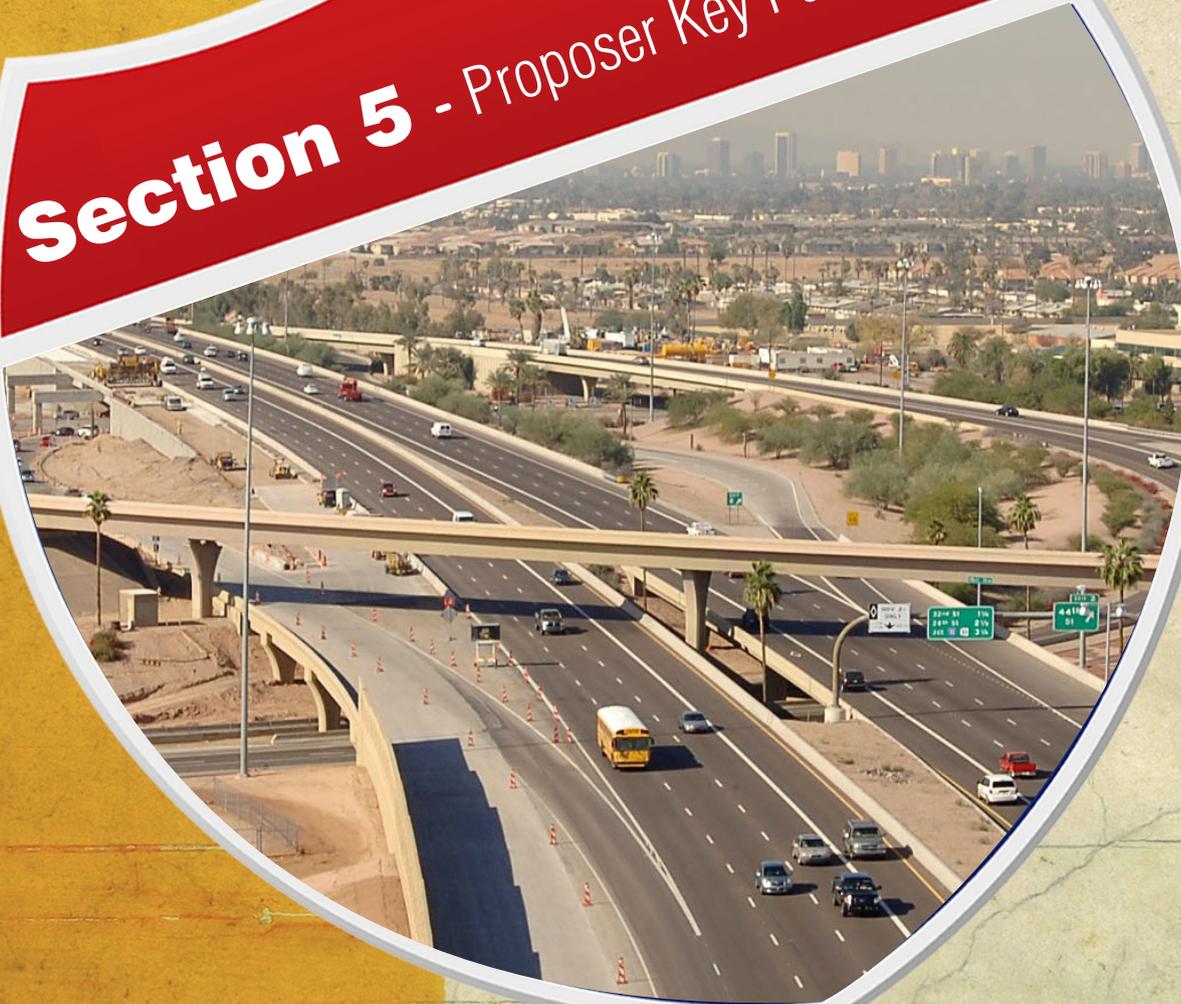
Warranty Period The warranty period for Kirkland was one year for road and three years for landscaping.

Amount of Claims No claims

Any Litigation? No litigation

Dispute Review Board History Kiewit did not participate in a DRB or alternative dispute resolution process on this project. We had no disputes with the owner that could not be resolved through our direct relationship.

Section 5 - Proposer Key Personnel



SR 202L Red Mountain Design-Build Phoenix, AZ

“The commitment to partnership exhibited by [Kiewit] on the SR 202 Design-Build project throughout the design and construction phases has been exemplary. The dedication of this team to meet the goals and expectations of the Department along with your proactive approach to issue resolution are the basic hallmarks of our excellent partnership.”

— **Annette Riley, PE**, Sr. Project Manager, ADOT



Section 5

Proposer Organization and Key Personnel

The Kiewit Team is comprised of a dedicated team of construction professionals with real-world experience in successful alternative delivery and Caltrans construction. This team is qualified and prepared to effectively manage all aspects of the contract and integrate with Caltrans in a cohesive and seamless manner. The team of Kiewit and Brutoco is committed to exceeding Caltrans expectations on this project.

To provide Caltrans with the best possible Project, we have selected a key major subcontractor and a specialized consultant to assist us with preconstruction and construction services. Kiewit, in conjunction with Brutoco Engineering & Construction, Inc., (Brutoco) and Green Com, Inc., (Green Com) will operate as a fully integrated entity and act as your advocate for maximizing value, avoiding surprises, and developing a Guaranteed Maximum Price (GMP) consistent with your expectations.

Our key major subcontractor, Brutoco, was brought onto the team because of their local experience in San Bernardino and Riverside Counties. Brutoco is an experienced bridge builder that, when paired with Kiewit, creates the most valuable team to build this project. Brutoco brings specific knowledge of local subcontractors and suppliers that will be of the most benefit to the cost and schedule of the project. They also are familiar with Caltrans District 8, local labor resources, and have long developed relationships with local craft employees that will ensure a quality product is provided.

Our specialized consultant, Green Com, was brought to the team because of Dennis Green's experience with Caltrans and the local community. Barton Road is the backbone and main access point for the City of Grand Terrace. Due to this project's impact on Grand Terrace and the surrounding community, we feel that a stakeholder liaison will add value to our team. As our Stakeholder Liaison for the project, Dennis will provide outreach to local residents, schools, and businesses, keeping them informed of project activities. Ultimately, Dennis will ensure the needs and desires of the community are effectively communicated to the project team.

- Consistent Team from Preconstruction through Construction and Project Close-out
- Caltrans experience totaling more than \$3 Billion
- Key personnel combined experience of more than 141 years

Together Kiewit, Brutoco, and Green Com make up the Kiewit team. Our proposed organizational structure was created specifically to integrate with and act as an extension of your staff. Our organizational chart shown in Figure 5-1, presents our structure, teaming arrangements, and reporting requirements for both preconstruction and construction phases.

3.6.A. Key Personnel

Kiewit is committed to providing Caltrans with the best team to deliver this project safely and successfully. We have selected four key personnel to provide special expertise that is critical to the Project. Our key personnel for this Project include:

- ◆ Project Manager - Nick Wiatrowski
- ◆ Construction Manager - Jose Martin
- ◆ Lead Estimator - Brandon Morlet
- ◆ Scheduler - Ashley Bales

We have defined two value-added key personnel for this Project based on their significant and relevant experience in complex infrastructure projects.

Our value-added key personnel for this Project include:

- ◆ Structures Manager - Ron Neal
- ◆ Stakeholder Liaison - Dennis Green

Form D (Proposed Key Personnel Information) is included at the end of this Section.

3.6.B. Required Resumes

The Kiewit Team is assigned and dedicated to the project from preconstruction services through construction services. Figure 5-2 on the following page depicts our time commitment by key individual for the preconstruction and construction phases. Our commitment means that our key personnel are available to meet Caltrans' schedule for meetings and providing deliverables. Resumes of Key Personnel are included in Appendix A, Resumes.

Figure 5-1: Illustrates our integrated project organization, designed to meet the needs of the project, and support the CMGC contracting approach

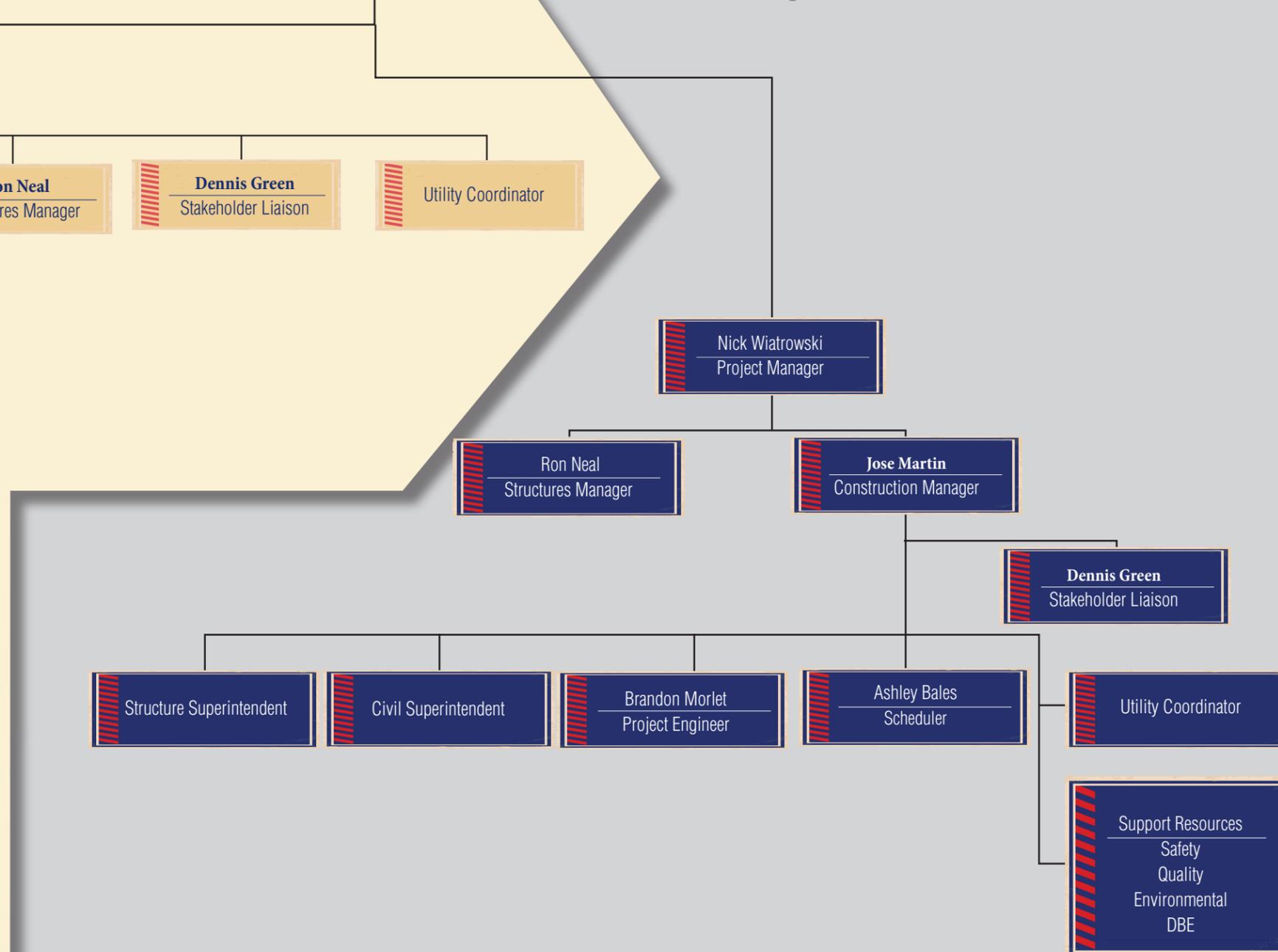
Organizational Chart



Preconstruction Organization Chart



Construction Organization Chart



Organizational Benefits

- ◆ The Kiewit Team is assigned and dedicated to the project from preconstruction services through construction services
- ◆ Key personnel combined experience of more than 141 years
- ◆ Our preconstruction services team is an effective balance of national CMGC expertise with local Inland Empire and Caltrans District 8 construction experience
- ◆ The Kiewit Team has experience in all of the major elements of construction detailed by Caltrans and brings industry leading experience to this contract
- ◆ Kiewit, in conjunction with Brutoco and Green Com will operate as a fully integrated entity



BARTON RD INTERCHANGE RECONSTRUCTION CMGC

Figure 5-2: Key Personnel Commitments – Preconstruction and Construction Phases

Key Team Members



Nick Wiatrowski
Project Manager

Nick Wiatrowski has more than 16 years experience in successful delivery of large infrastructure projects. Nick is recognized for his effective communication, leadership, and management skills. Nick is well versed in the federal, state, and local permitting process, and understands their impact on design, schedule, and costs. He will serve as the point of contact on the Project and will bring his unique blend of design and construction expertise to the team. During preconstruction, Nick and his team will work closely with Caltrans to establish staging, sequencing, and construction method options for Caltrans to select.

Preconstruction **100%** Construction **100%**
Nick will devote 100% of his time to support the preconstruction services when needed to ensure full availability and resources for the project. When not needed in preconstruction services, Nick will continue his role as Sponsor for Kiewit. During construction Nick will be fully committed to the project.



Jose Martin
Construction Manager

Jose Martin is an exceptional CMGC Construction Manager with more than 28 years of experience. He is highly skilled at communicating goals, schedule requirements, and safety procedures to his team as well as coordinating all project participants. He is well versed in all construction disciplines and the sequencing of events on projects in accordance with design, budget and schedule. Jose is recognized for his effective communication, leadership and field management skills, attention to detail, logical decision-making ability, and experience at working in deadline-driven project environments. His skill and experience enables him to consistently achieve quality and schedule benchmarks and successful project completions. Jose will work closely with Caltrans' Highway Project Manager to manage construction operations and generate value engineering and innovations.

Preconstruction **100%** Construction **100%**
Jose will be fully committed to the success of the I-215 Barton Road Interchange Reconstruction Project. He will only continue to support Brutoco's estimating staff if time allows during preconstruction services. During construction Jose will be fully committed to the project.



Brandon Morlet
Lead Estimator/Project Engineer

Brandon Morlet has more than eight years of experience successfully developing the quantities and cost estimates critical to the analyses of design and staging alternatives and to discovering ways to meet project objectives while reducing overall costs. Brandon has served the last two years as Kiewit's civil discipline lead estimator, as well as a Lead Estimator on several major projects, totaling more than \$500 million. During these projects, Brandon successfully lead a team of estimators under deadlines. Brandon will use an open book approach to estimating with Caltrans. With Caltrans' Independent Cost Estimator (ICE), Brandon's team will generate estimating guidelines for the estimates and supports the negotiation for the GMP. During the construction phase Brandon will transition into Project Engineer, where he will be responsible for managing the project budget, work plan development, field engineering, schedule changes and tracking, and project administration.

Preconstruction **100%** Construction **100%**
Brandon will be fully committed to the success of the I-215 Barton Road Interchange Reconstruction Project. He will only continue to support the estimating needs for Kiewit if time allows during preconstruction services. During construction Brandon will be fully committed to the project as Project Engineer.



Ashley Bales
Scheduler

For the last eight years **Ashley** has been responsible for scheduling on complex infrastructure projects throughout Southern California. She has extensive experience working with Caltrans. Currently, Ashley leads our scheduling efforts at the I-405 Sepulveda Pass Widening Project. Ashley will work closely with our team and Caltrans to generate a comprehensive schedule encompassing all work elements, ensuring schedule certainty.

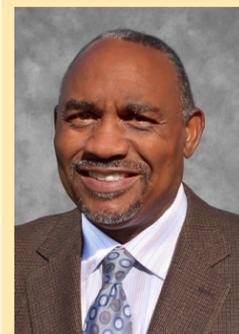
Preconstruction **35%** Construction **100%**
Ashley will be fully committed to the success of the I-215 Barton Road Interchange Reconstruction Project. She will continue to support the scheduling needs of Kiewit when time allows during preconstruction services. During construction Ashley will be fully committed.



Ron Neal
Structures Manager

Value-Added Personnel
Ron Neal is a structures specialist with talents in structure selection, work planning, constructability review, estimating, and managing large construction projects. His expertise will be effectively utilized in both preconstruction services and construction. He will collaborate with the Caltrans design team to find the right solutions to structure selections, bridge construction phasing, and support of excavation challenges.

Preconstruction **25%** Construction **25%**
Ron will devote 25% of his time or as required. He will continue his role as Vice President of Structures for Brutoco when time allows.



Dennis Green
Stakeholder Liaison

Value-Added Personnel
Dennis Green is an innovative problem solver with more than 35 years of experience in Public Affairs for developers, businesses, and government entities. Over his vast career experience, Dennis has developed many programs and campaigns within the construction industry, such as the Caltrans Construction Liaison Program. He has conceived and implemented public awareness and community outreach programs for many years. Dennis will directly communicate with our Construction Manager as well as our Project Manager to facilitate communication on changes and variance to project scheduling, construction stages, traffic control, and closures and detours that may affect the stakeholder group, contractors performing work adjacent to or within the project corridor or other members of the public at large.

Preconstruction **35%** Construction **25%**
Dennis will devote 35% of his time or as required during preconstruction services. He will continue his role as Public Affairs Officer for Green Com, Inc., when time allows.



3.6.C. Required Licenses

The Kiewit Team includes professionals with the requisite licenses and experience to perform the services required of the project. Kiewit and Brutoco have Class A and B, General Engineering Contractor Licenses in the State of California as seen in Figure 5-3.

