

EXISTING



SIMULATED

STATE ROUTE 58 KRAMER JUNCTION EXPRESSWAY PROJECT

Statement of Qualifications

Submitted February 26, 2015 - 3 p.m. PST





February 26, 2015

Jim Robinson, Project Manager
State of California Department of Transportation, District 8 Office
Division of Project/Program Management
464 West 4th Street
San Bernardino, CA 92410-1400

RE: State Route 58 Kramer Junction Expressway Project/General Contractor Services, Statement of Qualifications

Dear Mr. Robinson,

Kiewit Infrastructure West Co. (Kiewit) would like to thank you for the opportunity to submit a Statement of Qualifications for the above referenced Project. We are confident that, partnered with Caltrans, we have the Right Team and Right Approach to provide the Best Value, achieve the Project goals, and deliver the Project ahead of schedule.

Right Team | Caltrans has some of the most experienced designers in the country. Kiewit consistently ranks as one of the top transportation contractors in the nation by ENR. The CMGC delivery method allows us the opportunity to work as an integrated team to inspire one another and elevate our respective strengths to design and build a Project that meets or exceeds the established goals.

We know District 8's skilled in-house engineers and personnel have put considerable time and energy into advancing the Project to date. Because Caltrans is an important client to us, we have also invested significant time to assemble the Right Team to earn your trust from the start, led by one of our most talented and innovative leaders Project Manager Mauricio Andrade. Our team of key personnel brings nearly 150 years of experience, including experience on national CMGC and alternative delivery projects of similar size and scope, as well as relationships with key stakeholders like Southern California Edison.

Right Approach | Our team understands that the Right Approach starts with collaboration and integration between Caltrans and Kiewit to create a team that is dedicated to the success of the Project. We are committed to working side-by-side with Caltrans to jointly develop the best Project solutions resulting in the maximum scope within the budget and the lowest risk profile. Simply put, we believe our approach, teamed with Caltrans as our partner, will result in the greatest cost and schedule certainty for the Project.

Best Value | As you will see in Section 6, we've identified initial opportunities for potential innovations that could total \$12 million in savings. In addition, with effective coordination and collaboration with Caltrans and other Project stakeholders, we are confident that we can achieve project completion 8 months ahead of schedule, resulting in increased mobility and safety for the traveling public, as well as further Caltrans savings.

Our team is excited about the opportunity to work with Caltrans and other stakeholders to successfully deliver this significant Project in San Bernardino County. We look forward to your response to our proposal.

Sincerely,
Kiewit Infrastructure West Co.

Jamie D. Wisenbaker, Senior Vice President

Kiewit Infrastructure West Co.
2200 Columbia House Blvd.
Vancouver, WA 98661
(360) 693-1478

TRANSMITTAL LETTER AND FORM G

“Kiewit played a crucial role as Construction Manager for the ARRC during the preconstruction phase of the Tanana River Bridge. Their expertise in construction techniques, scheduling, cost estimating, risk analysis and logistics proved invaluable to the ARRC during design and permitting of the project. Kiewit was a critical part of the CMGC team that built a solid foundation for the ultimate success of the Tanana River Bridge. The Alaska Railroad was very pleased to partner with Kiewit on this critical ARRC infrastructure project.”

– Clark Hopp, Vice President, Engineering,
Alaska Railroad Corporation,
Northern Rail Extension, Salcha, AK

**Form A TRANSMITTAL
LETTER**

SOQ Date: 02/26/2015
California Department of Transportation
1727 30th Street
Sacramento, CA 95816-7006
Attn: Denetia Floyd-Smith, Contract Analyst

The undersigned (“Proposer”) submits this proposal and statement of qualification submittal (this “SOQ”) in response to that certain Request for Qualifications dated as of February 26,2015(as amended, the “RFQ”), issued by California Department of Transportation (“Department”) to provide preconstruction services and construct the related facilities within the State Route [Note to Drafter: Insert Route], 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:

Question and Answers No. 1-6	02/13/2015
Addendum 2	02/11/2015
Addendum 1	01/15/2015

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.

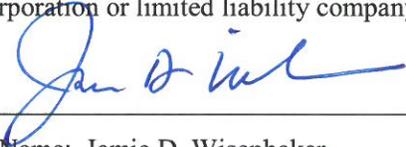
Proposer's business address:

2200 Columbia House Blvd.
(No.) (Street) (Floor or Suite)
Vancouver Washington 98661 United States
(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: Jamie D. Wisenbaker

Title: Sr. 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: N/A

Print Name: N/A

Title: N/A

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

3. Sample signature block for attorney in fact:

[Insert Proposer's name]

By: N/A

Print Name: N/A

Attorney in Fact

CALIFORNIA ALL PURPOSE ACKNOWLEDGMENT

Washington
State of ~~California~~

County of Clark

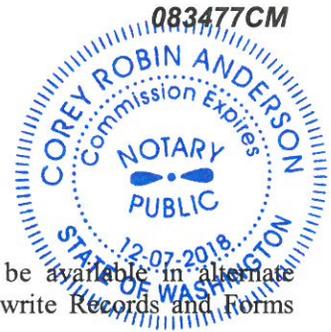
On 02/26/2015 before me, (here insert name and title of the officer), personally appeared Jamie D. Wisenbaker, Sr. Vice President who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to within the instrument and acknowledged to me that he/~~she/they~~ 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

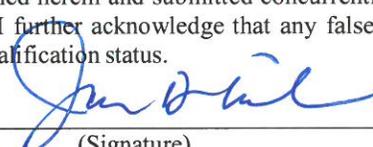
A COPY OF THIS CERTIFICATION MUST BE COMPLETED AND SIGNED BY PROPOSER AND, IF A PROPOSER IS A PARTNERSHIP, LIMITED PARTNERSHIP, JOINT VENTURE OR OTHER ASSOCIATION, THEN A SEPARATE CERTIFICATION MUST BE SIGNED BY AN AUTHORIZED REPRESENTATIVE OF EACH MEMBER AND SUBMITTED WITH THE STATEMENT OF QUALIFICATIONS.

DECLARATION

STATE OF Washington)
)SS:
COUNTY OF Clark)

I, Jamie D. Wisenbaker, being first duly sworn, state that I am the Sr. 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 State Route 58 Kramer Junction Expressway 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.



(Signature)

Jamie D. Wisenbaker
(Name Printed)

ACKNOWLEDGMENT

State of ~~California~~ ^{Washington}
County of Clark

On 02/26/2015 before me, Corey Robin Anderson, Notary Public personally appeared, Jamie D. Wisenbaker, 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.

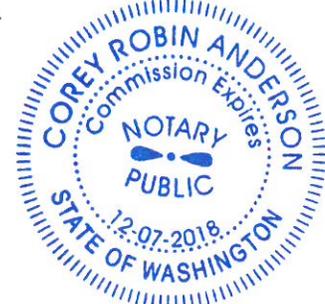
WITNESS my hand and official seal.

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

“

We could not be more pleased with the performance of the Kiewit-led design-build team on T-REX. From quality to safety, from technical ability to timeliness, you are the best contractor I have ever worked with.”

– Rick Clarke, Deputy Project Director,
Regional Transportation District,
I -25 Transportation Expansion Design-Build (T-REX), Denver, CO



Section 1 – Legal Structure

A. Legal Structure of the Proposer and its Organization

The Proposer is a sole Major Participant, Kiewit Infrastructure West Co. Kiewit Infrastructure West Co. has already been formed. Kiewit Infrastructure West Co. is a Delaware corporation that was incorporated in 1982.

The Proposer was formally known as Kiewit Pacific Co. In 2010, the corporation legally changed its name only to Kiewit Infrastructure West Co. The management, operations, manner of conducting business, general financial circumstances, business address and obligations of the Company remained the same. Articles of incorporation, a certificate of name change, and bylaws are included in Appendix B.

Kiewit Infrastructure West Co. is a licensed contractor in the State of California.

California Contractor’s License No.: 433176

Expiration Date: January 31, 2017

Classifications:

A - General Engineering

B - General Building

C10 - Electrical



Kiewit has also been registered as a Public Works Contractor with the California Department of Industrial Relations.

Registration No.: 1000001147

Expiration Date: June 30, 2015

B. Transmittal Letter

As the sole Proposer entity, Kiewit Infrastructure West Co. agrees to be fully liable for the performance under the Preconstruction Services Contract, as reflected in the execution of Form A.

C. Major Participants

Kiewit Infrastructure West Co. is the sole Major Participant. Kiewit Infrastructure West Co. is a wholly-owned indirect subsidiary of Kiewit Corporation. Kiewit has experience managing highway and bridge work in California. The information disclosed in our Statement of Qualifications does not materially affect our ability to carry out the Project responsibilities.

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

D. Conflicts of Interest

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

E. Form E - Proposer’s Organization Information

Kiewit Infrastructure West Co. has completed Form E, included in this section.

F. Proposer’s DBE Declaration Affidavit

Kiewit Infrastructure West Co. has completed Form F, included in 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:	<u>2200 Columbia House Blvd.</u> <u>Vancouver, WA 98661</u>	
Contact Name:	Jamie Wisenbaker	Title: Sr. Vice President
Telephone No.:	<u>(360) 693-1478</u> Fax No.: <u>(360) 693-5582</u> E-mail: <u>Jamie.Wisenbaker@kiewit.com</u>	
Local / Regional Contact		
Name:	<u>Mike Lowe</u>	
Address:	<u>12700 Stowe Drive, Suite 180</u> <u>Poway, CA 92064</u>	
Telephone No.:	<u>(858) 486-3410</u>	Fax No.: <u>(858) 486-3941</u> E-mail: <u>Mike.Lowe@kiewit.com</u>

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 Washington)
)
COUNTY OF Clark)

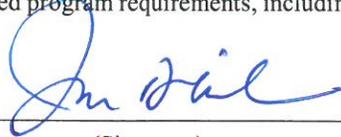
Each of the undersigned, being first duly sworn, deposes and says that Jamie D. Wisenbaker
(Contact Name)

is the Senior Vice of Kiewit Infrastructure and is the
President West Co. (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.



(Signature)

(Signature)

Jamie D. Wisenbaker

Department of Transportation
State Route 58 Kramer Junction Expressway Project

Request for Qualifications
083477CM

(Name Printed)

(Name Printed)

(Title) Sr. Vice President

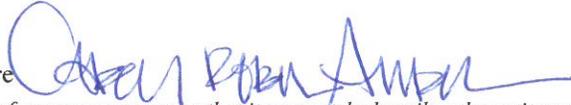
(Title)

Washington
State of ~~California~~

County of clark

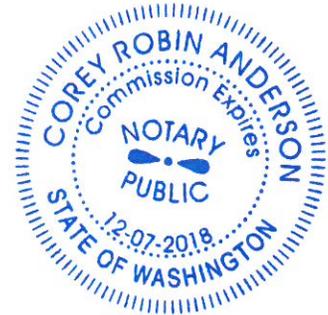
Subscribed and sworn to (or affirmed) before me on this 26th day of February, 2015, by Jamie D. Wisenbaker, proved to me on the basis of satisfactory evidence to be the person(s) who appeared before me.

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

“I feel that working with Kiewit on this most recent project has only enhanced my 13 year experience in Alaska. Every aspect of the project, from safety, quality, innovation, and my personal favorite, community relations, was at the highest level of professionalism. I can’t say enough about the process to get to construction and the 3-year construction effort, not to mention that it was finished under budget and in the same month and year that my first legislative report suggested. I can only hope that what is left in my career includes future phases of NRE and the potential of working with Kiewit again in the future.”

– Mark Peterburs, Project Director,
Alaska Railroad Corporation,
Northern Rail Extension, Salcha, AK



Section 2 – Financial Capacity

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 SR-58 Kramer Junction Expressway 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.

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 Pre-construction Services Contract.

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

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

– Lisa Buller, Travelers



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

One Tower Square
Hartford, CT 06183

February 24, 2015

California Department of Transportation
Division of Procurements and Contracts
1727 30th Street
Sacramento, CA 95816-7006

RE: State Route 58 Kramer Junction Expressway
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. 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.

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. 228894

Certificate No. 006235155

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, 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 13th day of January, 2015.

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 13th day of January, 2015, 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

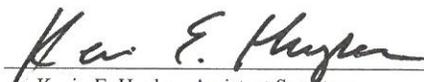
FURTHER RESOLVED, that any bond, recognizance, contract of indemnity, or writing obligatory in the nature of a bond, recognizance, or conditional undertaking shall be valid and binding upon the Company when (a) signed by the President, any Vice Chairman, any Executive Vice President, any Senior Vice 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 24th day of February, 20 15.

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.

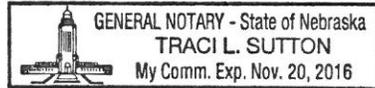
STATE OF NEBRASKA
COUNTY OF DOUGLAS

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 24th day of

February A.D., 20 15.



Traci L. Sutton
Traci L. Sutton, Notary Public



CERTIFICATE OF LIABILITY INSURANCE

Evidence of Coverage

DATE (MM/DD/YYYY)

1/28/2015

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:** 23210354 **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"/> HIRED AUTOS <input type="checkbox"/> SCHEDULED 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 type="checkbox"/> EXCESS LIAB 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"/> OTHER	
							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 Coverage

CERTIFICATE HOLDER Evidence of Coverage	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

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CERTIFICATE OF LIABILITY INSURANCE

Evidence of Coverage

DATE (MM/DD/YYYY)

2/17/2015

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. 2200 Columbia House Blvd. Vancouver WA 98661	INSURER B :		
	INSURER C :		
	INSURER D :		
	INSURER E :		
	INSURER F :		

COVERAGES

CERTIFICATE NUMBER: 23460302

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 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 <input type="checkbox"/> 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 <input type="checkbox"/> OTH-ER <input type="checkbox"/> E.L. EACH ACCIDENT \$ E.L. DISEASE - EA EMPLOYEE \$ E.L. DISEASE - POLICY LIMIT \$
A	Contractor Pollution Liability			CPO1955909	12/1/2014	12/1/2015	\$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 Coverage

CERTIFICATE HOLDER**CANCELLATION**

Evidence of Coverage

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

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ACORD 25 (2014/01)

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SECTION 3 – SAFETY PROGRAM

“The Kiewit team had an amazing safety program. I would definitely hire Kiewit again and think the six awards the project team has earned to date speaks highly of the quality of work Kiewit has to offer. Kiewit did an awesome job!”

– Steve Mishler, Development Engineer,
Arizona Department of Transportation,
SR 101L HOV Lanes, Phoenix, AZ



Section 3 - Safety

Safety has been a core value and part of our culture for decades. Kiewit’s approach to safety can be summed up by the phrase “Nobody Gets Hurt” which is seen, heard, and practiced on every jobsite, every day. We work collaboratively with craft, sub-contractors 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, which 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 SR 58 Kramer Junction Expressway Project (Kramer Junction). 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 safety program

SAFETY RECORD

Kiewit’s safety statistics demonstrate that employees embrace the safety culture. Included below is Kiewit’s workers’ compensation experience modification rates (EMR).

Year	EMR	Recordable Rate	Lost Work Rate
2014	0.54	0.94	0.33
2013	0.54	0.98	0.23
2012	0.55	0.83	0.25
3-year average	0.54	0.92	0.27
2011-2013 3-year Industry Average	1.00	3.80	1.47

Kiewit’s EMR for the past three years is 0.54, well under the industry average of 1.0. Our average total recordable injury/illness rate (0.92) and average lost work rate (0.27) 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. This strong safety culture will ensure the Project goal if safety is met.

ALTERNATIVE DISPUTE RESOLUTION SYSTEM

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

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 two “serious” penalties against KIWC in the past five years. KIWC has not been cited and assessed any “willful” penalties. The details of the citations are included below.

Two citations were assessed against KIWC on the I-405 Sepulveda 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.

SAFETY RECOGNITION

- AGC, Excellence in Safety Award, 2014
- 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 Safety Program

WORKERS' COMPENSATION HISTORY

Kiewit's workers' compensation experience history can be found under EMR on page 3-1.

WORKER SAFETY PROGRAM

Kiewit's approach to safety can be summed up by the phrase “Nobody Gets Hurt” which is seen, heard, and practiced on every jobsite, every day. Through proper planning and continuous communication we can eliminate most safety hazards and prevent damage, injury, and loss to our employees, subcontractors, consultants, the public, and other project participants — an important goal for the Project.

Kiewit's proposed Safety Program will provide an understanding of safe work principles, open communication among all personnel levels, and convey clear expectations. The program addresses:

- Design for Safety
- Craft Engagement
- Training
- Hazard Communication
- Communication strategy with Caltrans and the traveling public
- Subcontractors and Consultants
- Project-Specific Safety Considerations

This comprehensive program starts with employee engagement, which leads to an empowered workforce with the understanding that everyone has stop-work authority as it relates to safety. Kiewit's program provides a hands-on approach by enabling the craft workers to be responsible for their safety and, ultimately reducing lost and restricted workdays due to jobsite injury.

“Kiewit has impressed me as well as the [Valley] Metro staff with their proactive approach and true commitment to establishing an unprecedented Safety Culture on this project.”

- Joel Larkins, Manager Safety Community Action Committee (Valley Metro LS1)

DESIGN FOR SAFETY

Kiewit has a Design for Safety program that engages design engineers and safety professionals during design to remove or control hazards at their source before the workers arrive at the jobsite. Examples of designing for safety include a safe final product to keep the traveling public safe, selecting pre-assembled bridge components to eliminate false work, incorporating engineered tie-off points to increase fall protection safety, and installing turnouts for temporary access by incident responders and workers.

We have developed a corporate guidebook that identifies training, database capture, and engineering controls. The process includes these steps:

- Brainstorm and identify basic design features that could reduce exposure to hazards.
- Prepare an action plan for each item identified.
- Perform constructability reviews on the Design for Safety features.
- Observe activities for critique and submit to the electronic lessons learned database.
- Close out the action plan and post to the Design for Safety intranet site in our searchable database of best practices.



Craft Voice in Safety (CVIS) provides a platform to ensure all craft have an equal voice in safety, working in partnership with management to take a proactive approach on relationship building, empowering our peers to support safety through prevention, education and awareness with the ultimate goal of **“Nobody Gets Hurt”**.

CRAFT ENGAGEMENT

Craft employees are our first defense to effectively control risk, identify hazards, promote the culture to other craft, and help identify ways to improve the processes we face daily. The goal behind craft engagement is to produce a stronger and more effective safety culture. This is effective because it empowers craft to speak up and make safety recommendations.

To obtain and encourage craft engagement, Kiewit uses a Craft Voice in Safety Program (CVIS Program), which is comprised of craft workers from the different trades on our projects. The CVIS team’s mission is to promote and provide a safe workplace by making recommendations to the project team that empowers the voice of our craftsmen. The goal is to motivate all employees, both staff and craft, to recognize the risks specific to our project that could prevent our team from meeting its objective goal of “Nobody Gets Hurt.”

TRAINING

Training all employees is a core value at Kiewit. Training begins the first day on the project with new-hire orientation: the foreman and superintendent will both meet with every new employee to discuss safety expectations and review the work process. In addition to this safety orientation, training includes:

- Daily, weekly, and monthly safety meetings
- Certifying designated operators
- First aid and CPR classes
- Small tool safety talks
- Work-zone training
- Fall protection demonstrations

Craft will receive additional training for job-specific hazards as the project moves forward and the need arises on topics such as scaffolding, rigging and signaling, working in confined spaces, and traffic management.

HAZARD COMMUNICATION

As operations start, crews will meet to discuss work processes, tools, hazards, and safety measures associated with the operation. The job hazard analysis (JHA) is the primary hazard communication tool, used daily to inform workers about safe working methods on every operation. Craft will develop the JHAs with input from the superintendent and engineer. The crew will review and acknowledge they understand by signing the JHA before any operation starts. Each JHA will be a living document; as proficiency, techniques, and tools change, crews will review and update the JHA. If a change is needed, crews will stand down and make the change. The project will require complete JHAs for all operations, without exception. Kiewit will keep an up-to-date material safety data sheet (MSDS) database readily available to the craft and posted in a common area.

Because the work environment will constantly change, the safety program allows for monitoring, evaluating, and updating plans and JHAs. The CVIS Program and other tools will establish open communication among the project management, Caltrans, and all workers on site.

SUBCONTRACTORS AND CONSULTANTS

Kiewit intends to employ specialty subcontractors and consultants for various preconstruction and

construction phases. Subcontractors and consultants working on site are contractually obligated to match or exceed Kiewit’s Safety Program. Pre-activity meetings, where hazard identification and mitigation planning occurs, are required before starting on site. Subcontractors will participate in the CVIS Program and contribute to the hazard communication program. Once established on the Project, the subcontractor integrates as a full team member, held to the same expectations and level of accountability as Kiewit personnel. Subcontract monitors assist in integrating the subcontractor and Kiewit, and they provide daily input on safe work principles, policies, and hazard mitigation.

PROJECT-SPECIFIC SAFETY CONSIDERATIONS

We understand that Caltrans places the utmost importance on worker safety and that of the traveling public. We share this passion and commitment. As part of an integrated team, we will partner to ensure that this remains a top priority from day one. We will collaborate with you to incorporate and utilize a comprehensive public information communication plan, notifying the traveling public of key project operations.

Safety concerns change throughout the life of a project, but as the job progresses we will work with Caltrans to identify and address specific risks pertinent to each particular phase of the Project. After reviewing the RFQ documents provided and based on our experience on similar projects, we have tentatively identified the top safety considerations for the project to be:

- Protecting the traveling public
- High-voltage electrical utilities
- High-pressure gas utilities
- Falsework and support of excavation
- Regional weather
- Railway encroachment

Kiewit holds the traveling public’s safety as a top priority. Protecting the safety of the traveling public and mitigating the hazard posed by the traveling public to the Project’s employees are primary goals and will be achieved through traffic control



Mass safety meeting with all craft, subs and management

measures and work zone protection. Traffic control presents a high safety risk in several areas of the project, including over active traffic on US-395 and adjacent to the existing SR-58. Kiewit will prepare Maintenance of Traffic (MOT) plans that address traffic circulation, provide for emergency vehicle access, and account for sufficient temporary lighting. Signage, perimeter fencing, and trench plates will be utilized to ensure the jobsite is secured at the end of each shift. In some instances, as with significant traffic management risks, Kiewit will work with Caltrans to address the hazards by suggesting the use of exclusion zones, signage, physical barriers, and other measures to keep the public safe.

The existing high-voltage electrical utilities pose a significant hazard to all nearby operations. Kiewit’s project-specific Safety Plan will incorporate all applicable OSHA and Southern California Edison regulations and guidelines to ensure the safety of all employees, project personnel, and the traveling public. Physical barriers such as K-rail will be utilized where necessary to restrict access, and visual markings will be utilized to identify clearance limits. Additionally, all Kiewit projects operate under the guidelines of the Kiewit Corporate Crane Procedures Manual (CCP), which explicitly identifies restrictions and procedures for planning and executing work within the vicinity of power lines of all voltages. For crane use near active power lines a written plan will be produced in accordance with the CCP, which requires a dedicated spotter with the sole responsibility to verify that proper clearances are maintained and a salaried superintendent with the sole responsibility of verifying that all steps of the plan are being carried out as written.



Kiewit has also had success outfitting cranes with electronic limiting devices that ensure the cranes cannot exceed the planned movement, swing, and boom angle limitations.

Kiewit has extensive experience in utility work and the associated hazards, including high-pressure gas utilities. Our processes and policies guarantee safe operations. Utility owners will be consulted and brought on-site for work on or near their utilities. We have a strict potholing policy that allows us to locate all utilities before excavation occurs. Potholing information is included in a form called a dig permit, which must be completed and approved by managers before construction can begin.

Bridge falsework and support of excavation are potential safety risks on the project. Both of these elements are covered in our tested Temporary Structures and Construction Devices (TSCD) program. The TSCD program provides a framework for identifying, categorizing, engineering, installing, and verifying the safety of all systems and devices that are not specified by the contract documents but are required for the execution of our work and are designed, engineered, and constructed by Kiewit. The program outlines processes for ensuring the safety of TSCD devices including requiring independent design verifications.

Due to the location of this Project, weather can pose a risk to the health and safety of project participants. During summer, extreme temperatures make it dangerous to work due to the risk of heat exhaustion and dehydration. When possible, we can adjust shifts to start earlier in 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. Kiewit will work to re-direct crews to operations that can be performed safely in windy conditions until crane operations can resume safely.

Safely working around the active Burlington Northern Santa Fe Corp. (BNSF) Railroad line requires a significant investment to ensure worker safety and the safety of the active rail line. Kiewit is well acquainted with the safety requirements of the Federal Railroad Administration (FRA), the

California Public Utilities Commission (CPUC), BNSF Railroad, and with working around live tracks. Kiewit will require all personnel scheduled to work on or near railroad tracks to attend daily briefings where the foreman will identify the limits of construction and review safety restrictions (e.g. derails, flagging, designated Employee In Charge (EIC), live track or out-of-service track) and required safety precautions, such as no cell phone use on the right-of-way and no smoking in work zones. The foreman will also communicate with the EIC prior to starting work each day to ensure that all operations are completed in compliance with all project and legal safety requirements.

EMERGENCY SERVICE PLAN

We will develop a comprehensive Emergency Service Plan in coordination with emergency responders and law enforcement to ensure that access and mobility are maintained. The Emergency Service Plan will be incorporated into the traffic management plans, and will build on previously successful plans to provide synchronized incident response during construction of the project. The Emergency Service Plan will achieve the following:

- Establish communication protocols with emergency personnel
- Enhance the safety of stranded motorists
- Provide clear access for emergency vehicles
- Communicate traffic delays to the public

We will work closely with law enforcement and emergency responders and Caltrans to determine incident detection and verification parameters. All Kiewit supervisory personnel will be trained in reporting and responding to incidents, and will carry the emergency response phone tree of contact numbers at all times.

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 staff, craft, subcontractors, consultants, and our clients to ensure “Nobody Gets Hurt.”

SECTION 4 – FIRM EXPERIENCE AND PAST PERFORMANCE



“We are lucky to have Kiewit Infrastructure West Co. on board. They were selected using the CMGC project delivery method... having the contractor involved in the design and permitting phase from the very beginning and then moving into the construction phase has really allowed the project to move smoothly, quickly, and easily; and they have been a great partner in this project.”

– Wendy Lindskoog, Vice President,
Corporate Affairs, Alaska Railroad Corporation,
Northern Rail Extension, Salcha, AK

Section 4 – Firm Experience and Past Performance

A. CAPABILITY AND CAPACITY

Kiewit Infrastructure West Co. has the knowledge, experience and resources to work with Caltrans and other important stakeholders to achieve the goals of safety, mobility, quality, environmental compliance, project delivery by May 2020, innovation, and effectiveness established for the SR-58 Kramer Junction Expressway Project (Kramer Junction).

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.** Our client’s satisfaction is always a priority and we use tools such as surveys and client interviews conducted through third party organizations to continually measure and improve. Our team, led by experienced Project Manager Mauricio Andrade, is committed to not only completing this Project on time, but working effectively with Caltrans to maximize scope, find ways to reduce schedule, and deliver a quality product.

During preconstruction services on the recently completed San Diego International Airport Green Build Landside CMGC 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. We will utilize the same innovative approach during preconstruction for the Kramer Junction Project

“The Landside Project was estimated to cost approximately \$272 million. However, through preconstruction and construction phases of the project, the team found ways to effectively sequence work ... They identified engineering options that maintained the quality of the project, while aggressively managing overall project costs.”

- Bryan Enarson, VP, Development, San Diego Airport Authority

to ensure the goals of innovation, quality and effectiveness are achieved.

Capacity

Our streamlined structure as a sole major participant proposer will facilitate our ability to partner with Caltrans, provide you a single point of contact and accountability that will be responsive to your needs. Being a sole proposer firm with the necessary experience and resources minimizes the risk inherent in multiple firms coordinating management and delivery of work. **Figure 1** provides you an overview of our capacity illustrating that we have the resources, personnel and equipment to ensure the success of this Project.

Figure 1: Capacity overview

Kiewit Infrastructure West Co. (Proposer)	
• Nearly 69 years of experience in Southern California	
• 2,500 staff and craft employees	
• 5,000 equipment units	
Kiewit Corporation (Parent Company)	
• Operating for more than 130 years	
• 33,000 staff and craft employees	
• 25,000 equipment units	

CMGC, Highway, and Rail Experience

Our history performing major 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 North American history at the time. Building from that project, Kiewit has performed more than 960 CMGC and alternative delivery projects across the country and has earned the reputation as a leading national

Figure 2: Experience delivering projects of similar size, scope and complexity

	Contract Type	Year Completed	Cost (\$M)	Construction of projects of similar size, scope and complexity	Completed within the budget	Completed on time	Same key personnel	Construction/Reconstruction using innovative design methods and materials	Complicated staging and traffic handling common to this Project	Staged bridge construction over existing highway and/or railroad	Coordinating work and traffic control with adjacent contracts performing similar highway work as well as construction of municipal utilities	Innovative structure and wall design	Experience in placing large and deep cast-in-place and pre-cast structural concrete elements	Stakeholder Coordination	Railroad Coordination	Compliance with environmental regulations and restrictive permit requirements	No claims, dispute proceedings, litigation, or arbitration
San Diego International Airport Green Build Landside, San Diego, CA	CMGC	2013	\$227	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Port Mann Highway 1 Improvement, Vancouver, BC	DB	2014	\$2,700	●	●	●	●	●	●	●	●	●	●	●	●	●	●
SR 202L Red Mountain Design-Build, Phoenix, AZ	DB	2011	\$189	●	●	●	●	●	●	●	●	●	●	●	●	●	●
SR-41 Cottonwood Pass, Kettleman City, CA	DBB	2009	\$31	●	●	●	●	●	●	●	●	●	●	●	●	●	●
I-25 Transportation Expansion Design-Build, Denver, CO	DB	2006	\$1,280	●	●	●	●	●	●	●	●	●	●	●	●	●	●

contractor, ranked No. 2 in Transportation by ENR for 2014. 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. For example, our relationship with Southern California Edison (SCE) has provided us a keen understanding of the utility challenges on this Project. We want to work as an extension of the Caltrans District 8 team and see the Kramer Junction Project as the perfect opportunity to demonstrate our capabilities in this area.

To augment our experience working with BNSF, we’ve added J.L. Patterson and Associates, Inc. (JLP), a respected BNSF consultant, to our team. Kiewit has worked with JLP and BNSF on several projects in Southern California, including on the O’Neil to Flores and Stuart Mesa Second Main Track projects as well as current work with our Construction Manager Ron Robison on the Foothill Extension in Los Angeles. Our integrated team will work with BNSF to fully address design, construction, long term maintenance, and safety issues associated with the Project.

Our recent experience includes work and coordination with Project stakeholders, including BNSF and SCE. We understand the importance of early coordination

with Project stakeholders to minimize risk, maintain the project schedule, and deliver the maximum scope with the available funding. As a result of early coordination efforts with the client and local agencies at Port Mann Highway 1, an innovative design concept was approved and later constructed. This innovation was a traffic pattern that allowed the project team to construct three bridges concurrently, instead of one bridge at a time, which was in the original plan. This saved schedule, reduced traffic risks, and met all municipality requirements. Similarly, our team will work with Caltrans and Project stakeholders as early as possible to ensure on-time completion, maximized scope, environmental compliance and satisfied stakeholders.

Figure 2 provides an overview of how our experience aligns with the evaluation criteria you have identified. In addition to our experience listed below, Kiewit has partnered with Caltrans on several successful projects, including the Benicia-Martinez Bridge, San Francisco to Oakland Bay Bridge Foundations Removal CMGC project, and Cypress E in Oakland. **The following Form B pages further detail our successful performance and demonstrate our ability to help Caltrans achieve the goals identified for the Kramer Junction Project.**



FIRM EXPERIENCE (FORM B)

- ◆ **SAN DIEGO INTERNATIONAL AIRPORT
GREEN BUILD LANDSIDE** *Page 4-2*
- ◆ **SR-41 COTTONWOOD PASS** *Page 4-5*
- ◆ **I-25 TRANSPORTATION EXPANSION (T-REX)** *Page 4-8*
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Name of the Proposer: Kiewit Infrastructure West Co.

Name of Firm: Kiewit Infrastructure West Co. Project Role: Joint Venture Lead/Prime Contractor

Firm’s Office/Division/District which performed the work: Kiewit Infrastructure West Co.

Years of Experience (provide length of activity as it relates to the following three elements):

Roads/Streets: 2 Bridges/Structures: 2 Utility Relocations: 2

SAN DIEGO INTERNATIONAL AIRPORT GREEN BUILD LANDSIDE, SAN DIEGO, CA (SDIA LANDSIDE)

Kiewit was the prime contractor and managing partner on this \$227 million CMGC project.

Nature of Work: Benefit to Caltrans:

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

Key Personnel Involved:

- Mauricio Andrade (Project Manager)
- Melissa Meese (Scheduler)
- John Shemwell (Lead Estimator)



Project Description and Site Conditions

- ✓ **Construction of projects of similar size, scope and complexity** | As part of the largest improvement project in the airport’s history, the SDIA Landside project helped the airport meet current and future demand for travel, while improving customer service and serving as an economic stimulus for the San Diego region. The \$227 million CMGC project was completed on time and under budget. Work that was similar to the Kramer Junction Project included a circulation roadway, including six overpass bridges and a 1,300-ft four-lane second-level elevated departure roadway (EDR), and extensive coordination with project stakeholders to ensure minimal disruption to airport traffic and the public.
- ✓ **Experience of team members working together as integrated team** | From the start, Kiewit and the Airport Authority co-located and worked as an integrated team to reach a Guaranteed Maximum Price \$45 million under the original estimate. To achieve this the team utilized an iterative GMP process to evaluate innovative solutions as the design developed. The project team also collaborated to produce 15 early release packages for construction to ensure the project would finish on time.
- ✓ **Construction/reconstruction using innovative designs, methods, and materials** | Designing and constructing deep foundations for buildings and bridges was a challenge due to the site constraints, seismic requirements, high groundwater levels, caving soils, and potential for “boiling” conditions in the bottom of the drill holes. The engineers evaluated three types of foundation systems for the site: pre-cast driven piles, steel-jacketed piles, and cast-in-drilled-hole (CIDH) piles. Different systems were selected across the Landside Project depending on site-specific conditions and restrictions. Each alternative was evaluated for lateral loading performance, bearing capacity, bending moment, seismic resistance, and other parameters. The primary system was the pre-cast piles driven to 50- to 75-feet, but this was not functional in certain areas due to soft bay muds to obtain the lateral loading within the allowable footprint. Experiments with test piles provided empirical feedback that enabled the engineers to improve the pile design, in particular based on data collected from gamma-gamma logging of the piles.
- ✓ **Implementation of complicated staging and traffic handling** | Detailed staging and phasing of construction allowed the SDIA 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 this project** | 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 drainage, underground utilities and bridge foundations for fast-track construction. A similar approach would be used for this Project. 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.
- **Staged bridge construction over existing highway and railroad** | The critical path ran through the EDR, which was constructed in two separate traffic phases. Six roadway bridges varying in length from 500 ft to 1,500 ft were constructed, three of which were constructed over busy, active roadways. Much of the structured bridge work was staged to accommodate airport operations and terminal traffic where 13 million passengers a year travel. All bridges were constructed to Caltrans standards and included a variety of foundation types (concrete pile, cast-in-steel-shell (CISS) pile, and CIDH pile). This variety was necessary to accommodate the soft bay mud soils.
- ✓ **Coordinating 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 have been 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. We also coordinated and sequenced the work around an electrical utility relocation by third party San Diego Gas and Electric.
- ✓ **Innovative structure and wall design** | An example of innovation was in post tensioning means and methods. The project schedule required the Smart Curb pavilions and the 1,300-foot four-lane 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. The solution 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.
- ✓ **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 more than 5-ft deep and consisted of more than 11,000 cu. yds. of concrete. There were multiple foundation types including two foot diameter CISS piles, 18 in. square precast driven piles, and seven-foot diameter CIDH piles. This project also contained approximately 16,000 sf. of precast retaining wall panels.
- ✓ **Compliance with environmental regulations and restrictive permit requirements** | Maintaining environmental compliance during the construction of the SDIA was vital to its success. The project was in close proximity to sensitive bodies of water and protected wildlife. Kiewit obtained and implemented all state and local environmental regulations and permits without a notice of violation or compliance order being issued. Pre-existing conditions on the project included soil contamination from previous rental car facilities and a naval landfill. Kiewit managed the removal and disposal of this material. Kiewit also 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 met project emission limitations throughout the project.

- ✓ **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. John and a team of 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. 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.
- ✓ **Record of cost and schedule growth or reduction, cost reduction incentive proposals implemented to minimize cost and schedule growth, and 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. Claims were eliminated by assigning appropriate risks, contractor involvement, and advancing the design to a high level before executing the GMP.

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.):

Name of Client: San Diego County Regional Airport Authority **Owner Contact:** Thella Bowens
Address: 3225 North Harbor Dr., Third Floor, Commuter Terminal, **Telephone:** (619) 400-2404
San Diego, CA 92101 **Fax No:** N/A **Email:** tbowens@san.org

% Work Performed	Contract No.:	Contract Value:	Modification Value (US\$):	Final Value (US\$):
40%	201400	\$272M	<\$45M>	\$227M

Description of any Difference in Values: Kiewit supported the Airport Authority early in design concepts to develop budgets aligned with Project and Program needs. The difference in values is due to reduced scope of work that accomplished the Project goals.

Commencement Date:	Planned Completion Date:	Actual Completion Date:	Amount of Claims:	Any Litigation:
April 2011	April 2013	April 2013	N/A	No

Description of any Difference in Completion Dates: Completed project on time. **Warranty Period:** The warranty was for one year after substantial completion. **Dispute Review Board History:** Because all issues were handled at the project level, there were no issues brought to the Dispute Review Board.





Name of the Proposer: Kiewit Infrastructure West Co.
Name of Firm: Kiewit Infrastructure West Co. **Project Role:** Prime Contractor
Firm's Office/Division/District which performed the work: Kiewit Infrastructure West Co.
Years of Experience (provide length of activity as it relates to the following three elements):
Roads/Streets: 2 **Bridges/Structures:** 2 **Utility Relocations:** 2

SR-41 COTTONWOOD PASS, KETTLEMAN CITY, CA (COTTONWOOD)

Kiewit was responsible for the construction of this \$34 million highway widening and realignment.

- Nature of Work: Benefit to Caltrans:**
- Worked in sensitive desert habitat with no environmental violations
 - 10 miles of highway alignment and realignment
 - Partnered with Caltrans
 - Innovation to optimize phasing (CRIP)
 - Two cast-in-place box girder bridges
 - Balanced mass excavation and embankment to fit needs of project



- Key Personnel Involved:**
- Ron Robison (Construction Manager)

Project Description and Site Conditions

- ✓ **Construction of projects of similar size, scope and complexity** | The Cottonwood project is located on SR-41 approximately 12 miles south of Kettleman City and runs through King, Kern and San Luis Obispo counties. This project realigned, added a passing lane through the canyon section and constructed new alignment through the valley section.
The project constructed 4 miles of new alignment, 6 miles of realignment and widening, and a bridge replacement over Avenal Creek. Major items of work included 401,540 cu. yds. of excavation, 413,000 cu. yds. of embankment, 77,600 cu. yds. of Class 2 aggregate base, 102,000 tons of asphalt concrete, 1,131 ft. of retaining wall and 2,723 ft. of culvert.
- ✓ **Experience of team members working together as integrated team** | Kiewit partnered with Caltrans on this project to accomplish completion ahead of schedule, including collaborating on the use of a cost reduction incentive proposal (CRIP) further described below. As a result, this project was completed three months ahead of schedule.
- ✓ **Construction/reconstruction using innovative designs, methods, and materials** | An innovative method used on this project was a CRIP to change the phasing of the work, which allowed Kiewit to fully close the highway. This CRIP increased project efficiency, saved budget, reduced overall schedule, and provided a safer environment to the public and construction personnel.
- ✓ **Implementation of complicated staging and traffic handling** | The staging and traffic handling was simplified due to the CRIP, which allowed for full night-time closures. Our crews worked with Caltrans to coordinate night-time closures and sequence the work. Drainage crossings were completed overnight to eliminate further lane closures during the day. Standard lane closures were used during the day, in which traffic was shifted to the inside or outside lanes dependent upon where the work was taking place.
- ✓ **Accelerated construction of major elements common to this project** | The Avenal Creek Bridge is a single span box girder bridge spanning 85 ft. across the Avenal Creek. Ground was broken at the bridge site on May 11, 2007 and the bridge was completed on November 20, 2007. Bridge abutment work was accelerated to comply with an environmental permit restriction and to ensure we met the schedule because the bridge was on the critical path. To save time, work was performed on double shifts and both abutments



were constructed simultaneously. After the abutments were completed, the four wing walls were formed and poured simultaneously.

- Staged bridge construction over existing highway and railroad** | N/A
- Coordinating work and traffic control with adjacent contracts performing similar highway work** | There was an adjacent contract working at the West end of the Cottonwood project that tied into Kiewit's work. Weekly meetings with the adjacent contractor were held to coordinate the lane closure schedule, and where and when the work would tie-in to our alignment. Traffic resources to implement lane closures were also coordinated and shared.
- Coordination of complex public utility relocation as well as construction of municipal utilities (i.e. water and sewer)** | We had two utility relocations on this project. We coordinated with the private utility company to relocate 12 KV lines in two locations. We also worked with the Navy to relocate a 6 in. jet fuel pipe line.
- Innovative structure and wall design** | The structures work included a single span box girder bridge, six retaining walls, five cast-in-place (CIP) box culverts with wing walls, and two drainage headwalls. The retaining walls were constructed in the canyon. These were required to support the widened roadway in areas where fill could not be used, typically in places where the new roadway infringed on Cottonwood Creek. One CIP wall was constructed around a 8 ft. diameter multi-plate culvert. This multi-plate culvert was assembled and placed during a full closure to reduce impacts to the traveling public, in addition to saving schedule.
- Experience in placing large and deep cast-in-place and precast structural concrete elements** | The bridge abutments were founded on 130 each 16 in. diameter cast-in-drilled-hole piles. The piles ranged in length from 30 ft. to 36 ft. The pile work was done in two phases as the abutment footing stepped down. The wing walls were excavated first and the piles drilled. Then the grade was stepped down and the abutment piles were drilled. Pile work for the bridge was completed in just 2.5 weeks, averaging 11 piles per day. The bridge consisted of six precast box girders that spanned 85 ft. The bridge deck and stems were then cast-in-place (CIP). All retaining walls and box culverts were also CIP.
- Compliance with environmental regulations and restrictive permit requirements** | There were no environmental violations on this project. All work was performed in accordance with California Department of Fish and Game, California Department of Fish and Wildlife, U.S. Army Corps of Engineers permits, U.S. Fish and Wildlife, and the approved Storm Water Pollution Prevention Plan. Environmentally sensitive areas were identified prior to construction and special measures were taken to protect the species native to the area, including lizard fence erection and special monitoring for mammals and migratory birds. There was also an identified archaeological area during construction. We worked closely with the local authorities and native American tribes to excavate and preserve artifacts so they could be removed prior to highway realignment.
- Constructing controversial or highly sensitive public projects; including experience in coordination with local and regional agencies on similar sized projects** | A partnering meeting with Caltrans and all Kiewit personnel was held before work began to acquaint everyone with their teammates/counterparts and set goals for the project. A second partnering meeting was held midway through the project to ensure progress toward goals. Weekly meetings with Caltrans facilitated open lines of communication between both parties and ensured that any issues were resolved quickly due to the working relationships that were already established.
- Record of cost and schedule growth or reduction, cost reduction incentive proposals implemented to minimize cost and schedule growth, and experience with techniques to avoid delays and minimize claims** | The previously mentioned CRIP allowed most of the grading and embankment work to be carried out during a period of 80 nights under a night time full-closure. This reduced the amount of traffic control required for the job. It also reduced schedule and maximized budget and efficiency. This CRIP increased our productivity, saved time and saved the client \$100,000. It also provided a safer construction site for the public and for construction personnel by reducing interaction between the two.



Due to working closely with the client, there were no claims on this project. Any issues were resolved at the project level or at the Dispute Review Board, if necessary.

Name of Client (Owner/Agency, Contractor, etc.):

Name of Client: California Department of Transportation
Address: 855 M Street, Suite 200, Visalia, CA 93291
Fax No: (559) 651-8324

Owner Contact: Eric Karlson
Telephone: (559) 386-4971
Email: eric.karlson@dot.ca.gov

% Work Performed	Contract No.:	Contract Value:	Modification Value (US\$):	Final Value (US\$):
91%	06-3829U4	\$31.3M	\$3.2M	\$34.3

Description of any Difference in Values: Client-added scope and change orders.

Commencement Date:	Planned Completion Date:	Actual Completion Date:	Amount of Claims:	Any Litigation:
January 2007	January 2009	October 2008	N/A	No

Description of any Difference in Completion Dates: The CRIP allowed us to finish the Project ahead of schedule, despite client-added scope. **Warranty Period:** Two year warranty for plant establishment.

Dispute Review Board History: Four items were presented to the dispute review board: 1) Discrepancies between the plan typical cross-section and what was actually encountered in the field; 2) There was a landside on the project, which resulted in a right-of-way delay; 3) Unforeseen rock was encountered during excavation for drainage; and 4) Unexpected road settlement that resulted from sub-surface conditions. All four of these disputes were resolved amicably and a mutually acceptable compromise was reached in each case.



Name of the Proposer: Kiewit Infrastructure West Co.

Name of Firm: Southeast Corridor Constructors **Project Role:** Joint Venture Lead/Prime Contractor

Firm's Office/Division/District which performed the work: Kiewit Infrastructure West Co.

Years of Experience (provide length of activity as it relates to the following three elements):

Roads/Streets: 5 Bridges/Structures: 5 Utility Relocations: 5

I-25 TRANSPORTATION EXPANSION DESIGN-BUILD, DENVER, CO (T-REX)

Kiewit was the prime contractor and managing partner of this \$1.28 billion design-build joint venture.

Nature of Work: *Benefit to Caltrans:*

- Completed 22 months ahead of schedule
- 25 innovations valued at \$30 million
- Significant maintenance of traffic for 17 miles of roadway including 8 interchanges
- Extensive stakeholder coordination with agencies, municipalities, local business, and 400 utilities
- Ongoing active partnering program



Key Personnel Involved:

- Mauricio Andrade (Project Manager/ Design-Build Coordinator)
- Ron Robison (Construction Manager)

Project Description and Site Conditions

- ✓ **Construction of projects of similar size, scope and complexity** | The Kiewit team was responsible for 17 mi. of roadway widening/reconstruction including eight interchanges, upgrading a 50-year-old drainage system, the construction of 2.8 million sf of soundwalls and retaining walls, enhanced pedestrian and bicycle access, and 19 miles of grade-separated, double-track light rail transit (LRT). The project also included 75 bridges and tunnels, three parking structures, identification and relocation of more than 400 utilities and significant right-of-way acquisition. The project also included the complete redesign and reconstruction of one of the nation's busiest interchanges at I-25 and I-225.
- ✓ **Experience of team members working together as integrated team** | Successful project delivery can be attributed to an ongoing, active partnering program with the client; a collaborative management team focused on cost and schedule control; extensive outreach; and an innovative engineering and construction approach. We worked with the client to seamlessly integrate at all levels for the efficient resolution of issues and successful achievement of project goals.
- ✓ **Construction/reconstruction using innovative designs, methods, and materials** | As part of the collaborative process, the team analyzed nearly 100 cost-saving concepts. Following a formal review the team submitted 25 cost-saving Alternative Technical Concepts valued at \$30 million. The most notable of these was the new system interchange at I-25/I-225 incorporating both rail and highway alignments. Benefits from this value engineering included schedule enhancements, minimizing public inconveniences, fewer retaining walls, reduced traffic switches, and increased safety.
Kiewit also worked with the client to develop an alternative highway lighting plan. The revised lighting plan was less intrusive on neighboring properties, greatly reduced the number of poles needed, and offered long-term savings for CDOT in the form of lower energy bills and less traffic exposure.
- ✓ **Implementation of complicated staging and traffic handling** | The rail line and highway work was coordinated to allow for construction of both elements of work to occur at the same time to minimize disruptions to the traveling public. The project required significant maintenance of traffic planning because



all work was performed while accommodating live traffic. Approximately 40% of the work was completed during the night to maintain capacity during peak travel times. A dedicated Methods of Handling Traffic team oversaw live traffic operations and a 24/7 Courtesy Patrol responded to any unplanned incidents. During construction, a survey showed 80% of the public and 93% of the commuters polled thought the project had performed well or extremely well.