Figure 5-3: State of California Contractor Licenses



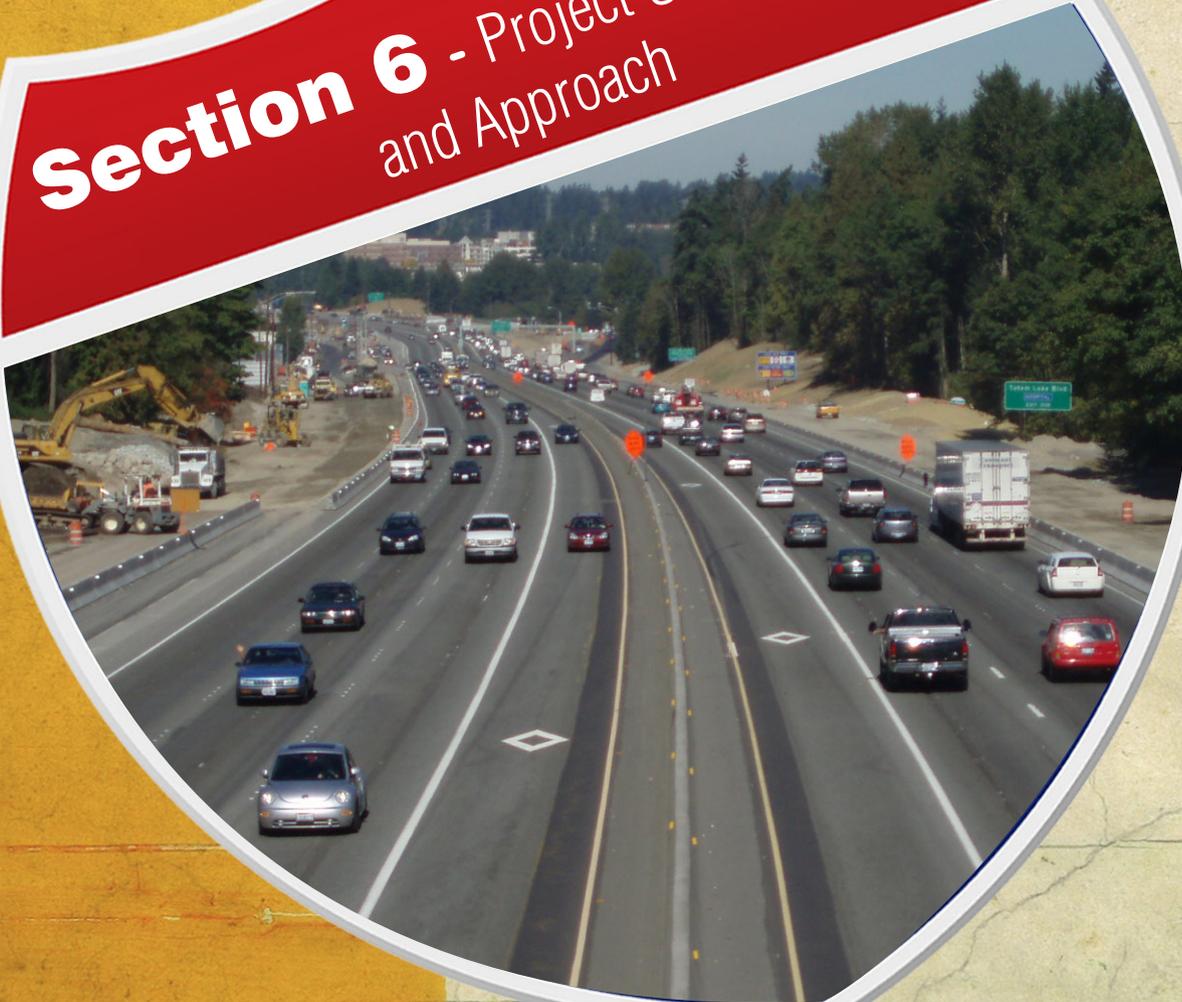
Form D
PROPOSED KEY PERSONNEL INFORMATION

Name of Proposer Kiewit Infrastructure West Co.

Instructions for Form completion: Responses shall be addressed within the table below. Should additional space be needed to adequately respond, Proposer is advised to increase the number of lines within the table as appropriate. Form D has no SOQ page limitation.

Position	Name	Years of Experience	Education and Registrations	Parent Firm Name
Project Manager	Nick Wiatrowski	16	High School Diploma	Kiewit Infrastructure West Co.
Construction Manager	Jose Martin	28	BS, Construction Engineering and Management Cal Poly - Pomona, 1985	Brutoco Engineering & Construction, Inc.
Lead Estiamtor/ Project Engineer	Brandon Morlet	8	BS, Civil Engineering, Cal Poly - San Luis Obispo, 2006	Kiewit Infrastructure West Co.
Scheduler	Ashley Bales	8	BS, Mechanical Engineering University of Nebraska Lincoln, 2006	Kiewit Infrastructure West Co.
Structures Manager	Ron Neal	46	Journeyman Carpenter, Southwest Regional Council	Brutoco Engineering & Construction, Inc.
Stakeholder Liaison	Dennis Green	35	Certificate in Public Speaking Crafton Hills Junior College, Yucaipa, CA	Green Com, Inc.

Section 6 - Project Understanding and Approach



I-405 Kirkland Nickel Stage 1 Kirkland, WA

➔ The team was awarded a project bonus for going above and beyond contract requirements regarding environmental, quality, and traffic control.



Section 6 Project Understanding & Approach

3.7.A. Project Understanding

Kiewit is excited about the opportunity to work with Caltrans as the Construction Manager for the I-215 Barton Road Interchange Reconstruction Project (Barton Road Interchange). The CMGC delivery method is a great model that allows for collaboration between Caltrans and Kiewit, bringing value to the Project through our preconstruction experience. Our experience will assist in reducing project risk, developing cost saving ideas, and reducing the overall project schedule.

The Project proposes to replace the Barton Road overcrossing bridge to increase capacity and reduce future congestion at the Barton Road Interchange project. The new overcrossing bridge will also accommodate a future widening of the I-215 freeway. The Project will require:

- ◆ Demolition of the existing bridge in two phases over the I-215 freeway
- ◆ Construction of the new bridge in two phases with the reconstruction and widening of Barton Road
- ◆ Realignment of the existing on- and off-ramps, including a new loop ramp for the southbound I-215 on-ramp
- ◆ New retaining walls throughout the Project
- ◆ Construction of a round-a-bout intersection west of the new bridge
- ◆ Protecting utilities in place and relocation of utilities in conjunction with the construction staging
- ◆ Realignment of Commerce way into Barton Road
- ◆ New road south of the Grand Terrace Fitness Park, between Grand Terrace Road and La Crosse Avenue

Major elements of the work for the Project include right-of-way acquisition, environmental compliance,

- ➔ Over \$3 billion in CMGC experience
- ➔ 12-time winner of the AGC Marvin M. Black Award for Partnering
- ➔ Team expectation of **Nobody Gets Hurt**

utility relocations and protection, staged construction, traffic control, and third party coordination. These elements are discussed in more detail below.

ROW Acquisition & Environmental

Right-of-way acquisitions directly affect the project schedule by the ability to start preconstruction activities. Kiewit will provide help prioritizing parcel acquisitions to facilitate preconstruction activities and construction access needs. The major environmental aspects of this project are hazardous waste remediation and noise abatement. Kiewit is an industry leader in environmental compliance. We will search for innovative sound mitigation measures like we implemented on our SR202L Red Mountain Design-Build project. We will also aid in environmental investigations, permitting, and provide various solutions during planning.

Utility Relocations

One of the most critical aspects of this project during the preconstruction phase is utility relocation planning and coordination. It will be important to setup “memorandums of understanding” with the utility owners early. The first phase of construction will include demolition of the southern part of the bridge, which has several overhead utility lines that need to be relocated. Early involvement of Edison, AT&T and Time Warner and persistent coordination during design is important to accelerate these critical relocations and the project schedule.

We will assist in utility investigations and planning for relocations, such as the 8-in. water line on the south side of Barton Road that will need to be temporarily relocated before the demolition of the bridge in the first phase. Once the bridge is completed in the first phase, utility relocations can be performed including the 3-in. gas line, the AT&T duct and the permanent 8-in. water line.



Maintenance of Traffic & Staging

Barton Road is the main thoroughfare for the City of Grand Terrace, which is why it is important to preserve traffic in each direction on the bridge throughout construction. To accomplish this, the bridge construction will be staged in two phases. We will work with Caltrans to review and propose alternative traffic handling concepts to reduce impacts to the public. This includes minimizing or eliminating closures and maintaining truck access from Barton Road to the freeway, which is important to businesses on La Crosse Avenue.

A unique feature of this project is the round-a-bout and it is important that the public has an easy transition to the use of this feature. The round-a-bout can be installed at the end of construction to allow for easy traffic transitions throughout the construction phasing. Installation after the complex construction staging is completed will also allow for an easy transition to public use.

Local and Regional Significance

This project is important for the mobility of the residents of Grand Terrace. The completion of this project will facilitate economic development and growth for this area. It will also allow for the future general purpose lane and auxiliary lanes that will be added to the I-215 freeway for the ultimate configuration. Grand Terrace Elementary School, which is located on the northeast corner of the interchange, will be a sensitive receptor to this project. We will provide solutions to accommodate the school traffic onto Vivienda Avenue, which includes seven buses and 780 students daily, of which approximately 230 students walk to school. The interchange work at Vivienda Avenue and the new road from Commerce Way need to be completed early in the project and can possibly be completed during summer, when school is out.

The Kiewit team provides the best value to Caltrans as a partner for this project. Our extensive experience working with the CMGC delivery method provides maximum utilization of the benefits of this project delivery method. Paired with the local expertise and

knowledge of our key subcontractor, Brutoco, we are ready to help make this a successful project.

3.7.B. CMGC Contracting Approach

Kiewit's approach to CMGC project contracting maximizes the benefits of this delivery method. As the Caltrans' Construction Manager, we will provide input regarding estimating, constructability, scheduling, and phasing to assist Caltrans in designing a more constructible project. Our advisory role during preconstruction will help Caltrans reduce risk and achieve early cost and schedule certainty. The success of the CMGC model is dependent upon collaboration between the two parties as early in the preconstruction phase as possible. Kiewit partners with owners soon after NTP to establish project goals and a shared vision for the project. We build a cohesive team through communication and collaboration early in the process, and maintaining both throughout the Project. Our goal is simple: do what is in the best interest of the Project.

We have identified three elements we consider essential for success:

- ◆ Creating an Integrated Project Team
- ◆ Maximizing Preconstruction Value
- ◆ Construction Execution

1. Fully Integrated Project Team

Our management approach to the Barton Road Interchange CMGC Project is founded on the core philosophy of creating and sustaining an integrated management team that focuses on innovation and providing benefit to Caltrans. Our project management team of construction professionals will work together with Caltrans to produce the best project possible while achieving all the goals of both parties. Creating an integrated, seamless team during preconstruction is essential to successfully executing construction. Co-location with all team members including owner, designer, and contractor personnel, results in an environment that is transparent and rewards innovation. A fully integrated team atmosphere encourages frequent, open and clear communication. The best way to achieve an



integrated project team is through the partnering process. We are committed to partnering during both preconstruction and construction to help the project achieve the best results possible. We have a history of partnering success and are a 12-time winner of the AGC Marvin M. Black Award for Partnering. Together with Caltrans, Kiewit won the 2008 Marvin M. Black award for the Benicia-Martinez Bridge project. It is critical to maintain a consistent team on the project throughout preconstruction and construction. Retaining key staff through this transition preserves established relationships, enhances communications and eliminates learning curves. Kiewit is committed to maintaining our team of key personnel throughout the entire project to ensure a seamless transition. Please see the information in Section 5, Proposer Key Personnel and Appendix A, Resumes for more detail on our proposed project team.

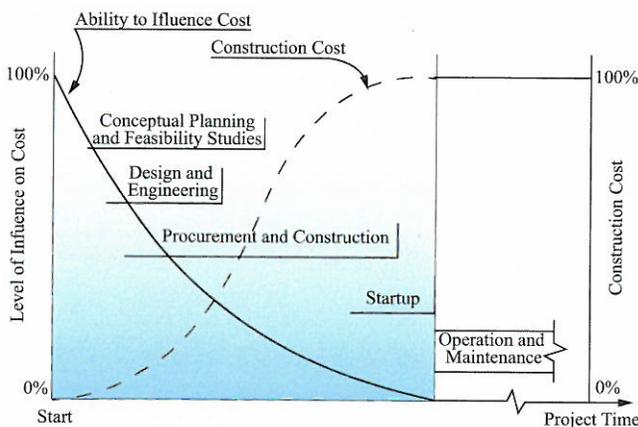
2. Preconstruction Approach

Kiewit will apply our proven methods of preconstruction management to the Barton Road Interchange CMGC Project.

Performing Design and Constructability Reviews

The opportunity to affect the cost of the project decreases as the design nears completion as shown in Figure 6-1.

Figure 6-1: CMGC Preconstruction Services



Our goal is to maximize cost and schedule savings by performing thorough design reviews and site

investigations early in the preconstruction phase. Conducting constructability reviews in conjunction with an early site investigation will facilitate a comprehensive value engineering analyses of the early design plans. This will aid Caltrans’ designers in achieving an optimized design that not only results in the lowest possible construction costs and shortest construction schedule; but also minimizes impacts to the public and impacts to the overall design costs by avoiding late design changes. Early involvement and timely, effective coordination between the design and construction teams is vital to achieve this.

The experience and knowledge of our Project Manager, Nick Wiatrowski, will be critical to creating integration between the design and construction groups to optimize the design early in the project. We will analyze the project phasing to develop innovative phasing ideas that will benefit the project schedule. An important aspect to working in a dense urban environment around an active freeway is stakeholder coordination and keeping affected stakeholders in the loop regarding the impacts of construction. Early development of project phasing allows the project team to communicate and receive feedback from all affected parties. Stakeholders include Southern California Edison, AT&T, Time Warner, Southern California Gas Company, Riverside Highland Water Company, City of Colton sewer operations, City of Grand Terrace, City of Riverside, as well as local business and property owners. Kiewit will conduct discipline specific meetings in which Caltrans, the construction team and stakeholders can address phasing concerns. We will explore opportunities to accelerate or expand a portion of any phase that will ultimately make the user more efficient and save the project schedule and budget.

Conducting Innovation Management

Kiewit develops cost saving alternatives and solutions by using the knowledge and experience of the entire project team. Kiewit has used innovation workshops to formally explore innovation opportunities. Innovation Workshops will be scheduled before the design reaches 30% and then again at 60% and 90%. These workshops will result in a list of ideas that will be explored further for consideration to be implemented on the project.



These cost savings ideas are not reductions in scope, but ideas that add value to the project by reducing cost to produce the same result. Our SouthEast Connector project in Reno provided 23 innovation proposals. The RTC ultimately accepted 12, resulting in over \$7 million in savings to the owner. Kiewit will maintain an innovation register to track the results of innovations on the Project. Figure 6-2 shows the savings resulting from innovations registers from past projects.

Figure 6-2: Innovation Savings

Project	Delivery Method	Owner Savings
San Diego International Airport Green Build Landside	CMGC	\$45,000,000
Pioneer Crossing	D-B	\$17,000,000
Southeast Connector	CMAR	\$7,000,000
Cotton Lane Bridge	CMAR	\$3,100,000
SR 85 Landfill	CMAR	\$2,760,000
Sky Harbor Taxiway D & E	D-B	\$2,100,000
Sky Harbor Taxiway	D-B-B	\$1,100,000
1-10 Reconstruction	D-B-B	\$1,000,000

Developing Integrated Preconstruction/ Construction Schedule

Kiewit will work closely with Caltrans to develop and maintain a thoroughly detailed preconstruction schedule. This detailed preconstruction schedule will be consistent with, and include all the elements of Caltrans’ requirement for substantial completion by October 2018. The preconstruction schedule will be integrated with the construction schedule to comprise an overall project schedule that includes all necessary activities, resources, interim milestones, sequencing, logic, design, permits, and owner milestones. The project schedule will highlight the relationships between tasks such as long lead items and their effects on construction. Progress will be monitored closely. Regularly scheduled review meetings will be held to keep all parties informed on schedule performance.

Development of Subcontracting Plan

Kiewit will oversee the review of specifications and drawings to ensure they are complete and enhance constructability and biddability for ease of subcontractor procurement. Our Project Manager Nick Wiatrowski, and Construction Manager Jose Martin, will be instrumental in reaching out to local specialty subcontractors, minorities and suppliers early to engage them and receive input during constructability reviews. Informational workshops similar to the ones Kiewit hosted on the California HSR CP-1 project will be held to educate the local industry on the CMGC delivery method. Kiewit will assist in developing and awarding critical early bid packages identified by the project team.

Cost Estimating

Cost modeling will fall under the supervision of our Lead Estimator Brandon Morlet. Kiewit will provide complete cost estimates at the major design milestones, or more frequently as agreed to by the project team. We will work with the Independent Cost Estimator (ICE) for Caltrans beginning with the Initial Approach to Cost Meeting. At that meeting, we will develop an organized and transparent method for estimate preparation and comparison.

Kiewit frequently requires two independent estimates be completed for projects we bid. This process requires checks of quantities and productions for all estimate categories. The experience of aligning independent cost estimates will help Kiewit when working with the ICE to compare estimates. Our estimating team will provide accurate estimates for the cost of construction by using relevant and accurate past cost data from similar projects. Competitive pricing information will be gathered and used in the cost models for subcontracted work and material supply.

We maintain one of the largest and most comprehensive past cost databases in the construction industry. Our cost model for the Barton Road Interchange CMGC Project will contain labor, equipment and material costs based on historical past cost data from similar projects. Our past cost database and experience with similar projects is a solid supporting basis for efficiently providing cost



models at the various stages of design. The cost models will be used to establish a baseline for accuracy and consistency in budget evaluation. Kiewit believes the way to perform this project function well, depends on our estimates being presented in a clear and transparent way. We have reached GMP agreements on all 36 of Kiewit's CMGC/CMAR projects.