- ✓ **Accelerated construction of major elements common to this project** | The project team was committed to completing this project 22 months ahead of the owner’s schedule. Delivering on this aggressive schedule was a feat that could only be accomplished with the flexibility offered by the alternative delivery method used. During preconstruction, a matrix management organization was used for concurrent design of major components and it established vertical team of technical discipline leads to work with production crews on technical issues, guide design and ensure consistency. During construction, the team focused initially on roadway widening activities to provide room for multiple crews and equipment needed to perform simultaneous activities of utility relocations, wall construction, highway widening and LRT construction. As a result, this project was completed ahead of schedule.
- ✓ **Staged bridge construction over existing highway and railroad** | The project involved building 75 bridges and tunnels, including six bridges in the “Narrows” section of I-25 that were rebuilt within a two-year time frame to minimize inconvenience in this sensitive urban area. Kiewit used phased reconstruction of these bridges so residents and business owners on either side of I-25 would always have an available route over the highway.
- ✓ **Coordinating work and traffic control with adjacent contracts performing similar highway work** | Another contractor was contracted to perform the second and third phase of the Broadway viaduct (Bridge over I-25). Kiewit crews and CDOT participated in coordination meetings to ensure that bridge closures and roadway construction/closures did not occur at the same time. Kiewit also assisted CDOT with temporary construction and design services where the two contracts interfaced. Kiewit personnel and CDOT personnel were on site for every one of the adjacent contractor’s closures to ensure work went smoothly.
- ✓ **Coordination of complex public utility relocation as well as construction of municipal utilities (i.e. water and sewer)** | Kiewit coordinated with the Denver Regional Transportation Department, designers and utilities from 35% to 100% drawings to review constructability and design elements to minimize costs. Over 400 utilities had to be identified and relocated, which required significant coordination efforts.
- ✓ **Innovative structure and wall design** | To accommodate both highway widening and light rail construction in a right-of-way restricted to 200 ft. wide, crews replaced sloped retaining walls in the “Narrows” section of I-25 with 30 ft.-tall vertical retaining walls. During design, Kiewit received approval to build caisson, tieback and mechanically stabilized earth (MSE) walls. Replacing the sloped walls with vertical walls not only provided the room necessary for simultaneous roadway and light rail construction, but it also reduced the number of properties that had to be acquired for construction.
- ✓ **Experience in placing large and deep cast-in-place and precast structural concrete elements** | The project consisted of 91,365 lf of caisson drilled shafts; 3 million sf. of retaining and sound walls, including 1,248 million sf of MSE walls; 982,000 sq. yd. of PCC paving; 901,800 tons of asphalt paving, and 13,800 lf of box culverts. We poured 305,000 lf of concrete barrier. 830,000 cu. yds. of concrete was used. Bridge work included 147 precast girders, 813,415 sf of bridge deck and 22 structural steel girders.
- ✓ **Compliance with environmental regulations and restrictive permit requirements** | The team developed a project-specific environmental impacts plan and worked with local, state and federal agencies to secure the necessary permitting. At the Dayton Light Rail Station, located adjacent to a three-acre wetland, the pedestrian bridge was designed to span the property so no piers encroach on the site. The pedestrian walkway was built as a floating structure to avoid environmental impacts. Work included widening the NB and SB I-225 bridges and constructing a new light-rail bridge over Cherry Creek. In addition to implementing environmental controls at the sensitive Cherry Creek waterway, Kiewit had to coordinate when



construction activities could occur to not interfere with the nesting season of migratory birds that would use the existing bridge structure as a nesting habitat.

✓ **Constructing controversial or highly sensitive public projects; including experience in coordination with local and regional agencies on similar sized projects** | During the initial stages of the project, the team supported the client and other agencies in setting up a project website, help hotline and public meetings to explain the impacts of the project. In the meetings, the public expressed their interest in mitigating construction noise. In response, the team established a noise mitigation and monitoring program unprecedented in the construction industry. Kiewit utilized 32 mobile sound mitigation trailers to protect adjacent residents from construction noise. During particularly loud activities (e.g., bridge demo), hotel rooms were offered to nearby residents.

With approximately 400 utility relocations, 200 power feeds, and \$40 million of drainage improvements, the project required significant third party coordination. Permitting across ten jurisdictions and almost 100 agencies required an extensive outreach effort. We also worked with numerous local agencies to prioritize project “enhancements” (additional scope items) as project savings were realized.

✓ **Record of cost and schedule growth or reduction, cost reduction incentive proposals implemented to minimize cost and schedule growth, and experience with techniques to avoid delays and minimize claims** | This project was completed 22 months ahead of schedule and eight days ahead of the substantial completion milestone. The project was able to stay ahead of schedule due to a collaborative approach between Kiewit and the client. To operate as efficiently as possible, Kiewit organized its team into three basic levels: executive oversight, program management, and design and construction task forces. At each level of Kiewit’s organization was a counterpart from the client’s team. There were no claims filed during this project, demonstrating the close and effective working relationships that were created.

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

T-REX earned more than 30 awards, including Marvin M. Black Excellence in Partnering; National DBIA Transportation over \$50M; Gold Pick Award-Community Relations; Environmental Excellence - CO Contractor’s Association; and Build America Grand Award – AGC.

“We could not be more pleased with the performance of the Kiewit-led design-build team on T-REX. From quality to safety, from technical ability to timeliness, you are the best contractor I have ever worked with.” - Rick Clarke, Deputy Project Director, Regional Transportation District (RTD)

Name of Client (Owner/Agency, Contractor, etc.):

Name of Client: Colorado Department of Transportation, Regional Transportation District
Address: 1600 Blake Street; Denver, CO 80202
Fax No: (303) 299-2184
Owner Contact: Richard Clarke
Telephone: (303) 299-2184
Email: richard.clarke@rtd-fastracks

% Work Performed	Contract No.:	Contract Value:	Modification Value (US\$):	Final Value (US\$):
50%	1HAA00268	\$1.16B	\$120M	\$1.28B

Description of any Difference in Values: Additional scope was added through owner-initiated and approved changes, including pedestrian bridge and floors in parking garages.

Commencement Date:	Planned Completion Date:	Actual Completion Date:	Amount of Claims:	Any Litigation:
June 2001	June 2008	September 2006	N/A	No

Description of any Difference in Completion Dates: Even with the added scope, the fast-track design-build method led to project completion 22 months ahead of the RFP contract schedule.

Warranty Period: One year for highway and light rail, two years on landscaping.

Dispute Review Board History: None





Name of the Proposer: Kiewit Infrastructure West Co.

Name of Firm: Kiewit Infrastructure West Co. **Project Role:** Joint Venture Lead/Prime Contractor

Firm's Office/Division/District which performed the work: Kiewit Infrastructure West Co.

Years of Experience (provide length of activity as it relates to the following three elements):

Roads/Streets: 5

Bridges/Structures: 5

Utility Relocations: 5

PORT MANN HIGHWAY 1 IMPROVEMENT, VANCOUVER, BC (PMH1)

Kiewit was the prime contractor and managing partner of this \$2.7 billion design-build project.

Nature of Work: *Benefit to Caltrans:*

- 23 miles of Freeway widening, 30 highway bridges
- Extensive traffic control and sequencing of work
- Completed on time, on budget
- Two bridges over BNSF railway
- Coordination with 19 private and public utilities, including two high voltage overhead lines



Key Personnel Involved:

- Ron Robison (Construction Manager)
- Dan Hemenway (Structures Construction Manager)

Project Description and Site Conditions

- ✓ **Construction of projects of similar size, scope and complexity** | This 23-mile stretch of highway spans east of downtown Vancouver, BC and across the Fraser River. One lane in each direction was added west of the river, two lanes in each direction were added on the east side of the river. A new 10-lane bridge was constructed to link the two sides, in addition to construction/reconstruction of more than 30 bridge structures. Kiewit began constructability reviews with the design team in late 2008. As a result of the start-up efforts, cost savings and schedule reductions were discovered before construction began. Despite challenging winter weather and poor soil conditions, Kiewit obtained substantial completion on schedule. Additional similar scope to the Kramer Junction Project included building multiple bridges over live rail and highway traffic.
- ✓ **Experience of team members working together as integrated team** | Kiewit co-located with key project management and design team individuals in a central office in close proximity to the client. The majority of the design work was performed in Kiewit's office in downtown Vancouver, which was located 10 floors above the client's office. This co-location allowed direct input to the design from the construction team's design coordinators and the client's personnel. Through this increased communication and constructability input, a more efficient and high quality design was produced, while meeting the fast-tracked project schedule.
- ✓ **Construction/reconstruction using innovative designs, methods, and materials** | There were nine fish and wildlife crossings that went underneath Highway 1. The phasing for these features required innovation because they had to be built underneath six lanes of traffic. Traffic was phased four lanes at a time. The project was phased to allow continuous traffic movement while constructing the box culverts in phases. During preconstruction, we innovated a traffic pattern to construct three bridges concurrently, instead of one bridge at a time, as originally planned. This innovation allowed a continuous flow of traffic, met all emergency service and municipality requirements, reduced traffic switches, and saved schedule and budget.
- ✓ **Implementation of complicated staging and traffic handling** | The daily ridership along the alignment was approximately 250,000, with traffic commonly backed up on Highway 1. The contract requirements did not allow lane closures on Highway 1 during daytime operating hours, with liquidated damages of \$400,000 CA/day. These constraints challenged the team to find creative methods of work execution during nighttime





hours along Highway 1. To mitigate these issues, we worked with the municipalities on MOT work plans before operations proceeded. This approach offered the advantage of determining if detours would be more useful than a nighttime lane closure. Occasionally it was more effective to implement a nighttime lane closure than a daytime detour because work could be accomplished faster and with less man hours during a nighttime closure. Daytime detours called for construction crews to work next to live traffic for longer durations, which could increase safety hazards. The Kiewit team worked closely with the municipalities to make these important determinations. Similarly, we will work with San Bernardino County to ensure construction sequencing is scheduled to minimize impacts and ensure mobility to residents and the traveling public.

- ✓ **Accelerated construction of major elements common to this project** | As discussed above, coordination with municipalities to execute the right MOT plan played a large role in accelerating certain aspects of construction work. In addition, the use of a universal false-deck system accelerated the schedule of demolition and construction of bridges along the project. The team was able to reuse the false-deck system for the demolition of other structures within the project limits.
- ✓ **Staged bridge construction over existing highway and railroad** | The demolition of bridges over Highway 1 demonstrates the use of effective and innovative staging to limit impacts to the public. The team originally planned to stage this demolition by closing lanes beneath the bridge. However, with traffic in such close proximity to the work zone, the team was challenged in developing an MOT plan. The solution was to eliminate the staging and construct false-deck bridges, providing field crews a safe access point above the structure to be removed. This eliminated the need for fall protection, and removed MOT from the equation. This solution also reduced the risk of debris falling on traffic or causing injury to field crews. Two bridges were constructed over active BNSF rail. Communication with the railroad began early in the design process and continued throughout construction. They were informed through continuous emails and phone calls as designs were developed, concepts changed or access was needed. Kiewit worked with the railroad to establish a schedule and flagger requirements to ensure construction did not impact the active rail.
- ✓ **Coordinating work and traffic control with adjacent contracts performing similar highway work** | There were three other small projects that Kiewit coordinated with along the project alignment. We shared schedules, had lines of communication, and had regular meetings when warranted.
- ✓ **Coordination of complex public utility relocation as well as construction of municipal utilities (i.e. water and sewer)** | During design, Kiewit worked with 19 private and public utility owners, three railways, and seven municipalities. One segment required a utility relocate program including relocation of a 230 kv power line, a 72-in. sewer line, and a 69 kv power line to move a railroad track.
- ✓ **Innovative structure and wall design** | Construction innovations on the Port Mann Bridge included utilizing drilled shafts to eliminate ground improvements when in close proximity of businesses to minimize noise and vibration impacts; erecting segments from an overhead gantry on parallel bridges, erected segments on both bridges in the same span by side-shifting the gantry from bridge to bridge; and erecting both balanced cantilever and span-by-span segments from a single specially designed combination overhead gantry capable of erecting both.
- ✓ **Experience in placing large and deep cast-in-place and precast structural concrete elements** | The pylons for the Port Mann Bridge are supported on 63 marine piles and 50 land piles. The bridge foundations are supported by 251 individual 6-ft. diameter driven pile and 108 individual 6 to 8-ft. diameter drilled shafts that vary in depth from 190 ft. to 230 ft. The cable-stay and segmental bridges are composed of 287,000 cu. yds. of concrete. We erected parallel bridges three segments wide and connected the three sections with a cast-in-place stitch pour between wing tips.
- ✓ **Compliance with environmental regulations and restrictive permit requirements** | Environmental control is especially important on a project this size, so Kiewit and the client developed a program that replaced impacted environmental habitats with an equal amount prior to construction. Due to the conversion of degraded habitat to roadway right-of-way, Kiewit committed to the new construction of habitat compensation areas. These compensation areas expand the available aquatic and seasonal wetland habitat within the project corridor. Environmental representatives from the client, Department of Fisheries and Oceans (DFO),



and Environment Canada received monthly reports from Kiewit on the compensation area construction progress and also participated in Kiewit-led field inspections. Interaction with these representatives extended to other project environmental permit requirements such as early entry authorizations for in-water work and monitoring of raptors and songbirds. Early entry authorizations are contingent upon satisfactory past performance. Based on our satisfactory previous work, DFO granted early entry authorizations for the 2014 season, which kept the project on schedule. Likewise, Kiewit will work with environmental representatives on the Kramer Junction Project to ensure necessary permits are in place well-in-advance of construction execution.

✓ **Constructing controversial or highly sensitive public projects; including experience in coordination with local and regional agencies on similar sized projects** | When critical operations were approaching, the Kiewit team worked with impacted stakeholders, giving them an opportunity to voice their opinion about upcoming operations and help plan their schedules around the impact. This interface with stakeholders gave Kiewit the motivation to identify the best method for executing the operation. Construction was also scheduled around events occurring at nearby GM Place, which serves as the home for the National Hockey League’s Vancouver Canucks and also represents the City of Vancouver’s premier venue for corporate conventions and concert events. This ensured public mobility before and after events. The 2010 Winter Olympics also took place in Vancouver during the height of construction and no lane closures or stoppages were allowed along the entire job for 28 days. Work that did not affect traffic was planned for this period and the project schedule was unaffected.

✓ **Record of cost and schedule growth or reduction, cost reduction incentive proposals implemented to minimize cost and schedule growth, and experience with techniques to avoid delays and minimize claims** | Throughout the duration of the project, the team worked to stay on schedule, regardless of unexpected conditions encountered. We collaborated with the client in all stages of construction. This relationship was crucial to expedient issue resolution. For instance, the submittal of traffic closures were only allowed within select “windows,” followed by the client responding in a similar, expedited manner in order to avoid impacts to traffic. In one instance, the client preferred delaying the traffic closure, uncertain of the impacts. To resolve the delay, Kiewit met with the client to discuss this time-sensitive issue and managed to reach a mutually agreeable solution.

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

The Port Mann/Highway 1 Improvement Project is the largest transportation construction project in British Columbia’s history. This project won a 2014 Award of Excellence in the Transportation category at the Canadian Consulting Engineering Awards. The project also won the Deputy Minister’s Contractor of the Year Award for Bridges and Structures in 2013.

Name of Client (Owner/Agency, Contractor, etc.):

Name of Client: Transportation Investment Corporation **Owner Contact:** Garry Dawson
Address: Suite 210–1500 Woolridge Street Coquitlam BC V3K 0B8 **Telephone:** (778) 783-1241
Fax No.: (778) 783-1201 **Email:** gdawson@ticorp.ca

% Work Performed	Contract No.:	Contract Value:	Modification Value (US\$):	Final Value (US\$):
78%	N/A	\$2.39B	\$292M	\$2.69B

Description of any Difference in Values: Client directed changes.

Commencement Date:	Planned Completion Date:	Actual Completion Date:	Amount of Claims:	Any Litigation:
March 2009	December 2014	December 18, 2014	None	No

Description of any Difference in Completion Dates: N/A **Warranty Period:** Warranty varies from 21 months to 5 years, depending on the section of the project. **Dispute Review Board History:** All disputes were settled through direct negotiations.





Name of the Proposer: Kiewit Infrastructure West Co.

Name of Firm: Kiewit Infrastructure West Co. **Project Role:** Joint Venture Lead/Prime Contractor

Firm’s Office/Division/District which performed the work: Kiewit Infrastructure West Co.

Years of Experience (provide length of activity as it relates to the following three elements):

Roads/Streets: 1.2 years **Bridges/Structures:** 0.8 years **Utility Relocations:** 0.9 years

SR 202L RED MOUNTAIN DESIGN-BUILD, PHOENIX, AZ (SR 202L)

Kiewit was the 70% joint venture managing partner for the design and construction of this \$190.7 million design-build project.

Nature of Work: *Benefit to Caltrans:*

- 10 miles of freeway widening
- 22 bridge widenings and reconstruction of 18 ramps
- Marvin M. Black Partnering Award
- Completed ahead of schedule on budget
- Staged bridge construction over freeway
- Expedited schedule through innovative design solutions
- Coordination with freight rail



Project Description and Site Conditions

- ✓ **Construction of projects of similar size, scope and complexity** | The 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 reconstruction of 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.
- ✓ **Experience of team members working together as integrated team** | Partnership was instrumental in delivering ADOT’s SR 202L project early and under budget, while maintaining rigorous standards for safety and quality. The project team implemented a partnering charter early-on which set the tone and direction of the project for all project stakeholders. The KSJV team also employed the following partnering concepts to make the SR 202L project a success: two partnering workshops (one for design and one for construction), ADOT’s Partnership Evaluation Program, Kiewit’s Raving Fans Program, issue resolution procedures, bi-weekly “how are we doing” meetings, co-location of the entire design and construction staff along with ADOT staff, and monthly team building activities.
- ✓ **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 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 with the East Valley cities. 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 their 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 (ARACFC). 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 this project** | ADOT’s original schedule was 845 calendar days to design and construct the project. KSJV 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 highway and railroad** | Our innovative use of “hybrid “ and “drop-in” bridges made use of staged bridge construction techniques.
- Coordinating work and traffic control with adjacent contracts performing similar highway work** | N/A
- 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 incorporated their comments as design progressed, giving the agencies greater familiarity with the design and resulting in faster design reviews and approvals.
- Innovative structure and wall design** | 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.
- 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, KSJV 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 with the East Valley cities. 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 KSJV team to keep traffic restrictions and closures to a minimum. Due to the high-profile nature of the project, KSJV and ADOT made meeting the stakeholders’ needs and concerns one of the top project goals.
- ✓ **Record of cost and schedule growth or reduction, cost reduction incentive proposals implemented to minimize cost and schedule growth, and experience with techniques to avoid delays and minimize claims** | There were no claims on the project. 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 outside agencies was received in May 2011 and construction began immediately.

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

“Collaboration is not a strong enough word for how this team addressed the day-to-day issues that are a part of every large urban construction project. When they solved problems neither party gave anything up—rather the outcome was always in the best interest of the project and, by definition, their interests as well.” - Thomas R. Warne, PE, Tom Warne and Associates, SR 202L D-B Project Partnering Facilitator

Name of Client (Owner/Agency, Contractor, etc.):

Name of Client: Arizona Department of Transportation **Owner Contact:** Annette Riley
Address: 205 S. 17th Avenue, MD 611E, Room 133, Phoenix, AZ 85007 **Telephone:** (602) 712-7360
Fax No: N/A **Email:** ariley@azdot.gov

% Work Performed	Contract No.:	Contract Value:	Modification Value (US\$):	Final Value (US\$):
55%	202 MA 000 H687 101C	\$188.9M	\$2.1M	\$190.8M

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.

Commencement Date:	Planned Completion Date:	Actual Completion Date:	Amount of Claims:	Any Litigation:
December 2008	June 2011	June 2011	None	No

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. **Dispute Review Board History:** KSJV did not participate in a DRB or alternative dispute resolution process on this project. Our partnering process successfully resolved issues to avoid disputes.



SECTION 5 – PROPOSER ORGANIZATION AND KEY PERSONNEL

“Never before has a multi-modal project of this scale been attempted in Colorado. Your team faced significant challenges in transforming the vision of T-REX into reality. Each challenge was met with an equal amount of determination and innovation, both of which have allowed the Project to progress at an incredibly rapid pace”

– Richard F. Clarke, W.H. Murphy, Laurence E. Warner,
The T-REX Project Team
I -25 Transportation Expansion Design-Build (T-REX), Denver, CO

Section 5 – Proposer Key Personnel

We have assembled the Right Team of proven CMGC and alternative delivery construction professionals who will work collaboratively with Caltrans and its design team to successfully tackle the challenges, constraints and goals identified on the SR-58 Kramer Junction Expressway Project (Kramer Junction Project). We are bringing key personnel with a combined 150 years of relevant industry experience to give Caltrans and the Project the best opportunity for success. As you will see in the descriptions and examples below, our proposed Key Personnel have extensive experience with Caltrans, complex highway work, structures, CMGC contracting, partnering and environmental compliance, in addition to established relationships with key stakeholders like Southern California Edison (SCE) and BNSF Railway.

A. RESUMES

Resumes for each of the proposed Key Personnel are located in Appendix A.

B. FORM D

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

PREFERRED KEY PERSONNEL

When selecting our Key Personnel, we analyzed the Project scope and selected the Right Team based on those who have demonstrated the critical attributes needed to ensure Project success. Attributes include:

- Proven safety leaders who always put the safety of the public, Caltrans and each other first
- Relevant and transferable Project experience, including local, Caltrans, CMGC and alternative delivery, rural locations, structures over highways, railroad coordination and environmental compliance
- Proactive communicators who solve issues as they arise

- Relationship-focused team players who understand the value and benefits of establishing solid partnerships upfront and fostering those relationships throughout the life of the Project
- Innovative builders to deliver the maximum scope under the available budget

The Key Personnel identified in this SOQ are listed below. Once selected, we will work with Caltrans to round out our team with additional personnel who will contribute to the success of the Project.

- **Project Manager Mauricio Andrade** | Skilled communicator and leader with 20 years of experience, including CMGC experience
- **Project Construction Manager Ron Robison** | Seasoned highway construction manager with 32 years of experience
- **Lead Estimator John Shemwell** | 40-year construction veteran who manages estimates in Southern California

- **Scheduler Melissa Meese** | Scheduling expert with 23 years of experience, including CMGC and highway
- **Structures Construction Manager Dan Hemenway** | More than 20 years of structures, interchange and highway design and construction experience
- **Environmental Manager Caleb Mayfield** | Seven years of successful environmental compliance in California

This section includes:

- **Figure 1** below provides an overview of how the experience of each of our Key Personnel aligns with the Project goals;
- Key Personnel overviews highlighting why each person is highly qualified for the role, and their responsibilities, reporting and authority on this Project;
- An **organizational chart** on page 4 further clarifying the levels of authority and reporting structure during preconstruction and construction phases; and
- **Figure 3** on page 6 provides Key Personnel time commitments

Figure 1: Key Personnel experience aligned with the Project goals

Key Personnel	PROJECT GOALS						
	Safety	Mobility	Quality	Environmental Compliance	Project Delivery	Innovation	Effectiveness
Project Manager Mauricio Andrade	Managed team to complete more than 107,000 MH of work on Farrington Guideway without a safety incident	Developed T-REX MOT plan that minimized impacts to the traveling public and pedestrians; achieved 93% commuter approval rating	Developed successful QA/QC plan for T-REX, which resulted in no quality incidents, no rework and a highly satisfied client	Managed environmental compliance program for SDIA Landside, resulting in zero environmental violations	Planning expertise and project control management contributing to Farrington Guideway’s expected on-time delivery	Optimized construction approach to SDIA Landside during preconstruction, resulting in a GMP \$45 million below the original budget	Highly experienced project manager with successful track-record finishing projects on budget and on time
Project Construction Manager Ron Robison	Currently coordinates with BNSF on Foothill Extension to work safely around active railway	More than 14 years of successful MOT management on highway widening projects	More than 20 years of quality control management on transportation and infrastructure projects	Experience with similar environmental considerations working in the mountainous region near Tehachapi, CA	Managed on-time completion of Cottonwood Pass for Caltrans; successfully coordinates work schedules with SCE on Foothill Extension	Coordination with client, designers and agencies on T-REX alleviated challenges and accelerated construction	30 years of construction management experience results in no stone left unturned; proven partnering on several alternative delivery projects
Lead Estimator John Shemwell	40-year construction veteran with 12 years of field experience resulting in a comprehensive safety analysis for each alternative priced	SR-91 estimate coordinated with 8-phase MOT plan to provide construction access without impacting motorists	Transparent estimating practices resulting in high levels of quality and confidence among team members	More than 20 years of similar experience in SoCal, including on APWA’s Environmental Project of the Year - All American Canal	Estimate on SDIA Landside CMGC developed accurately and efficiently to meet preconstruction timeline	Six months of Kramer Junction analysis and brainstorming has already resulted in innovation development (see Section 6)	Led SDIA Landside CMGC estimate to reach GMP that was \$45 million below owner’s initial estimate
Scheduler Melissa Meese	18 years working in Southern California resulting in an in-depth understanding of scheduling for safety	Developed and maintained complex schedule that kept airport operations running smoothly during construction at SDIA Landside project	Coordinated schedules with adjacent contractor to develop master program schedule at client’s request at SDIA Landside project	Understands environmental restrictions and impacts on activities, also scheduler on APWA’s Environmental Project of the Year - All American Canal	Detailed scheduling led to completion of SDIA Landside CMGC project on time	25 years of industry experience ensures design and construction needs are carefully aligned	More than 18 years of CPM scheduling experience resulting in accurate and realistic schedules
Structures Construction Manager Dan Hemenway	Successful safety management on 8 highway/structures projects, including for Caltrans	Managed MOT plan for Chihuly Bridge over busy BNSF railway (as many as 100 trains/day)	Constructability input on PMH1 and I-15 Reconstruction increased quality and reduced lifecycle costs	Successful environmental compliance on several highway projects, including in Northern California	Supervised construction of 24 bridges while maintaining 2 lanes of traffic at all times through I-40/I-25 interchange	Reduced lane closures and consolidated operations on I-5 highway widening work to minimize traffic impacts	Successful management on Skagit River Bridge recovered prior schedule loss to finish the project on time
Environmental Manager Caleb Mayfield	No employee or public safety concerns as a result of environmental impacts on projects where Caleb managed the environmental program	Optimized new roadway design to minimize environmental impacts while still providing necessary access for large vehicles on Pine Tree project	More than 7 years producing accurate, complete and timely reporting of environmental compliance	No SWPPP or air-related enforcement actions on current I-405 project in LA; managed compliance in Tehachapi, CA	Coordinated with agencies and developed permit applications to facilitate compliance efforts on I-405 in LA	Grade design optimization on roadways in Tehachapi, CA minimized environmental impacts	Ensures environmental requirements get incorporated into design and work plans so there are no surprises during construction

**Project Manager
Mauricio Andrade****Why Mauricio was selected:**

Mauricio brings more than 20 years of significant relevant experience including managing alternative delivery highway widening and bridge construction, utility coordination, preconstruction design coordination, CMGC experience, interchange reconfiguration, and client and stakeholder relations. In his roles fulfilling project manager responsibilities on the San Diego International Airport Landside Improvements (SDIA Landside) and the I-25 Transportation Expansion (T-REX), Mauricio's leadership motivated the project team to overcome challenges resulting in several successes, including early completion of critical work. His innate passion for the work and ability to bring team members together to work collaboratively, communicate effectively, and work in the best interests of the project are qualities that set Mauricio apart. These qualities are what make him the best candidate for project manager on a CMGC project.

On the SDIA Landside project, Mauricio served as the project manager during preconstruction and construction, bringing continuity to the project that ultimately resulted in project completion on time and under budget. During preconstruction, Mauricio earned the client's trust by developing multiple estimates to assist the client in design choice. The team's work resulted in a negotiated GMP \$45 million under the client's original estimate. Mauricio will be committed to Kramer Junction throughout all phases to bring this same successful approach to managing the work.

Responsibilities on Kramer Junction: Mauricio will have ultimate responsibility for managing all aspects, including safety, quality, environmental compliance, budget, schedule, and resources to ensure Caltrans' Project goals are met at every step. During preconstruction, Mauricio will direct any partnering and co-location efforts on behalf of Kiewit; provide overall management of

the estimating process and development of the integrated Project schedule; oversee constructability reviews, risk workshops, and innovation development; and facilitate decision making at the Project level. Mauricio will assist Caltrans with stakeholder outreach, serve as the main point of communication to the Project team, ensure adequate personnel and resources are assigned to the Project, and be responsible for contractual matters.

Reporting and Authority: Mauricio will report to the Caltrans Project Manager as well as to Kiewit's Executive Management Team. He will work with the Executive Management Team to ensure the Project has the right people, equipment and resources to be successful. Mauricio will have stop work authority should he encounter any safety, quality or environmental compliance issues.

**Project Construction Manager
Ron Robison**

Why Ron was selected: Ron brings more than 30 years of experience safely managing field operations, site logistics, schedules, equipment availability, subcontractors, and

project personnel. He has assisted Caltrans and other clients and design partners through preconstruction efforts on some of our most complex transportation projects, including on the PMH1 project and the I-25 Transportation Expansion Project (T-REX) where he collaborated with the project teams to alleviate challenges and accelerate construction of major elements of work.

Ron will leverage his vast field experience during constructability reviews, risk assessments, and value engineering brainstorms to develop innovative solutions that will mitigate impacts to mobility, minimize maintenance costs, and ensure the Project goals are met once construction begins. In his current position, Ron regularly coordinates with SCE and BNSF. His understanding of these organizations and how to successfully coordinate schedules and operations will be a tremendous asset to keep this Project on schedule.

Responsibilities on Kramer Junction: With safety as a top priority, Ron will participate in constructability reviews to ensure a high-quality Project is constructed in accordance with the design and Project requirements, and Caltrans Construction Standards. Once construction begins, Ron will be onsite 100% of the time. He will regularly coordinate with stakeholders, adjacent contractors, and utilities to maintain efficient operations that will lead to on-time completion of the work.

Reporting and Authority: Ron will report to Project Manager Mauricio Andrade. He will have stop work authority should he encounter any safety, quality or environmental compliance issues.



Lead Estimator John Shemwell

Why John was selected: John is one of Kiewit's most experienced estimators in California, responsible for pricing and estimating services on several large and complex pursuits. As a 30-year Kiewit veteran working almost exclusively in Southern California, John has worked on several hundred estimates assessing price and risk associated with each project, including alternative delivery projects for Caltrans. He is familiar with working on CMGC contracts with an open cost model and guaranteed maximum price, having recently completed work on the San Diego International Airport Green Build Landside (SDIA Landside) CMGC project. John has been researching, analyzing and developing preliminary estimates for this Project so he is well positioned to begin collaborating with the Project team during preconstruction services.

Responsibilities on Kramer Junction: John's focus on open-book, transparent estimating practices will provide confidence and cost certainty to Caltrans. His participation in meetings where price, risk, schedule and other factors relevant to estimating are discussed will ensure this information is reflected in accurate estimating. He will manage the estimating staff, prepare construction bid price proposals with backup documentation, and coordinate formal milestone review meetings at the 30%, 60% and

90% stages, as well as the Opinion of Probable Construction Cost. He will produce any pricing and estimating reports required by Caltrans. During construction, John will continue to support pricing alternatives to ensure rapid decision making and efficient estimating to achieve critical schedule milestones.

Reporting and Authority: John will report to Mauricio. He will work collaboratively with Caltrans and the Independent Cost Estimator and share information used to develop pricing for the Project.



Scheduler Melissa Meese

Why Melissa was selected:

Melissa has 25 years of construction experience, including 23 years with Kiewit. She has served our clients as scheduler on several CMGC and alternative contract delivery method projects. Most recently, Melissa managed the program schedule for the SDIA Landside CMGC project for which she incorporated both the landside and airside schedules for the client. The SDIA Landside schedule had almost 1,900 activities and included several construction disciplines. Melissa served on that project from preconstruction to close-out, providing continuity that was critical to effective scheduling. She will provide the same continuity on this Project.

Responsibilities on Kramer Junction: Melissa will be responsible for creating and updating preconstruction and construction schedules including those for each Project phase and key milestones, deliverables, and dependencies, along with durations for design, preconstruction, procurement, construction management, and construction work.

Reporting and Authority: Melissa will report to Mauricio during preconstruction services and then to Construction Manager Ron Robison during construction. She will coordinate with Caltrans, the design team, stakeholders and utilities to incorporate relevant scheduling information to maintain an accurate and realistic schedule that can be flexible with the changing needs of the Project.



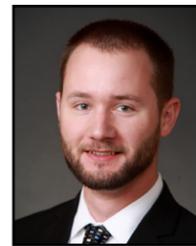
**Structures Construction Manager
Dan Hemenway**

We have chosen to include a dedicated structures construction manager because the structures work is a critical component of the Project that will affect other operations and the overall success of the Project if it is not properly coordinated and executed. The structures work will require careful management by an individual who has proven success safely managing similar structures work over highways and freight rail, while also maintaining motorist traffic and mitigating impacts to nearby utilities. In addition, incorporating the knowledge of a seasoned structures manager during preconstruction will ensure appropriate risk identification and mitigation, while also considering innovations and constructability issues that could have significant impacts to the schedule and budget.

Why Dan was selected: Dan brings more than 23 years of structures construction experience, including on projects such as the PMH1 project that involved building bridges over highways and coordinating with a BNSF-owned heavy railway. His experience includes eight highway and structures projects, where he has worked closely with Caltrans and other Departments of Transportation, design teams and stakeholders to enhance constructability to meet safety, quality, schedule and budget goals. Dan has worked on alternative delivery projects such as the I-15 Corridor Reconstruction where he worked with the Utah DOT to perform constructability reviews on substructure designs, then moved into the field to supervise the work, providing a seamless transition.

Responsibilities on Kramer Junction: During preconstruction, Dan will leverage his experience in constructability reviews, identifying and mitigating project risks, providing input for bridge types, developing innovations, work planning and phasing, scheduling, and value engineering. Similar to what he did on the I-15 Corridor Reconstruction, he will then move into the field to manage structures operations.

Reporting and Authority: Dan will report to Mauricio during preconstruction and Ron during construction. He will have authority to stop work should he encounter any safety, quality or environmental compliance issues.



**Environmental Manager
Caleb Mayfield**

We understand environmental compliance is a key focus and one of the Project goals that will ultimately measure the success of this Project. The inclusion of an environmental manager will significantly reduce the risk of project delays associated with environmental compliance. Working in California requires specific compliance measures and this Project also has several unique environmental commitments including protected animals and

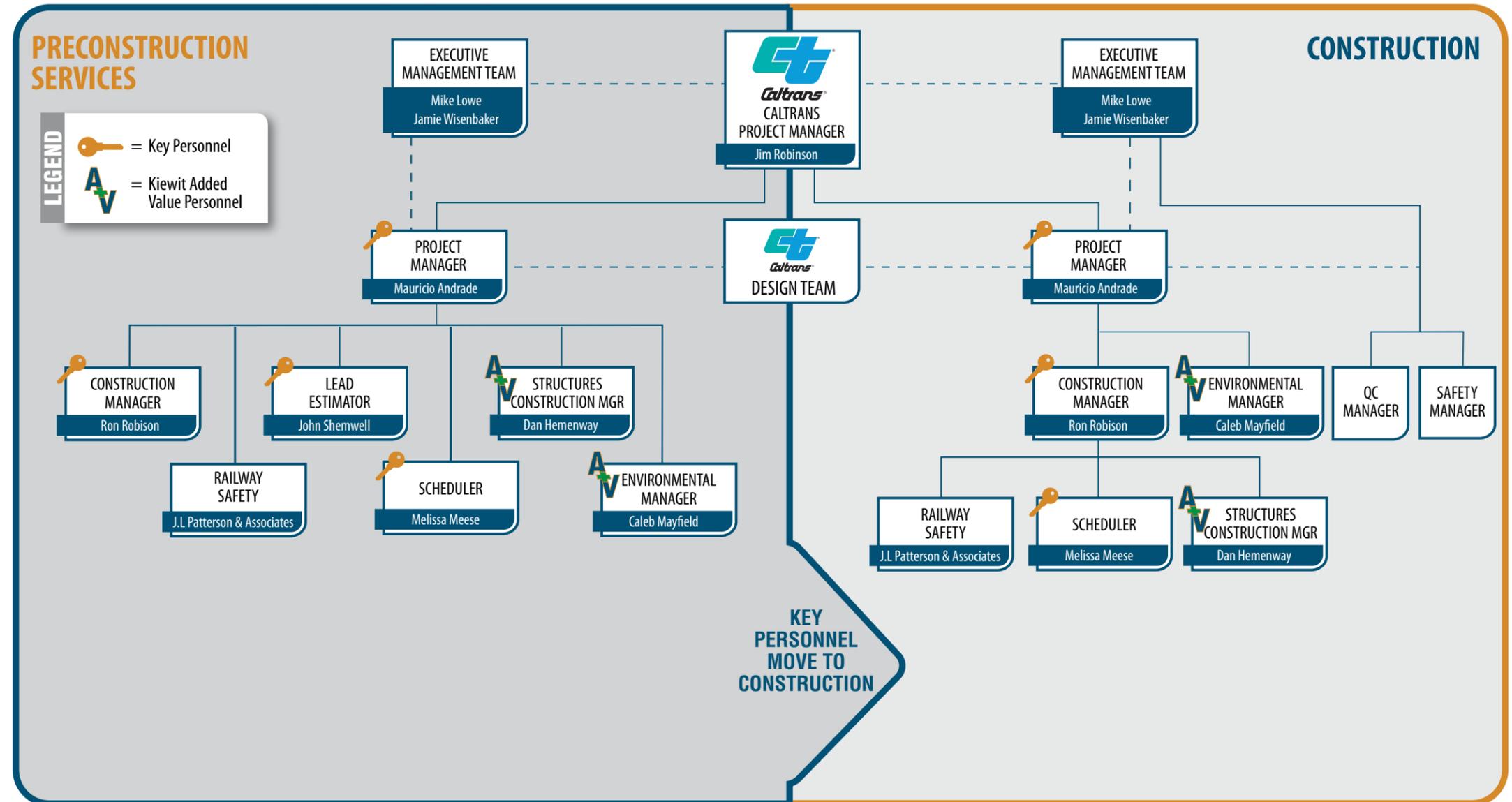
vegetation that may be encountered when establishing the new alignment. To ensure tracking and compliance with all environmental components, as well as to provide permitting assistance and training to all Project team members, we have included an experienced environmental manager on our team.

Why Caleb was selected: Caleb has been working in environmental compliance in Southern California for more than seven years, specializing in on-site environmental program management. For the past three years, Caleb has been working closely with multiple departments from Caltrans District 7 on the I-405

Sepulveda Pass Widening Project. Under Caleb's environmental leadership, the team has not had any SWPPP or air-related enforcements actions and has worked through bird nesting seasons without incident. Caleb brings established relationships with the regulatory agencies to help expedite approvals and ensure proper reporting.

Responsibilities on Kramer Junction: During preconstruction, Caleb will develop a Project-specific environmental program and assist with permit requirements. During construction, he will implement and manage the environmental program. He will provide training to team

Figure 2 : SR-58 Kramer Junction Expressway Project Organizational Chart





members, review work plans for necessary environmental protection measures, coordinate necessary permitting, and complete required reporting. He will serve as the liaison between the Project team and Caltrans' environmental team.

Reporting and Authority: Caleb will report to Mauricio. He will have the authority to implement environmental requirements and Best Management Practices, as well as to stop work should he encounter any safety, quality or environmental compliance issues.

Executive Management Team

Project Manager Mauricio Andrade will be supported by an Executive Management Team that will provide guidance and ensure the Project has the personnel, equipment and resources to be successful. The Executive Management Team will include Mike Lowe, Kiewit's California Area Manager, and Jamie Wisenbaker, Executive Vice President overseeing West Coast operations.

Mike has served in a management role for our Southern California work for more than 20 years. He recently was the Project Director for the successful SDIA Landside CMGC project and was an Executive Sponsor on the T-REX project.

Jamie has 25 years of experience in civil infrastructure construction and has overseen/managed several CMGC and Caltrans highway projects, including the SDIA Landside CMGC, Port Mann Highway 1, and the Diamond Bar Highway 57 Widening and Grossmont Summit projects for Caltrans. Mike and

AWARD

Kiewit has received 12 Marvin M. Black national partnering awards, and we plan to work with Caltrans and Project partners to win another.

Jamie will support the Project as necessary to lend expertise that will ensure the goals are achieved.

Building a Professional and Collaborative Project Team

All of our Key Personnel have experience collaborating with clients and designers during preconstruction. We believe co-location of key personnel and team members is critical to preconstruction efforts, and we will work with Caltrans to determine the right level of co-location. In this environment, team members can work together to establish and understand common goals that will facilitate teamwork and decision making at the Project level.

All Key Personnel are Kiewit employees who have worked together on past projects. We bring a single culture and set of principles that will drive efficient collaboration with Caltrans from day 1 to finish the Project on time. This experience includes:

- **Port Mann Highway 1 Design-Build:** CM Ron Robison, Structures CM Dan Hemenway, Exec. Oversight Jamie Wisenbaker
- **SDIA Landside CMGC:** PM Mauricio Andrade, Lead Est. John Shemwell, Scheduler Melissa Meese, Exec. Oversight Jamie Wisenbaker and Mike Lowe
- **T-REX:** PM Mauricio Andrade, CM Ron Robison, Exec. Oversight Mike Lowe
- **All American Canal:** CM Ron Robison, Lead Est. John Shemwell, Scheduler Melissa Meese
- **San Joaquin Hills Transportation Corridor:** PM Mauricio Andrade, Lead Est. John Shemwell

When team members make a genuine effort to partner at all levels, the results speak for themselves. We continue to refine our approach and work with each client to tailor the approach to what is best for the project, as we will work with Caltrans to do on Kramer Junction.

"It's no surprise that Kiewit has been a successful construction company for over 100 years ... Your company's depth of knowledge, interest in quality, your focus on the things that matter, and your employee's motivation to get the job done, are what set you apart from the rest."

-Jane Traffalis, Federal Highway Administration



Key Personnel Commitments

Kiewit has been building successful projects and relationships in Southern California for more than 69 years, and the majority of our Key Personnel also live and raise families there. We see this Project as an excellent opportunity to continue that legacy.

In order for the Project to achieve the level of success required, continuity between preconstruction and construction is of utmost importance. The interaction and relationships among all of the parties to find solutions and develop the best Project must be honored from start to finish. Kiewit’s Key Personnel involved during preconstruction will remain assigned to ensure commitments are upheld throughout the life of the Project.

Figure 3 shows our proposed Key Personnel time commitments. We understand that each of these Key Personnel may not need to spend 100% of their time on the Project during all phases, but we will guarantee their availability to partner with Caltrans and achieve the established goals throughout the duration of the Project. We are committed to finding the optimal level of commitment for each key person to get the most effective outcome.

Figure 3 : Key Personnel time commitments

Key Personnel	Percent Time Commitments		Other Commitments
	Design/ Preconstruction	Construction	
Project Manager Mauricio Andrade	100%	100%	All key personnel are committed to this Project and will be available 100%. This Project will be their top priority. We will work with Caltrans to determine the right level of commitment. Involvement in other projects will only be allowed if time permits.
Project Construction Manager Ron Robison	100%	100%	
Lead Estimator John Shemwell	100%	100%	
Scheduler Melissa Meese	100%	100%	
Structures Construction Manager Dan Hemenway	100%	100%	
Environmental Manager Caleb Mayfield	100%	100%	

Form D
PROPOSED KEY PERSONNEL INFORMATION

Name of Proposer: Kiewit Infrastructure West Co.

Position	Name	Years of Experience	Education and Registrations	Parent Firm Name
Project Manager	Mauricio Andrade	20	B.S., Civil Engineering, San Diego State University	Kiewit Infrastructure West Co.
Project Construction Manager	Ron Robison	32	U.S. Army, Operating Engineer and Kiewit education and training	Kiewit Infrastructure West Co.
Lead Estimator	John Shemwell	40	B.S., Civil Engineering, University of Missouri	Kiewit Infrastructure West Co.
Scheduler	Melissa Meese	25	General Studies, Cornell College, Mount Vernon, IA	Kiewit Infrastructure West Co.
Structures Construction Manager	Dan Hemenway	23	B.S., Civil Engineering, Washington State University	Kiewit Infrastructure West Co.
Environmental Coordinator	Caleb Mayfield	7	B.S., Management, Quincy Univ.	Kiewit Infrastructure West Co.

SECTION 6 – PROJECT UNDERSTANDING AND APPROACH

“The I-15 highway reconstruction project in Salt Lake City is an excellent example of how innovative methods on interstate construction projects can save taxpayer money and provide benefits to millions of transportation users.”

– Norman Mineta, U.S. Transportation Secretary,
I-25 Transportation Expansion Design-Build (T-REX), Denver, CO

Section 6 - Project Understanding and Approach

Caltrans has developed seven goals to align the team and define success—safety, mobility, quality, environmental compliance, project delivery, innovation and effectiveness. To achieve these goals, we have put together the Right Team and the Right Approach to deliver the Best Value to Caltrans, the traveling public and stakeholders. Section 6 describes our management approach for Best Value that is based upon our experience, a thorough reconnaissance of the alignment, a study of the preliminary documents and discussions with Project stakeholders. Our approach has the potential to reduce the schedule by eight months and save \$12 million.

A. PROJECT UNDERSTANDING

Local and Regional Significance

State Route 58 is a major east-west transportation artery that connects people and moves goods between I-5 in Bakersfield and I-15 and I-40 in Barstow, and carries a high volume of interstate truck traffic. As the southernmost route through the Central Valley, SR-58 provides a route that bypasses the traffic congestion of the Los Angeles metropolitan area. The purpose of the Kramer Junction Project is to close the gap in the four-lane expressway system for route continuity, and to improve operational efficiency of this locally and regionally significant facility.



“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, P.E., Sr. Project Manager, ADOT
SR 202L Red Mountain Design-Build,
Marvin M. Black award-winning project

US-395 is a major north-south transportation artery for travel between the eastern Sierras and the Inland Empire. Currently, US-395 is a two-lane highway. The Kramer Junction Project will improve the US-395 segment surrounding SR-58 by widening to four lanes and adding turn lanes to allow safe passing and easy access to SR-58.

Due to the dedicated efforts of Caltrans, the Project has gained wide local acceptance by the communities of Kramer Junction and Boron.

Major Project Scope Elements

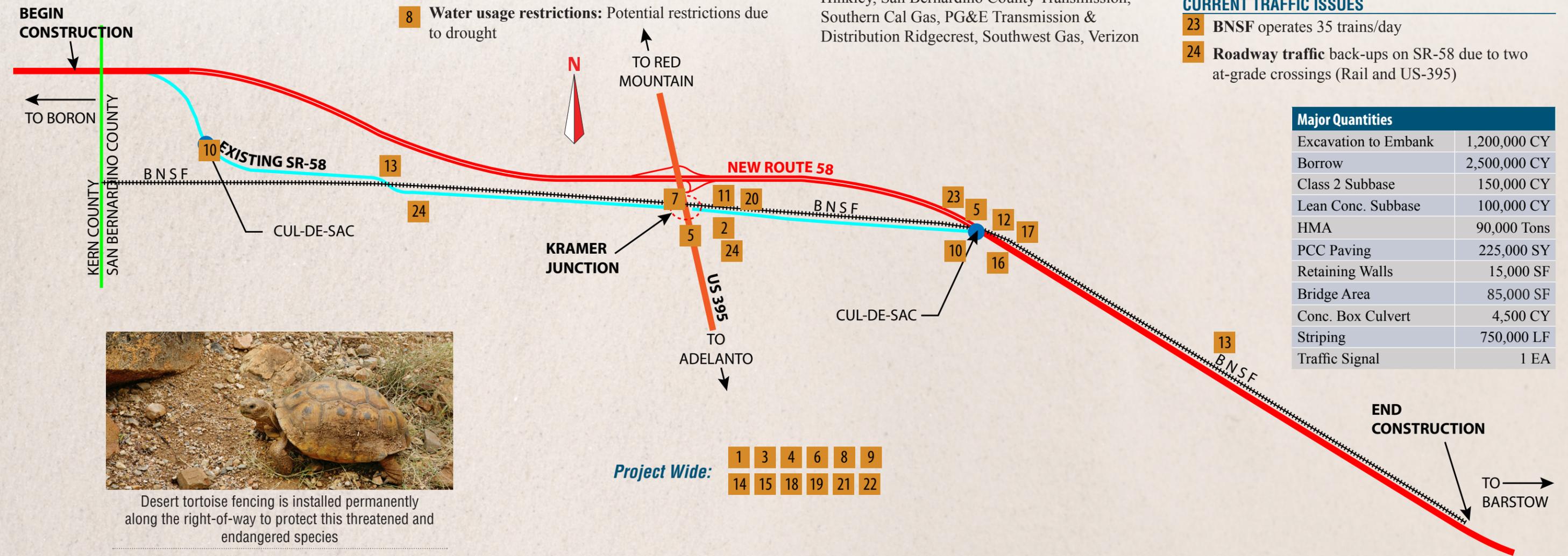
The major elements of the scope of work are:

- Improve 13.3 miles of SR-58, including transition striping areas
- Improve 2,560 feet of US-395
- Construct diamond/cloverleaf interchange at SR-58/US-395 Junction
- Construct overhead structure at BNSF Railway intersection
- Construct signalized at-grade intersection on the eastbound ramps at US-395
- Construct directional lighting at the SR-58/US-395 interchange
- Relocate electric transmission lines and transformer poles by Southern California Edison (SCE)

PROJECT UNDERSTANDING MAP

Over the past six months, our California-based construction experts have walked the alignment, conducted a thorough reconnaissance of the Project, met with stakeholders, and studied the preliminary documents to discern the Project complexities and constraints. **Figure 1** illustrates our understanding of this locally and regionally significant Project.