3. Construction Execution

The Project Construction Management Plan is developed during preconstruction and outlines all processes to be followed during construction. Team continuity from preconstruction to construction makes certain the project team is familiar with the details of the plan and the intent of the design, and can respond quickly when construction activities begin. As shown on our organization chart in Section 5, all of our key personnel are involved in both preconstruction and construction including:

- ◆ Project Manager – Nick Wiatrowski
- ◆ Construction Manager – Jose Martin
- ◆ Lead Estimator/Project Engineer – Brandon Morlet
- ◆ Scheduler – Ashley Bales
- ◆ Structures Manager – Ron Neal
- ◆ Stakeholder Liaison – Dennis Green

The Kiewit team will use our fundamentals to plan, schedule and manage the Barton Road Interchange project. Our planning will focus on safety, quality, work procedures, and cost control. Scheduling of the project is vital to the project team and all stakeholders involved in the Project. During construction our team will manage the Project with a focus on:

- ◆ Protecting the safety of all project workers and the public
- ◆ Delivering a quality product to Caltrans
- ◆ Managing subcontractors on site
- ◆ Maximizing mobility for the public
- ◆ Coordination of public information program
- ◆ Cost control

The tools used to execute the safety, quality, environmental compliance, schedule and cost control

EXECUTION TOOLS

Planning

- ➔ Work planning matrix
- ➔ Pre-activity meetings
- ➔ Operation work plans
- ➔ Operation hazard analysis
- ➔ Survey plan
- ➔ Safety/quality/environmental plans

Scheduling

- ➔ P6 CPM baseline schedule
- ➔ 90-Day schedules
- ➔ 3-week look ahead schedules
- ➔ “Play of the Day” meetings
- ➔ Commodity curves

Managing

- ➔ Safety, quality, environmental compliance programs
- ➔ Safety and quality tours
- ➔ Cost and quantity tracking
- ➔ Weekly labor reports
- ➔ Monthly cost reports
- ➔ Method analysis/time studies
- ➔ DBE utilization/community benefits utilization
- ➔ Document control systems

are shown on the following page. These tools have proven to be very effective in producing projects under budget, on-time, safely with superior quality and will be used to manage the Barton Road Interchange project to completion.

3.7.C. Approach to Meeting Project Goals

Kiewit will employ its organization and CMGC process in a disciplined and proven manner as we team with Caltrans to ascertain the best possible solutions and achieve the Project goals. To attain the desired results, it is essential that we begin with the right organization and process. Figure 6-3 depicts the CMGC process and the use of our organization throughout preconstruction and construction.

The Kiewit culture and core values are aligned with the Project goals identified by Caltrans. On the next page in Figure 6-4, we show how our team and approach will accomplish these goals.

3.7.D. Top Project Risks and Potential Solutions

One of the major advantages to the delivery method chosen by Caltrans is that they can draw on our experience managing construction risks during the design development phase. The early identification of these risks can help to ensure that the alternatives are quantified and allow Caltrans to make fully-informed decisions during design to meet the commitments for cost, schedule, safety, mobility, quality, and environmental compliance.

Construction of a cast-in-place concrete box girder bridge, while maintaining live traffic, is a core competency of both Kiewit and Brutoco. Our extensive experience building interchanges for Caltrans and other agencies, along with our review of the RFQ documents and review of the site suggests that some of the primary risks are:

- ◆ Utility conflicts
- ◆ Staging issues

Figure 6-3: Integrating Goals with the CMGC Process

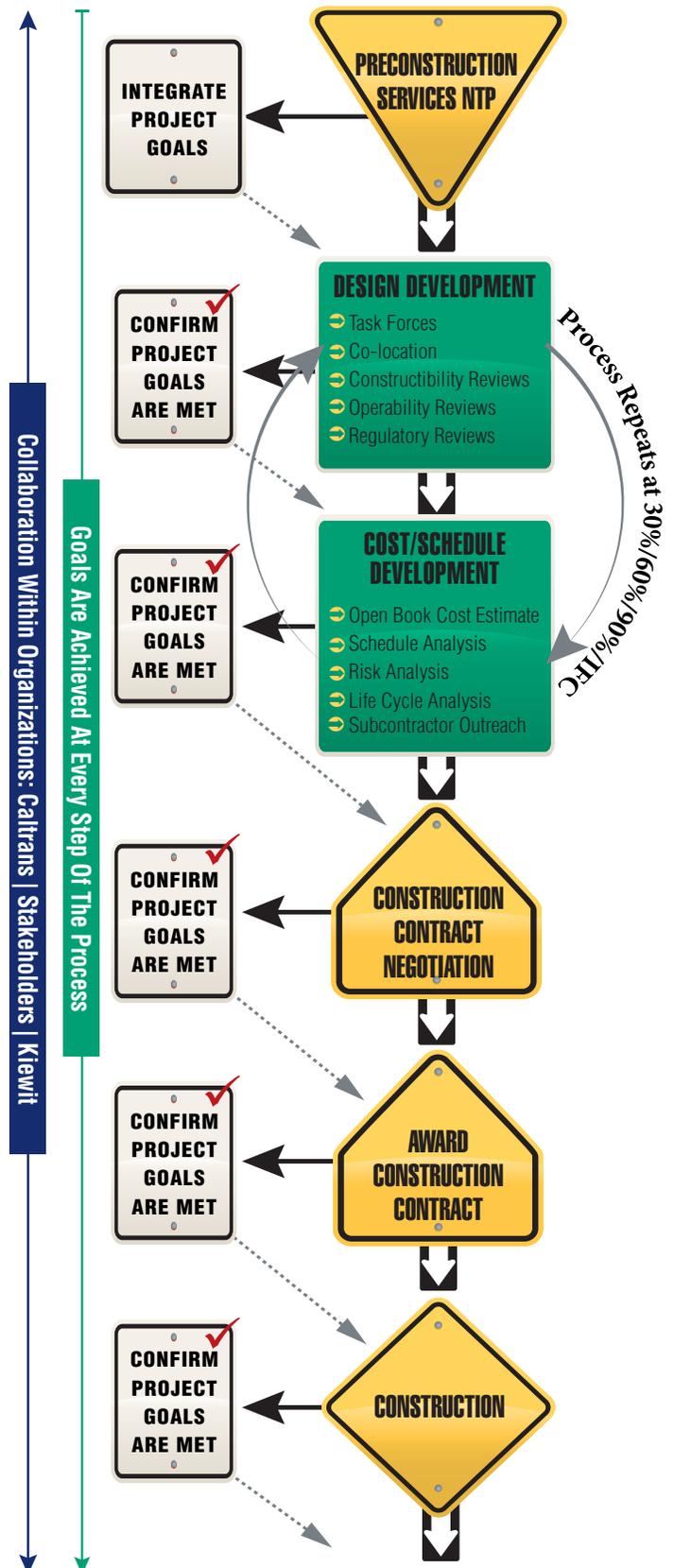


Figure 6-4: Project Goals

	Project Goals	Project Organization & Approach
Safety	 <p>Maintain safety of the traveling public and employees during construction of the project.</p>	<ul style="list-style-type: none"> • Construction manager to plan safety into design • Craft ownership empowers workers • Crew observation program • Training • Daily, weekly, monthly safety meetings • Weekly safety audits • Subcontractor safety compliance monitoring • Incorporation of feedback to develop safety culture on the project
Mobility	 <p>Minimize impacts to the motoring public, businesses, and emergency services during construction of the project.</p>	<ul style="list-style-type: none"> • Traffic Management Plan • Inspections and documentation of TMP set-ups • Public outreach and communication • Emergency responder briefings
Quality	 <p>Construct a high quality, fully functional interchange that meets current design standards.</p>	<ul style="list-style-type: none"> • Develop construction work plans including hold points. • Weekly quality audits • Training • Subcontractor quality compliance monitoring
Environmental Compliance	 <p>Comply with all environmental commitments and permits.</p>	<ul style="list-style-type: none"> • Environmental Commitments Record (ECR) identifies commitments and responsibilities • Weekly environmental audits • Subcontractor environmental compliance
Project Delivery	 <p>Develop and implement innovative solutions to obtain substantial completion by October 2018.</p>	<ul style="list-style-type: none"> • Early development of project schedule • Schedule incorporates preconstruction and construction • Daily, weekly, monthly tracking • Focus on critical path activities and provide solutions to expedite schedule
Innovation	 <p>Utilize the expertise of the project team to continually evaluate the design and construction methods to maximize funding, reduce schedule, and deliver a quality project.</p>	<ul style="list-style-type: none"> • Apply project management experience to constructability reviews • Open-minded approach to early design • Preliminary cost analysis for innovative ideas • Partnering to align goals and work toward a successful project

- ◆ Temporary engineered construction
- ◆ Traffic control

Those areas serve as the opportunity for our team to offer cost-effective improvements or innovations to reduce risks.

The project risk register will serve to identify and quantify the risks during all phases of the project. The preliminary risk register, shown in Figure 6-5 on the next page, lists the top risks we have identified from the proposal documents and alternatives to avoid, mitigate, or reduce the impacts that would be evaluated based on review of the current design.

Quantification of these risks and the potential solutions would begin during design development using project cost estimates and schedule analysis.

3.7.E. Managing Risks

Kiewit has achieved success on projects by accurately analyzing risks based on the available information and then managing the risks we have assumed. The Barton Road Interchange CMGC project will advance this process into the design development phase and allow the project team to benefit by focusing early efforts on the high impact risks.

The following tools and approaches will be used by the Kiewit team during the design and construction phases to identify and quantify project risks. This will allow Caltrans to optimize the budget and schedule for the project while maximizing safety, quality, mobility and environmental compliance.

Risk Register - During preconstruction, we will work with Caltrans to identify the risks based on the current design, and help develop alternatives to avoid, reduce or mitigate them. The risk and the alternatives will be analyzed for their impacts to each of the project goals. This analysis will include cost estimating, CPM schedule analysis, probability assessment to quantify the likelihood and severity of the risk.

The risk register will be updated throughout the design and construction phases, as risks are mitigated and new risks arise. This allows the team to focus resources on the highest probability and impact issues throughout the project life cycle.

Figure 6-5: Risks Identified and Potential Solutions



RISK IDENTIFIED	POTENTIAL SOLUTIONS (AVOIDANCE, REDUCTION, MITIGATION)	POTENTIAL IMPACTS					
		Cost	Schedule	Safety	Mobility	Quality	Environmental
Design							
1 Conflicts between existing and new footings at column locations	<ul style="list-style-type: none"> Review constructability and sequencing of footing construction to identify conflicts and adjust final design during preconstruction Select CIDH pile or alternate pile type to minimize conflict locations 	●	●				
2 Existing overhead power and telecommunications lines which must be relocated prior to Stage 1 could delay construction of south side of new overcrossing	<ul style="list-style-type: none"> Advance relocation of overhead power lines and telecommunications lines to preconstruction phase Early MOUs and Utility agreements Use of CMGC Stakeholder Liaison and Utility Coordinator Coordinate with SC Edison, AT&T, Time Warner to complete their design relocation with 60% design plans. Evaluate options for revised staging to build north side of overcrossing first so construction can proceed while SC Edison, AT&T and Time Warner complete overhead line relocation 	●	●	●			
3 Water line, AT&T duct, and gas line running through existing bridge must be relocated prior to Stage 1 construction	<ul style="list-style-type: none"> Advance relocation to preconstruction phase Early MOU and Utility agreement Use of CMGC Stakeholder Liaison and Utility Coordinator Coordinate with EVMWD, RHCW, and SoCal Gas to complete their design relocation with 60% design plans. Evaluate options for revised staging to build north side of overcrossing first so construction can proceed while utility relocates water line 	●	●	●			



BARTON RD INTERCHANGE RECONSTRUCTION CMGC

			Cost	Schedule	Safety	Mobility	Quality	Environmental
Construction								
4	Falsework will reduce clearances on the I-215 and is susceptible to damage	<ul style="list-style-type: none"> Evaluate options for using bulb T precast girders or another precast girder alternative during design phase 	●	●	●	●	●	
5	Traffic pattern disruptions during construction decrease mobility and risk public injury	<ul style="list-style-type: none"> Develop phasing revisions to reduce ramp closures Construct roundabout at the end of the project to maximize options for traffic sequencing Constructability review of TMP prior to start of construction Public outreach of construction detours and closures throughout construction 		●	●	●		
6	Erection and removal of temporary engineered structures including falsework and formwork	<ul style="list-style-type: none"> Engineered erection and removal plans for falsework Utilize Kiewit Temporary Construction Risk Assessment Tool and implement recommended actions 		●	●	●	●	
✓	Discovery of unforeseen utilities during construction could delay project	<ul style="list-style-type: none"> Potholing during design Contingency plans in place Use of CMGC Stakeholder Liaison and Utility Coordinator 	●	●	●			
✓	Discovery of paleontological resources during excavation	<ul style="list-style-type: none"> Worker training for identification of artifacts Response plan in place at the start of excavation 	●	●				●
✓	Discovery of contaminated soils or hazardous materials during construction	<ul style="list-style-type: none"> Contingency plans in place for sampling, testing and removals Established local subcontractor relationships result in quick response time 	●	●	●			●
✓	Qualified labor shortage	<ul style="list-style-type: none"> Established local union workforce Successful DBE outreach plan 	●	●			●	
Right of Way								
7	Delay in property acquisition could affect start of work in some areas	<ul style="list-style-type: none"> Ongoing monitoring of lagging property acquisitions Schedule analysis and resequencing workarounds to mitigate lat access to some work areas 	●	●				
Environmental/Stakeholder								
8	Pedestrian safety during construction operations, including interference with Grand Terrace Elementary School drop off/ pick up.	<ul style="list-style-type: none"> Establish relationships and coordinate revisions to traffic flow with school staff during design Use of CMGC Stakeholder Liaison Ongoing communication and notices to parents 			●	●		●
9	Construction noise interference with school or residents	<ul style="list-style-type: none"> Noise monitoring Use of temporary noise barriers during construction Extension of sound wall at elementary school 						●
10	Damage claims from nearby residents or businesses	<ul style="list-style-type: none"> Preconstruction video and photo survey Response procedure Public outreach professional 	●					●
✓	Emergency response may be interrupted or delayed due to increased travel time through construction project	<ul style="list-style-type: none"> Ongoing communication regarding traffic detours and closures with emergency services Use of CMGC Stakeholder Liaison 			●	●		





Constructability Reviews and Value Engineering

– A primary tool in identification and workarounds for design and construction risks are in-depth constructability reviews performed at each of the remaining phases of design development. The types of issues and identified include:

- ◆ Access for construction
- ◆ Right of way issues
- ◆ Structures sequencing
- ◆ Traffic staging and sequencing
- ◆ Required closures
- ◆ Soil import and export
- ◆ Recycling and reuse of materials

When issues are identified during constructability reviews, our team also develops the alternatives – including value engineering options – for these conflicts. Cost estimates and schedule analysis are completed to provide Kiewit and Caltrans the information needed to make timely revisions to the design.

Temporary Construction Risk Assessment –

Temporary construction is one of the critical areas of risk in this structures project. On every project

Kiewit uses a “Temporary Structures and Construction Devices” matrix to manage risks from temporary construction devices that require engineering. All engineered devices that will be used on the project are identified and assessed for their risk. This includes support of excavation, falsework, fall protection, formwork, rebar hoisting, and crane lifting, among other things. Based on the risk assessment, designers and reviewers are assigned to each item, with the higher risk items using third party design and review. The final component to this tool is the check off for inspection before any loading is applied. This tool is critical to managing risk on out projects.

Utility Coordinator – Due to the number and location of existing utility lines, primary risks to this project include untimely utility relocations and unforeseen utility conflicts. Both of these have the potential to impact project cost, schedule and mobility. Therefore,

Kiewit will have an experienced utility coordinator assigned during design and construction to assist Caltrans with facilitating these critical tasks.

During design, they will assist with the coordination needed to advance relocations of overhead lines and the water lines running through the existing bridge, including execution of MOUs and utility agreements. Design by the utilities of their relocations could proceed at 60% project design documents. The utility coordinator will work with the utility owners to provide the level of information necessary to move ahead with this work at the earliest possible time. Stakeholder Liaison Dennis Green, will support the utility coordinator with these efforts.

The utility coordinator will also work to reduce the likelihood and potential impacts of improperly located or unforeseen utilities. During design development, they will work with the team to perform potholing so that existing lines are correctly located prior to construction. They will also develop the protocol for identification and relocation or redesign when unforeseen utilities are encountered during construction. This contingency plan will minimize response time and decrease the impacts of this common work interruption.

Stakeholder Liaison – To successfully navigate through the many third party risks and environmental concerns, Kiewit team member Dennis Green will assist with ongoing communication with the many stakeholders involved in the project, including the utility companies, residents, businesses, elementary school and public services. Dennis has 35 years of experience in outreach for Caltrans and other agencies involving these same parties.

Environmental and stakeholder risks include:

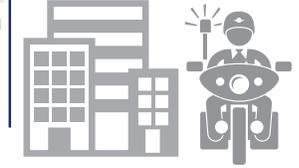
Motorist and Pedestrian Safety Issues



Noise Disruption



Reduced Mobility for Emergency Services, Residents, and Businesses





Proactive and ongoing communication with the local parties is fundamental to avoiding and minimizing these risks. It will allow our team to identify key concerns in advance so that they can be addressed during final design and planning for construction operations. We recognize that communication is a two-way street. Dennis and the entire Kiewit team will seek to work with stakeholders with flexibility and identify mutually-beneficial solutions.

During construction, ongoing notification for detours and closures to the public, school and emergency services will be critical. We will work with Caltrans to establish and implement protocols for public outreach.

Partnering – We recognize that partnering with Caltrans keeps projects moving, thereby reducing risks. The Kiewit team is committed to using a partnering approach when working with Caltrans and other stakeholders. We have found partnering encourages the establishment of mutual project goals, and develops a framework for the escalation of issues and channels for communication. Partnering, whether formal or informal, encourages proactive communication and timely issues resolution. Partnering sessions can be used to include specific stakeholders, such as cities, utilities, or others stakeholders on critical issues.

Kiewit has extensive partnering experience and is a 12-time winner of the AGC Marvin M. Black award for partnering. Brutoco received four partnering awards from Caltrans from 2009-2012. In 2010, Brutoco won the Caltrans Silver Award for Partnering for accomplishments on the SR-90 Imperial Highway Grade Separation, which was completed eight months ahead of schedule. In 2012, Brutoco received the Caltrans Excellence in Partnering Gold Award for accomplishments on the SR-91 Eastbound Lane Addition project, which was opened to traffic one year earlier than originally planned by Caltrans. In both of those projects, partnering to revise the project staging paid off for both Brutoco and Caltrans.

3.7.F. Use of Innovative Ideas to Meet Project Goals

The Kiewit team has successfully completed a number of projects that are remarkably similar to construction of the Barton Road Interchange project. Based on this experience, we have identified several options for further consideration during the preconstruction phase that present the opportunity to positively affect the cost, schedule, quality, mobility, and safety of the project.

1. Pile selection to minimize conflict with existing structures

Potential conflicts between new construction and the existing bridge may complicate the installation of piling on the project. Driven piles are often preferred for new bridge construction, however, construction of the new overcrossing while keeping the existing bridge in operation, adds complexity to the foundation work. The adjacent work when completed for the I-215 Bi-County HOV Lane Gap Closure project might cause additional conflicts with retaining walls and other structures on this project.