Figure 1: Project Understanding Map



ENVIRONMENTAL CONCERNS

- 1 **Threatened and Endangered Species:** Desert tortoise and Mojave ground squirrel
- 2 **Disruption to animal movement:** 2 oversize culverts east and west of US-395 installed for desert tortoise and Mojave ground squirrel passage (6' h x 10' w)
- 3 **Air Quality:** Requirement for construction monitoring to reduce emissions from equipment
- 4 **Plant Species:** Joshua trees shall be relocated
- 5 **Aesthetics:** Context sensitive solutions at bridges
- 6 **Cultural Resources/Paleontology:** No known historic properties or archaeological sites.
- 7 **Hazardous Waste Materials:** Potential at existing airplane hangar site
- 8 **Water usage restrictions:** Potential restrictions due to drought

RIGHT-OF-WAY ISSUES

- 9 **113 parcels** including government land parcels from the BLM and from Edwards Air Force Base
- 10 **Relinquishment of existing SR-58** to San Bernardino County; existing SR-58 remains as local access

UTILITY IMPACTS

- 11 **Southern California Edison (SCE)** transmission towers, transmission "H" frames, wooden transformer poles, wooden poles, transmission towers
- 12 **BNSF** switches and signals
- 13 **Fiber optic line** moves from median to north
- 14 **Protect-in-place** private sewer and water utilities along US-395, AT&T, El Paso Mojave Pipeline Operating Company, PG&E Gas Transmission Hinkley, San Bernardino County Transmission, Southern Cal Gas, PG&E Transmission & Distribution Ridgcrest, Southwest Gas, Verizon

PERMIT SUPPORT

- 15 **Temporary construction permits** (County of San Bernardino)
- 16 **Encroachment permit** (BNSF)
- 17 **Construction/maintenance agreement** for BNSF overcrossing bridge (CPUC)
- 18 **Storm Water Permit** (CSWRCB)
- 19 **Dig Permit** (DOD)

STAKEHOLDER ISSUES

- 20 **Existing utilities** feeding businesses and structures along US-395 maintained at all times
- 21 **Local work force** used during construction
- 22 **Local businesses** used during preconstruction and construction

CURRENT TRAFFIC ISSUES

- 23 **BNSF** operates 35 trains/day
- 24 **Roadway traffic back-ups** on SR-58 due to two at-grade crossings (Rail and US-395)

Major Quantities	
Excavation to Embank	1,200,000 CY
Borrow	2,500,000 CY
Class 2 Subbase	150,000 CY
Lean Conc. Subbase	100,000 CY
HMA	90,000 Tons
PCC Paving	225,000 SY
Retaining Walls	15,000 SF
Bridge Area	85,000 SF
Conc. Box Culvert	4,500 CY
Striping	750,000 LF
Traffic Signal	1 EA

- Project Wide:**
- | | | | | | |
|----|----|----|----|----|----|
| 1 | 3 | 4 | 6 | 8 | 9 |
| 14 | 15 | 18 | 19 | 21 | 22 |



Project Constraints

The potential cost and schedule drivers of the Project are heavily influenced by third parties and outside agencies due to the fixed durations for design, reviews and approvals. **Figure 2** summarizes these constraints. Additionally, major construction quantities, such as borrow and concrete paving, are also cost and schedule drivers.

The following is a discussion of Project constraints, their effect on the Project schedule, and our team’s proposed actions to meet the goal for substantial completion.

Right-of-Way (ROW). The acquisition of 113 parcels will affect the construction phasing and have the potential to delay the start of construction. We will collaborate with Caltrans to prioritize the construction phasing and schedule to correspond with the ROW acquisition. We will create an integrated ROW parcel delivery, design and construction schedule, then continuously track ROW certification and modify the schedule accordingly. This will be done during the preconstruction phase and provide the team with flexibility to optimize the construction schedule while mitigating risk.

Permits and Environmental Constraints. A BNSF Encroachment Permit for bridge construction will be necessary based on the current plans. A California Public Utilities Commission (CPUC) application and approval, a Right of Entry Permit and Construction and Maintenance Agreement are needed prior to beginning construction in the BNSF ROW. These documents need to be initiated as early as possible in the design phase in order to maintain the planned construction schedule. J.L. Patterson & Associates, Inc. (JLP) can assist with the preparation and review of these documents; and because of JLP’s excellent working relationship with BNSF and CPUC, they can assist in expediting this process. We have consulted with BNSF and JLP and both concur that the permit process can be completed in 12 months.

The requirements of the Environmental Commitments Record can constrain construction. These constraints may include the translocation of Desert Tortoise; the removal of vegetation outside the breeding season of September 15 to February 15; or work stoppage due to the identification of rare plants, burrowing owls, American badgers, or Mohave ground squirrels. Our team has included an Environmental Manager to train the team in the

Figure 2: Project Constraints

ANNUAL SCHEDULE CONSTRAINTS	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
High power demands: No SCE power line relocation work	Jan 1st				May 1st							Dec 31st
BNSF 4th quarter moratorium										Oct 1st		Dec 31st
Migratory bird nesting: No clearing and grubbing (BIO-18)		Feb 15th							Sep 15th			
Burrowing Owl nesting: Do not disturb (BIO-16)		Feb 1st						Aug 31st				
Desert tortoise active season: preconstruction survey required (BIO-24)			Mar 1st							Oct 31st		

MAJOR CONSTRAINTS - Estimated Dates	2017				2018				2019				2020			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Right-of-Way Certification Complete (1/1/2017)	★															
BNSF Encroachment Permit (7/1/2017)			★													
SCE Transmission Power Line Relocation (5/1/2018)					★											
Substantial Completion (5/1/2020)															★	



environmental requirements, provide a proactive approach to addressing issues, and a single point of contact for Caltrans on environmental matters.

Our project schedule will make allowances for critical environmental elements and third party and permit constraints that relate to both design and construction activities.

BNSF Coordination. We understand the importance of mitigating operational impacts to BNSF while constructing this Project, and our focus will be on the safety of the public, Caltrans employees and the normal operations of the BNSF trains.

Our teammate, JLP, has worked on many rail projects and assisted with on-track safety on BNSF rail property; and they are experts in mitigating rail impacts. We have a long history of working with JLP, most recently with Ron Robison on the Foothill Gold Line Extension and the Oceanside Passing Track Extension projects in California. During preconstruction, JLP will help our team develop the Rail Coordination Plan that takes into account current track usage, approvals of work windows, the rail “fourth quarter moratorium” and any other BNSF work windows that may constrain construction.

Southern California Edison (SCE) Coordination. The design, approval and relocation of the electrical utilities by SCE are on the critical path. The SCE process could possibly take 2 to 5 years, however alternative approaches are available to begin construction before relocation is complete, thereby mitigating this risk. Innovation #3 in Section 6.F is an example of a workaround that would allow construction to proceed if the relocation process is delayed.

The relocation of the transmission lines will be scheduled during an approved low power utilization window, typically February through April. We have successfully worked with SCE on previous projects to develop a relocation plan that facilitates the needs of all parties for the benefit of the project. Most recently, Construction Manager Ron Robison worked closely with SCE on utility relocations on the Foothill Extension Project, as well as the Walnut

Creek Power Plant and the Victorville 2 Hybrid Power Plant.

Community Relations. It is important to maintain respect and build on the community acceptance gained by the Department in order to prevent disruptions which could impact the Project. We have met with several stakeholders to understand their issues—e.g. Property owner James Darr, the City of Boron, the Borax Mine, BNSF, SCE and BLM. We can leverage existing relationships to better understand concerns, such as our 30-year relationship with Borax Mine.

We recognize that job growth and local spending are important to the local economy and this is a key to good community relations. While building work in California, Kiewit has supported remote communities, such as Yermo and Tehachapi, by employing the local work force, and patronizing local businesses for materials, supplies, accommodations, food, and services. We pledge to become a good member of the Kramer Junction community as we did in Yermo.

Concrete Paving Operations. Paving 52 lane-miles of PCCP requires specialized resources. To ensure efficient paving operations, significant equipment resources are required for aggregate production and concrete batching. Kiewit has demonstrated the ability to locate, develop and operate material sources. Our team has established mobile plants for concrete construction on other projects, including Olivenhain Dam and Diamond Valley Lake’s East Dam. In addition, our crews produced 257,000 cu. yds. of concrete for T-REX in Denver and 800,000 tons of hot mixed asphalt for the roadway widening in Yermo.

Borrow Sources. Over 2 million cu. yds. of imported borrow will be required, and identifying and developing local material sources with efficient access is important for schedule and cost. Kiewit has extensive experience in development of borrow sources and will evaluate mining operation cost against commercial sources. From our investigations, Borax Mine is the closest stockpile of borrow. Section 6.F discusses our innovative approach to giving you the most economical haul.

B. APPROACH TO CMGC CONTRACTING

The best approach to CMGC contracting starts with the Right Team on day one developing a strong relationship with the Department by integrating our organizations into one team with common goals. Section 6.B describes how we accomplish this through our focus on client relations, our CMGC methodology, as well as how we assist Caltrans in preconstruction and execute construction.

Client Relations

Overall client satisfaction consistently ranks higher on CMGC projects due to the integrated team approach of the client, contractor and designer working together to produce exceptional results. For that reason, CMGC is becoming a preferred method of delivery. Continuously improving our approach to the way we pursue and build work, partner and collaborate with our clients, and find innovative solutions and processes is an inherent part of our culture, and we look forward to working with District 8 on your second CMGC project to continue these efforts.



Projects delivered under a CMGC model scored more than 19% higher in client satisfaction surveys.

We have found that our most successful CMGC projects are executed with the client’s goals and satisfaction in mind and combine elements of collaboration, communication, and a joint approach to finding the right solutions to technical challenges. Great client relations are the foundation of client satisfaction and can be summarized by these six guiding principles:

1. **Understand our client’s perspective and internal processes** by early alignment of expectations beginning with a kick-off meeting where we will discuss such items as methods for tracking

the preconstruction budget, the competitive procurement process and steps to the GMP.

2. **Spend public funds wisely** by continually updating the estimate to evaluate decisions and maximize scope for the \$142 million budget and help position Caltrans to take the CMGC process to the next level.
3. **Over-communicate from Day 1** by communicating early and often in a straightforward and transparent manner.
4. **Let our performance do the talking** by continuously monitoring our performance against the Caltrans Project goals through internal and external audits.
5. **Build lasting partnerships** not only between Kiewit and Caltrans, but with external stakeholders such as BNSF and SCE.
6. **Build personal relationships** at all levels of each of our respective organizations by formal and informal partnering.

CMGC Methodology

Build an Integrated and Cohesive Team

Our handpicked group of senior construction professionals was selected specifically to integrate and act as an extension of Department’s Project team. Integrating our team begins with our initial partnering session so that a completely integrated organizational chart can be drafted. Kiewit successfully utilized this approach on other CMGC projects, such as the award-winning San Diego Airport Landside Project, to help each team member understand their role, who they will be working with directly, and the lines of communication. This builds collaboration as well as efficiency in delivery, innovation, and building strong relationships to resolve project challenges.

We are currently collaborating with District 4 on the San Francisco-Oakland Bay Bridge (SFOBB) Foundations Removal CMGC project to refine the design and support third party coordination. Based on this experience, **Figure 3** (on the following page) suggests how we may begin to integrate our teams to fit the Project’s needs.



Figure 3: Integrating the key personnel into the Caltrans team

KIEWIT TEAM MEMBER	KIEWIT ROLE	CALTRANS TEAM MEMBER
Mauricio Andrade Project Manager	Ultimate responsibility for meeting all Project Goals. Caltrans single point of contact for issues	Project Manager Design Manager Risk Manager
Ron Robison Construction Manager	Civil constructibility review and biddability	Civil Design Manager
Dan Hemenway Structures Manager	Structures constructibility review and biddability	Structures Design Manager
John Shemwell Lead Estimator	Develops estimate in collaboration with team members. Responsible for updating risk and cost matrix weekly	Independent Cost Estimator Caltrans Cost Estimator
Caleb Mayfield Environmental Mgr	Responsible for environmental training and permit compliance	Environmental Manager
Melissa Meese Schedule Manager	Responsible for integrated design and construction schedule	Schedule Manager

Partner Every Day

We believe that partnering is a commitment to building relationships with emphasis on up-front collaboration, clear definition of common goals and objectives, and rapid issue resolution at the lowest level. By working collaboratively every day to mitigate project risks and challenges, we establish a pattern of working together during pre-construction that carries through to construction. In addition to our annual independent evaluations, we take proactive steps to measure our effectiveness at quarterly intervals, keeping our focus on what matters the most to Caltrans. From the beginning, we put plans in place to address any concerns that should arise throughout the course of the Project and we also define success and Project milestones that will be celebrated together.

A high level of integration is routine for us: Kiewit is 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.

Cost and Schedule Certainty

Our CMGC methodology is to maximize the program scope for the available budget, and provide cost and schedule certainty to the Department. To better understand the Project, we have already

prepared a rough order of magnitude estimate and developed a schedule based on the preliminary drawings. As a result, after the preconstruction notice-to-proceed, our first focus will be on giving you the most economical borrow pricing, securing water agreements, and supporting the Department in third party coordination.

Preconstruction Approach – Focus on Effectiveness

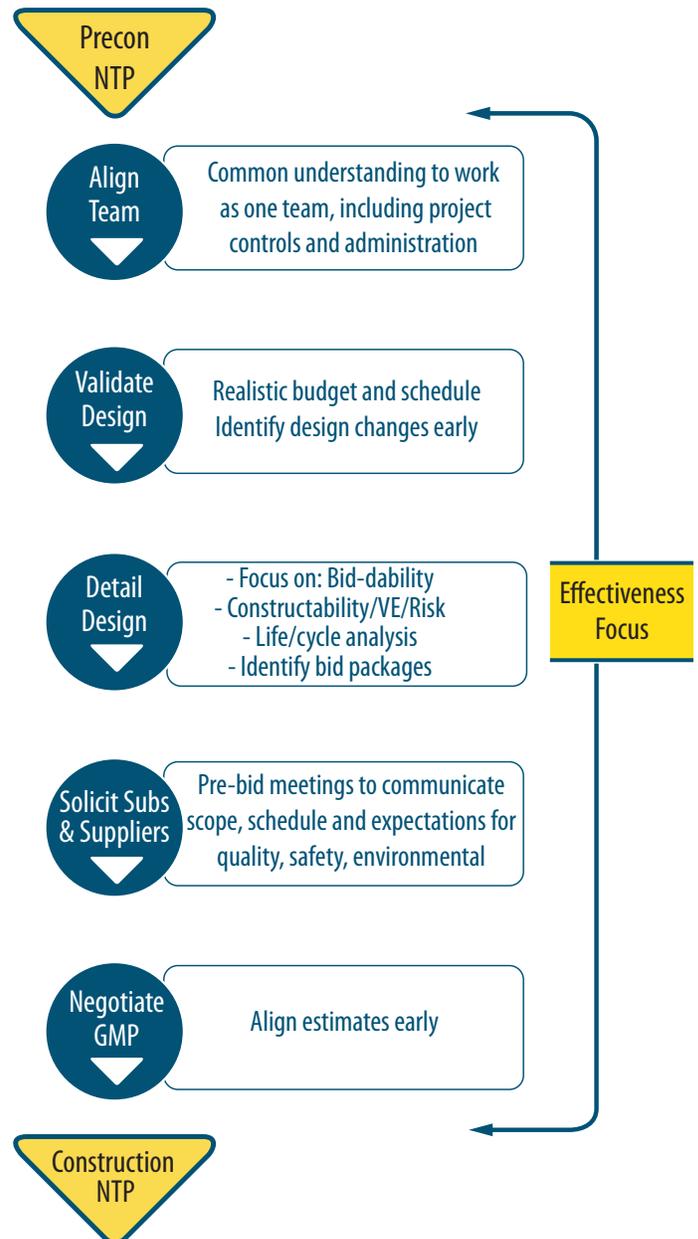
The preconstruction phase is the cornerstone for the well-orchestrated construction of the Project. Our preconstruction approach is to focus on effectiveness and eliminating coordination inefficiencies to maximize the Department’s time and money. This will be done by establishing workflows for when and how each entity provides input to protect the Department’s budgets and schedules. The project may require overlapping design and construction which would require multiple work package releases. This will require the team to collaboratively adapt processes, such as Right of Way Certification, Ready to List, to efficiently align with the procurement of the subcontractors and suppliers. We are already invested in the Project as our Project Manager, Mauricio Andrade, and Construction Manager, Ron Robison, have begun developing budgets, schedules, an innovations matrix and a risk register.

Figure 4 summarizes our preconstruction approach and provides examples of focus areas for effectiveness.

Based on our experience with Caltrans on the SFOBB Foundations Removal CMGC project and our nationwide CMGC experience, the following are important elements:

1. **Assist Caltrans.** Our job as the Construction Manager is to support Caltrans as an extension of your staff. Our suggestions must be made early for changes related to constructability and include a detailed evaluation of the costs and benefits. Our focus is to help move the Project forward, without impacting the design effort.
2. **Combine events for efficiency.** Our experience with past projects is that there are many meetings during preconstruction, and in order to make the process as efficient and effective as possible, we combine complementary meeting topics. An example is combining the interconnected topics of VE/risk analysis/constructability/bid-ability.
3. **Develop subcontractor understanding of the work and their responsibilities.** We believe in an integrated team approach that includes our subcontractor team mates. Meaningful participation by subcontractors, including DBE subcontractors, begins early in preconstruction with the solicitation process. We host informational workshops to inform the industry on the scope, schedule, goals, responsibilities and opportunities, and to select the most qualified subcontractors to support this Project. With this approach, every team member is committed to success in safety, quality and project delivery.
4. **Risk Management.** Central to CMGC contracting is our ability as a team to meet the Project goals by identifying risks and then working together to shrink or eliminate risks. This is discussed further in Section 6.E Risk Management.
5. **Seamless GMP negotiations.** We have developed reliable estimates on a consistent basis, including on the SDIA Landside CMGC project, ensuring that our clients know what to expect.

Figure 4: Our CMGC preconstruction approach



Construction Approach – Deliver High Quality Construction

The following are the elements we will use to deliver high quality construction to the Department:

1. **Continuity from Preconstruction to Construction.** All of our Key Personnel are involved in both preconstruction and construction. This continuity ensures that the knowledge gained in preconstruction is not lost and achieves the goal of a high quality, fully functional expressway meeting current design standards.
2. **Subcontractor Management.** We will engage with subcontractors on a consistent basis to mentor and monitor for compliance with safety, environmental, and quality standards. We will hold regular contract status meetings to foster open communication and support successful outcomes for all subcontractors in achieving the Project goals.
3. **Construction Execution Tools.** The tools shown in **Figure 5** are used to execute the safety, quality, environmental compliance, schedule and cost controls to deliver superior quality--and a satisfied client.
4. **Self-Perform Work.** Kiewit self-performs critical features of work where it is essential for us to control the schedule, budget, interaction with the public and, ultimately, the risk to the Department. For example, Kiewit would self perform the estimated 1,200,000 cu. yds. of roadway excavation and 2,500,000 cu. yds. of borrow placement.
5. **Efficient Project Closeout.** To reduce time-related overhead and ensure a rapid closeout of the Project, a closeout plan is developed with the Department’s team in the preconstruction phase including milestones, events, and assigns responsibilities.

Figure 5: Tools used to execute safety, quality, environmental compliance, schedule and cost controls



C. APPROACH TO MEETING GOALS

As we discussed throughout this SOQ, we are committed to meeting the Project goals and delivering the Best Value. To deliver these goals, it is essential to begin with the right organization and processes in pre-construction, and then transfer this knowledge to construction. **Figure 8** demonstrates how our team will use our organization and processes to achieve the Project goals and ensure a successful Project.

Figure 8: Approach to meeting Project goals

	Project Goals	Kiewit Leader	Project Organization & Approach
Safety	 <p>Maintain safety of the traveling public and employees during construction of the Project.</p>	<p>Project Manager</p> <p>Construction Mgr</p> <p>Safety Manager</p>	<ul style="list-style-type: none"> • Incorporate safety into design for the safety of the public and Caltrans maintenance staff after construction • Safety culture and training empowers workers, including Caltrans employees, in their personal safety • Subcontractor safety compliance monitoring • Daily, weekly, monthly safety meetings
Mobility	 <p>Minimize impacts to the motoring public, businesses and emergency services</p>	<p>Construction Manager</p>	<ul style="list-style-type: none"> • Traffic Management Plan coordinated with the Project schedule • Emergency responder briefings • Public outreach and communication • Continuous inspection and documentation of traffic control set-ups
Quality	 <p>Construct a high quality, fully functional expressway meeting current design standards</p>	<p>Quality Manager</p>	<ul style="list-style-type: none"> • Quality Plan that defines roles and responsibilities for acceptance of work • Field staff are responsible for checking for quality work prior to Caltrans inspection • Transparency in quality issues and corrective actions with design approval of field changes • Subcontractors trained in Quality Plan, then monitoring for conformance
Environmental Compliance	 <p>Comply with all environmental commitments and permits</p>	<p>Environmental Manager</p>	<ul style="list-style-type: none"> • Environmental Commitments Record tracking matrix that pro-actively assigns responsibility and reports status • Training of craft and staff on environmental requirements • Regular reporting of status on compliance
Project Delivery	 <p>Obtain substantial completion by May 2020. Early completion - 8 months earlier</p>	<p>Project Manager</p>	<ul style="list-style-type: none"> • Over-communicate beginning on Day 1 • Self-perform necessary work for greater control of the critical path • Integrated design & construction schedule continuously updated • Daily, weekly, monthly tracking of schedule • Potential to reduce the schedule by eight months
Innovation	 <p>Utilize the expertise of the Project team to continually evaluate the design and construction methods</p>	<p>Project Mgr</p> <p>Construction Mgr</p> <p>Structures Mgr</p>	<ul style="list-style-type: none"> • One page summary of each option analyzed (cost, risk, pros and cons) • Prepare Innovation Management Matrix summarizing all proposed, accepted and eliminated options
Effectiveness	 <p>Capitalize on opportunities to maximize funding, reduce schedule and deliver a quality project</p>	<p>Project Manager</p>	<ul style="list-style-type: none"> • Make decisions based on best value to the taxpayers • Early identification of design changes • Innovations register captures pros and cons • Coordinate the estimates prepared by Caltrans, Independent Cost Estimator, and Kiewit for quick comparison • Reduce time-related overhead by finishing early

D. TOP PROJECT RISKS AND SOLUTIONS

How we manage risk is central to the success of the Project and the success of our partnership. In **Figure 9** we present what we believe are the top priority risks that we may face together in meeting the goals of the Project, and the proposed risk strategies to shrink, eliminate and/or manage these risks.

Figure 9: Risks that we have identified and our potential solutions that will either reduce or eliminate the risk

RISKS IDENTIFIED	POTENTIAL SOLUTIONS - Reduce, Eliminate or Manage Risk	POTENTIAL IMPACTS					
		Cost	Schedule	Safety	Mobility	Quality	Environmental
Design							
Design changes suggested by Construction Manager impact design schedule and increase design costs. Design changes require additional environmental analysis or additional permits.	<ul style="list-style-type: none"> Analyze alternatives based on costs and benefits Make decisions early and quickly to manage costs in the best interest of the Department and taxpayers 	<input checked="" type="checkbox"/>					
Permits and approvals among multiple agencies, such as BNSF and CPUC, can delay delivery of a coordinated set of design plans and specifications	<ul style="list-style-type: none"> Recognize limited agency resources and adapt to agency needs by finding solutions and coordinating critical milestones Develop mechanism for limited NTP and break out early design packages to overlap design and construction 	<input checked="" type="checkbox"/>					
Delays in design, review and approval of SCE transmission power line relocation	<ul style="list-style-type: none"> Adapt the construction schedule to SCE requirements Take SCE relocation work off the critical path; innovation in Section 6.F provides options to accomplish this 	<input checked="" type="checkbox"/>					
Right-of-Way							
Condemnation process takes longer than anticipated; acquisition of parcels controlled by Federal Agency may take longer than anticipated	<ul style="list-style-type: none"> Create a parcel delivery schedule to integrate ROW acquisition with design and construction Continuously track ROW certification and adapt the construction schedule 	<input checked="" type="checkbox"/>					
Construction							
Adequate water supply for embankment compaction and dust control	<ul style="list-style-type: none"> Perform draw-down tests at private wells to confirm supply and to improve private wells that have high potential Execute water source agreements with private well owners and public supplier 	<input checked="" type="checkbox"/>					
Quantity overruns due to differing site conditions, hazardous materials encountered, or scope creep	<ul style="list-style-type: none"> We will work to preserve Caltrans contingency regarding overruns 	<input checked="" type="checkbox"/>					
The relocation of the overhead transmission lines by SCE is a long lead item and could cause delays. In addition, the relocation work must be scheduled during a low power utilization window, typically February through April	<ul style="list-style-type: none"> Adapt the construction schedule to SCE relocation needs SCE relocation off the critical path by performing bridge work with power line in place 	<input checked="" type="checkbox"/>					
Delays due to underground utilities not identified in design	<ul style="list-style-type: none"> Provide temporary options that may be implemented to mitigate potential schedule delays 	<input checked="" type="checkbox"/>					
Delays to traveling public on SR-58 during construction due to at-grade crossings	<ul style="list-style-type: none"> Traffic control plan to open WB lanes on new alignment after one bridge is complete to add more capacity 	<input checked="" type="checkbox"/>					
Paving 52 lane-miles of PCCP requires specialized resources	<ul style="list-style-type: none"> Kiewit will use our experience setting up mobile plants using our extensive equipment resources 	<input checked="" type="checkbox"/>					
Developing borrow source for hauling 2 million cubic yards of borrow	<ul style="list-style-type: none"> Kiewit can provide innovative solutions to the most economical hauling, as described in Section 6.F 	<input checked="" type="checkbox"/>					
Environmental Compliance							
Non-compliance with requirements and restrictions of the Environmental Commitments Record	<ul style="list-style-type: none"> Environmental requirements are incorporated into work plans and construction schedules Environmental Manager trains the team and is the single point of contact for Caltrans on environmental matters Early site investigations/clearances to identify any issues and help mitigate impacts 	<input checked="" type="checkbox"/>					
Stakeholder							
Local communities pose objections to the Project; media issues	<ul style="list-style-type: none"> Utilize local businesses and labor to engage the community in the benefits of the Project Support Caltrans' outreach efforts. Communicate prior to and during construction to engage the local residents, such as James Darr and Karen Callier, in how to best serve them Self performing work allows "boots on the ground" to respond immediately to concerns Plan for maintaining continuous service to businesses and structures along US-395 	<input checked="" type="checkbox"/>					

E. RISK MANAGEMENT

Iterative Process

The risk management effort is an iterative process where the effectiveness of the control actions is constantly evaluated, new risks discovered, and existing risks are reassessed. This iterative process continues through the life of the Kramer Junction Project until all risks are resolved or closed. Kiewit is currently assisting Caltrans District 4 in risk management for the SFOBB Foundations Removal CMGC project. Although the scope of work for that project is very different from the Kramer Junction Project, the process applies to both. **Figure 10** describes the process we are utilizing to identify, mitigate and price risk.

Figure 10: Risk Management



Our approach to managing risks is to shrink risk or eliminate risk, not to simply shift risk. Our ability as a team to meet the Project goals is closely tied to our ability to identify, reduce and manage risks. The CMGC approach to project delivery is one of the most effective risk management tools available to identify risks early in the Project lifecycle, and allow the opportunity to appropriately manage risk.

Work with the Department to identify and develop risk strategies early. This provides the opportunity to reduce the cost, shorten the schedule, and still deliver the scope required while allowing the contractor the opportunity to meet business objectives. In short, we are all incentivized to achieve common goals.

Involve the team to determine who can best handle the risk. Management of risk is a positive mechanism to involve the Project team and build unity, camaraderie and collaboration; and will assist in “right sizing” the contingency for all parties. For example, third party utilities would be Caltrans’ contingency whereas labor escalation belongs to Kiewit.

Accurate information on cost and schedule is key. Kiewit will prepare detailed cost estimates and schedules based on historical information in the context of the CMGC process. The means, methods, productions and schedule will be reviewed and discussed with Caltrans and stakeholders as part of the GMP process in an open-book format. The assumptions related to the risks identified as part of the risk process will be clearly identified so that all parties can focus their attentions appropriately. This enables the Project team to reach a GMP agreement by knowing the risks to cost certainty and schedule, and how they are being covered.

The ongoing and interactive process of defining, quantifying and eliminating risk will “**right size**” the contingency to the satisfaction of all parties, including funding agencies. It delivers the Project at maximum value and with the largest possible scope within the funding limits, and will result in the Project being managed with the fewest overall risk dollars being spent.



Ongoing Risk Assessment, Monitoring, Mitigation

Preconstruction

One of the most important preconstruction activities will be a bi-weekly meeting to connect risk review, value engineering/constructability evaluations, and GMP planning together into a single event. This focuses the team on established goals by combining the opportunity side of value engineering with risk and constructability for a complete picture. The event is structured to allow a review of risks, cost evaluation and innovations in a collaborative discussion with representatives of Caltrans, Kiewit, designers and key stakeholders who can progress decisions, provide creative ideas, and carry information back to their counterparts.

The risk review is captured in a Risk Register, an example of which is shown in **Figure 11**.

Our unique approach of combining VE/constructability/risk has been used successfully on other projects. Kiewit delivered this approach on the Utah DOT’s I-15 Reconstruction project. The \$1.38 billion project was schedule-sensitive as it had to be completed for the opening of the 2002 Olympic Games. The project was delivered ahead of schedule, with zero claims or outstanding issues, and unanticipated project savings were returned to the DOT at the end of the project. More recently, Kiewit again succeeded with the Utah DOT on the Mountain View Corridor CMGC project in Salt Lake City. The team delivered additional scope

for the original budget. This project also received positive accolades from UDOT and stakeholders; with no claims or outstanding issues.

Construction

During construction, detailed work planning will be reviewed and approved by Kiewit management prior to beginning field operations, with the known risks being engineered out of operations to the greatest extent possible. This detailed and systematic procedure of assessing, classifying, engineering, constructing and monitoring elements of project risk will minimize the exposure to the contractor, Caltrans and public during construction.

The work plans will identify risks such as:

- Work zone access and motorist safety
- Worker safety risks and mitigations
- Quality risks and mitigations
- Environmental risks and mitigations
- Requirements for inspection of temporary structures designed by a professional engineer
- Excavation permits to verify area is cleared of underground utilities

Construction pre-activity meetings will be held with the Project team, including inspectors and affected third parties, to ensure that the plan for operations is well understood and communicated before starting work. These steps will help deliver the Project safely and with minimal disruptions to the public.

Figure 11: An example of a Risk Register currently being used on the SFOBB Foundation Removal Project

SFOBB FOUNDATION REMOVAL RISK REGISTER				POTENTIAL COST / DELAY IMPACTS		MITIGATION PLAN								
UPDATED: February 2, 2015				\$ LOW	\$ HIGH	\$ LIKELY	DELAY CALENDER DAYS	RESP		ADD MONEY			MITIGATION MEASURES	CALTRANS ACTION NEEDED
ID #	RISK	POTENTIAL IMPACT	PROBABILITY OF RISK					GC	CALTRANS	DIRECT COST	CONTINGENCY	INSURANCE		
1	CT204 Permit Acquisition: New Enviro conraints delay permits, increase scope of work, or change means and methods	Postpone Pier E3 demolition. Missing the November blast window will delay project by one year.	20%				365				X		Risk to be evaluated in 3 ways: 1) Short Permit Delay 2) Long Permit Delay 3) Permit Changes Demo Methods	
2	CT205 Quantity Overruns or no method of payment for work defined on plans	Work shown in contract documents but not detailed in bid items. Or typo / math errors.	25%						X		X			Caltrans carries 4% contingency of overall budget
3	CT907 Hazardous materials over and above those identified in the contract	Delays and additional cost to project for remediation of hazardous materials	10%						X		X		Setup meeting between Caltrans & K/M to develop testing plan	Perform soil testing Caltrans carries 1% contingency of overall budget
4	CT903 Diffusive Site Conditions	Potential schedule delays and additional	5%								X			Contingency included in item 2



F. POTENTIAL INNOVATIONS

Our team brainstormed many potential innovations for the Kramer Junction Project based on our thorough review of the Project. We selected the following eight innovations to demonstrate the range of solutions that our team can deliver to adapt to the Department’s needs and achieve the Project goals. From the eight innovations, we have selected four to describe in detail (noted with *).

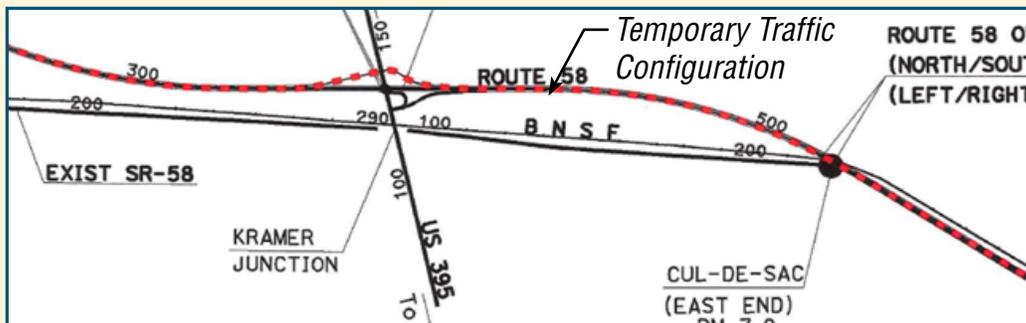
Innovation #	Innovation Description	Potential Savings	Benefit
1*	Early lane opening	\$-	Safety; adapt to mobility issues
2*	Off-highway truck hauls & temporary haul bridge across US-395	\$7,400,000	Safety; cost and schedule savings
3*	SCE transmission line workaround	\$325,000	Safety; solve schedule impacts
5	Locate borrow sources inside the ROW, then utilize the excavations for permanent storm water detention	\$3,650,000	Safety; cost and schedule savings
6	Temporary water pipeline to convey construction water to storage instead of hauling in trucks	\$450,000	Safety; cost savings
7	Test pile program to reduce pile length and establish driving criteria	\$200,000	Cost and schedule savings
8	Use of recycled material in the roadway structural section	\$400,000	Cost savings
		\$12,425,000	Cost savings

Innovation #	Innovation Description	Potential Cost	Benefit
4*	Accelerated bridge construction: SR-58/US-395 superstructure	\$375,000	Adapt to schedule impacts and mobility issues

1. Early Lane Opening

Project Constraints: The existing SR-58 lanes narrow from a four-lane expressway to a conventional two-lane highway resulting in operational inefficiencies.

Innovation: Prior to the completion of the SR-58/US-395 bridges, shift traffic from the existing two-lane highway to the new four-lane expressway. Traffic is temporarily routed around the SR-58/US-395 bridge construction using the westbound on- and off- ramps.



Benefits and Impacts to Project Goals

- **Safety:** Enhances safety of the traveling public by providing additional capacity
- **Mobility:** Early congestion relief and improved mobility, as well as providing direct frontage road access from the City of Boron to southbound US-395
- **Quality:** No impacts
- **Environmental Compliance:** No impacts
- **Schedule:** No change
- **Cost:** Potential added cost for temporary traffic signal at the intersection of the US-395 and SR-58

2. Off-Highway Truck Hauls & Temporary Haul Bridge Across US-395

Project Constraints: With more than 2 million cu. yds. of material required for this Project, hauling borrow is a major driver of both cost and schedule.

When hauling east of US-395 with construction equipment and materials (borrow, aggregates, concrete, water, formwork, and fuel) it will be necessary to flag the intersection of SR-58/US-395. This constrains the mobility of the traveling public, and slows construction productivity.

Innovation: Kiewit’s preliminary investigations and meetings with potential suppliers have determined that obtaining borrow from local sources and accessing the Project without hauling on public roads is an option. The proposed off-highway haul would be in areas previously disturbed.

A temporary haul bridge spanning US-395 and constructed within the right-of-way in the vicinity of the SR-58 and US-395 grade separation structures would eliminate the need for flaggers to control construction traffic. This temporary bridge would be located to conform with the SCE guidelines for horizontal and vertical clearances to the existing power lines, poles, and towers; and it would be designed to carry off-highway vehicle loads.

Benefits and Impacts to Project Goals:

- **Safety:** Enhances safety of the traveling public by reducing truck traffic and the related impacts to motorists
- **Mobility:** Enhances mobility of the traveling public by reducing truck traffic on SR-58, US-395 and local roads; and by eliminating the need for flaggers to control construction traffic entering, exiting, and crossing US-395 from the SR-58 ROW
- **Quality:** Improves quality due to better construction access to the work
- **Environmental Compliance:** Reduces noise and dust impacts
- **Schedule:** Enhances schedule control resulting from less haul units to manage and coordinate
- **Cost Savings:** \$7,400,000

Kiewit’s Successful Implementation of this Innovation:

Hauling with off-highway trucks is something we routinely perform on all types of earthmoving projects, such as highway construction, mining, cross-country pipelines, and dam construction

Kiewit has experience planning and designing temporary haul bridges on projects such as the San Joaquin Hills Toll Road (used a haul bridge spanned across SR-133: Laguna Canyon Rd) and the Glenn-Parks Interchange project near Anchorage, Alaska (see photo).

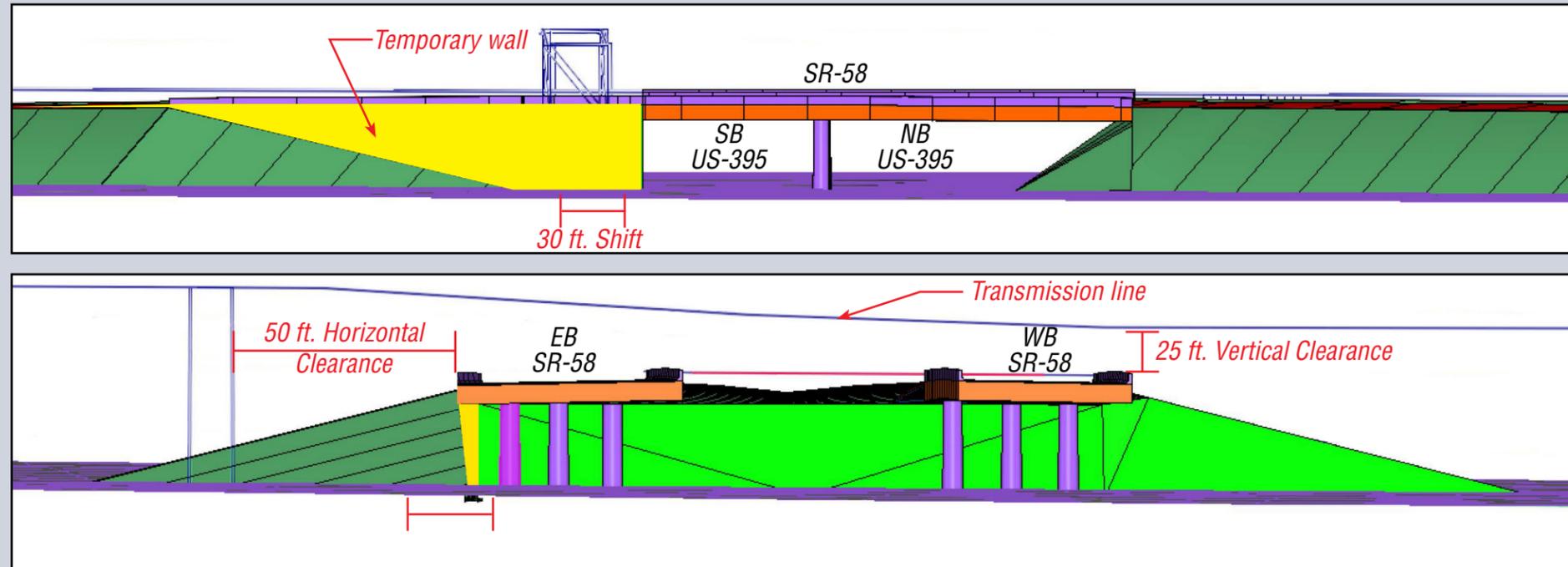


3. SCE Transmission Line Workaround

Project Constraints: The existing high-voltage transmission lines and towers require relocation. The construction of the SR-58/US-395 grade separation structures are constrained by SCE horizontal and vertical clearance requirements. SCE guidelines specify 25 ft. of vertical separation and 50 ft. of horizontal separation.

Innovation: Shifting the SR-58/US-395 grade separation structures provides a workaround for construction of the bridges with the SCE transmission lines in place. Shifting the bridges achieves the required clearances to the SCE facilities to remove the constraint. Specifically:

1. Shift the SR-58 alignment north approximately 40 ft. and construct a temporary wall at the bridge abutment to achieve the horizontal clearance.
2. Shift the west bridge abutments east approximately 30 ft. and maintain the planned widths for US-395.



Benefits and Impacts to Project Goals:

- **Safety:** Maintains required clearances to SCE power lines
- **Mobility:** No impacts
- **Quality:** No impacts
- **Environmental Compliance:** No impacts
- **Schedule Savings:** This innovation saves time-related overhead and adds the cost of a temporary wall
- **Cost Savings:** Assuming a 3-month delay, the total savings is \$325,000

Kiewit's Successful Implementation of this Innovation:

Kiewit constructed the Folsom Dam Bridge adjacent to a 230 kV transmission line while maintaining the required horizontal and vertical separations (see photo).



4. Accelerated Bridge Construction: SR-58/US-395 Superstructure

Innovation: The duration of superstructure construction and the related impacts to traffic can be reduced by utilizing the Self-Propelled Modular Transport (SPMT) method of construction.

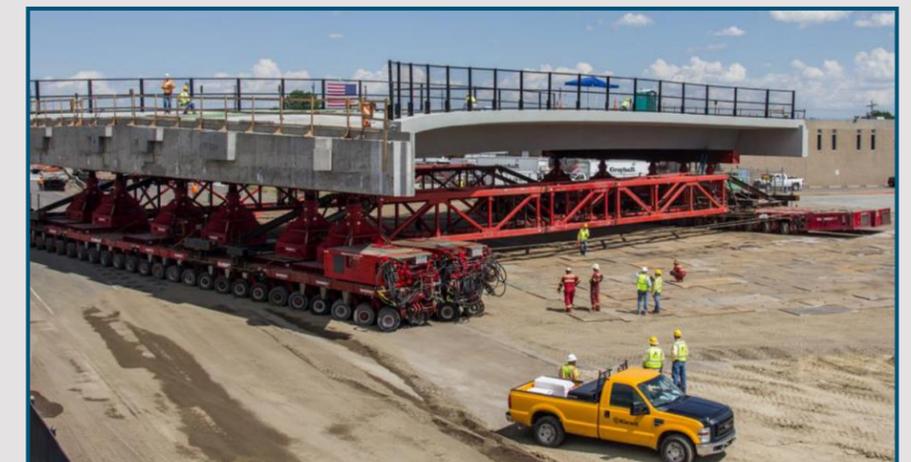
The SPMT method of construction involves fabricating each span of the bridge off the final alignment, raising the completed span with SPMTs, moving the span into position, and then releasing the jacks to place the span in its final position. This accelerates superstructure construction and eliminates crane clearance to power line issues.

Benefits and Impacts to Project Goals:

- **Safety:** Enhances safety by reducing impacts to traffic
- **Mobility:** Enhances mobility by accelerating bridge construction
- **Quality:** No impacts
- **Environmental Compliance:** No impacts
- **Schedule Savings:** This innovation could be used in a recovery schedule should SCE relocation work slip
- **Cost Savings:** Assuming one month of time-related overhead is saved, the total cost is \$375,000

Kiewit's Successful Implementation of this Innovation:

Kiewit is experienced in accelerated bridge construction using SPMT methods on projects such as the Pecos Street Over I-70 Bridge Replacement Project in Denver, Colorado where they built and transported a 156-ft. long span (see photo); and the Pioneer Crossing project in American Fork, Utah that required four spans with a maximum length of 190 ft.



APPENDIX A - RESUMES



“Throughout the project, Kiewit focused on activities critical to the project and worked with FHWA to develop solutions which met the contract requirements, enabled early completion, and minimized cost. ...Kiewit worked with FHWA in a very collaborative manner, while still recognizing and respecting the contract and the respective roles of the government and the contractor.

– Jane Traffalis, Project Manager,
Federal Highway Administration,
Deweyville Trailhead to Neck Lake Road, Prince of Wales Island, AK

APPENDIX A: RESUMES

- ♦ **PROJECT MANAGER** | MAURICIO ANDRADE *Page A-1*
- ♦ **PROJECT CONSTRUCTION MANAGER** | RON ROBISON *Page A-4*
- ♦ **LEAD ESTIMATOR** | JOHN SHEMWELL *Page A-8*
- ♦ **SCHEDULER** | MELISSA MEESE *Page A-11*
- ♦ **STRUCTURES CONSTRUCTION MANAGER** | DAN HEMENWAY *Page A-14*
- ♦ **ENVIRONMENTAL MANAGER** | CALEB MAYFIELD *Page A-17*



MAURICIO ANDRADE Project Manager

Professional Experience Overview

Mauricio has more than 20 years of experience with Kiewit working on several of our most challenging and complex projects. He has assisted our clients and design partners through preconstruction efforts on some of our most high-profile alternative contract delivery and complex transportation projects, including the Farrington Guideway urban elevated light rail project in Honolulu, HI; the I-25 Transportation Expansion (T-REX) in Denver, CO; and the San Diego International Airport Land-side CMGC Project. He has extensive experience working on urban highway projects, including T-REX and the San Joaquin Hills Transportation Corridor. Through his professional growth, Mauricio has honed his project management skills to become proficient in every aspect of CMGC contracting, including estimating, design coordination, and field construction management. Mauricio brings first-hand knowledge in design coordination, design review, estimating, schedule and budget, work plan review, quality control administration, subcontractor coordination, and the review and approval process. His abilities encompass coordination and planning of construction, staff supervision, safety, quality, schedule, traffic control, public information reporting, and environmental compliance.

Consistent with all Kiewit personnel, Mauricio’s diligence instituting safety and quality initiatives on projects has resulted in an exceptional performance record. These Kiewit-basic skills have given Mauricio the tools to actively manage project operations, while working with project controls staff to produce reliable schedules and cost forecasts on a weekly basis. This foresight has allowed him to make accurate adjustments to production means and methods to achieve projected budgets and schedule milestones.

Related Work Experience

Project Manager | Farrington Guideway | City and County of Honolulu | Honolulu, HI | Time on Project: 100% | Project No.: DTS-0900015 | 2013-Present

Mauricio is managing the civil scope of work for this urban, elevated light rail, design-build project. He oversees a team of discipline superintendents who perform drainage work, structure access, grading work, erosion control, and highway maintenance of traffic (MOT). Mauricio manages construction sequencing and MOT for building the elevated guideway over one of Honolulu’s busiest freeways.

He is engaged with the client on a daily basis. In addition to weekly client meetings, he assists the client with design changes and right-of-way acquisitions. He attends stakeholder meetings to collaborate with the client and other agencies regarding construction agreements, third



Years of Performing Similar Work:

20 Years – Kiewit
20 Years – Industry

Education:

B.S., Civil Engineering, San Diego State University

Licenses, Registration, Certifications and Training:

- Kiewit-sponsored training in areas including safety, quality, leadership, project management and project controls

Relevant Work Examples:

- Client relations including preconstruction service management on a CMGC project
- Experience managing and staging highway widening and bridges over highways
- Proven leader in the field
- Complex utility coordination to sequence construction work
- Stakeholder and third part coordination on major infrastructure projects





party utility agreements, construction access along public institution land, and locations for future light rail stations. Utility work is a significant part of this project. Mauricio manages third party utility relocations, including large power lines, natural gas, and fuel lines. He also works with municipalities to accelerate relocations to ensure the project stays on schedule.

The \$526 million Farrington Guideway project is the first of three projects for the construction of the Honolulu High Capacity Transit Corridor. As part of Honolulu Authority for Rapid Transportation’s (HART) plan to provide better public transportation for the area, the City and County of Honolulu contracted Kiewit to design and construct approximately 6.8 mi. of light-rail track to link west Oahu with downtown Honolulu. The scope of work encompasses significant utility relocations, reconfigurations of highway medians and left turn pockets, roadway widening, access road construction, and reconstruction of box culverts, retaining walls, and associated site grading. Also included in this contract are the foundations for seven stations and a rail maintenance facility. Because construction is taking place along the busy Farrington Highway and H-1/H-2 interchange, the team has developed a detailed phasing plan dividing the work into distinct stages to reduce the number and duration of lane closures as well as limit traffic disturbances to off-peak hours.

Owner Contact Information:

Karley Halsted, (808) 768-6251, khalsted@honolulu.gov

Project Manager | San Diego International Airport Landside Improvements | San Diego County Regional Airport Authority | San Diego, CA | Time on Project: 100% | Project No.: 201400 | 2009-2012

Mauricio was involved with the project from start to finish, including proposal development, preconstruction and the establishment of a Guaranteed Maximum Price (GMP), and through to substantial completion. During preconstruction, Mauricio assisted in the development of construction packages, scheduling, and constructability reviews. He was integral in establishing the construction budget iteratively through a rigorous design development phase that included significant value engineering and innovation, which resulted in a GMP more than \$45 million below the engineer’s estimate. By supporting the client and helping them save cost on the landside package, the Airport Authority was able to move budget to other areas of the airport programs.

During the construction stage, Mauricio managed all aspects of work, including field construction, subcontractors and client relations. Working under live airport conditions, Mauricio managed a schedule that often included minute-by-minute detail to ensure there were no impacts on airport operations. To further limit impacts, Mauricio collaborated with a diverse stakeholder group, including a separate airside contractor. Under Mauricio’s management, the team completed a fee parking lot ahead of schedule for the client.

This \$227 million project improved landside infrastructure at the Airport’s Terminal 2 by enhancing mobility, access and traffic flows. Work included a four-lane, 1,300-ft. elevated departure roadway with Smart Curb check-in; transit center; 16,100 SF combined United Service Organization and Parking Management Office; and improvements to access roads and parking areas. The renovations included demolition and highly sequenced construction of new pedestrian bridges to minimize impacts on airport operations. Project successes included early completion of revenue-generating parking space, and exceeding environmental requirements by earning LEED Gold certification. Under Mauricio’s project management, this project was completed on schedule and under budget.