Figure 6-6: Foundation Evaluation Matrix

	Estimated Cost Per Foot	Required QA	Waste from Installation	Possible Vibrations	Cap Required	Ease of Installation	Installing Equipment	Proprietary System
Mono Drilled Shaft	(7.5 ft) \$980 (7 ft) \$860 (6.5 ft) \$751 (6 ft) \$650	Red	Red	Green	Green	Red	Red	Green
Driven H-Pile (14x89)	\$75	Green	Green	Red	Red	Yellow	Red	Green
Micropile	\$80	Yellow	Green	Green	Red	Red	Green	Yellow
Helical Piles (150 kip)	\$100	Yellow	Green	Green	Red	Green	Green	Red
Helical Piles (264 kip)	\$125	Yellow	Green	Green	Red	Green	Green	Red
2-ft Pipe (t=0.5 in.)	\$100	Green	Green	Red	Red	Yellow	Red	Green

Note: Cap Concrete@\$325/cy

Large diameter cast-in-drilled-hole (CIDH) piles are one option to reduce the number of piles and, therefore, the number of potential conflicts. However, issues with water table and pile anomalies can sometimes lead to significant delays to pile acceptance, which may offset the benefit of minimizing conflicts.

The Kiewit team has a wealth of experience with other piling which might be used in this situation including helical piles or geopiers. A foundation evaluation matrix such as the one in Figure 6-6 on the previous page, will be used to analyze foundation types and help select the best value option based on cost, schedule, and equipment availability among other criteria.

After a geotechnical investigation, the team can assist Caltrans designers to provide data and analysis for implementation of these alternate pile methods and evaluate the impacts on cost and schedule, and other factors such as noise, access and staging.

2. Girder type selection

While the preliminary design documents indicate the new overcrossing will be a cast-in-place box girder bridge, there may be significant advantages to Caltrans and the traveling public to select an alternate girder type for construction. These advantages could include schedule savings as well as improved safety and mobility during construction.

Precast girders, such as bulb T girders, might be used in this application, since they can be used in longer spans. The current box structure is approximately 6-feet-high. Kiewit and Caltrans can use their combined knowledge of the design and construction of precast girder bridges to optimize the bridge based on phasing, number and size of girders, to produce the most cost effective bridge design possible while still achieving the clearance requirements. Kiewit is experienced in bridge construction using precast concrete girders on projects like the 192 ft long precast girders used on Pioneer Crossing. Kiewit possesses expertise in casting of precast concrete girders through its subsidiary, Kie-Con. Kie-Con is a Caltrans certified precaster. Kie-Con recently cast the longest precast

Longest Super Girder



super girder ever to be used in California. It is over 160 ft long and was used for the Porter Creek Road Bridge Replacement in Santa Rosa, California. For the Metro Orange Line Extension BRT Design-Build project, team member Brutoco worked with its design consultant for bridge selection and utilized bulb T precast girders for one of the bridges spanning the LA River and precast girders for another to minimize environmental impacts by keeping work out of the channel and eliminate rainy season work restrictions. Both of the precast girder bridges were built to Caltrans specifications.

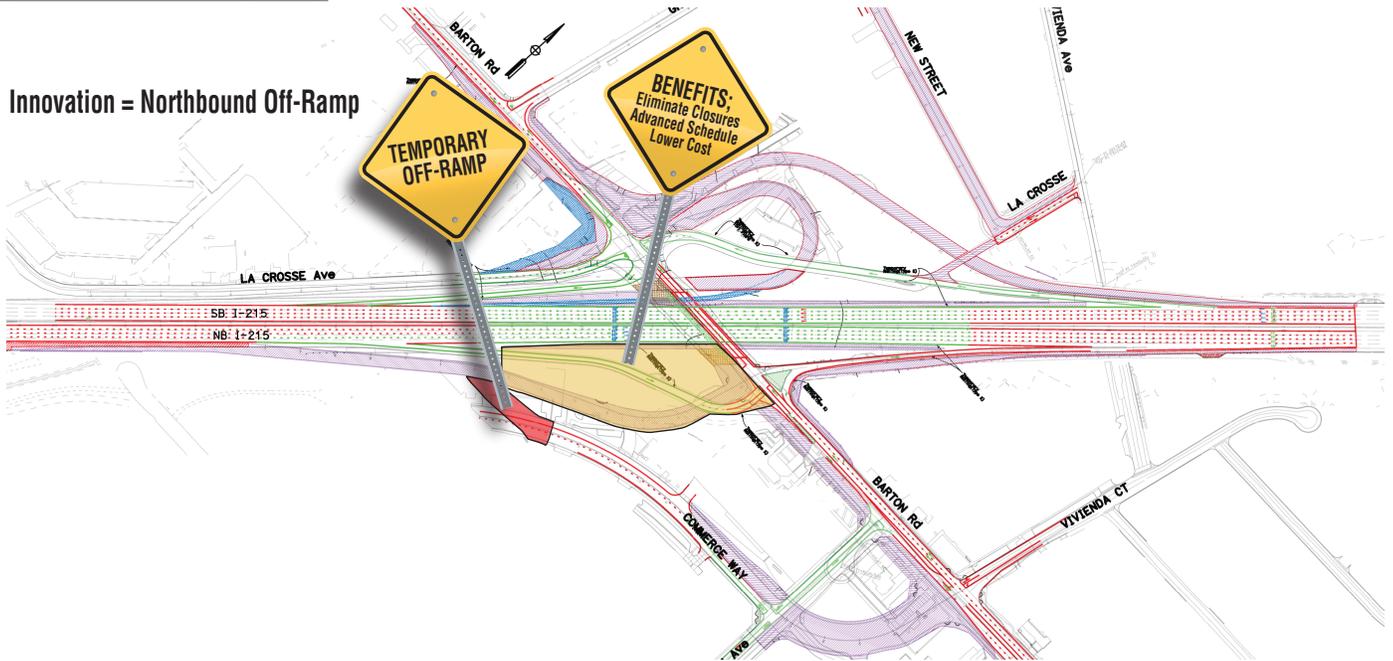
Setting precast girders would be expected to save approximately three weeks per phase as compared to soffit and stem construction in the field. Given the two-phase construction of the bridge, these time savings would double.

In addition, fewer freeway closures are required to set precast girders than would be needed for falsework erection and removal. Therefore, one full freeway per phase would be eliminated.

This strategy also improves public safety by removing the clearance issues which often lead to collisions with the falsework by oversize vehicles and inattentive drivers, as well as reducing the potential for fire damage. Summary of potential cost, schedule, and quality impacts:

- ◆ Significant time savings, including associated overhead costs savings for Kiewit and Caltrans

Figure 6-7: Northbound Off-Ramp



- ◆ Increased mobility for drivers due to deletion of two full freeway closures
- ◆ Reduced risk of delays and added cost due to falsework damage

ramp and ramp termini, this is estimated to eliminate a six to eight week ramp closure.

Summary of potential cost, schedule and quality impacts:

3. Construction Staging at Northbound Off-ramp

One of the greatest benefits to Caltrans in the CMGC delivery is the ability to take advantage of the Contractor's approach to construction staging. While staging plans are painstakingly developed during design to allow construction while minimizing impact to the traveling public, our team has proven success in finding aspects of the construction that can be advanced. The benefit is reduction of overall construction duration, which reduces costs for both Caltrans and the Contractor and allows the public earlier use of the improvements.

- ◆ Increased mobility for drivers due to deletion of several weeks of ramp closure
- ◆ Increased productivity on retaining wall and ramp work reduces construction cost

To maximize mobility during construction and eliminate a closure of the northbound off-ramp, we will propose to evaluate the option of building the new intersection at Vivienda and then building a temporary detour ramp for the northbound off-ramp to Commerce Way as shown in Figure 6-7. This would open space for the construction of the retaining wall and new northbound off-ramp, and eliminate closures at this area. Due to the construction of retaining wall,

4. Retaining Wall Construction at La Crosse Avenue

The construction of the retaining wall between the southbound on-ramp and La Crosse Avenue will reduce mobility of local traffic due to closures and detours. In order to reduce the area needed for construction and the impacts to the mobility of local traffic, secant piles can be evaluated as an alternative for the retaining wall. The secant piles would be installed as the temporary shoring system and then the retaining wall would be cast against the face of the secant pile wall. In comparison with conventional shoring this method reduces risk of damage to existing utilities in La Crosse Avenue, which reduces safety risk and significant impacts to the schedule. It would also allow traffic to remain on La Crosse Avenue



throughout construction, eliminating the need for any closures. The one-side forming would achieve schedule savings due to deletion of the backfill. This is estimated to be one week for the footing and two weeks for the wall.

3.7.G. Approach to Safety

After reviewing the RFQ documents provided and based on our experience on similar projects, we have identified the top safety elements for the Project to be:

- ◆ Traffic control
- ◆ Protecting the traveling public
- ◆ Demolition
- ◆ Falsework
- ◆ Unknown utilities
- ◆ Support of excavation
- ◆ Regional weather (heat and Santa Ana winds)

Safety concerns change throughout the life of a project, but as the job progresses we will focus on specific risks pertinent to that particular phase of the project.

For this project, traffic presents a high safety risk because all work involves traffic control. Construction will occur over active traffic on I-215 and adjacent to active traffic on the new bridge. When feasible we will use concrete barrier for added worker and public protection. Night time closures can be considered for additional protection on high risk operations such as bridge demolition. We have also had success using CHP and local law enforcement to assist in enforcing speed limits and enforcing closures to maintain safety.

The bridge falsework has potential safety risks as well. Our tested temporary engineering program will ensure the performance of all falsework systems used on the Project. While minimum roadway clearances will be maintained, uncompliant travelers can present the risk of collision with the falsework. We will provide necessary information to assist in evaluating bridge types and construction methods, which can eliminate bridge falsework and the accompanying hazards.

Kiewit has extensive experience in utility work and the associated hazards. Our processes and company policies guarantee safe operations. To reduce the risk of unknown utilities, all information is investigated and gathered for planning. Utility owners will be consulted and brought on-site for work on or near their utilities. We have a strict potholing policy which allows us to locate all utilities before excavation occurs. Potholing information is included in a form called a dig permit, which needs to be completed and approved by managers before construction can begin.

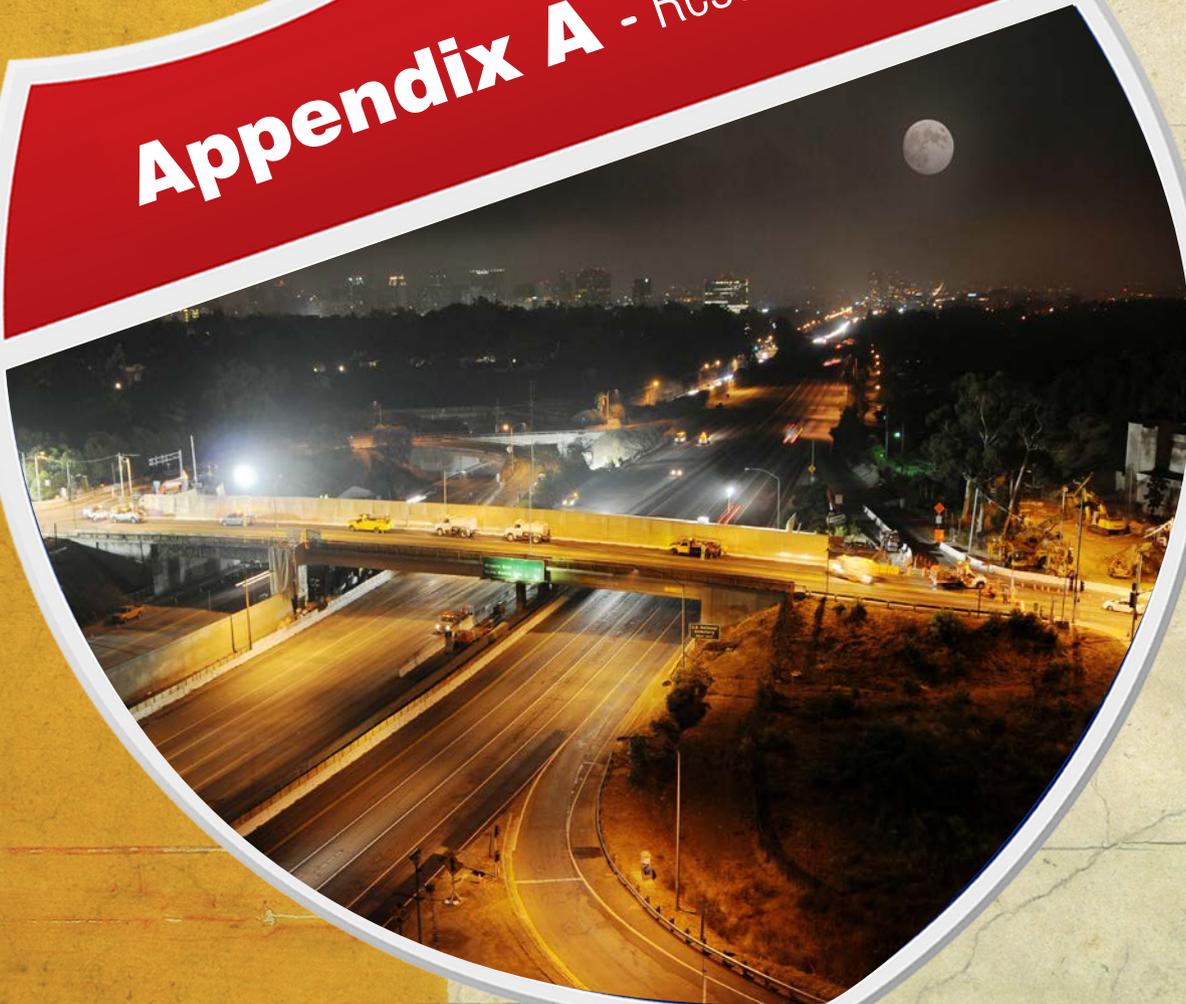
Weather in this region can be a safety concern at times. During summer, extreme temperatures make it dangerous to work at the risk of heat exhaustion and dehydration. When possible, we can adjust shifts to start earlier in the day to complete work before the heat of the day. High winds, known as “Santa Ana winds,” occur in this area and present safety risks as well. When winds are high enough, crane operations become too risky and need to be shut down. If other operations are determined to be safe in windy conditions, crews can be re-directed to those operations.

At Kiewit, training is an important element to our safety strength. We conduct extensive training within our company and on every one of our projects. Our projects are also able to draw from corporate resources to receive training and for accountability through safety audits. Our local office performs mandatory training meetings for our 300 staff on Saturdays, four times per year. On our projects we have multiple processes setup for craft safety training including stretch and flex, toolbox meetings, weekly foreman’s meetings, and monthly all-hands meetings.

At Kiewit, safety is first in everything we do. Safety is a core part of our culture and is important to us because of our relationships with each other. We bring our strong safety culture and performance to the Project with the goal that **Nobody Gets Hurt.**



Appendix A - Resumes



I-405 Sepulveda Pass Widening
Los Angeles, CA

I-215 BARTON RD INTERCHANGE RECONSTRUCTION CMGC

Nick Wiatrowski | Project Manager



Areas of Expertise

- ◆ Project Management
- ◆ Bridges/Structures
- ◆ Constructability Review
- ◆ Project Controls Management
- ◆ Highway Construction and Realignment
- ◆ Stakeholder and Third Party Coordination
- ◆ Value Engineering
- ◆ Risk Identification and Mitigation
- ◆ Construction Phasing

QUALIFICATIONS

Licenses/Registration/Certifications

Supervisory Conference
Superintendents' - Operations School
Job Superintendents' School
Project Management School
District Leadership Development Program

Education

High School Diploma

Years of Experience 16

Position Description and Responsibilities

As Project Manager, Nick will be the main point of contact to the project team and ensure a seamless continuity between preconstruction and construction services. Nick will be responsible for ensuring that the project is delivered in accordance with the design and project contract requirements. He will participate in design and constructability reviews, public and stakeholder meetings, and estimating during preconstruction services. He will also ensure the project's success by using his project management skills.

Authority

Nick has the authority to negotiate a GMP with Caltrans. He has authority to enter into subcontracts, consulting agreements, and purchasing agreements on behalf of Kiewit. During construction Nick is empowered to "Stop Work" when a dangerous situation is observed. He has authority over daily construction operations as well as field and subcontractor staff.

Career Summary

Nick is one of Kiewit's most experienced CMGC project managers and has been tasked with some of Kiewit's most challenging and rewarding projects. With 16 years of construction experience, his skills and talent enable him to ensure successful integration of project components such as safety, environmental sensitivity, partnering, and value engineering. With his experience as a project manager, construction manager, general superintendent and field superintendent, Nick brings a wealth of construction knowledge and will be a tremendous asset to this project. We selected Nick to fill the critical role as the Project Manager because of his experience building projects and his directly applicable experience of building heavy transportation projects. Nick has led over 1.6 million manhours of construction virtually accident free. Two of Nick's projects have been recipients of Marvin M. Black Awards for Excellence. Nick's project teams have developed significant cost savings for their project owners. Nick is focused on the successful integration of project components including safety, quality, environmental compliance and value engineering. One of the most appealing aspects of CMGC delivery to Nick is the opportunity it provides for the project team to find innovative ways to reduce project costs, especially when an owner and the CMGC contractor are committed to a true project partnership. Nick believes CMGC projects come with the responsibility to collaborate in the development of constructable plans and specifications, reducing project risks, developing value engineering ideas, and building the project at the lowest cost possible.

I-215 BARTON RD INTERCHANGE RECONSTRUCTION CMGC

Actual Work Examples

Project Manager | March 2012 – Present | SouthEast Connector CMAR; Truckee River Bridge Phase between Greg Street to Clean Water Way | Washoe County Regional Transportation Commission (RTC) | Reno, NV | \$65 Million

Reference: Garth Oksol | (775) 743-6851 | goksol@rtcwashoe.com

Responsibilities: During the preconstruction phase of the project, Nick recognized that due to the complexity of the work and high volume of traffic, the MOT plan needed to be brainstormed, and developed collaboratively with all parties involved. Nick worked closely with the RTC, designers and local agencies to develop a phased traffic control plan to move traffic efficiently and maximize the construction zones to allow lower cost production rates to be used in the GMP development. Nick and RTC representatives used Magnetic Imaging Technology (MIT) to evaluate dowel placement in the concrete paving on the project. Through the use of the MIT scanner, Nick and his team demonstrated successful dowel placement on over 17,000 SY of concrete pavement on the SouthEast Connector. During the preconstruction phase, Kiewit worked with the RTC, designer, Kiewit Subject Matter experts and reduced project cost by over \$7 million through value engineering. These savings were developed in all aspects of the project from utilities to roadway improvements and structures. Nick was responsible for coordinating with multiple third parties and utilities including the city of Reno, Sparks, Truckee Meadows Waste Water Reclamation Facility, Truckee Meadows Water Authority, NV Energy and multiple communication companies. Nick was responsible for leading the cost estimating, cost comparison, contract negotiations, schedule development, and project execution.

Project Description: The SouthEast Connector is a new six-lane high access control arterial approximately 5.5 miles in length and includes the construction of a 1,400 LF long-steel girder bridge/viaduct over the Truckee River. The scope included utility installation and relocations and other improvements. The SouthEast Connector project ties into the existing Greg St and Sparks Blvd. intersection adjacent to Interstate 80. This beginning of the project was paved with PCCP and required reconstruction and widening, while maintaining the high volume of truck traffic and commuter traffic associated with Interstate 80 and the City of Sparks and Reno.

Project Manager | January 2011 – May 2012 | State Route 114 Geneva Road Widening Design-Build | Utah Department of Transportation | Orem, UT | \$37.4 Million

Reference: Bryan Adams | (801) 360-4451 | bryanadams@utah.gov

Responsibilities: Nick was responsible for leading the efforts to design plans and special specifications for the project from a conceptual design through the 30%, 60%, 100%, and RFC submittals. Nick's other responsibilities were managing the design schedule, project schedule, daily schedule, third party coordination meetings, the detailed 120-day and five-week schedule meetings held with all superintendents and engineers. Nick also oversees and manages the daily, weekly and monthly cost vs. budget tools and ensures that the safety, quality, and environmental programs are utilized every day in the field and that production and schedule goals are being met. He also maintained communication with UDOT/Access Utah County staff on a daily basis. The project received the following prestigious awards under Nick's management: 2011 AGC/UDOT Best Partnering Project of the Year, 2012 ENR Mountain States Merit Award for Best Transportation Project, and Utah AGC Project of the Year over \$10M, and 2013 Marvin M. Black Excellence in Partnering Award.

Project Description: This fast-track project included the reconstruction and alignment of Geneva Road. The main structure was a bridge that spanned over the Union Pacific Railroad (UPRR) and Utah Transit Authority (UTA) railroad tracks that run through town. Asphalt was used to resurface five miles of roadway. Quantities included 105,000 CY of excavation and over 120,000 TN of base course.

I-215 BARTON RD INTERCHANGE RECONSTRUCTION CMGC

Construction Manager | November 2008 – August 2010 | Pioneer Crossing, Lehi/American Fork Interchange Design-Build | Utah Department of Transportation | Salt Lake City, UT | \$194 Million

Reference: Bryan Adams | (801) 360-4451 | bryanadams@utah.gov

Responsibilities: Nick managed the project schedule, held daily schedule/coordination meetings and the detailed 120-day and five-week schedule meetings involving all superintendents and engineers. Nick oversaw and managed the daily, weekly and monthly cost vs. budget tools and ensured the safety and quality programs were implemented. He ensured production and schedule goals were met and he had the authority to stop work to ensure quality and safety measures were followed. Nick ensured daily communication occurred with UDOT staff to keep all parties up-to-date on project status. Nick led the development of early work design packages that enabled construction to begin without having a completed design. For example, demolition, early grading and soil stabilization were completed before the plans for the entire project were completed. Under Nick's leadership, Kiewit completed over 350,000 SY of PCCP paving on the project. In 2010, the project received the following prestigious awards: Build America Award, Utah AGC Transportation Project of the Year, ENR Mountain States Transportation Project of the Year, and ENR Mountain States Top Project of the Year.

Project Description: This design-build project includes six miles of new east-west connector from American Fork Main Street through Lehi to Redwood Road in Saratoga Springs, improvements at the I-15 American Fork interchange, and new 60-in. waterline. Components include five- to seven-lane urban arterial with PCCP pavement, new bridges over the Jordan River and UPRR, new concrete box culverts at Dry Creek and Lehi Trail crossing, noise walls, retaining walls, aesthetics/landscaping, drainage, utility relocations, and Advanced Traffic Management System (ATMS) and traffic signal work. An innovative Diverging Diamond Interchange (DDI) bridge at I-15 replaces the existing diamond interchange and includes new ramps and I-15 widening.

Project Manager | October 2008 – December 2008 | Yuma CV-2 Border Fence | United States Army Corps of Engineers | Welton, AZ | \$20.1 Million

Reference: Troy Olsen | (602) 230-6870 | troy.olsen@usace.army.mil

Responsibilities: Nick was tasked to manage one of the USACE's most challenging pieces of Border Fence. This \$21 million project was located 30 miles into the desert on the Cabeza Prieta National Wildlife Refuge and the Barry Gold Water Bombing Range on the Mexican border. Nick's responsibilities included working with the USACE, Yuma Sector Border Patrol and US Fish and Game. Under Nick's supervision, the schedule was accelerated and completed by January 1, 2009.

Project Description: This \$21 million project included nine miles of border fence and was located 30 miles into the desert on the Cabeza Prieta National Wildlife Refuge and the Barry Gold Water Bombing Range on the Mexican Border. Nick's responsibilities on project included working on a day-to-day basis with Army Corps of Engineers, Yuma Sector Border Patrol and US Fish and Game; supervising all work, managing the accelerated schedule due to the USACE commitment to have all fence complete by January 1, 2009, as well as overseeing the safety and quality of all work and maintaining Kiewit's commitment to leave the Refuge and Bombing Range just as clean and wild as we found it. Project scope included constructing nine miles of three different types of permanent vehicle fence, access roads, and associated wash crossings as well as the rough grading and maintenance of over 50 miles of road throughout the construction timeline. Even with the project in a very remote area and in hostile conditions the job finished ahead of its aggressive schedule in just 55 days, under budget, and without an OSHA recordable accident.

I-215 BARTON RD INTERCHANGE RECONSTRUCTION CMGC

Construction Manager/Project Manager | November 2005 - June 2008 | Valley Metro Rail (VMR)
Line Section 1 | Valley Metro Rail | Phoenix, AZ | \$72 Million

Reference: Russ Smith | (210) 362-2092 | rsmith@metrohightrail.org

Responsibilities: Nick kept his construction team focused and despite these impacts, met VMR's grand opening milestone and completed over 400,000 manhours of work accident free. As Project Manager, Nick's responsibilities included working on a day-to-day basis with Valley Metro Rail, supervising all work, managing the schedule, as well as overseeing the safety and quality of all utility work. As the Construction Manager, Nick supervised the planning and execution of all work packages on the project and was critical in resequencing to mitigate utility conflicts.

Project Description: This project required the construction of over 2.2 miles of new LRT guideway in Phoenix, Arizona. Work included utility redesign and schedule re-sequencing, as well as roadway reconstruction and widening preparation, and installation of concrete embedded track, three station platform foundations, roadway improvements, drainage modifications, systems wide duct bank installation to the substation site interface, traffic signals, signage, striping, street lighting, overhead contact system pole foundation, demolition, landscaping, and irrigation. Line Section One was one of the most challenging utility relocation projects in the City of Phoenix. Kiewit relocated over two roadway miles of utilities to clear a corridor for the light rail commuter train. With over 2,000 utility conflicts Kiewit worked with Valley Metro's designers, City of Phoenix and other third party utility owners to design and relocate all utilities.

I-215 BARTON RD INTERCHANGE RECONSTRUCTION CMGC

Jose Martin | Construction Manager



Areas of Expertise

- ◆ Caltrans District 8 Experience
- ◆ Preconstruction Services
- ◆ Urban Highway Construction
- ◆ Highway Construction Estimating
- ◆ Highway Design Manual and Caltrans Standards
- ◆ Construction Sequencing to Minimize Impacts
- ◆ Value Engineering
- ◆ Stakeholder Coordination
- ◆ Construction Phasing

QUALIFICATIONS

Licenses/Registration/Certifications

OSHA 10 and 30 Hour Certified
First Aid & CPR
Fall Protection Certified
Crosby Rigging Certified
Scaffold Awareness Certified
Trenching/Excavation Competent Person

Education

Bachelor of Science, Construction Engineering and Management, California Polytechnic University, Pomona, CA, 1985

Years of Experience 28

Position Description and Responsibilities

As Construction Manager, Jose will plan, organize, schedule and direct all project construction activities. He will work with the team to develop a schedule and budget; and then deliver to those specific plans. He will participate in constructability reviews and estimating during preconstruction services and will be present at the site of work at all times construction is in progress. He will manage construction staff, craft labor, subcontractors, and suppliers. Jose will be responsible for enforcing the Project's safety plans and policies. He will be responsible for ensuring that the project is constructed in accordance with the design and project contract requirements.

Authority

Jose has the authority to "Stop Work" when a dangerous situation is observed. He has authority over daily construction operations including field and subcontractor staff. Jose will have full authority over field operations.

Career Summary

Jose has 28 years of experience in the engineering and construction of complex transportation and utilities projects and has been with Brutoco since 1994. He has been directly responsible for successful cost, schedule and quality management of numerous public works projects including his most recent assignment as project manager of the I-10/Citrus Avenue Overcrossing Reconstruction in Fontana, CA, a two-phased interchange replacement very similar to the Barton Road Interchange CMGC project. The Citrus Overcrossing project was contracted by SANBAG, with Caltrans as the designer and end user. Jose worked collaboratively with SANBAG personnel to identify over \$1 million in value engineering savings on this design-bid-build contract and executed a project recognized by the local community for its outstanding quality.

Jose has managed the construction of several complex grade separation projects including Passons Grade Separation for the City of Pico Rivera and the Nogales Grade Separation for Alameda Corridor East (ACE). Both projects featured multiple Agency stakeholders, extensive utility relocations and sensitive residents and businesses nearby. He has also overseen construction of the Eastern Maintenance Facility in Colton, CA for Metrolink which had numerous design-build components as part of the contract. His areas of

I-215 BARTON RD INTERCHANGE RECONSTRUCTION CMGC

expertise include bridges, retaining walls, phased roadway construction, traffic management plans, utility and systems engineering, procurement and construction. In addition to project management, Jose has significant construction estimating experience which informs his approach to value engineering and budget optimization during construction.

Actual Work Examples

Project Manager | April 2012 Year – May 2014 | I-10/Citrus Avenue Interchange | San Bernardino Associated Governments (SANBAG) | Fontana, CA | \$33 Million

Reference: Nick Manchev | (951) 278-2820 | nmanchev@falcon-ca.com

Responsibilities: As project manager, Jose was responsible for planning, scheduling and execution of all field operations for this \$33 million interchange replacement in Fontana, CA. Jose worked with the Agency to identify over \$1 million in value engineering savings to the District by rephasing ramp construction and realigning a drainage system. The project site is adjacent to two high schools, so Jose was also responsible for assuring pedestrian as well as vehicular safety throughout construction. During construction, he also coordinated utility relocations with SC Edison, AT&T, and Fontana Water.

Project Description: This interchange project replaced the four-lane Citrus Overcrossing with a seven-lane bridge built to Caltrans specifications, realigned on- and off-ramps, and widened the existing bridge over Union Pacific Railroad tracks from three lanes to six lanes. Bridge construction was divided into two major phases so that the interchange remained open throughout construction. It featured numerous locations of shoring up to 30 feet in height using beams and lagging with tie-backs and walers. The scope of work included construction of a box culvert and extensive drainage improvements, mechanically stabilized earth (MSE) walls, retaining walls, intersection work and city street improvements.

Project Manager | December 2010 – December 2012 | Passons Boulevard Grade Separation | City of Pico Rivera | Pico Rivera, CA | \$12 Million

Reference: Art Cervantes | (562) 801-4225 | acervantes@pico-rivera.org

Responsibilities: Jose oversaw the construction budget, schedule and project operations for this bridge project. He also coordinated and scheduled third party utility companies and agencies involved with the work including BNSF Railroad, LA County Sanitation District, LA County Flood Control, Pico Rivera Water District, Verizon, Southern California Edison, Southern California Gas, and Time Warner Cable. The project was built in close proximity to a residential community and two schools, and Jose assured that ongoing, proactive communication and outreach occurred with these stakeholders.

Project Description: This grade separation project constructed a new bridge for the BNSF Railroad, lowered Passons Boulevard, and reconfigured city streets. The numerous utility relocations and improvements included an 18-inch sewer line and water line relocations, construction of 1,400 ft of reinforced concrete box culvert, and a pump station 28 ft below grade located directly adjacent to live railroad tracks. The project won an APWA Project of the Year award.

Project Manager | February 2008 – September 2009 | SCRRA Eastern Maintenance Facility | Metrolink | Colton, CA | \$34 Million

Reference: Elmo DeLosSantos | (323)855-2164 | elmo.delossantos@aecom.com

Responsibilities: Jose was responsible for all construction operations at the jobsite including planning and scheduling of manpower, equipment and materials, supervising field staff, subcontractor scheduling and coordination, safety, quality, and environmental compliance. Brutoco's team established and maintained a cooperative relationship with the Owner and worked with them to identify and implement ways to save time

I-215 BARTON RD INTERCHANGE RECONSTRUCTION CMGC

and address design issues. The project finished under budget, which allowed the Owner to increase scope with their available funds and add significant upgrades via change order work and the project finished within the original time of completion. One of the ways that Jose mitigated delays to the project was to propose an alternate method of constructing the 48-in. double barrel storm drain parallel to existing track. Brutoco performed the work around-the-clock during two, 55-hour weekend closures of Metrolink track. Instead of taking the two months scheduled, the work was performed over two weekends and saved seven weeks time.

Project Description: Facilities constructed include a four track storage yard with capacity for four six-coach trainsets, two Service and Inspection (S&I) tracks, fueling and sanding service setup for the S&I, a 240-ft long Train Washer, a 5,150-sq ft Transportation Building containing offices and mechanical staff welfare areas, grading, drainage, paving, utilities, bridge construction, and other site work. Engineering, procurement and construction of \$10 million of facility systems including the train wash system, sand bridge and distribution equipment, inspection platforms, fuel system and industrial waste systems. After successfully mitigating several Owner and Contractor caused delays, Brutoco completed the project on the original contract completion date.

Project Manager | January 2006 – August 2007 | Robert Diemer Water Treatment Plan Oxidation Retrofit and Chemical System Upgrades | Metropolitan Water District of Southern California | Yorba Linda, CA | \$15 Million

Reference: Steven Kobzeff | (909) 391-5233 | skobzeff@mwdh2o.com

Responsibilities: As the project manager, Jose oversaw all aspects of the construction contract, managed field staff, planned and scheduled work, prepared pricing proposals and change orders, verified quantities, and was responsible for site safety, quality and environmental compliance.

Project Description: The project consisted of demolition of the existing wash water reclamation facility, construction of a sulfuric acid feed and storage system and three other chemical storage tanks; modification of existing sulfuric acid tank farm to accommodate new fluorosilicic acid feed and storage system; canopy construction, installation of chemical trenches, piping, utilities, and electrical systems.

Project Manager | September 2003 – November 2005 | Nogales Grade Separation | Alameda Corridor East (ACE) | City of Industry, CA | \$17 Million

Reference: Regina Talamantez | (619) 255-7287 | reginat@rtengineering.net

Responsibilities: Jose managed Brutoco personnel and subcontractors for this multi-phased grade separation project. Utility relocations were identified as critical to success of the project and he coordinated extensively with Walnut Valley Water District, Rowland Water District, LA County Sanitation District, LA County Department of Public Works, and the Cities of Industry and West Covina. Jose also successfully resequenced street closures and phased streetwork to minimize impact to local businesses and residents by reducing closure of the intersection at Valley Boulevard and Nogales Street to one month.

Project Description: This grade separation project lowered Nogales Street under Valley Boulevard and constructed two bridges for vehicle traffic, UPRR and Metrolink trains after diverting trains onto a shoofly. Extensive traffic control was required for the multiple phases of construction and utility relocations that included new storm drain, water lines and sewer lines and a storm drain pump station. Utilities were required to jack and bore their lines under the railroad tracks. The scope of work also included retaining wall construction, a loop connector road, street work, intersection improvements, and landscaping.

Brandon Morlet | Lead Estimator



Areas of Expertise

- ◆ Quantities Estimates
- ◆ Cost Estimating Alternatives
- ◆ Value Engineering
- ◆ Constructability Review
- ◆ DBE Outreach
- ◆ Construction Bid Package Development
- ◆ Vendor and Supplier Relationships
- ◆ Construction Management
- ◆ Guaranteed Maximum Price Development
- ◆ Risk Management

QUALIFICATIONS

Licenses/Registration/Certifications

Qualified SWPPP Practitioner
Certified Erosion, Sediment and Storm Water Inspector (CESSWI)
First Aid and CPR Certified
Cal-OSHA Confined Space Certified

Education

Bachelor of Science, Civil Engineering,
California Polytechnic State University-San
Luis Obispo, 2006

Years of Experience 8

Position Description and Responsibilities

As Lead Estimator, Brandon will lead the estimating effort through preconstruction services including GMP negotiations. During construction, Brandon will transition into a role of Project Engineer. As Project Engineer, Brandon will be responsible for budget, schedule development and maintenance, contract compliance and administration, project administration systems management, and management of jobsite crews.

Authority

Brandon has the authority to share cost information including crew composition and history of productions with his Caltrans and Independent Cost Engineer counterparts. Brandon has the authority to interact with subcontractors and suppliers and discuss innovation alternatives, current cost considerations, and escalations.

Career Summary

Brandon Morlet has more than eight years of construction experience specializing in structures and civil work, contract administration, falsework design, environmental compliance, subcontractor management, and estimating large-scale infrastructure projects. Over his eight year career, Brandon has lead project estimates totaling more than \$600 million. Brandon has a strong knowledge of analyzing and planning operations, identifying financial opportunities and risks, and executing operations in a safe manner while upholding Kiewit's and our Client's quality standards. He is skilled at developing the quantities and cost estimates critical to the analyses of design alternatives and to discovering ways to meet project objectives while reducing overall costs, which will be a great benefit to Caltrans for the I-215 Barton Road Interchange Reconstruction Project.