Owner Contact Information:

David Brush, (619) 400-2933, Dbrush@san.org



Project Manager/Design-Build Coordinator | I-25 Transportation Expansion (T-REX) | Regional Transportation Department | Denver, CO | Time on Project: 100% | Project No.: 1HAA00268 | 2001-2004

As Design-Build Coordinator, Mauricio coordinated all design for civil work, drainage, utilities and traffic control. He successfully managed cost, progress, quality, and schedule for 150 designers and established the cost control systems, schedule and design progress for more than 15 design firms. He created and participated in task force groups with the client to resolve design-build, quality and client issues. He also directly managed five engineers who provided constructability reviews before releasing them for construction.

Mauricio managed all field operations related to overall structure and roadway construction and maintenance including grading, drainage and utilities. He was also responsible for the daily planning and scheduling of activities for all grading and drainage crews and inter-discipline coordination for roadway, bridges, structures, walls and traffic control. Demolition of bridges over existing traffic was accomplished during carefully coordinated weekend interstate closures and paved the way for reconstructing newly designed bridges over live traffic. Mechanically Stabilized Earth (MSE) walls 60-ft. tall were constructed along with 30-ft. tall soil nail walls, box culverts and drilled shafts. Mauricio conducted task force groups related to drainage, walls, grading and traffic control, and assisted in the development of the QA/QC Plan.

This \$1.28 billion multimodal design-build transportation project consisted of both highway and transit work, including 17 mi. of urban freeway reconstruction, upgrades to a 50-year-old drainage system, 2.8 million SF of sound/retaining walls, 61 bridges and tunnels, 400 utility relocations, enhanced pedestrian and bicycle access, and 19 mi. of grade separated, double-track light rail transit. An innovative temporary high-occupancy vehicle (HOV) lane was constructed to help mitigate traffic impacts during construction. This project was completed 22 months ahead of schedule.

Owner Contact Information:

Del Walker, (303) 764-8819, del.walker@parsons.com OR Richard Clarke, (303) 299-2184, richard.clarke@rtd-fastracks.com

Project Engineer | San Joaquin Hills Transportation Corridor | Transportation Corridor Authority | Orange County, CA | Time on Project: 100% | Contract No.: S90-19 | 1996-1997

Mauricio was in charge of drainage, steel water line installation, switch pump stations, MSE walls, and traffic control operations on this 17-mi., six-lane toll road. Each of the project's four major sections had its own quality control unit responsible for inspection, testing and documentation of all work. Mauricio managed the engineering staff for quality, cost-to-budget, tracking progress, compliance, and field design changes.

This \$800 million design-build project included 10 interchanges encompassing 68 bridges, 725,000 SF of retaining walls, and 32 million CY of excavation. The project required mapping and appraisal of more than 100 individual parcels and incorporated more than 300 environmental mitigation measures into the design. Onsite co-location of the owner, designer and contractor under one roof enhanced the construction process and cultivated trusting working relationships between all parties involved. The roadway was opened to traffic more than three months early, and received several awards.

Owner Contact Information:

Gene Foster, Project Manager (retired), (714) 345-4757, tincanman63@hotmail.com

Additional Experience

- Construction Manager, San Vicente Pumping Facilities, San Diego County Water Authority
- Construction Manager, McCarran Airport Airsides Improvements, Clark County Department of Aviation
- Construction Manager, LAX Southside Taxiways, Los Angeles World Airports





RON ROBISON Project Construction Manager

Professional Experience Overview

Ron has more than 30 years of experience managing field operations, site logistics, schedules, equipment availability, subcontractors, and project personnel. He has assisted our clients and design partners through pre-construction and construction efforts on some of our most high-profile alternative contract delivery and complex transportation projects, including on the Port Mann Highway 1 Improvements, Foothill Extension Phase 2A Alignment, and the I-25 Transportation Expansion Project (T-REX). His experience filling a similar role on eight highway projects will bring significant benefit to this Project. Ron’s ability to provide constructability feedback, risk identification and mitigation, and value engineering expertise will be critical to achieving the Project goals.

Working as a team with Chris, Ron’s extensive construction management background supports Chris’s leadership and oversight of the Project team. Ron has honed his construction management skills to become proficient in every aspect of CMGC contracting, including estimating, design coordination, permit coordination and field construction management. His abilities encompass coordination and planning of operations, staff supervision, safety, quality, schedule, traffic control, public information reporting, and environmental compliance. Ron has demonstrated his ability to successfully partner with multiple team members and stakeholders, including BNSF and Southern California Edison, to manage projects like the Kramer Junction Project.

Related Work Experience

Construction Manager / Project Manager | Foothill Extension Phase 2A Alignment | Metro Gold Line Foothill Extension Construction Authority | Pasadena to Azusa, CA | Time on Project: 100% | Project No.: C1135 | 2014-Present

Ron is responsible for overseeing all project operations, including performance in safety, quality, engineering, construction, cost, productivity, and subcontracting results. He regularly collaborates with the client and design team, and oversees a team of approximately 70 staff, 225 craft, and 20 subcontractors. Ron also coordinates closely with Southern California Edison on the transformer and substation work necessary for track electrification. In addition, he works closely with BNSF and JL Patterson to secure necessary permitting, coordinate designs, and to re-locate/rebuild nearly 3 miles of new rail line. Ron served as Construction Manager from January to November of 2014 prior to becoming Project Manager.

This design-build project includes final design and construction of 11.5 miles of double light rail main track, 15 bridges, and a maintenance and operations facility. The project begins in Pasadena in the middle of the I-210 freeway, where Kiewit left off on the Gold Line Phase 1 Project,



Years of Performing Similar Work:

21 Years – Kiewit
32 Years – Industry

Education:

U.S. Army, Operating Engineer and Kiewit education and training

Licenses, Registration, Certifications and Training:

- Kiewit-sponsored training in areas including safety, quality, leadership, project management and project controls

Relevant Work Examples:

- Caltrans experience
- 14+ years highway widening construction management experience
- Successful MOT implementation on highways and interchanges
- Coordination with freight rail, including BNSF
- Relationship with Southern California Edison
- Excellent safety record
- More than 15 years experience in Southern California



and runs to Citrus College in Azusa, CA. Relevant aspects include utility coordination and relocation, maintenance of traffic, coordination with freight rail, significant stakeholder coordination, environmental permitting and staged construction.

Owner Contact Information:

Chris Burner, Chief Project Officer, (626) 305-7022, CBurner@foothillgoldline.org

Construction Manager | Port Mann Highway 1 Improvement Project | Ministry of Transportation and Infrastructure | Vancouver, BC | Time on Project: 100% | Project No.: None | 2009-2014

Ron managed several operations including ten new bridges, four major interchanges, 11 miles of eight-lane highway construction, earthworks, drainage, MSE walls, road works, paving, traffic control, and utility relocation. He was responsible for safety, scheduling, production, cost, subcontractors, contract administration, training, and owner relations on this 11-mile segment. Ron coordinated daily with the adjacent freight rail, owned by BNSF, to schedule work and flaggers such that safety was ensured and impacts to operations were minimized. Ron managed department staff and supervisors on this multiple-shift job.

This \$2.7 billion design-build project's scope of work includes construction of a 37 km section of the Highway 1 corridor, adding one lane in each direction west of the new Fraser River Crossing and two lanes in each direction east of the crossing with significant upgrades to approximately 10 interchanges. This massive project also includes the construction of a new 10-lane bridge crossing the Fraser River, replacing the existing Port Mann Bridge which will then be demolished. Due to the ingenuity and efficiency of the project team, the Port Mann Bridge opened a full year earlier than originally required. Along the project alignment, two highway bridges cross over active railway lines. Both of these locations are owned by BNSF and required significant coordination of flaggers, schedules and operations. Other relevant aspects include utility coordination and relocation, extensive maintenance of traffic, significant stakeholder coordination, environmental permitting, and staged construction over existing highway.

Owner Contact Information:

Norm Richard, West Section Manager, TICorp, (604) 250-1727, nrichard@ticorp.ca

Construction Manager | Pine Tree Wind Farm Design-Build | Los Angeles Department of Water and Power | Tehachapi, CA | Time on Project: 100% | Project No.: 21727 | 2007-2009

Ron managed maintenance and field supervisors during the construction of 88 turbines and 28 miles of access roads. He contributed heavily to the logistics planning of the delivery of the wind turbine generators to the remote mountainous location.

The primary scope of this \$147 million project included the design, engineering, material procurement, and construction of 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 scope also included the overall site construction management and interface coordination at the facility including the activities of other contractors working for LADWP.

Owner Contact Information:

Louis Ting, Los Angeles Department of Water and Power, (213) 367-0239, louis.ting@ladwp.com

Project Manager | Cottonwood Pass | California Department of Transportation | San Luis Obispo, CA | Time on Project: 100% | Project No.: 06-3829U4 | 2006-2007

Ron was responsible for safety, scheduling, production, cost, subcontractors, contract administration, training, and owner relations. He managed job staff, equipment maintenance crews, and field supervisors on this



multiple-shift project. This \$31 million project constructed 4 miles of new roadway, 6 miles of roadway realignment/widening, and replaced a bridge. Work included grading, finishing, drainage, walls, bridges, paving, and utility relocation. The job was completed on time and with no recordable safety incidents.

Owner Contact Information:

Eric Karlson, RE, Caltrans, (559) 246-7337, eric_karlson@dot.ca.gov

Construction Manager | All American Canal | Imperial Irrigation District | Yuma, AZ | Time on Project: 100% | Project No. 05-43 | 2006

Ron managed site development and scheduled multiple shift work including excavation, embankment, and multiple subcontractors. His other responsibilities included owner relations along the highly sensitive California and Mexico border.

The project's scope of work included 21 million cu. yds. of excavation and 1.2 million cu. yds. of paving. The paving work included transitioning the existing canal into the new concrete lined canal in five locations. In addition, work involved producing nearly 300,000 tons of concrete aggregate from an on-site source and installing and removing more than 4 million pounds of sheet pile twice for the in-water tie-in paving.

Owner Contact Information:

Larry Bell, Parsons (owner's representative), +971-56-709-6675, lawrence.m.bell@saudiparsons.com

Construction Manager | I-25 Transportation Expansion (T-REX) | Colorado Department of Transportation | Denver, CO | Time on Project: 100% | Project No.: 1HAA00268 | 2004-2006

Ron's civil construction manager responsibilities included coordinating work and schedules with the client, the design team, and several city agencies during construction. This collaboration helped alleviate challenges and accelerate construction of major elements of work. Ron supervised multiple grading, drainage, wall, and utility superintendents and their crews. He was also responsible for writing work plans, developing and maintaining schedules, cost control, and implementing the safety and quality programs.

This \$1.28 billion design-build interstate project reconstructed 17 miles of I-25 and I-225, constructed 19 miles of new double-track light rail transit lines, 13 light rail stations, three parking structures, numerous drainage improvements, and more than 75 bridges and tunnels. The highway work included reconstruction of eight interchanges, ranging from flyover bridges to overpass and underpass structures. Construction under live traffic required detailed traffic staging and phasing. In addition, over 400 utilities were relocated within the proposed right-of-way to accommodate highway widening and construction of light rail transit.

Owner Contact Information:

Richard Clarke, (303) 299-2184, richard.clarke@rtd-fastracks.com

Job Superintendent | Lake Hodges Pipeline | San Diego County Water Authority | Rancho Santa Fe, CA | Time on Project: 100% | Project No.: None | 2004

Ron was responsible for excavation, pipe installation, and backfill operations. He supervised three crews consisting of nearly 50 craft personnel. Ron developed and implemented traffic control and work plans. The scope included installation of a 5,850-ft pipeline to connect Lake Hodges and the Olivenhain Reservoir.

Owner Contact Information:

N/A

Grading Superintendent | Metro Gold Line Phase 1 | Metro Transit Authority | Los Angeles to Pasadena, CA | Time on Project: 100% | Project No.: 2000-02 | 2002-2004

Ron supervised the retaining wall construction, drainage installation crews, electrical crews, material import





operations, and the finishing operations along a 6-mile stretch of the project. He was also responsible for all 28 street improvements along the alignment consisting of demolition, utility protection/relocation, grading, and backfill activities. He supervised asphalt paving, flat work, utility, and striping subcontractors. Ron coordinated operations with surveyors and equipment superintendents. During the design, Ron performed constructability reviews on the street improvements. He also developed work packages prior to construction to accelerate critical elements. Ron worked closely with designers and city agencies to help solve problems or deficiencies before they occurred.

This design-build project extended 13.7 miles of light rail from downtown Los Angeles to Pasadena. Features of the project included the construction of six light rail stations, a 230-ft pedestrian bridge over a freeway, seismic retrofits, two cut-and-cover tunnels, and more than 3 miles of retaining walls. In addition, 28 street crossings and major intersections were reconfigured during the work.

Owner Contact Information:

N/A

General Superintendent | I-80 Gold Run | California Department of Transportation | Gold Run, CA | Time on Project: 100% | Project No.: 03-1A80U4 | 2002

Ron was responsible for site preparation and establishing the concrete batch plant, the aggregate screen plant, traffic control, and crib wall construction. The scope of work included asphalt concrete paving, PCC paving, concrete barriers, fiber optics installation, and electrical work along a section of I-80 through the Sierra Mountains.

Owner Contact Information:

N/A

General Superintendent | I-15 Corridor Reconstruction Design-Build | Utah Department of Transportation | Salt Lake City, UT | Time on Project: 100% | Project No.: SP-15-7-(135)296 | 2000-2002

Ron supervised swing shift operations including mass grading, import, finishing, structure excavation, MSE wall installation, drainage, utilities, fiber optics, electrical, structure support, road closures, and white paving operations. He facilitated production and compliance with the project's safety and quality programs.

This \$1.38 billion design-build project provided significant highway improvements including the reconstruction of more than 16 miles of freeway and the reconstruction of 142 bridges. The team built 3 major freeway-to-freeway interchanges and widened the 6-laned highway to 12 lanes. Other relevant aspects included complicated staging and traffic handling, coordination of complex utility relocations, stakeholder coordination, rail coordination, and environmental compliance.

Owner Contact Information:

N/A

Superintendent | US 95 Bonners Ferry | Idaho Department of Transportation | Bonners Ferry, ID | Time on Project: 100% | Project No.: NH-F-5116(026) | 2000

Ron was responsible for approximately 3 miles of the reconstruction work. He supervised clearing and grubbing, striping, excavation, drainage, and embankment crews. Ron managed the delivery and placement of imported material, shot rock and finish grade construction. The scope of work included realignment, widening, and reconstruction of approximately 3 miles of US 95 in northern Idaho.

Owner Contact Information:

N/A



JOHN SHEMWELL Lead Estimator

Professional Experience Overview

As a 40-year construction veteran and Kiewit’s Estimating Manager in our San Diego office, John has worked on hundreds of infrastructure estimates assessing price, schedule and constructability, including alternative delivery projects for Caltrans. He is familiar with working on CMGC contracts with an open cost model and guaranteed maximum price, having recently completed work on the San Diego International Airport Green Build Landside (SDIA Landside) CMGC project. John was responsible for estimating and comparing estimates for budget and guaranteed maximum price purposes on civil and structural scopes as design progressed from concept drawings through final design. John supported the design development process through estimating to help Kiewit and the client reach the guaranteed maximum price, which was \$45 million below the owner’s initial estimate. Additional successful estimates include the All American Canal, San Joaquin Hills Transportation Corridor, and Smuggler’s Gulch - Area V and VI Border Infrastructure System.

John understands how to successfully manage cost, schedule and facilitate issue resolution from preconstruction through construction. Drawing on his considerable experience and understanding of how we build work, John regularly manages estimate teams to estimate milestone Opinion of Probable Construction Costs.

John has estimated work in terrain similar to that of the Kramer Junction Project, so he brings a unique understanding of the risks involved in working in the desert. He has been studying this Project for more than a year, conducting numerous site visits as well as meeting with local stakeholders to understand project issues and concerns. He is adept at developing the quantities and cost estimates critical to the analyses of design alternatives and discovering ways to meet Project goals while reducing overall costs, which will be a great benefit to Caltrans for the Kramer Junction Project.

Related Work Experience

Lead Estimator | I-5 North Coast Corridor Phase 1 | California Department of Transportation | San Diego, CA | Time on Project: 100% | Project No.: N/A | 2014

John led a team of estimators in brainstorming and establishing order of magnitude pricing for this CMGC SOQ proposal. They used concept drawings and data available to support the SOQ effort with enhanced project understanding and innovative ideas.

Kiewit submitted a SOQ for CMGC services on this \$550 million project. Scope included one high occupancy vehicle (HOV) lane in each di-



Years of Performing Similar Work:

30 Years – Kiewit
40 Years – Industry

Education

B.S., Civil Engineering,
University of Missouri

Licenses, Registration, Certifications and Training:

- **Kiewit-sponsored training in areas including safety, quality, leadership, project management and project controls**

Relevant Work Examples:

- **Experienced open-book estimator**
- **Extensive CMGC and alternative delivery experience**
- **Detailed knowledge of Project site, challenges and concerns**
- **20 years Southern California experience**



rection from Lomas Santa Fe Drive to SR 78; replacement of the MacKinnon Avenue Overcrossing; a direct access ramp (DAR) and multi-use facility at Manchester; replacement of the San Eijo and Batiquitos lagoon highway bridges; and construction of soundwalls.

Owner Contact Information: N/A

Lead Estimator | San Diego Airport Green Build Landside CMGC (SDIA Landside) | San Diego County Regional Airport Authority | San Diego, CA | Time on Project: 10-100% over 4 years | Project No.: 201400 | 2008-2013

John was responsible for estimating and comparing estimates, as required, for budget and guaranteed maximum price purposes on civil and structural scopes as design progressed from concept drawings through final design. John supported the design and development process through estimating to help Kiewit and the Airport Authority reach the guaranteed maximum price, which was \$45 million below the owner’s initial estimate. John assisted in estimates when the design reached the critical 30, 60 and 90 percent completion. The project finished \$10 million below the initial estimate.

The \$227 million CMGC project provided much-needed improvements to Terminal 2 to enhance mobility, access and traffic flows. Work included a four-lane, 1,300-ft. elevated departure roadway with Smart Curb check-in; transit center; 16,100 SF combined USO and Parking Management Office; and improvements to access roads and parking areas. Project successes included completion \$45 million below original estimate, 34% participation by small and disadvantaged businesses, and early completion of critical parking space.

Owner Contact Information:

Thella Bowens, President, (619) 400-2404, tbowens@san.org

Lead Estimator | Mid-Coast Corridor Transit Projects | San Diego Association of Governments | San Diego, CA | Time on Project: 100% | Project No.: N/A | 2013-2014

As the lead estimator for the civil scope of work on this CMGC pursuit, John led the team’s efforts with constructability reviews and budget and cost estimating. He also developed work methods, material take-offs, and cost analyses. This \$800 million CMGC project will extend trolley service from Old Town to the University City community, expand transportation capacity, and reduce congestion.

Owner Contact Information: N/A

Lead Estimator | SR-91 Corridor Improvements Design-Build | Riverside County Transportation Commission | Corona, CA | Time on Project: 100% | Project No.: N/A | 2012-2013

During this design-build pursuit, John led an estimating team of 15 staff in quantifying, pricing and assessing risks for the SR-91 project. The scope of work included demolition, earthwork, bridges, retaining walls, drainage and paving. John’s team interacted weekly with designers and consultants to continually optimize the design and resolve geotechnical challenges. As part of the estimating effort, a P6 construction schedule was coordinated with an eight-phase Maintenance of Traffic Plan to provide construction access, while ensuring mobility on this congested freeway. John’s estimate was verified by a second estimate team. He led the coordination of these two independent estimates.

Owner Contact Information: N/A

Lead Estimator | Smuggler’s Gulch - Area V and VI BIS | USACE | San Diego, CA | Time on Project: 100% | Project No.: W912BV-07-D-2018 | 2007-2008

John led a team of estimators on this design-build project for the USACE that involved 1.5 million cu. yds. of excavation. John leveraged his local knowledge in implementing innovative ideas in the estimating phase regarding earthmoving and ground improvement that significantly advanced the project schedule. Innova-





tion, collaboration and efficient management resulted in project completion one year ahead of schedule.

This design-build project involved the design and construction of 10,660 ft. of border fence and associated site improvements for the USACE. The project limits extended from the Pacific Ocean approximately 3.25 mi. inland to the tie-in with existing border fence. Our team worked with the USACE and the CBP to build a safe, quality and environmentally conscious project that garnered an “outstanding” rating from the USACE.

Owner Contact Information: Julie Martinez, RE, USACE, (858) 569-5238, julie.a.martinez@usace.army.mil

Lead Estimator | Sunrise Power Link | San Diego Gas & Electric | San Diego, CA | Time on Project: 100% | Project No.: N/A | 2009

John led a team of estimators and was responsible for quantifying and estimating the civil scope of work which included earthwork, drainage, road surfacing, retaining walls, traffic control, tower foundations, permanent and temporary environmental measures, and other attendant civil scope for this joint venture effort. Two estimates for the same scope of work were independently prepared, compared, reviewed, assessed and adjusted prior to bid close out. Kiewit submitted a bid to build 120 mi. of new 500 kv electric transmission lines through mostly remote and rugged terrain in Imperial and San Diego Counties, CA for this project.

Owner Contact Information: N/A

Lead Estimator | All American Canal | U.S. Army Corps of Engineers (USACE) | Imperial County, CA | Time on Project: 100% | Project No.: 05-43 | 2008

John led the estimate for the scope of work which included earthwork, water diversion, sheet pile diversion walls, aggregate processing, miscellaneous metalwork, temporary cofferdams and dikes, temporary and permanent erosion control, temporary work trestles and overhead. The job demanded two complete independent estimates. Typical estimating tasks for this scope required extensive review of soil and groundwater information, knowledge of groundwater dewatering methods, knowledge of desert terrain and weather conditions, comparison of alternate earthmoving techniques, risk assessment, comparison of temporary power methods and costs, material quantification, interaction with specialty consultants, prebid interaction with the client, interaction with subs, suppliers, and equipment dealers, and estimate review and close out. Following a successful estimate, Kiewit was contracted to construct approximately 12 mi. of new concrete-lined canal through the Glamis Sand Dunes.

Owner Contact Information:

Jerry Reed, (619) 522-6600, jreed@sdewa.org OR Larry Bell, Parsons (owner’s representative), (971) 56-709-6675, lawrence.m.bell@saudiparsons.com

Lead Estimator | San Joaquin Hills Transportation Corridor Design-Build | Transportation Corridor Agency | Orange County, CA | Time on Project: 100% | Project No.: S90-19 | 1994-1995

Throughout the design process, John interacted with the designers and owners to provide constructability reviews, comments, and direction pertaining primarily to drainage, earthworks and geotechnical issues. He also worked closely with the designer’s specification writers in developing job specifications using Caltrans Standard Specifications as a guideline. Kiewit was responsible for construction of 10 interchanges encompassing 68 bridges, 725,000 sq. ft. of retaining walls, and 32 million cu. yds of excavation on this \$800 million project. The design-build team co-located with the Transportation Corridor Agency and Caltrans to ensure close coordination throughout the project.

Owner Contact Information:

Gene Foster, Project Manager (retired), (714) 345-4757, tincanman63@hotmail.com



MELISSA MEESE Scheduler

Professional Experience Overview

Throughout her career, Melissa has refined her expertise in Critical Path Method (CPM) scheduling. She understands the fundamental importance of accurate schedule management in supporting timely decision making, as well as visibility and accountability. Her experience includes managing project preconstruction and construction schedules to help ensure that a project hits milestone deadlines.

For the San Diego International Airport Green Build Landside project, Melissa led the effort, at the request of the client, to integrate the landside improvement schedule with the adjacent contract for the terminal airside expansion to accommodate the needs for overlapping work areas and complex systems integration. Melissa worked closely with the client during preconstruction and construction to create and advance program schedule requirements that formed the basis of the P6 Master Schedule for the \$1 billion Green Build Program. This effort allowed the client to effectively recognize issues early, which provided the project teams time to collaborate and reach effective resolutions while maintaining a program design and construct timeline that met the client’s needs.

In her 23 years with Kiewit, Melissa has worked on a wide variety of heavy civil construction projects in Southern California, including the San Joaquin Hills Transportation Corridor Design-Build. Her background and extensive training in contract management, scheduling, estimating, and client relations results in a comprehensive approach to scheduling.