I-215 BARTON RD INTERCHANGE RECONSTRUCTION CMGC

Actual Work Examples

Lead Estimator | July 2012 – Present | Southern California District | Kiewit Infrastructure West Co. aka Kiewit Pacific Co. | Santa Fe Springs, CA

Reference: Mike Rood | (562) 946-1816 | mike.rood@kiewit.com

Responsibilities: Brandon is responsible for managing the civil and structural estimates on heavy civil projects in Southern California. His responsibilities include quantity take-offs, pricing, scheduling, risk analysis, good faith effort, and subcontractor management. Two key projects Brandon lead as an estimator include:

Regional Connector Design-Build Pursuit - As civil lead estimator, Brandon was responsible for managing quantity takeoffs, pricing, alignment and comparison of alternate estimates and design options, providing innovative design solutions, analysis of risk, and subcontractor scope evaluation.

The Regional Connector pursuit was a \$1.4 billion light rail connection extending from the Metro Gold Line Little Tokyo/Arts District Station to the 7th Street/Metro Center Station in downtown Los Angeles, allowing passengers to transfer to Blue, Expo, Red and Purple Lines, bypassing Union Station. Estimating the project involved complex utility relocations and coordination, traffic control in downtown Los Angeles, support of excavation and trench excavations over 30 ft deep, cast-in-place below-grade stations, and 1.9 miles of tunnel.

SR-91 Freeway Widening Design-Build Pursuit - As utility lead estimator, Brandon was responsible for managing quantity takeoffs, pricing, alignment and comparison of alternate estimates and design options, providing innovative design solutions, analysis of risk, and subcontractor scope evaluation.

The SR-91 Freeway Widening Pursuit was a \$1.3 billion freeway expansion project extending tolled express lanes on SR-91 between the Orange County/Riverside County line and I-15; adds one regular lane between SR-71 and I-15; adds one regular lane from the 15/91 Interchange to Pierce Street; improves five local interchanges and the 15/91 Interchange. Estimating the project involved significant right-of way acquisitions, extensive utility relocations and coordination, roadway grading, new bridge structures, and roadway paving.

Project Description: The Southern California District Office manages all of the estimates and proposals for the area.

Civil Engineer | July 2010 – September 2011 | Magnolia Trunk Sewer Rehabilitation | Orange County Sanitation District | Fountain Valley, CA | \$15 Million

Reference: Brian Bingman | (714) 593-7307 | bbingman@ocsd.com

Responsibilities: Brandon was responsible for coordinating 14 subcontractors and supervising six craft personnel to provide field engineering for the project and planning and field layout for various pit excavations, shoring, and backfill.

Project Description: This was the first large diameter design-build slipline project in North America. The project upon receiving notice to proceed completed a full condition assessment, design, and executed construction in under 18 months. In October 2012, The Magnolia Trunk Sewer Rehabilitation Project was awarded the 2012 Trenchless Technologies sewer rehabilitation project of the year. The construction to rehabilitate the existing Magnolia Trunk Sewer spanned three cities: Fountain Valley, Westminster, and Garden Grove. The team constructed 13 temporary access shafts up to 18 ft deep with tremie slabs and localized dewatering sumps. The wells were constructed to perform the five miles of segmental sliplining using CCFRP Hobas pipe ranging from 36-in. diameter to 48-in. with no bypassing during slipline installation, PVC manhole rehabilitation, collector reinstatement, and transforming an existing 36-in. twin barrel siphon to a self-cleaning 22-in. siphon.

I-215 BARTON RD INTERCHANGE RECONSTRUCTION CMGC

Structures Engineer | September 2007 – April 2009 | Bakersfield WWTP No. 3 Expansion | City of Bakersfield | Bakersfield, CA | \$212 Million

Reference: Art Chianello | (661) 326-3715 | achianel@bakersfieldcity.us

Responsibilities: Brandon was responsible for coordinating and supervising eight craft personnel to complete the field engineering for the headworks building, design and support field work for various formwork systems, field survey, and operation cost tracking.

Project Description: The scope of work involved constructing a new headworks structure that included mechanically cleaned bar screens, influent pumps, and grit removal tanks. The team also constructed a new activated sludge secondary treatment system, which consisted of aeration basins, fine bubble air diffusers, aeration blowers, a blower building, secondary clarifiers, return activated sludge/waste activated sludge pump station, and a plant process water pump station.

In addition, crews constructed upgrades to a two MGD tertiary treatment system, which included a rapid mixer, cloth media continuous backwash filter, chlorine contact tank, flocculation and disinfection chemical facilities, six new effluent disposal percolation basins, and dissolved air flotation sludge thickeners. The overall project quantities included more than 1.5 million cubic yards of scraper excavation; 42,000 cubic yards of structural concrete; and 120,000 LF of above-ground and underground pipe ranging from one-half inch to 90 inches in diameter.

Ashley Barton Bales | Scheduler



Areas of Expertise

- ◆ Project Progress and Productivity Analysis
- ◆ Resource Loading P6 Schedule Development
- ◆ CPM Scheduling
- ◆ Value Engineering and Design-Build Coordination
- ◆ CPM Time-Scaled Scheduling and Monthly Updating, including Narrative and Concurrent Impact Analysis

QUALIFICATIONS

Licenses/Registration/Certifications

Primavera P6
Primavera P3
CPM Scheduling

Education

Bachelor of Science, Mechanical Engineering,
University of Nebraska, Lincoln, 2006

Years of Experience 8

Position Description and Responsibilities

As Scheduler, Ashley will work with the Project Team and Caltrans to develop and maintain the baseline project schedule. Using Primavera P6, or another approved software. Ashley will support the CM in validating the current schedule and analyzing schedule risk. Ashley's responsibilities as Project Scheduler will include developing and updating the projects' preconstruction and construction schedules. In conjunction with Caltrans and the design team, she will develop a baseline construction schedule that will be updated at major design milestones.

Authority

Ashley shall have the authority to work directly with his Caltrans counterpart to validate the Caltrans schedule logic, provide updates and create alternative schedules. She has the authority to share the schedule information directly with Caltrans.

Career Summary

Over the last eight years, Ashley has prepared many preconstruction schedules in addition to the construction baseline version. She integrates with the project team and coordinates resource loading, durations, activity links with the construction engineers and estimating team. Ashley's primary career experience has been CPM scheduling for civil roadway and bridge projects. As Scheduling Manager, Ashley is responsible for developing baseline schedules for clients in addition to providing monthly updates and schedule narrative reports. Similar to her project management and estimating experience, Ashley's experience generating and analyzing detailed schedules has provided her a unique perspective on how to avoid, mitigate, and resolve delay issues of all types and causes.

I-215 BARTON RD INTERCHANGE RECONSTRUCTION CMGC

Actual Work Examples

Scheduler Manager | July 2010 – Present | I-405 Sepulveda Widening Pass Widening Design-Build | Los Angeles Metropolitan Transportation Authority | Los Angeles, CA | \$786 Million

Reference: Helen Shi | (310) 782-5331 | helen.shi@kkcsworld.com or SHIH@metro.net

Responsibilities: As Schedule Manager, Ashley manages the Monthly CPM Update and all schedule deliverables while managing her team of three Segment Schedulers. For the I-405 Project, Ashley manages a team of five schedulers that maintain the projects CPM schedule and provides all monthly updates and reporting. Ashley works with the Client to ensure that all schedule reporting and updates are adequately understood.

Project Description: This design-build project involves constructing one 10-mile high-occupancy vehicle (HOV) lane northbound on I 405 from I-10 to US-101, adding 10-ft shoulders, and restriping all lanes to standard 12-ft widths. The project will realign existing on and off ramps, reconstruct or modify 23 bridge and ramp structures, build approximately 18 miles of retaining walls, and perform road improvements on the adjacent city streets.

Schedule Engineer | December 2008 – July 2010 | Field Engineer | October 2007 – November 2008 | Pine Tree Wind Farm Design-Build | Los Angeles Department of Water and Power | Tehachapi, CA | \$174 Million

Reference: Louis Ting | (213) 367-1934 | louis.ting@ladwp.com

Responsibilities: As the Project Scheduler, Ashley had the primary responsibility to build and maintain a resource loaded and leveled P3 schedule. Ashley also had primary responsibility maintaining the schedule throughout the contract, including all monthly updates and reporting.

As Field Engineer for the foundations, Ashley assisted with the planning and monitoring of the actual work for the WTG Foundations. During her time as a field engineer for the erection of the Met Towers, she read through the contract to understand what needed to be done and what parts needed to be ordered; assisted in the writing of contracts for the Met Towers and Instrumentation; filed for and obtained the permits for the foundations; developed a work plan for the foundations and erection of the Met Towers; and assisted with the monitoring of the actual work for the towers including Instrumentation. In addition, Ashley read through the contract and developed an understanding for what paperwork needed to be done for Mechanical Completion of the WTG's; laid out general plans and worked with the Owner and the Owners Rep on what actions needed to be done to make Mechanical Completion happen for each WTG. When managing the cleaning and mechanical completion crew for the WTG's, she organized pre walk downs of each tower and developed a list of work to complete for each tower with GE and LADWP to receive the Mechanical Completion Certification. Lastly, Ashley put together and maintained the books that were required by contract of all applicable QA/QC paper work that was needed for final completion for the erection portion of the work.

Project Description: The project involved design, engineering, material procurement, and construction of the balance of plant facilities to support the delivery, construction, and operation of the wind turbine generators, as well as a system to collect the electricity generated and deliver it to the substation. The work consisted of 1.3 million cy of excavation and embankment, 26 miles of crane access roads, construction of 80 each GE 1.5 MW wind turbines and foundations, design review of all structures components, and procurement of all structures components.

I-215 BARTON RD INTERCHANGE RECONSTRUCTION CMGC

Mechanical Estimator/ Pre-Bid Scheduler | February 2007 – September 2007 | Southern California District | Kiewit Infrastructure West Co. aka Kiewit Pacific Co. | Santa Fe Springs, CA

Reference: Dan Krupski | (402) 884-5800 | dan.krupski@kiewit.com

Responsibilities: Ashley worked in the Mechanical Estimating Department as a coordinator and called and worked with subcontractors and vendors for projects such as Perris, P1-102 OCSD, Pine Tree Wind Project, and Bakersfield. Ashley acted as scheduler and created P3 schedules for the following projects: Weymouth, Lancaster, Kailua Digester, Pico Rivera, and Brightwater.

Project Description: The Southern California District Office manages all of the estimates and proposals for the area.

I-215 BARTON RD INTERCHANGE RECONSTRUCTION CMGC

Ron Neal | Structures Manager

Value-Added Position



Areas of Expertise

- ◆ Significant Caltrans Experience
- ◆ Accelerated Bridge Construction
- ◆ Multiphase Construction
- ◆ Bridge Type Selection
- ◆ Retaining Wall Selection
- ◆ Support of Excavation
- ◆ Bridge Demolition
- ◆ Falsework and Shoring Design

QUALIFICATIONS

Licenses/Registration/Certifications

CPR/First Aid Certified
Excavation Safety Trained
Fall Protection Trained
Scaffold Competent Person

Education

Journeyman Carpenter
Southwest Regional Council

Years of Experience 46

Position Description and Responsibilities

As the Structures Manager, Ron will provide constructability reviews, and input on Accelerated Bridge Construction and innovative bridge construction techniques during preconstruction. During Preconstruction, Ron will work closely with Brandon Morlet to price out structures work and all alternatives related to bridges, retaining structures and support of excavation. He will be a key member in the evaluation of super and sub-structure selection, evaluation of shoring methods, negotiating with speciality subcontractors and creating phasing and construction workplans. Ron will integrate with the earthwork task force to ensure coordination of all structural excavation and backfill. He will coordinate structure related schedule information with Scheduler, Ashley Barton. As the project transitions to the construction phase, Ron will report to Project Manager Nick Wiatrowski and will manage the structures execution during construction.

Authority

Ron has the authority to schedule and conduct planning sessions, and negotiate with subcontractors and suppliers.

Career Summary

Ron has 46 years of experience in structures construction for heavy civil engineering projects and joined Brutoco in 1969 as a bridge carpenter. Today he has a proven record of success managing and coordinating field operations on a wide range of structures projects throughout California. Ron has extensive knowledge of roadway construction, bridge structures, retaining walls, grade separations, railroad interface, traffic management plans and utility coordination.

During his career at Brutoco, Ron has built over 120 bridges in California – not including bridge widening and seismic retrofits. He is currently the Vice President of Structures for Brutoco, where he oversees all operational aspects of structures work on their projects, including estimate review, budgets, construction means and methods, resource management and schedule performance. Ron's longevity in the southern California construction market assures a qualified and experienced work force on Brutoco bridge projects.

I-215 BARTON RD INTERCHANGE RECONSTRUCTION CMGC

Actual Work Examples

Structures Manager | April 2012 – May 2014 | I-10/Citrus Avenue Interchange | San Bernardino Associated Governments (SANBAG) | Fontana, CA | \$33 Million

Reference: Nick Manchev | (951) 278-2820 | nmanchev@falcon-ca.com

Responsibilities: Ron was responsible for planning and oversight of all structures construction on the interchange replacement project. He worked with the project manager Jose Martin to plan and schedule resources, materials, means and methods for field work. He provided oversight and guidance for structures superintendents in the field.

Project Description: This interchange project replaced the Citrus Overcrossing with a two-span cast-in-place prestressed concrete girder structure built to Caltrans specifications, realigned on- and off-ramps, and widened the existing single-span precast/prestressed concrete girder bridge over Union Pacific Railroad tracks from three lanes to six lanes. Bridge construction was divided into two major phases so that the interchange remained open throughout construction. The scope of work included construction of a box mechanically stabilized earth (MSE) walls and Type 1 retaining walls. Structures construction required numerous locations of shoring up to 30 ft in height using beams and lagging with tie-backs and walers.

Structures Manager | March 2010 – June 2012 | Metro Orange Line Extension BRT Design-Build | Metro | Los Angeles, CA | \$92 Million

Reference: Scott McConnell | (818) 701-2805 | mcconnells@metro.net

Responsibilities: Ron oversaw operations, budget and schedule performance for the construction of three bridges, retaining walls, MSE walls, and station structures. He worked with design consultants on bridge type selection and performed constructability reviews during design development and reviewed construction cost estimates.

Project Description: This design-build project of a 4.5 mile busway extension included construction of a 500-ft three-span cast-in-place box girder bridge, a precast bulb-T girder bridge and a precast girder bridge built to Caltrans specifications. Construction of 156-in. CIDH pile installed up to 80 ft deep within 12 ft of operating railroad track using “wet method” construction, intersection improvements, nine stations with canopies, and 61,000 sq ft of MSE wall construction adjacent to Metrolink track. This project was finished ahead of schedule and under budget.

Structures Manager | December 2010 – December 2012 | Passons Boulevard Grade Separation | City of Pico Rivera | Pico Rivera, CA | \$12 Million

Reference: Art Cervantes | (562) 801-4225 | acervantes@pico-rivera.org

Responsibilities: Ron assisted with preparation of the estimate for structures work, developed means and methods for construction, and managed the budget, schedule and resources during construction of all structural elements in the project.

Project Description: This grade separation project constructed a new bridge for the BNSF Railroad, lowered Passons Boulevard, and reconfigured city streets. The steel-girder bridge had cast-in-drilled-hole pile foundations. Structures also included retaining walls, 1,400 ft of reinforced concrete box culvert, and a pump station 28 ft below grade located directly adjacent to live railroad tracks. The project won an APWA Project of the Year award.

I-215 BARTON RD INTERCHANGE RECONSTRUCTION CMGC

Structures Manager | November 2009 – December 2010 | SR-91 Widening SR-241 to SR-71
| Caltrans | Corona, CA | \$36 Million

Reference: Saeid Asgari | (949) 338-1961 | saeid_a_asgari@yahoo.com

Responsibilities: Ron was responsible for management and oversight of all structures construction operations on this freeway widening project. Ron worked with the project team to develop the structures sequencing approach due to limited access for work performed between and operating freeway and an environmentally sensitive area. He also coordinated manpower requirements and extra shifts to meet project early completion goals. Ron was part of the project team that won two Caltrans partnering awards for this work.

Project Description: The project widened the eastbound SR-91 freeway from SR-241 to SR-71, adding one general purpose lane and widening all lanes to standard widths while maintaining tolling operations. Ron oversaw the widening of five Caltrans bridge structures including cast-in-place box girder and precast girder construction, as well as soil-nail walls and Type 1 retaining walls. This project was successfully built in one year as compared to Caltrans planned duration of two years due to extensive planning and scheduling efforts.

Structures Manager | April 2007 – October 2009 | SR-90 Imperial Hwy/Orangethorpe Grade Separation | OCTA/Caltrans | Yorba Linda, CA | \$33 Million

Reference: Saeid Asgari | (949) 338-1961 | saeid_a_asgari@yahoo.com

Responsibilities: Ron provided planning, budgeting and construction management oversight of all structures operations for this bridge project on a state highway. His other responsibilities included project administration of construction operations, partnering and oversight of project delivery. While the staging plans were highly complex, Ron worked with the project manager to evaluate the constructability of the structures and roadway and identified the option to combine three stages into one stage. This was performed without additional impact to local businesses or traffic, and the early turnover had large benefit in reduction of traffic impacts at no added cost to Caltrans.

Project Description: Construction of the Imperial Highway grade separation over the operating BNSF mainline track at Orangethorpe Avenue included two 300-ft long cast-in-place box girder bridges, a 1300-ft long soldier pile/tie-back retaining wall, a 350-ft long soil-nail wall, and 48,000 sq ft of MSE retaining wall, 68,000 sq ft of masonry sound wall, intersection work, roadway improvements, drainage and paving. Extensive planning and resequencing of the work allowed to Brutoco successfully complete this project eight months early. This project won the Caltrans Partnering in Motion award for 2009 and a Caltrans Silver Award for Partnering Excellence in 2010.