Related Work Experience

Scheduler | San Diego International Airport Green Build Landside (SDIA Landside) | San Diego County Regional Airport Authority | San Diego, CA | Time on Project: 100% | Project No.: 201400 | 2009-2014

As scheduler, Melissa was responsible for training, mentoring and developing a team of project management system experts and users. She provided support and expertise to address the client’s request for assistance and advice on the coinciding airside project schedule management systems. Activities included scheduling, document control and project reporting during preconstruction and construction. Melissa met with the owner and airside project management team weekly, which allowed them to mitigate scheduling issues and keep the project on track to hit key milestones and finish on time. Melissa also led the development of the Work Breakdown Structure (WBS) and development of schedules and budget data for WBS elements. She assembled and verified schedule and cost data and provided oversight for incorporation of contract schedules into an integrated design and construction schedule. Melissa supervised the preparation and maintenance of budgets from approved estimates, and



Years of Performing Similar Work:

23 Years – Kiewit
25 Years – Industry

Education:

General Studies, Cornell College,
Mount Vernon, IA

Licenses, Registration, Certifications and Training:

- Kiewit-sponsored training in areas including safety, quality, leadership, project management and project controls

Relevant Work Examples:

- 18 years CPM scheduling experience
- Local knowledge and experience
- Experience coordinating CMGC preconstruction activities
- Familiar with scheduling complex projects with multiple schedule constraints



the preparation of formal notifications for requests for allowances. Melissa maintains status reports, including labor productivity, schedule status, financial analysis, cost performance and earned value reports. The SDIA schedule had almost 1,900 activities including four activities with constraints (substantial completion, final completion, opening of short-term parking lot and opening of United Service Organization [USO] and Parking Management Office [PMO]), 22 stakeholder interface points (which Kiewit further defined into 54 touch-points to ease all stakeholders' schedules and to clarify work windows for construction staff), 20 long-lead activities, and design and construction integration of several project elements.

The \$227 million CMGC project provided much-needed improvements to Terminal 2 to enhance mobility, access and traffic flows. Work included a four-lane, 1,300-ft. elevated departure roadway with Smart Curb check-in; transit center; 16,100 SF combined USO and PMO; and improvements to access roads and parking areas. The renovations included demolition of existing pedestrian bridges and highly sequenced construction of new pedestrian bridges to minimize impacts on airport operations. Partnering with the client was vital to limit impacts and ensure the success of the project. Project successes included completion \$45 million below original estimate, 34% participation by small and disadvantaged businesses, early completion of critical parking space, and earning LEED Gold certification (exceeding the required Silver certification).

Owner Contact Information:

David Brush, (619) 400-2933, Dbrush@san.org

Scheduler | Rattlesnake Ridge Border Fence | U.S. Army Corps of Engineers (USACE) | Campo, CA | Time on Project: 35% | Project No.: W912BV-07-D-2018 | 2008-2009

Melissa was responsible for schedule coordination for three USACE border fence contracts (Tecate, Rattlesnake Ridge and Jacumba). Melissa met weekly with USACE regarding the schedule to ensure that key milestones were being met at all three jobs, which were being performed concurrently. In addition, she managed information flow to the USACE, and ensured all contract specifications and responsibilities were adequately met.

The projects were spread out in remote areas along 37 mi. of the California and Mexico border. All three-projects were managed out of the Campo Office. Campo is centrally located on State Route 94 between Tecate, Mexico and Jacumba, CA. The projects involved clearing and grubbing the existing terrain, drilling and shooting, and rough grading for the patrol roads.

Owner Contact Information:

Cynthia Myrtetus, (213) 452-3247, cynthia.h.myrtetus@usace.army.mil

Contract Administrator | Smuggler's Gulch - Area V and VI BIS | USACE | San Diego, CA | Time on Project: 65% | Project No.: W912BV-07-D-2018 | 2008-2009

Melissa was responsible for all contract administration functions including cost-loaded schedules, pay estimates and change management. She negotiated all project subcontracts and coordinated with the electrical subcontractor in the preconstruction and construction of onsite power, lighting and communication needs. During preconstruction, she worked with the concrete superintendent to develop the construction work plan for the triple-barrel reinforced concrete box culvert. Innovation, collaboration and efficient management resulted in this project being completed one year ahead of schedule.

This design-build project involved the design and construction of 10,660 ft. of border fence and associated site improvements for the USACE. The project limits extended from the Pacific Ocean approximately 3.25 mi. inland to the tie-in with existing border fence. The majority of the work was performed within 200 ft. of the existing primary border fence between the United States and Mexico. The project was very unique



because of its close proximity to Mexico and need to work in the midst of U.S. Custom and Border Patrol (CBP) operations. Our team worked with the USACE and the CBP to build a safe, quality and environmentally conscious project that garnered an “outstanding” rating from the USACE.

Owner Contact Information:

Gregory Schulz, (858) 569-5238, Gregory.M.Scultz@usace.army.mil

Scheduler | All American Canal | San Diego County Water Authority | Yuma, AZ | Time on Project: 100% | Project No. 05-43 | 2007

Melissa’s duties included developing, updating and monitoring the P6 CPM schedule. Because of political delays and environmental approvals outside the project’s control, Melissa managed an intensive effort with the Imperial Irrigation District representatives to develop detailed recovery schedules. The All American project is located 20 mi. west of Yuma in the southeast corner of California. Kiewit was contracted to construct approximately 12 mi. of new concrete-lined canal through the Glamis Sand Dunes. The project involved a significant amount of cofferdam installation and dewatering work, five tie-ins to the existing canal, mass excavation, pile driving, paving and retaining wall construction.

Owner Contact Information:

Jerry Reed, (619) 522-6600, jreed@sdcwa.org OR Larry Bell, Parsons (owner’s representative), +971-56-709-6675, lawrence.m.bell@saudiparsons.com

Scheduler | Olivenhain Dam | San Diego County Water Authority | Escondido, CA | Time on Project: 100% | Project No.: SPEC 513 | 2001-2003

Melissa created and managed the preconstruction and construction schedules from start to finish on this project, including each project phase and key milestones. During the dam erection, Melissa was responsible for permit acquisition and for training and supervision of the project’s 13 engineers. She was also responsible for cost control and contract administration with the client and subcontractors. Melissa worked with the subcontractors to see that their submittals were in order. During the project’s second phase, Melissa was responsible for the design and construction of a stand-by power plant. She was exclusively responsible for coordinating design changes during construction and supervising all operations during plant construction.

The Olivenhain Dam was the largest roller-compacted concrete (RCC) dam in the United States at the time of its construction. The scope of work included 1.4 million cu. yds. of RCC, a 300-ft. high inlet/outlet structure with gates, and a downstream control structure with valves, filters, and piping. Major quantities included 3 million tons of crushed aggregate and 40,000 cu. yds. of structural concrete.

Owner Contact Information:

Jerry Reed, (619) 522-6600, jreed@sdcwa.org

Estimator | San Joaquin Hills Transportation Corridor Design-Build | Transportation Corridor Agency | Orange County, CA | Time on Project: Varied | Project No.: S90-19 | 1994-1995

Melissa worked with Lead Estimator John Shemwell during the development of the initial estimate. She continued to support the project pricing alternatives during construction. Kiewit was responsible for construction of 10 interchanges encompassing 68 bridges, 725,000 sq. ft. of retaining walls, and 32 million cu. yds of excavation on this \$800 million project. The design-build team co-located with the Transportation Corridor Agency and Caltrans to ensure close coordination throughout the project.

Owner Contact Information:

Gene Foster, Project Manager (retired), (714) 345-4757, tincanman63@hotmail.com



DAN HEMENWAY Structures Construction Manager

Professional Experience Overview

Dan brings more than 23 years of structures construction experience, including on projects involving bridges over highways and requiring coordination with heavy rail. His experience includes eight highway and structures projects, where he has worked closely with Caltrans and other Departments of Transportation, design teams and stakeholders to enhance constructability to meet safety, quality, schedule and budget goals.

Dan is currently the structures project manager for the \$2.4 billion Port Mann Highway 1 Improvements design-build project in Vancouver, British Columbia where his tasks include constructability reviews, client relations, public relations, railroad coordination, and construction oversight. Dan’s team completed critical in-water work operations on schedule and opened the bridge to allow stakeholders to start collecting tolls, which was a key milestone on the project.

Dan also gained valuable alternative delivery experience on the \$1.4 billion I-15 Corridor Replacement project in Salt Lake City, Utah where he worked closely with the design team performing constructability reviews on substructure design. He then took his design knowledge to the field where he supervised construction of the 4.3-mile-long Jordan Segment.

He has additional experience in railroad coordination and urban interstate expansion and reconstruction projects from the \$221 million I-40/I-25 (“Big I”) Interchange reconstruction project in Albuquerque, New Mexico; the \$144 million Cypress “E” freeway reconstruction project in Oakland, California; and the Chihuly Pedestrian Bridge in Tacoma, WA that spanned six lanes of I-705 and three sets of active BNSF railroad tracks.

Related Work Experience

Structures Construction Manager | Port Mann Highway 1 Improvements Project | Ministry of Transportation and Infrastructure | Vancouver, BC | Time on Project: 100% | Project No.: None | 2008-2015

Dan is responsible for the approach structures, which are a combination of span-by-span and balanced cantilever precast segmental construction, and the superstructure’s record-setting, 2,788-ft.-long main span. Dan’s tasks include constructability reviews, client relations, public relations, and construction oversight.

This \$2.4 billion design-build project’s scope of work includes construction of a 37 km section of the Highway 1 corridor, adding one lane in each direction west of the new Fraser River Crossing and two lanes in each direction east of the crossing with significant upgrades to approximately 10 interchanges. This project also includes the construction of a



Years of Performing Similar Work:

23 Years – Kiewit
23 Years – Industry

Education:

B.S., Civil Engineering, Washington State University

Licenses, Registration, Certifications and Training:

- Kiewit-sponsored training in areas including safety, quality, leadership, project management and project controls

Relevant Work Examples:

- Eight highway/structures projects with similar aspects
- Caltrans experience
- Alternative delivery experience
- Coordination with BNSF and freight rail
- Constructability reviews during preconstruction



new 10-lane bridge crossing the Fraser River, replacing the existing Port Mann Bridge which will then be demolished. Due to the ingenuity and efficiency of the project team, the Port Mann Bridge opened a full year earlier than originally required. Along the project alignment, two highway bridges cross over active railway lines. Both of these locations are owned by BNSF and required significant coordination of flaggers, schedules and operations. Other relevant aspects include utility coordination and relocation, extensive maintenance of traffic, significant stakeholder coordination, environmental permitting, and staged construction over existing highway.

Owner Contact Information:

Linda Meindersma, PE, Bridge Section Manager, (778) 783-1281, lmeindersma@ticorp.ca

Structures Construction Manager | 48th Street to Pacific Avenue | Washington State Department of Transportation | Tacoma, WA | Time on Project: 100% | Project No.: 6958 | 2005-2008

Dan oversaw the project schedule, subcontractor coordination, stakeholder communication, compliance audits, and cost estimates. He managed the maintenance of traffic (MOT) plan that focused on reducing lane closures and consolidating operations to minimize traffic impacts. This project increased the capacity of I-5 through downtown Tacoma and added a new multi-lane northbound collector and a distributor roadway that improved access. The project involved demolishing and reconstructing two bridges to meet modern seismic standards, as well as excavation, soil nail retaining walls, cast-in-place walls, concrete and asphalt paving, roadway, and utilities.

Owner Contact Information:

Troy A. Watts, Pacific Ave. Field Engineer, (253) 474-7013, wattst@wsdot.wa.gov

Project Manager | Skagit River Bridge | City of Mount Vernon | Mount Vernon, WA | Time on Project: 100% | Project No.: STPF-7323 (002) | 2002-2003

Dan started as project manager after this project had been underway for more than a year and at that time the project was a full year behind schedule. Despite the challenges and being behind schedule, Dan’s team opened the bridge on time. This project included the installation of utility lines and construction of a reinforced concrete girder bridge over the Skagit River. Pier construction was performed during an “in-water” work period per NMFS Section 7 permits and Dan’s crews completed the entire project with an excellent safety record.

Owner Contact Information:

Mike Love, PE, Assistant Public Works Director, (360) 336-6204, mikaell@mountvernonwa.gov

Project Superintendent | I-40/I-25 Interchange (The “Big 1”) | New Mexico Department of Transportation | Albuquerque, NM | Time on Project: 100% | Project No. AC-MIP-(IM)-(TPU)-025-4(78)227 | 2000-2002

Dan supervised the construction of 24 separate bridges while maintaining two through lanes of traffic at all times through this vital urban interchange. In this role, he scheduled and supervised the crews constructing the bridges. The \$237 million contract involved fast-track, phased reconstruction and expansion of nearly two miles of the existing I-25/I-40 interchange through central Albuquerque in just 24 months. Features of the reconfiguration included 55 new or reconstructed bridges (33 concrete girder bridges, four structural steel girder bridges, 10 rehabilitated bridges and eight new precast segmental fly-over bridges), four miles of sound walls, and 111 lane-miles of paving.

Owner Contact Information:

Ted Barela, Chief Inspector, (505) 823-1000, No email available



Project Superintendent | I-15 Corridor Reconstruction | Utah Department of Transportation | Salt Lake City, UT | Time on Project: 100% | Project No.: SP-15-7-(135)296 | 1997-2000

Dan worked closely with the design team on this design-build project for Utah Department of Transportation, performing constructability reviews on substructure design. He then supervised the pile-driving and shoring operations and subsequently the construction of the bridge structures within the 4.3-mile Jordan Segment of the project. Maintenance of traffic included phasing for 22 traffic switches. The project involved designing, demolishing, and reconstructing more than 16 miles of freeway, including 142 bridges, three major freeway-to-freeway interchanges, 16 miles of retaining walls and 10 miles of sound walls. Also included were Utah's first HOV lanes and installation of a new Automated Traffic Management System.

Owner Contact Information:

N/A

Superintendent | Cypress E Freeway | California Department of Transportation | Oakland, CA | Time on Project: 100% | Project No.: 04-192234 | 1996-1997

The Cypress E project included the reconstruction of roadway and structures on I-880 and the ramps to I-80 and I-880. The project includes seven concrete box-girder structures, eight flat-slab structures, three structural steel girder structures, and an orthotropic structural steel tub that was manufactured in Vancouver, Washington. Approximately 500,000 vehicles use the Bay Bridge each day, and three of the project's structures crossed over I-80 where it widened to 14 lanes at a toll plaza.

Owner Contact Information:

N/A

Project Engineer | Arroyo Seco | Los Angeles Metropolitan Transportation Authority | Los Angeles, CA | Time on Project: 100% | Project No.: C6430 | 1995-1996

Dan was the project engineer on this project for the Los Angeles Metropolitan Transportation Authority to rehabilitate an existing eight-span structural steel bridge. Work also included grading, paving and retaining walls.

Owner Contact Information:

N/A

Project Engineer | LA River Bridge | Los Angeles Metropolitan Transportation Authority | Los Angeles, CA | Time on Project: 100% | Project No.: C6410 | 1994-1995

Dan was the project engineer on the LA River Bridge contract with the Los Angeles Metropolitan Transportation Authority to demolish an existing railroad bridge and replace it with new concrete structures.

Owner Contact Information:

N/A



CALEB MAYFIELD Environmental Manager

Professional Experience Overview

Caleb has been working in environmental compliance in Southern California for more than seven years, specializing in on-site environmental program management. He has experience managing both stationary and portable source air permitting, fugitive dust control, industrial and construction site storm water management, and hazardous material storage and disposal including spill response capabilities. For the past three years, Caleb has been working closely with multiple departments from Caltrans District 7 on the I-405 Sepulveda Pass Widening Project. Caleb is experienced in environmental impact report analysis, mitigation monitoring and reporting, asbestos removal, lead abatement, and early preparation for efficient project closeout. He is also proficient in Storm-water Pollution Prevention Plan (SWPPP) compliance, hazardous material and waste management (CUPA-HMBP), air quality compliance, and emergency spill response. Because environmental compliance is one of Caltrans' Project goals and accurate permitting and compliance will be integral to the success of this Project to avoid schedule delays, Caleb's expertise will be a valuable asset to our team.

Related Work Experience

Environmental Manager | I-405 Sepulveda Pass Widening | Los Angeles County Metropolitan Transportation Authority | Los Angeles, CA | Time on Project: 100% | Project No.: IFB No. C0882 | 2011-Present

Caleb is responsible for the implementation of the environmental compliance program. His responsibilities include developing all permit applications in conjunction with various local, state, and federal government agencies; and developing the overall job environmental management plan to encompass SWPPP, water quality, air quality, noise and vibration, biological, and hazardous materials. Caleb worked closely with all involved agencies including Caltrans, LACMTA, U.S. Army Corps of Engineers, City of Los Angeles, County of Los Angeles, CA Department of Fish & Game, City and County of Los Angeles Fire Departments, South Coast Air Quality Management District, State of California Water Resources Control Board, Los Angeles Regional Water Quality Control Board, and the Los Angeles Department of Urban Forestry. He was responsible for supervision, scheduling, and coordination of all environmental-related subcontractors, consultants, and vendors as well as all in-house environmental crews and staff. Caleb developed a cost control system related to environmental planning and development and assisted in setting up the project controls for approximately \$30 million of associated environmental work. Caleb has supervised up to four full-time environmental coordinators and two interns during the peak of construction.

This design-build project involves constructing one 10-mile high-oc-



Years of Performing Similar Work:

- 7 Years – Kiewit
- 7 Years – Industry

Education

B.S., Management, Quincy Univ.

Licenses, Registration and Certifications:

- Certified Erosion, Sediment, and Storm Water Inspector (CESSWI), Envirocert, Intl.
- Qualified SWPPP Practitioner (QSP, CASQA)
- 40-Hr HAZWOPER (OSHA)
- RCRA/DOT Hazardous Materials Training (DOT/OSHA/EPA)
- Fundamentals of Enforcement (Course 100) (CARB)
- Visual Emissions Evaluation (VEE) (Course 100.1), maintained certification (EPA Method 9)
- South Coast Air Basin Fugitive Dust Control Class
- SCAQMD Rule 1403 – Asbestos Emissions Course
- Caltrans 24-Hr SWPPP Course

Relevant Work Examples:

- 6+ years environmental compliance experience in Southern CA
- Caltrans and permitting agency experience





cupancy vehicle (HOV) lane northbound on I-405 from I-10 to US-101. 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. Kiewit also oversaw demolition of the Mulholland Bridge, coined by the media as “Carmageddon” for its potential impacts to Los Angeles’ heavily congested traffic corridor. The demolition was completed 17 hours ahead of schedule.

Owner Contact Information:

Fiona Nagle, (213) 897-2956, fiona.nagle@dot.ca.gov

Environmental Coordinator | I-405 Sepulveda Pass Widening | Los Angeles County Metropolitan Transportation Authority | Los Angeles, CA | Time on Project: 100% | Project No.: IFB No. C0882 | 2011

Caleb was responsible for the environmental inspection, reporting, and support of operations in Segment 2. The area identified as Segment 2 was the area from Constitution Ave. north to the Sepulveda undercrossing of the I-405 at the Getty Trailhead, approximately 3 miles in length.

Owner Contact Information:

Fiona Nagle, (213) 897-2956, fiona.nagle@dot.ca.gov

Environmental Manager | Tujunga Wash Ecosystem Restoration | U.S. Army Corps of Engineers | Los Angeles, CA | Time on Project: 20% | Project No.: W912BV-07-D-2018 | 2012

Caleb was responsible for implementing the Storm Water Pollution Prevention Plan, including developing and monitoring the compliance requirements for the project. Caleb coordinated the stormwater inspections and reports including monthly inspections and project walk-throughs with project engineers and maintenance staff from the Army Corps of Engineers. The project consisted of regrading and landscaping the right-of-way along the Tujunga Wash from Sherman Way to Vanowen St. in Los Angeles. The western side of the right-of-way construction included the addition of a meandering stream feature to divert water through prior to discharging into the wash.

Owner Contact Information:

Stanley S Fujimoto, (626) 401-4084, Stanley.S.Fujimoto@usace.army.mil

Environmental Coordinator | Perris Yard, Kiewit Infrastructure West | Romoland, CA | Time on Project: 15% | Project No.: N/A | 2010-2014

Caleb was responsible for overseeing and managing the environmental compliance and reporting associated with a fixed facility storage yard. The facility was utilized as an equipment storage yard and was covered under and the California Industrial Stormwater Permit and generated small amounts of hazardous materials.

Owner Contact Information:

N/A

Environmental Coordinator | U.S. Border Fence - Boulevard Drainage Improvements | U.S. Army Corps of Engineers | Jacumba, CA | Time on Project: 100% | Project No.: W912BV-07-D-2018 Task Order CQ05 | 2010

Caleb was responsible for the environmental program, including auditing, monitoring all environmental related activities, completing environmental documents and reporting, overseeing compliance with environmental regulations, and completing environmental documentation and reporting. The project consisted of the construction 13 concrete drainage crossings between Tecate to Ocotillo along the U.S.-Mexico border, including the retrofitting of various sections of border fence with gates that could be lifted during times of high water.



Owner Contact Information:

James A. Moyer, PE, (602) 315-0667, james.a.moyer@usace.army.mil

Environmental Coordinator | Pine Tree Wind Farm Design-Build | Los Angeles Department of Water and Power | Tehachapi, CA | Time on Project: 100% | Project No.: 21727 | 2007-2009

As environmental coordinator, Caleb worked with County of Kern, California Fish and Game, Bureau of Land Management and local environmental groups to permit the first wind project under the new Universal Building Codes of 2007 within Kern. Design and engineering coordination included grading design optimization to minimize environmental impact yet provide access for delivery of the large wind turbine components, some of which were over 125 ft. in length and over 200,000 pounds. The project required significant coordination with permitting agencies including U.S. fish and Game, Bureau of Land Management, California Fish and Game, Kern County, Caltrans, Regional Water Quality Control Board, Kern AQMD, and DWP. The primary scope of this \$147 million project included the design, engineering, material procurement, and construction of 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 scope also included the overall site construction management and interface coordination at the facility including the activities of other contractors working for LADWP. The project consisted of 28 miles of road, 1.3 million cubic yards of embankment, 161,000 linear feet of Electrical Collection System, and foundations and erection of 88, 1.5 megawatt wind turbines.

Owner Contact Information:

Louis Ting, Los Angeles Department of Water and Power, (213) 367-0239, louis.ting@ladwp.com

APPENDIX B - LEGAL DOCUMENTS

Every aspect of the project, from safety, quality, innovation, and my personal favorite, community relations, was at the highest level of professionalism. I can't say enough about the process to get to construction and the 3-year construction effort, not to mention that it was finished under budget and in the same month and year that my first legislative report suggested.

– Mark Peterburs, Project Director,
Alaska Railroad Corporation,
Northern Rail Extension, Salcha, AK



APPENDIX B: LEGAL DOCUMENTS

- ◆ **POWER OF ATTORNEY**
- ◆ **CERTIFICATE OF NAME CHANGE**
- ◆ **ARTICLES OF INCORPORATION**
- ◆ **BYLAWS**

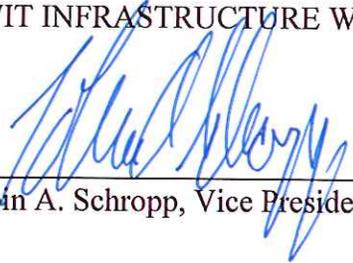
POWER OF ATTORNEY

KIEWIT INFRASTRUCTURE WEST CO., a Delaware corporation (the "Corporation"), appoints **JAMIE D. WISENBAKER**, Senior 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 State Route 58 (SR-58) Kramer Junction Expressway Project, Contract No. 083477CM, Project ID 0800000616, located in San Bernardino County, 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 February 17, 2018.

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 February 17, 2015 (the "Effective Date").

KIEWIT INFRASTRUCTURE WEST CO.

By 
Tobin A. Schropp, Vice President

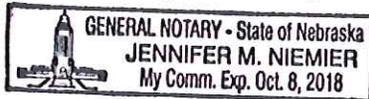
ATTEST:

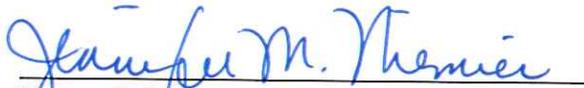


Michael F. Norton, Secretary

STATE OF NEBRASKA)
)ss.
COUNTY OF DOUGLAS)

The foregoing instrument was acknowledged before me this 17th day of February, 2015, by Tobin A. Schropp, Vice President, and Michael F. Norton, Secretary, who are 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.




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:

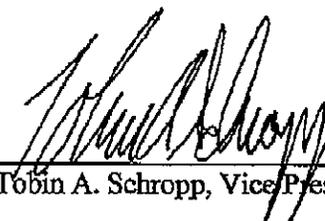
“ARTICLE I

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.

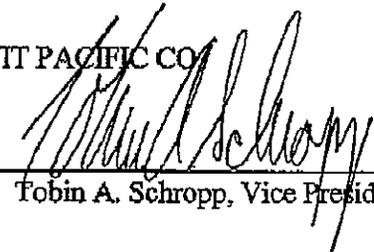
If the General Corporation Law of the State of Delaware is amended after the date hereof to authorize corporate action further eliminating or limiting the personal liability of directors, then the liability of a director of the Corporation shall be eliminated or limited to the fullest extent permitted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