Structures Manager | June 2007 – October 2009 | Jurupa Grade Separation | City of Riverside
| Riverside, CA | \$13 Million

Reference: Jon Rohrer | (714) 730-2300 | jon.rohrer@hdrinc.com

Responsibilities: Ron was responsible for management and oversight of all structural construction operations on this grade separation project. His responsibilities included, budgeting, project administration of construction operations, and oversight of project delivery.

Project Description: This complex project constructed a temporary road and shoofly track for Union Pacific Railroad on their mainline track to construct a grade separation with a three-track railroad bridge. Ensured close coordination with the railroad for flagging and track work performed by the railroad. This project was important to the City of Riverside as Jurupa Avenue is a major east-west regional arterial carrying 16,290 commuters in and out of the city daily. Coordinated construction operations with the City of Riverside, the third party construction manager, the County of Riverside, and local businesses during construction.

I-215 BARTON RD INTERCHANGE RECONSTRUCTION CMGC

Dennis Green | Stakeholder Liaison
Value-Added Position



Areas of Expertise

- ◆ Experience in Public Affairs and Consensus Building
- ◆ Skilled Facilitator for Partnering, Community, and Project Stakeholder Meetings
- ◆ Extensive District 8 Experience
- ◆ 12 years Experience as Union Steward
- ◆ Risk Management Experience
- ◆ Successful Caltrans Partnering

QUALIFICATIONS

Licenses/Registration/Certifications

Certificate in Public Speaking, Crafton Hills Junior College, Yucaipa, CA
Certificate in Interpersonal Communication Skills, Crafton Hills Junior College, Yucaipa, CA

Education

High School Diploma

Years of Experience 35

Position Description and Responsibilities

As our primary Stakeholder Liaison, Dennis will use his local knowledge of the community and his 35 years of industry experience to ensure the needs and desires of the residents are effectively communicate to the project team. Designing and constructing the new interchange is the easy part. Designing and constructing the interchange so that it effectively serves the current and future land use in the surrounding community, appropriately considers the concerns of the businesses and schools, and elevates the self-worth of the residents an only be accomplished with the expertise of a resource like Dennis Green.

Authority

Dennis has the authority to facilitate community workshops and meetings with various stakeholders including the schools, businesses, utility companies, and emergency services. He will also implement a public awareness campaign for this project.

Career Summary

Over the last 35 years, Dennis' career has evolved into an innovative Public Outreach expert. Throughout his career Dennis has facilitated and mediated issues for developers, businesses, and government entities; polished his skills as a facilitator for partnering, community, and project stakeholder meetings; created programs, such as the Caltrans Construction Liaison Program; and has 12 years of experience as an Union Steward. With his vast knowledge in public outreach, Dennis will play a key role in the successful completion of the I-215 Barton Road Interchange Reconstruction Project.

I-215 BARTON RD INTERCHANGE RECONSTRUCTION CMGC

Actual Work Examples

Public Outreach | September 2009 – August 2012 | Van Buren Bridge Replacement at Santa Ana Riverbed | Riverside County Transportation Department | City, CA | \$25 Million

Reference: Patricia Romo | (951) 955-6740 | promo@rctlma.org

Responsibilities: Dennis and his staff provided public outreach to Riverside and Jurupa Valley communities for the Van Buren Bridge project over the Santa Ana Riverbed. Dennis coordinated with the Cities of Riverside and Jurupa Valley to develop, coordinate, and facilitate public information meetings, stakeholder meetings, and emergency responders meetings. Green Com, Inc. staff responded to inquiries from local elected officials and staff, media and the public. Green Com, Inc. kept stakeholders apprised of local issues, community concerns and legislative contacts. They created project collateral: brochures, newsletters, presentations, press releases, traffic advisories, meeting agendas, web updates. Staff made presentations to local service clubs, chambers and at local events. Green Com, Inc. staff coordinated the project with local elected officials and staff, local businesses, school districts, emergency service providers, contractors, public transportation and California Department of Transportation.

Project Description: This Riverside County Project (construction completed fall, 2013) consisted of providing: two (northbound and southbound) replacement bridges of approximately 1,005 ft in length and reconstructing 2,600 ft of approach roads; a state of the art structurally and seismically sound bridge with complementing aesthetic features; standard shoulders, adequate bridge width for a future third lane in each direction, sidewalks with positive separation from vehicular traffic; and traffic signal and intersection modifications, street lighting and other pertinent improvements.

Public Outreach | January 2009 – August 2011 | River Road Bridge Replacement in Corona/Norco | Riverside County Transportation Department | Riverside, CA | \$40 Million

Reference: Patricia Romo | (951) 955-6740 | promo@rctlma.org

Responsibilities: As part of the Riverside County Transportation District On-Call Contract, Green Com, Inc. Staff provided public outreach to the Cities of Corona, Norco and Eastville. Green Com, Inc., as subconsultant to Falcon Engineering. Dennis and staff coordinated with other involved agencies and contractors for development and implementation of outreach. Green Com, Inc. responded to inquiries from local elected officials and staff, media and the public; developed, coordinated and facilitated public information meetings, stakeholder meetings and emergency meetings. Green Com, Inc. staff kept Riverside County staff apprised of local issues, community concerns and legislative contacts. Green Com, Inc. created project collateral: brochures, newsletters, presentations, press releases, traffic advisories, meeting agendas, web updates. Staff coordinated the groundbreaking event; made presentations to local service clubs, chambers and local events. Green Com, Inc. established and maintained a toll-free help line; contracted and coordinated the project with local elected officials and staff, local businesses, school districts, emergency services providers, contractors, public transportation and California Department of Transportation. Green Com, Inc. staff attended meetings with local service clubs and neighborhood groups and gave presentations as requested.

Project Description: The River Road Bridge Replacement Project is located in an environmentally sensitive area across the Santa Ana River. River Road is a major artery connecting the cities of Norco, Corona, Eastville, Interstate 15, and State Route 91. The project (completed 2010) consisted of: providing a state-of-the-art structurally and seismically sound bridge 1200 ft in length with complementing aesthetic features; reconstructing 2000 ft of approach roads; raising the roadway profile to provide an adequate bridge waterway to convey the 100 year base flood; and providing adjacent street improvements, traffic signal and intersection modifications, street lighting, and other associated improvements.

I-215 BARTON RD INTERCHANGE RECONSTRUCTION CMGC

Public Outreach | March 2009 – June 2011 | Big Bear Dam Bridge Replacement | Caltrans | Big Bear Lake, CA | \$39 Million

Reference: Ray Stokes, Sr. | (951) 232-6051 | ray.stokes@dot.ca.gov

Responsibilities: A Green Com, Inc. team member under previous employment as Sr. Public Officer/ Risk Manager with TCM Group coordinated with the cities Big Bear, Big Bear Lake and other cities in the mountain community as the Construction Liaison. He responded to inquiries from local elected officials and staff, media and the public; developed, coordinated and facilitated public information, stakeholders and emergency meetings. Green Com, Inc. team member kept mountain community staff apprised of local issues, community concerns and legis-lative contacts; created project collateral: brochures, newsletters, presentations, press releases, traffic advisories, meeting agendas, web updates; made presentations to local service clubs, chambers, and at local events. A Green Com, Inc. team member coordinated the project with local elected officials and staff, local businesses, school districts, emergency services providers, contractors, public transportation and California Department of Transportation. A Green Com, Inc. team member attended meetings with local service clubs and neighborhood groups and gave presentations as requested. Green Com, Inc. staff also provided the partnering facilitation for this project.

Project Description: Big Bear Dam Bridge is the major artery for the residents and businesses of Big Bear City. This project (completed October, 2011) consisted of replacing the 60 year old existing bridge with a state-of-the-art cast-in-place arch bridge across the Big Bear Dam Canyon.

Public Outreach | September 2011 – December 2012 | Mecca Roundabout | Caltrans | Mecca, CA, | \$3 Million

Reference: Patricia Romo | (951) 955-6740 | promo@rctlma.org

Responsibilities: As part of the Riverside County Transportation Department's On-Call Contract, Dennis and staff provided public outreach to the city of Mecca, CA.

Dennis and staff developed, coordinated, and facilitated public information meetings, stakeholder meetings and emergency responders meetings. Green Com, responded to inquiries from local elected officials and staff, media and the public. Green Com, Inc. kept stakeholders apprised of local issues, community concerns and legislative contacts. They created project collateral: brochures, newsletters, presentations, press releases, traffic advisories, meeting agendas, web updates. Staff made presentations to local service clubs, chambers and at local events. Green Com, Inc. staff coordinated the project with local elected officials and staff, local businesses, school districts, emergency service providers, contractors, public transportation and California Department of Transportation.

Project Description: The intersection of Hammond Road and Fourth Street in Mecca, Ca was reconfigured into a roundabout as part of the City of Mecca's Downtown Revitalization Plan. Features for this roundabout (completed in 2012) included: entry monument, decorative block wall, central island, sidewalk, truck apron, and splitter island.

Awards and Recognition

- ◆ 2012 Partnering in Motion Award (Gold) - Big Bear Bridge Project
- ◆ 2012 International Partnering Institute Award (Sapphire) - Route 58 Overlay Project
- ◆ 2011 Caltrans Excellence in Partnering Award (Gold) - I-15 Mountain Pass Improvement Project
- ◆ 2010 Caltrans Partnering Success in Motion Award (Silver) - I-15 Mountain Pass Improvement Project
- ◆ 2010 National Partnership for Highway Quality - Making a Difference - Partnering (Bronze) - I-15 Mountain Pass Improvement Project
- ◆ 2010 Caltrans Excellence in Partnering (Silver) - Route 38 Asphalt Rubber Seal Coat Project
- ◆ 2010 Caltrans Excellence in Partnering (Silver) - Route 78 Improvements Project

Appendix B - Legal Documents



I-405 Kirkland Nickel Stage 1
Kirkland, WA

POWER OF ATTORNEY

KIEWIT INFRASTRUCTURE WEST CO., a Delaware corporation (the "Corporation"), appoints ERIC M. SCOTT, Vice President of the Corporation, as its Attorney-in-Fact with the authority to act on behalf of the Corporation with respect to the State of California, Department of Transportation, for the Interstate 215 Barton Road Interchange Reconstruction, Contract No. 08-0J07CM, Project ID 0800000282, located in Grand Terrace, California (the "Project"), to execute and deliver statements of qualifications, bid proposals, and bonds for the Project, and upon award of the Project, to execute and deliver the Project contract and related documents.

The Corporation reserves the right to revoke or amend this Power of Attorney. This Power of Attorney shall remain in effect for a period of three (3) years from its effective date, unless earlier revoked in writing, thereby expiring on October 7, 2017.

IN WITNESS WHEREOF, Kiewit Infrastructure West Co. has caused its name to be subscribed hereto and its corporate seal to be affixed by its duly authorized officers on October 7, 2014 (the "Effective Date").

KIEWIT INFRASTRUCTURE WEST CO.

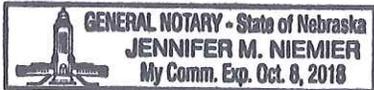
By *Jeffrey P. Petersen*
Jeffrey P. Petersen, Senior Vice President

ATTEST:

Dean J. Kampschneider
Dean J. Kampschneider, Assistant Secretary

STATE OF NEBRASKA)
)ss.
COUNTY OF DOUGLAS)

The foregoing instrument was acknowledged before me this 7th day of October, 2014, by Jeffrey P. Petersen, Senior Vice President, and Dean J. Kampschneider, Assistant Secretary, who is personally known to me to be the identical persons named in and who executed the foregoing instrument and acknowledged that they executed the same as their voluntary act and deed.



Jennifer M. Niemier
Notary Public

My commission expires: 10-8-18

Delaware

PAGE 1

The First State

I, JEFFREY W. BULLOCK, SECRETARY OF STATE OF THE STATE OF DELAWARE, DO HEREBY CERTIFY THE ATTACHED IS A TRUE AND CORRECT COPY OF THE CERTIFICATE OF AMENDMENT OF "KIEWIT PACIFIC CO.", CHANGING ITS NAME FROM "KIEWIT PACIFIC CO." TO "KIEWIT INFRASTRUCTURE WEST CO.", FILED IN THIS OFFICE ON THE TWENTY-FOURTH DAY OF JUNE, A.D. 2010, AT 10:44 O'CLOCK A.M.

AND I DO HEREBY FURTHER CERTIFY THAT THE EFFECTIVE DATE OF THE AFORESAID CERTIFICATE OF AMENDMENT IS THE THIRTIETH DAY OF JUNE, A.D. 2010.

0937630 8100

100704079



You may verify this certificate online
at corp.delaware.gov/authver.shtml


Jeffrey W. Bullock, Secretary of State
AUTHENTICATION: 8087720

DATE: 06-30-10

State of Delaware
Secretary of State
Division of Corporations
Delivered 10:44 AM 06/24/2010
FILED 10:44 AM 06/24/2010
SRV 100686502 - 0937630 FILE

CERTIFICATE OF AMENDMENT
OF
AMENDED AND RESTATED CERTIFICATE OF INCORPORATION
OF
KIEWIT PACIFIC CO.

1. The Amended and Restated Certificate of Incorporation of Kiewit Pacific Co., a Delaware corporation, is amended by changing ARTICLE I thereof so that, as amended, said ARTICLE I shall read as follows:

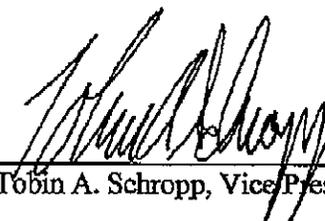
"ARTICLE I

The name of the Corporation is: Kiewit Infrastructure West Co."

2. The undersigned officers certify that the amendment above has been duly adopted in accordance with the provisions of Section 242 of the General Corporation Law of the State of Delaware.

3. This Certificate of Amendment shall become effective on June 30, 2010.

Dated: June 22, 2010.



Tobin A. Schropp, Vice President

AMENDED AND RESTATED CERTIFICATE OF INCORPORATION
OF
KIEWIT PACIFIC CO.

Kiewit Pacific Co., a corporation organized and existing under the laws of the State of Delaware, hereby certifies as follows:

1. The name of the corporation (the "Corporation") is Kiewit Pacific Co.
2. The original Certificate of Incorporation of the Corporation was filed in the office of the Secretary of State of Delaware on May 18, 1982.
3. This Amended and Restated Certificate of Incorporation, which was duly adopted pursuant to Sections 242 and 245 of the Delaware General Corporation Law, restates and integrates and further amends the provisions of the Corporation's Certificate of Incorporation to read as herein set forth in full:

ARTICLE I

The name of the Corporation is: Kiewit Pacific Co.

ARTICLE II

The address of the registered office of the Corporation in the State of Delaware is Corporation Trust Center, 1209 Orange Street, Wilmington, New Castle County, Delaware 19801. The name of the registered agent of the Corporation at such address is The Corporation Trust Company.

ARTICLE III

The nature of the business or purposes to be conducted or promoted is to engage in any lawful act or activity for which corporations may be organized under the General Corporation Law of the State of Delaware.

ARTICLE IV

The total number of shares of stock which the Corporation shall have authority to issue is 10,000 shares of Common Stock, having a par value of \$1,000.00 per share.

ARTICLE V

In furtherance and not in limitation of the powers conferred by statute, the Bylaws of the Corporation may be made, altered, amended or repealed by the stockholders or by a majority of the entire board of directors of the Corporation (the "Board").

ARTICLE VI

Unless and except to the extent that the Bylaws of the Corporation shall so require, the election of directors of the Corporation need not be by written ballot.

ARTICLE VII

(a) The Corporation shall indemnify, to the fullest extent permitted under and in accordance with the laws of the State of Delaware, any person who was or is a party or is threatened to be made a party to any threatened, pending or completed action, suit or proceeding, whether civil, criminal, administrative or investigative (other than an action by or in the right of the Corporation) by reason of the fact that the person is or was a director, officer, employee or agent of the Corporation, or is or was serving at the request of the Corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise, against expenses (including attorneys' fees), judgments, fines and amounts paid in settlement actually and reasonably incurred by the person in connection with such action, suit or proceeding if the person acted in good faith and in a manner the person reasonably believed to be in or not opposed to the best interests of the Corporation, and, with respect to any criminal action or proceeding, had no reasonable cause to believe the person's conduct was unlawful. The termination of any action, suit or proceeding by judgment, order, settlement, conviction, or upon a plea of nolo contendere or its equivalent, shall not, of itself, create a presumption that the person did not act in good faith and in a manner which the person reasonably believed to be in or not opposed to the best interests of the Corporation, and, with respect to any criminal action or proceeding, had reasonable cause to believe that the person's conduct was unlawful.

(b) The Corporation shall indemnify, to the fullest extent permitted under and in accordance with the laws of the State of Delaware, any person who was or is a party or is threatened to be made a party to any threatened, pending or completed action or suit by or in the right of the Corporation to procure a judgment in its favor by reason of the fact that the person is or was a director, officer, employee or agent of the Corporation, or is or was serving at the request of the Corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise against expenses (including attorneys' fees) actually and reasonably incurred by the person in connection with the defense or settlement of such action or suit if the person acted in good faith and in a manner the person reasonably believed to be in or not opposed to the best interests of the Corporation and except that no such indemnification shall be made in respect of any claim, issue or matter as to which such person shall have been adjudged to be liable to the Corporation unless and only to the extent that the Court of Chancery or the court in which such action or suit was brought shall determine upon application that, despite the adjudication of liability but in view of all the circumstances of the case, such person is fairly and reasonably entitled to indemnity by the Corporation for such expenses which the Court of Chancery or such other court shall deem proper.

(c) Expenses incurred in defending a civil or criminal action, suit or proceeding shall (in the case of any action, suit or proceeding against a director of the Corporation) or may (in the case of any action, suit or proceeding against an officer, trustee, employee or agent of the Corporation) be paid by the Corporation in advance of the final disposition of such action, suit or proceeding as authorized by the Board upon receipt of an undertaking by or on behalf of person so indemnified to repay such amount if it shall ultimately be determined that he is not entitled to be indemnified by the Corporation as authorized in this Article VII.

(d) The indemnification and other rights set forth in this Article VII shall not be exclusive of any provisions with respect thereto in the Bylaws of the Corporation or any other contract or agreement between the Corporation and any officer, director, employee or agent of the Corporation.

(e) Neither the amendment nor repeal of this Article VII, nor the adoption of any provision of this Certificate of Incorporation inconsistent with this Article VII, shall eliminate or reduce the effect of this Article VII in respect of any matter occurring before such amendment, repeal or adoption of an inconsistent provision or in respect of any cause of action, suit or claim relating to any such matter which would have given rise to a right of indemnification or right to the reimbursement expenses pursuant to this Article VII if such provision had not been so amended or repealed or if a provision inconsistent therewith had not been so adopted.

(f) No director shall be personally liable to the Corporation or any stockholder for monetary damages for breach of fiduciary duty as a director; provided, however, that the foregoing shall not eliminate or limit the liability of a director:

(i) for any breach of the director's duty of loyalty to the Corporation or its stockholders;

(ii) for acts or omissions not in good faith or which involve intentional misconduct or a knowing violation of law;

(iii) under Section 174 of the General Corporation Law of the State of Delaware; or

(iv) for any transaction from which the director derived an improper personal benefit.

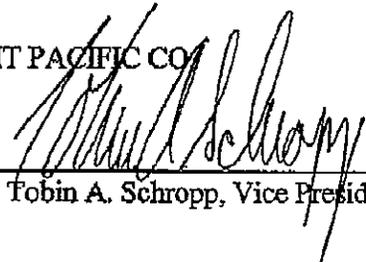
If the General Corporation Law of the State of Delaware is amended after the date hereof to authorize corporate action further eliminating or limiting the personal liability of directors, then the liability of a director of the Corporation shall be eliminated or limited to the fullest extent permitted by the General Corporation Law of the State of Delaware, as so amended.

ARTICLE VIII

The Corporation may incorporate a subsidiary or register a branch in any country under the name Kiewit Pacific Co. or such other trade name as the officers determine, and may use such name in connection with the commercial activities of the Corporation, the subsidiary and/or branch in any location.

IN WITNESS WHEREOF, Kiewit Pacific Co. has caused this Amended and Restated Certificate of Incorporation, to be signed and attested by its duly authorized officers as of the 1st day of October, 2008.

KIEWIT PACIFIC CO.

By: 

Tobin A. Schropp, Vice President

ATTEST:

By: 

Michael J. Piechoski, Vice President

AMENDED AND RESTATED
BYLAWS
OF
KIEWIT INFRASTRUCTURE WEST CO.

Adopted May 18, 1982
Amended June 19, 1989
Amended June 6, 2005
Amended August 4, 2010

**AMENDED AND RESTATED BYLAWS
OF
KIEWIT INFRASTRUCTURE WEST CO.**

**ARTICLE I
OFFICES**

Section 1. Registered Office and Agent.

The registered office of the corporation is at the Corporation Trust Center, 1209 Orange Street, Wilmington, Delaware. The registered agent at that address is The Corporation Trust Company.

Section 2. Other Offices.

The Corporation may have other offices, both within and outside the State of Delaware, from time to time as the Board of Directors may designate or as business may require.

**ARTICLE II
STOCKHOLDERS**

Section 1. Annual Meeting.

An annual meeting of stockholders, for the election of directors to succeed those whose terms expire and for the transaction of such other business as may properly come before the meeting, shall be held at such place, on such date, and at such time, either within or without the State of Delaware, as the Board of Directors shall each year fix.

The chairman of the meeting shall have the power and the duty to determine whether a nomination of director or any business proposed to be brought before the meeting has been made in accordance with the procedures set forth in these Bylaws and, if any proposed nomination or business is not in compliance with these Bylaws, to declare that such defectively proposed business or nomination shall not be presented for stockholder action at the meeting and shall be disregarded.

Section 2. Special Meetings.

Special meetings of stockholders, other than those required by statute, may be called at any time by the Board of Directors acting pursuant to a resolution adopted by a majority of the Whole Board. For purposes of these Bylaws, the term "Whole Board" shall mean the total number of authorized directors whether or not there exist any vacancies in previously authorized directorships. The Board of Directors may postpone or reschedule any previously scheduled special meeting.

Special meetings will be called by the President at the request of a majority of the stockholders entitled to vote at the meeting. The notice of a special meeting shall state the purposes for which the meeting has been called.

Section 3. Notice of Meetings.

Notice of the place, date and time of all meetings of stockholders, and the means of remote communications, if any, by which stockholders and proxyholders may be deemed to be present in person and vote at such meeting, shall be given, not less than ten (10) nor more than sixty (60) days before the date on which the meeting is to be held, to each stockholder entitled to vote at such meeting, except as otherwise provided herein or required by law (meaning, here and hereinafter, as required from time to time by the Delaware General Corporation Law or the Certificate of Incorporation of the Corporation). If mailed, such notice shall be deemed to be given when deposited in the United States Mail, postage prepaid, directed to the address that appears on the corporate records for the relevant stockholder.

When a meeting is adjourned to another time or place, notice need not be given of the adjourned meeting if the time and place thereof are announced at the meeting at which the adjournment is taken; provided, however, that if the date of any adjourned meeting is more than thirty (30) days after the date for which the meeting was originally noticed, notice of the place, date, and time of the adjourned meeting and the means of remote communications, if any, by which stockholders and proxyholders may be deemed to be present in person and vote at such adjourned meeting, shall be given in conformity herewith. At any adjourned meeting, any business may be transacted which might have been transacted at the original meeting.

Section 4. Quorum.

At any meeting of stockholders, the holders of a majority of all of the shares of the stock entitled to vote at the meeting, present in person or by proxy, shall constitute a quorum for all purposes, unless or except to the extent that the presence of a larger number may be required by law. Where a separate vote by a class or classes or series is required, a majority of the shares of such class or classes or series present in person or represented by proxy shall constitute a quorum entitled to take action with respect to that vote on that matter.

If a quorum shall fail to attend any meeting, the stockholders so present may, by majority vote, adjourn the meeting to another place, date, and/or time until a quorum shall attend.

Section 5. Organization.

Such person as the Board of Directors may have designated or, in the absence of such a person, the Chairman of the Board, if any, or, in his or her absence, the President of the Corporation or, in his or her absence, a Vice President of the Corporation, or in his or her absence, such person as may be chosen by the holders of a majority of the shares entitled to vote who are present, in person or by proxy, shall call to order any meeting of the stockholders and act as chairman of the meeting. In the absence of the Secretary of the Corporation, the secretary of the meeting shall be such person as the chairman of the meeting appoints. The chairman of the meeting shall announce

at the meeting of stockholders the date and time of the opening and closing of the polls for each matter upon which the stockholders will vote.

Section 6. Conduct of Business.

The chairman of any meeting of stockholders shall have the right and authority to prescribe such rules, regulations and procedures and to do all such acts as, in the judgment of such chairman, are appropriate for the proper conduct of the meeting. The chairman shall have the power to adjourn the meeting to another place, date and time. The date and time of the opening and closing of the polls for each matter upon which the stockholders will vote at the meeting shall be announced at the meeting.

Section 7. Proxies and Voting.

At any meeting of stockholders, each stockholder entitled to vote at any meeting of stockholders shall be entitled to one vote for each share of common stock held by such stockholder. Each stockholder entitled to vote may authorize another person or persons to act for them by proxy, but no such proxy shall be voted or acted upon after three years from its date, unless the proxy provides for a longer period.

The Corporation may, and to the extent required by law, shall, in advance of any meeting of stockholders, appoint one or more inspectors to act at the meeting and make a written report thereof. Each inspector, before entering upon the discharge of his or her duties, shall take and sign an oath faithfully to execute the duties of inspector with strict impartiality and according to the best of his or her ability. Every vote taken by ballots shall be counted by a duly appointed inspector or inspectors.

All elections of directors shall be determined by a plurality of the votes cast, and except as otherwise required by law, all other matters shall be determined by a majority of the votes cast by the holders of all shares of stock outstanding and entitled to vote thereon.

Section 8. Stock List.

The Secretary shall prepare and make a complete list of stockholders entitled to vote at any meeting of stockholders, arranged in alphabetical order, and showing the address of each stockholder and the number of shares registered in the name of each stockholder. Such list shall be open to the examination of any stockholder for any purpose germane to the meeting for a period of at least 10 days prior to the meeting in the manner provided by law.

The stock list shall also be open to the examination of any stockholder during the whole time of the meeting as provided by law. This list shall determine the identity of the stockholders entitled to vote at the meeting and the number of shares held by each of them.

ARTICLE III
BOARD OF DIRECTORS

Section 1. Number, Election and Term of Directors.

The business and affairs of this Corporation shall be managed by its Board of Directors. The Board of Directors shall consist of one or more members, the number thereof to be fixed from time to time exclusively by the Board of Directors pursuant to a resolution adopted by a majority of the Whole Board. Directors need not be stockholders. The Board of Directors shall initially consist of the persons named as directors by the incorporator, and each director so elected shall hold office until the first annual meeting of stockholders or until his or her successor is elected and qualified. At the first annual meeting of stockholders and at each annual meeting thereafter, the stockholders shall elect directors each of whom shall hold office for a term of one year or until his successor is elected and qualified or until his earlier resignation or removal. Any director may resign at any time upon written notice to the Corporation.

Section 2. Newly Created Directorships and Vacancies.

Newly created directorships resulting from any increase in the authorized number of directors or any vacancies in the Board of Directors resulting from death, resignation, retirement, disqualification, removal from office or other cause shall, unless otherwise required by law or by resolution of the Board of Directors, be filled only by a majority vote of the remaining members of the Board of Directors then in office, though less than a quorum, or by a plurality of the votes cast at a meeting of stockholders, and directors so chosen shall serve for a term expiring at the annual meeting of stockholders at which the term of office to which they have been elected expires or until such director's successor shall have been duly elected and qualified. No decrease in the number of authorized directors shall shorten the term of any incumbent director.

Section 3. Regular Meetings.

Regular meetings of the Board of Directors may be held at such place or places, on such date or dates, and at such time or times as shall have been established by the Board of Directors and publicized among all directors. A notice of each regular meeting shall not be required.

Section 4. Special Meetings.

Special meetings of the Board of Directors may be held at such place, on such date, and at such time whenever called by the Chairman of the Board, the President or by a majority of the Whole Board. Notice of the place, date, and time of each such special meeting shall be given to each director by whom it is not waived, either personally or by mail or by proven facsimile transmission at least twenty-four (24) hours before the meeting. Unless otherwise indicated in the notice thereof, any and all business may be transacted at a special meeting.

Section 5. Quorum.

At any meeting of the Board of Directors, a majority of the total number of the Whole Board shall constitute a quorum for all purposes. If a quorum shall fail to attend any meeting, a majority of those present may adjourn the meeting to another place, date, and/or time, without further notice or waiver thereof.

Section 6. Participation in Telephonic Meetings.

Members of the Board of Directors, or of any committee thereof, may participate in a meeting of such Board of Directors or committee by means of conference telephone or other communications equipment by means of which all persons participating in the meeting can hear each other and such participation shall constitute presence in person at such meeting.

Section 7. Conduct of Business.

At any meeting of the Board of Directors, business shall be transacted in such order and manner as the Board of Directors may from time to time determine, and all matters shall be determined by the vote of a majority of the directors present, except as otherwise provided herein or required by law. Action may be taken by the Board of Directors without a meeting if all members thereof consent thereto in writing or by electronic transmission, and the writing or writings or electronic transmission or transmissions are filed with the minutes of proceedings of the Board of Directors.

Section 8. Compensation.

By resolution of the Board of Directors, each director may be paid a fixed sum, and any expenses, for attendance at a board meeting. No such payment shall preclude a director from receiving compensation or serving the corporation in any other capacity.

ARTICLE IV
OFFICERS

Section 1. Generally.

The officers of the Corporation must consist of a President and a Secretary. The Board of Directors may also elect additional officers, to include but not limited to one or more Vice Presidents, one or more Assistant Secretaries, a Controller, one or more Assistant Controllers, a Treasurer, and one or more Assistant Treasurers. The President and Secretary shall be elected by the directors at the annual meeting of Board of Directors. Other officers may be elected by the Board of Directors from time to time. Each officer shall hold office until his or her successor is elected and qualified or until his or her earlier resignation or removal. Any number of offices may be held by the same person. Any officer may resign at any time upon written notice to the Corporation. Any vacancy occurring in any office of the Corporation by death, resignation,

removal or otherwise may be filled for the unexpired portion of the term by the Board of Directors at any regular or special meeting.

Section 2. President.

The President shall be the chief executive officer of the Corporation. He shall have general responsibility for the management and control of the operations of the Corporation and shall perform all duties and have all powers which are commonly incident to the office of chief executive officer or which are delegated to him by the Board of Directors. Subject to the direction of the Board of Directors, the President shall have power to sign all stock certificates, contracts and other instruments of the Corporation which are authorized and shall have general supervision of all of the other officers, employees and agents of the Corporation.

Section 3. Vice President.

Each Vice President shall have such powers and duties as may be delegated to him by the Board of Directors. One (1) Vice President shall be designated by the Board of Directors to perform the duties and exercise the powers of the President in the event of the President's absence or disability.

Section 4. Treasurer.

The Treasurer shall have the responsibility for maintaining the financial records of the Corporation. He shall make such disbursements of the funds of the Corporation as are authorized and shall render from time to time an account of all such transactions and of the financial condition of the Corporation. The Treasurer shall also perform such other duties as the Board of Directors may from time to time prescribe.

Section 5. Secretary.

The Secretary shall issue all authorized notices for, and shall keep minutes of, all meetings of the stockholders and the Board of Directors. He shall have charge of the corporate books and shall perform such other duties as the Board of Directors may from time to time prescribe.

Section 6. Delegation of Authority.

The Board of Directors may from time to time delegate the powers or duties of any officer to any other officers or agents, notwithstanding any provision hereof.

Section 7. Action with Respect to Securities of Other Corporations.

Unless otherwise directed by the Board of Directors, the President or any officer of the Corporation authorized by the President shall have power to vote and otherwise act on behalf of the Corporation, in person or by proxy, at any meeting of stockholders of or with respect to any action of stockholders of any other Corporation in which this Corporation may hold securities and

otherwise to exercise any and all rights and powers which this Corporation may possess by reason of its ownership of securities in such other Corporation.

Section 8. Compensation.

The compensation of all officers shall be fixed by the Board of Directors. An officer, who is also a director, may be compensated in both capacities.

ARTICLE V
STOCK

Section 1. Certificates of Stock.

The Board of Directors shall determine the form of certificate which represents ownership of shares of the Corporation. Each stockholder shall be entitled to a certificate signed by, or in the name of the Corporation by, the President or a Vice President, and by the Secretary or an Assistant Secretary, or the Treasurer or an Assistant Treasurer, certifying the number of shares owned by it. Any or all of the signatures on the certificate may be by facsimile.

Section 2. Transfers of Stock.

Transfers of stock shall be made only upon the transfer books of the Corporation kept at an office of the Corporation or by transfer agents designated to transfer shares of the stock of the Corporation. Except where a certificate is issued in accordance with Section 3 of Article V of these Bylaws, an outstanding certificate for the number of shares involved shall be surrendered for cancellation before a new certificate is issued therefore. The requirements of any applicable stock transfer restriction agreement must also be satisfied.

The Board of Directors may, except as otherwise required by law, fix a record date, which record date shall not be more than sixty (60) nor less than ten (10) days before the date of any meeting of stockholders, nor more than sixty (60) days prior to the time for any other action. Such record date will determine the stockholders entitled to notice of or to vote at any meeting of stockholders, or to receive payment of any dividend or other distribution or allotment of any rights or to exercise any rights in respect of any change, conversion or exchange of stock, or for the purpose of any other lawful action.

A determination of stockholders of record entitled to notice of or to vote at a meeting of stockholders shall apply to any adjournment of the meeting; provided, however, that the Board of Directors may fix a new record date for the adjourned meeting.

Section 3. Lost, Stolen or Destroyed Certificates.

In the event of the loss, theft or destruction of any certificate of stock, another may be issued in its place pursuant to such regulations as the Board of Directors may establish concerning proof of such loss, theft or destruction and concerning the giving of an affidavit that the certificate has been lost, stolen or destroyed, and a satisfactory bond or bonds of indemnity.

ARTICLE VI
NOTICES

Section 1. Notices.

If mailed, notice to stockholders shall be deemed given when deposited in the mail, postage prepaid, directed to the stockholder at such stockholder's address as it appears on the records of the Corporation. Without limiting the manner by which notice otherwise may be given effectively to stockholders, any notice to stockholders may be given by electronic transmission in the manner provided in Section 232 of the Delaware General Corporation Law.

Section 2. Waivers.

A written waiver of any notice, signed by a stockholder or director, or waiver by electronic transmission by such person, whether given before or after the time of the event for which notice is to be given, shall be deemed equivalent to the notice required to be given to such person. Neither the business nor the purpose of any meeting need be specified in such a waiver. Attendance at any meeting shall constitute waiver of notice except attendance for the sole purpose of objecting to the timeliness of notice.

ARTICLE VII
MISCELLANEOUS

Section 1. Facsimile Signatures.

In addition to the provisions for use of facsimile signatures elsewhere specifically authorized in these Bylaws, facsimile signatures of any officer or officers of the Corporation may be used whenever and as authorized by the Board of Directors.

Section 2. Corporate Seal.

The corporate seal shall have the name of the Corporation inscribed thereof and shall be in such form as may be approved from time to time by the Board of Directors, which seal shall be in the charge of the Secretary.

Section 3. Reliance upon Books, Reports and Records.

Each director and each officer of the Corporation shall, in the performance of his or her duties, be fully protected in relying in good faith upon the books of account or other records of the Corporation and upon such information, opinions, reports or statements presented to the Corporation by any of its officers or employees, or by any other person as to matters which such director reasonably believes are within such other person's professional or expert competence and who has been selected with reasonable care by or on behalf of the Corporation.

Section 4. Fiscal Year.

The fiscal year of the Corporation shall end on the last Saturday of each December, or as determined by resolution of the Board of Directors.

Section 5. Time Periods.

In applying any provision of these Bylaws which requires that an act be done or not be done a specified number of days prior to an event or that an act be done during a period of a specified number of days prior to an event, calendar days shall be used, the day of the doing of the act shall be excluded, and the day of the event shall be included.

ARTICLE VIII
AMENDMENTS

In furtherance and not in limitation of the powers conferred by law, the Board of Directors or stockholders are expressly authorized to adopt, alter, amend or repeal these Bylaws.

Effective this 4th day of August, 2010.